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Colophon

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Contents

Foreword	004
Curriculum	007
Design Courses	013
Design Platforms	045
Exchange Programme	113
2021 Graduating Students	121
Post Graduates Research	209
Service Design Lab	217
Design Incubation Centre	223
Achievements	233
Staff Index	239

Foreword

Head, Division of Industrial Design

Associate Professor (Dr.) Christian Boucharenc

This 2020-21 academic year, NUS was able to respond well to the tremendous challenges in the face of a pandemic. Our DID team played a part in that through their strong involvement and commitment, adapting and swiftly switching some of our courses and exams to online format. We would like to express our heartfelt gratitude to our students as well, who understood the situation and cooperated fully with the safety guidelines. Despite the ongoing pandemic, we can add that this academic year has further motivated our DID team together with the students to be proactive. It opened some innovative and original opportunities for staff and students who have conducted research and projects, bringing new perspectives and innovative solutions to our daily lives during these exceptional times.

Our platforms – the spine of DID’s programme established a few years ago – reflect the evolution of these seven domains of expertise: product design, service design, UI/UX design, medical and healthcare design, space and retail design, exploratory design, and speculative design. Every year, we offer our students new projects related to these respective domains. To achieve this goal, our Division constantly reinforces our engagement with the industry (as witnessed by the prestigious collaborations this year) to provide our students with hands-on experiences and exposure to relevant and valuable professional feedback. One of our collaboration projects is with Philips Company, which we worked hand in hand with the Department of Architecture.

The dynamism of our Division is also reflected by numerous awards won by our students including Red Dot Award 2020, European Product Design Award™, IDA | International Design Awards™ and Golden Pin Design Award. For the sixth consecutive year, DID was invited to showcase our students’ design works at the Dubai Design Week.

Our Design Incubation Centre (DIC) directed by A/P Christophe Gaubert helps young design talents to develop and achieve their ideas and projects for production. This year, two products were released to the market: Ji Jian Wu by Lin Qiuxia and

Shine by Ng Zi Ning. The Centre started several collaborations, with NCSS (National Council of Social Services) and MBI (NUS Mechanobiology Institute) and also developed special projects that were awarded, Tree Whisperer by Sheryl Ang and Yuta Nakayama for the Conversation about Climate Change competition and the outdoor furniture for our new SDE4 building that The Red Dot Design awarded in the Product Design’s category. DIC also participated in major exhibitions, as Visions of the Future, organised by Design Singapore, with three incubation projects among the seven showcased works.

Numerous of our colleagues have been recognized for their respective professional practice at the international and local level. In terms of teaching, two of our colleagues: A/P R. Brian Stone and Mr Donn Koh, won the Annual Teaching Excellence Award (ATEA) in NUS.

In parallel to our colleagues’ teaching, their personal design practices have been acknowledged with prestigious international awards. A/P Song Kee Hong won two Red Dot Awards 2020 for industrial and interface design of Transforma’s autonomous industrial painting robot and Endofotonics’ real-time cancer tissue analyser. The design for Endofotonic also won the Best Of The Best award for the AI category. He was also invited to the international jury panel for Red Dot Award 2021 and Mr Donn Koh, the Co-founder of STUCK Design, is one of the recipients for SkillsFuture Fellowships 2020. A/P Patrick Chia leads the work package in Passenger Comfort, Sleep and Cabin Service for the newly established SIA-NUS Digital Aviation Corporate Laboratory. Jointly established by NUS and SIA, the Corp Lab has been created to develop and commercialise innovative technologies that could accelerate the digital transformation of Singapore’s aviation sector and redefine the air travel experience. A/P Yen Ching-Chiuan, the Director of the CUTE Center, leads the project Droplet and Aerosol Reducing Tent (DART). This project was done by the CUTE Centre in Collaboration with the National University Hospital, School of Design and Environment and NUS Enterprise.

On this occasion of our students’ graduation, I would like to give my heartiest congratulations to our students for their steadfast hard work and passion, leading them to eventual great success. All these accomplishments would not come into fruition without the support of our dedicated faculty staff. Special thanks also go to the DIC team, who has rendered their support in our programme over the years, through teaching, research and promotion of our Division, through various exhibitions, conferences and workshops. Last but not least, our heartfelt appreciation and thanks to our administrative staff who supported us throughout all our projects.

This coming academic year 2021-22 will also be the theatre of major changes in NUS. Firstly, the restructuring which will bring together the Faculty of Engineering, the Department of Architecture, Department of Building and the Division of Industrial Design. This restructuring would open new opportunities in terms of collaboration and cross-disciplinary learning.

Firstly, a very warm thanks to A/P Hans Tan who leads our DID team in developing the new Design Thinking pillar in the Common Curriculum for the Faculty of Engineering and the School of Design and Environment. This could not be possible without the contribution of our colleagues A/P Hans Tan, A/P R. Brian Stone, Dr. Jung-Joo Lee, Dr. Clement Zheng and Mr Donn Koh.

During this last academic year, under a pandemic circumstance, we have fulfilled all the academic objectives, by being proactive and resilient. The Division of Industrial Design will continue its pursuits in the development of its curriculum, platforms, pedagogy and extensive industry collaborations to ensure its relevance in the evolving world of design.

CURRICULUM

Division of Industrial Design

The Division of Industrial Design (DID) was founded in 1999 as Singapore's first university-level course in industrial design. DID offers a highly selective degree course in industrial design. Our pedagogy combines design thinking, innovation methods and humanistic approaches, alongside a clever mix of technical, artistic and economic disciplines - a multi-disciplinary vision of design.

Our vision is to make life better through design; to equip students with interdisciplinary skills and thinking processes required to find unmet needs, as well as solve complex problems involved when creating viable new products, experiences, interfaces and environments. Our graduates are able to take up highly valuable and versatile roles as creative designers, innovators, entrepreneurs, and leaders of change.

Originally part of the Department of Architecture, our programme has built a stellar track record and gained independence in just 12 years. We are ranked 28th for the subject of art and design by QS World University Rankings by subject in 2021.

The teaching in DID is mainly articulated on four dimensions, four directions in which design grows in balance.



Commercial

The field of commercial design is highly focused on the development of a sustainable business case. It is a profit-driven model which utilises design principles to develop compelling products and services that are able to sway consumer behaviour. Industrial design projects that are seated in commercial design train its practitioners to be masters of industry, production and designing products with high desirability.

Experimental

The main goal of experimental design is to explore ideas or concepts through material inquiry. Be it a physical, social or digital material, experimental design projects are concerned with the 'what ifs', pushing the limits of the expression of a medium and developing new and novel ways of interaction through the process of discovery. Industrial design projects that are seated in experimental design train their practitioners to be relentless explorers, makers and thinkers.

Social

Responsible design utilises design principles and distribution methods similar to commercial design, however, responsible design's primary concern is to benefit society regardless of its business case. It is a user-driven model that seeks to help extreme user groups through comprehensive intervention. Industrial design projects that are seated in social design train their practitioners to be masters of empathy, observation and innovation.

Discursive

The primary concern of discursive design is the communication of ideas through objects in order to provoke ideological shifts. It leverages on society's conventional understanding of products and services to communicate ideas or intents by tactful manipulation of their typical affordances. Industrial design projects that are seated in discursive design train their practitioners to be master communicators, artisans and provocateurs.

B.A. course structure

YEAR 1

Semester 1

Semester 2

Design Fundamentals

Design Fundamentals

Semesters 1-2

In the first 2 semesters of Design Fundamentals, students acquire fundamental knowledge, skills and aptitudes in industrial design. This is achieved through a succession of small-scale design exercises that focus on specific areas of learning in detail.

YEAR 2

Semester 3

Semester 4

Design Platforms

Design Platforms

Semesters 3-7

As part of our strategy to evolve constantly, a major component of the course is the Design Platforms. It allows students to tailor their individual course of learning by selecting and participating in 2 concurrent design studios from a variety of design projects offered every semester — ranging from furniture design, healthcare design, consumer electronics design, transportation design, apps and interaction design, retail design, home appliance design, conceptual design, service design and more. The range of different topics reflects the ever-expanding role of an industrial designer. Students are not only able to receive exposure to different areas of industrial design, but also gain the opportunity to learn different approaches to designing, from studio leaders and industry collaborators.

In addition, the vertical format of the design platforms encourages cross-learning of ideas, skills and methods while junior students work alongside and/or compete with senior students. Students in a lower year will take up the role of a junior designer, whilst senior students will have the opportunity to assume the role of a senior designer. This arrangement reflects the importance of

YEAR 3

Semester 5

Semester 6

Design Platforms

Exchange & Internship Programme

group dynamics in industry practice, where design teams often consists of junior designers, senior designers and sometimes a creative director.

From 2010 till 2020, we have accepted a wide variety of industry-sponsored projects from the following industry partners:

Akzonobel, ASUS, DBS Bank Ltd, Dell, Dupont, Eight Inc., Estée Lauder, Eu Yan Sang, Festo AG & Co. KG, GovTech, Groupe PSA, Guerlain (LVMH), Hewlett Packard, Housing Development Board of Singapore, IBM, ICI Dulux, International Flavors & Fragrances (IFF), Jurong Port, L'Oréal, Ministry of Education Singapore, Ministry of Manpower Singapore, Motorola, National University Hospital, Nestlé, Nirvana Memorial Garden, OCBC Bank, Origins, OSIM, Philips Design, Prime Ministers Office Singapore, PSA, RISIS, Rolls Royce, Samsung, Shiseido Group, SIMTech, Singapore Civil Defence Force, Sutar Membrane Technology, Supermama, Toshiba, Tupperware, VISA, Woodlands Health Campus, World Kitchen, Xentiq, Yong Loo Lin School of Medicine

YEAR 4

Semester 7

Semester 8

Design Platforms

Final Year Thesis

Final Year Thesis

Semesters 7-8

In the fourth year, students are required to research and investigate opportunities to develop a comprehensive design project. The major topics addressed in this level include research methodology, brief formulation, project planning techniques, information search and documentation, product analysis and evaluation, concept development and selection process for design development, design detailing and final market implementation. The final year thesis gives students the opportunity to self-initiate a project according to their area of interest, preparing the graduates for a career in design.

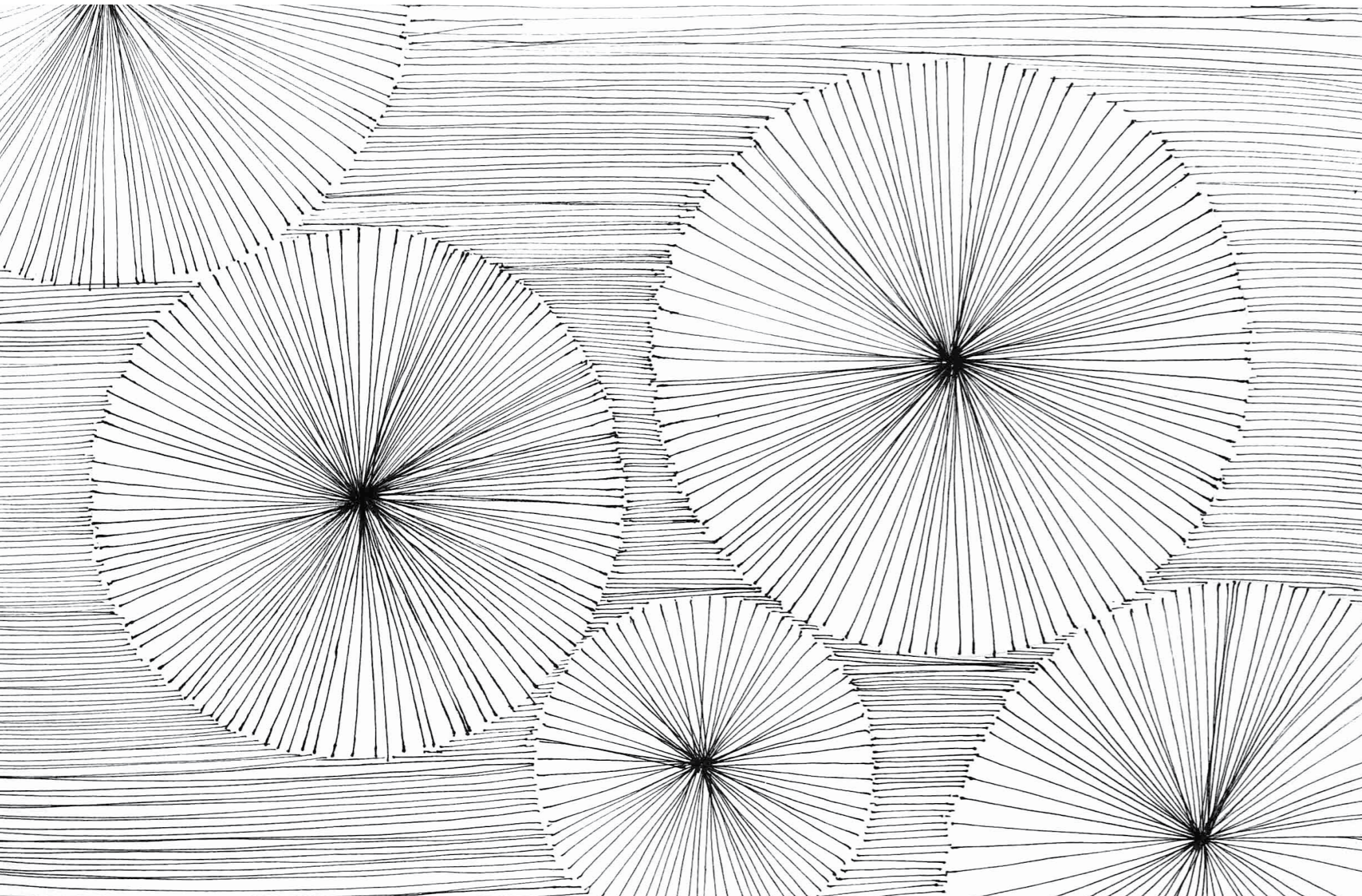
The final project ensures that students are sufficiently competent in research as an integral part of the design process. In this final year, students learn to form and evaluate value judgements on design decisions ensuring that design proposals meet rationalised and functional criterion as well as less tangible aesthetic qualities. Successful graduates will demonstrate innovation and competency in industrial design.

DESIGN COURSES

Sketching for design

Instructor
Vincent Leow

From drawing straight lines without rulers, to 3D forms in perspective, students learn how to sketch anything from their imagination with ease and confidence.



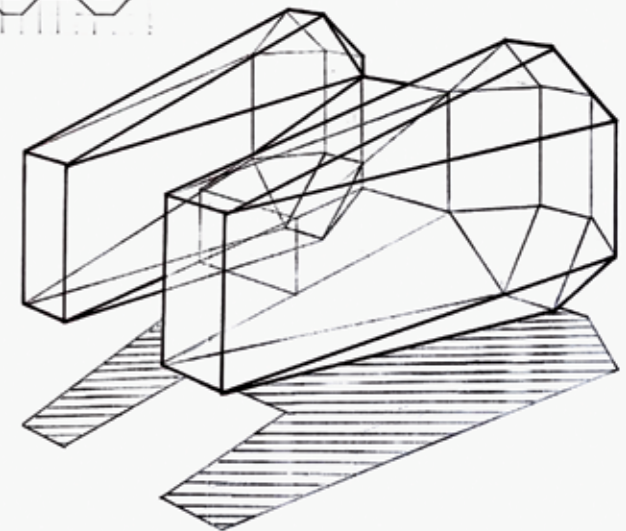
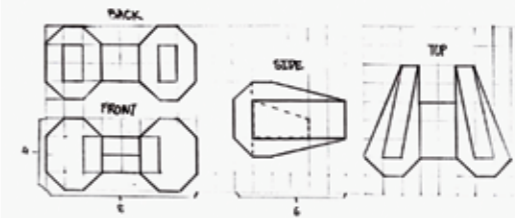
Straight lines

Tanya Verma



Draw through

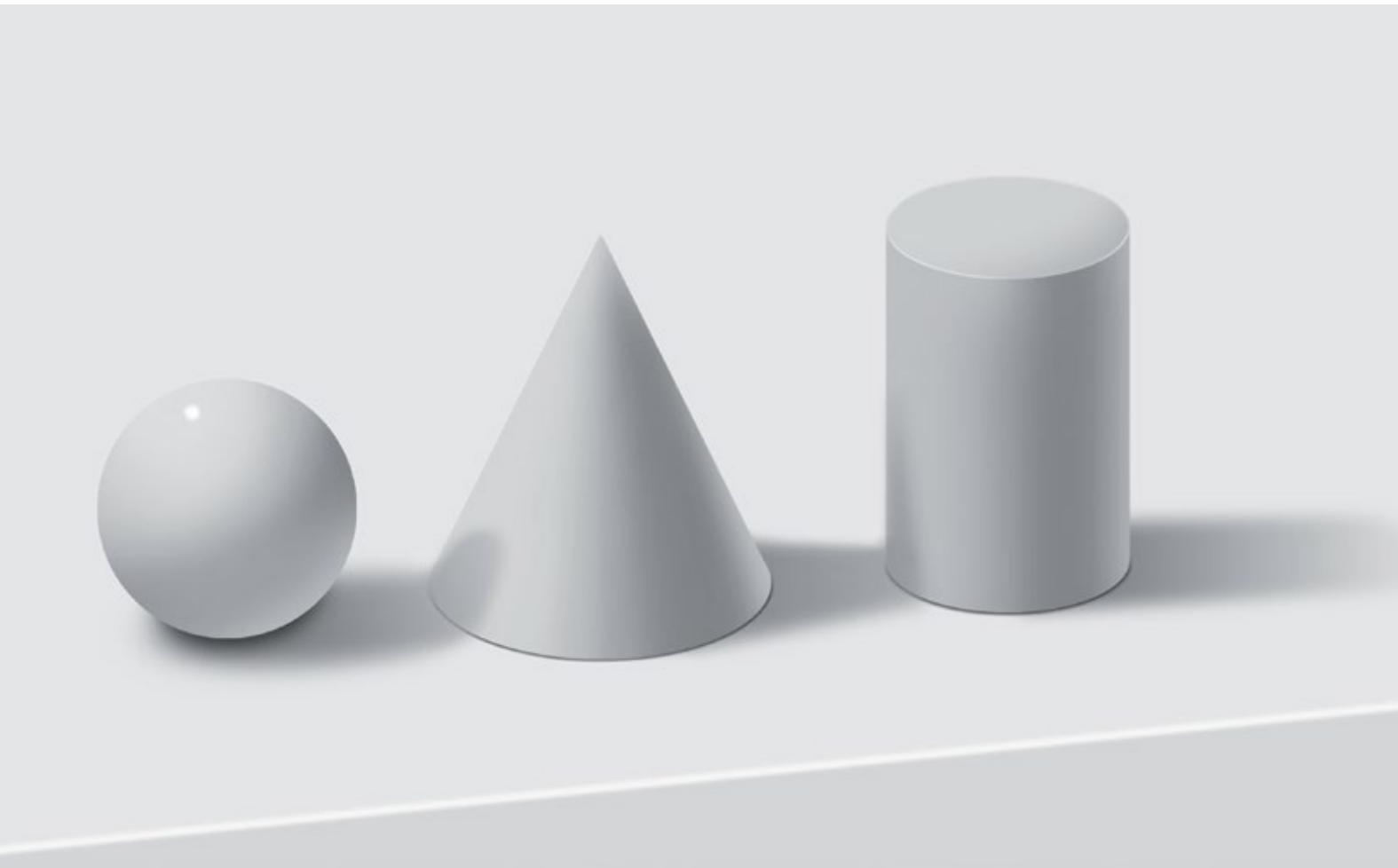
Joseph Liew



Digital sketching and painting

Instructor
Vincent Leow

The course is designed to teach individuals how to create digital art using Photoshop. Through hands-on practice and weekly projects, they learn to paint light and shadow, as well as techniques to generate unique pieces of work.



PS geofoms

Understanding of light and shadow through simple forms.

Rain Tay



PS Swatch

Use of customised brushes to create textures and patterns.

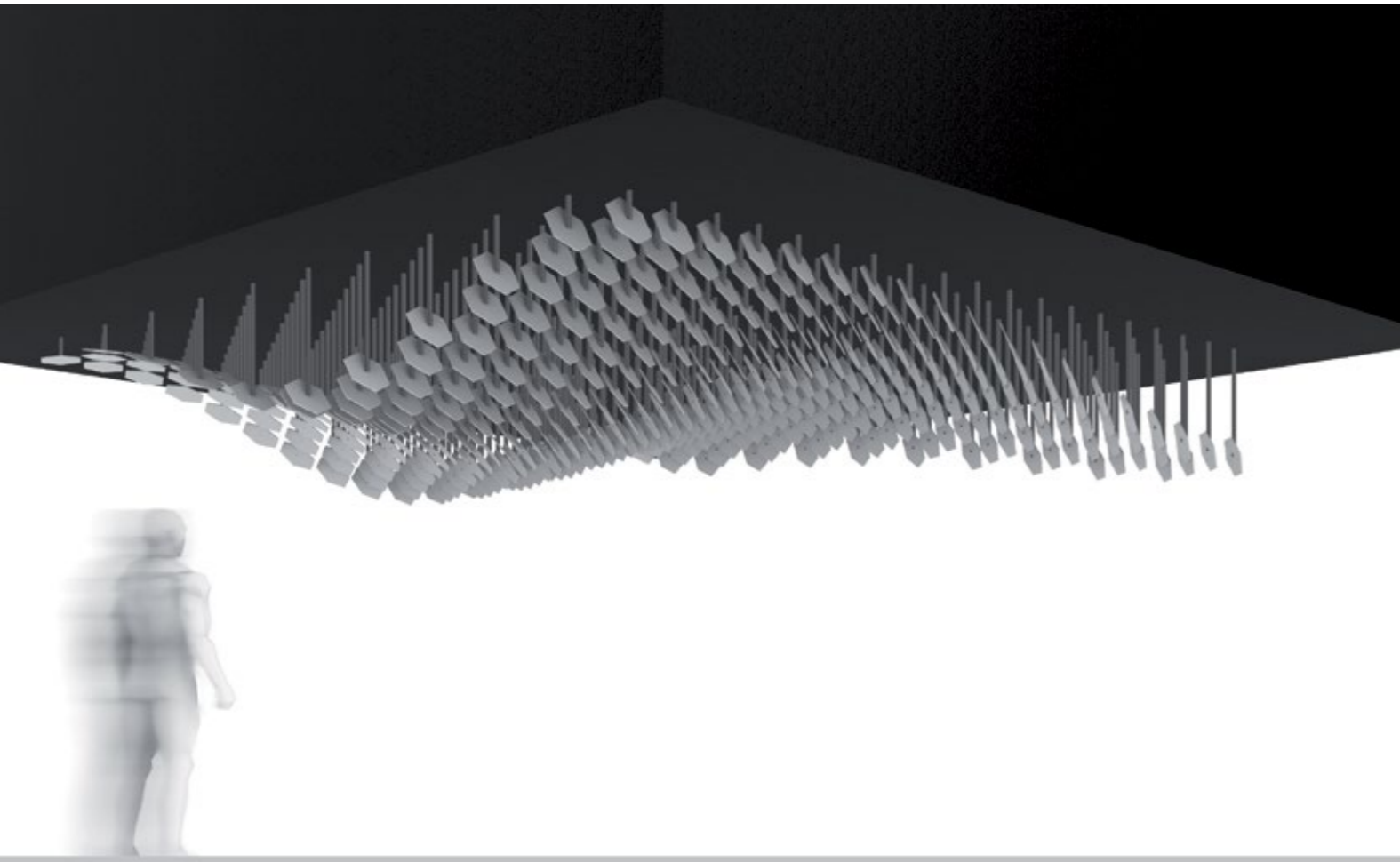
Syasya Nur



Computer-aided industrial design

Instructor
Martin Danzer

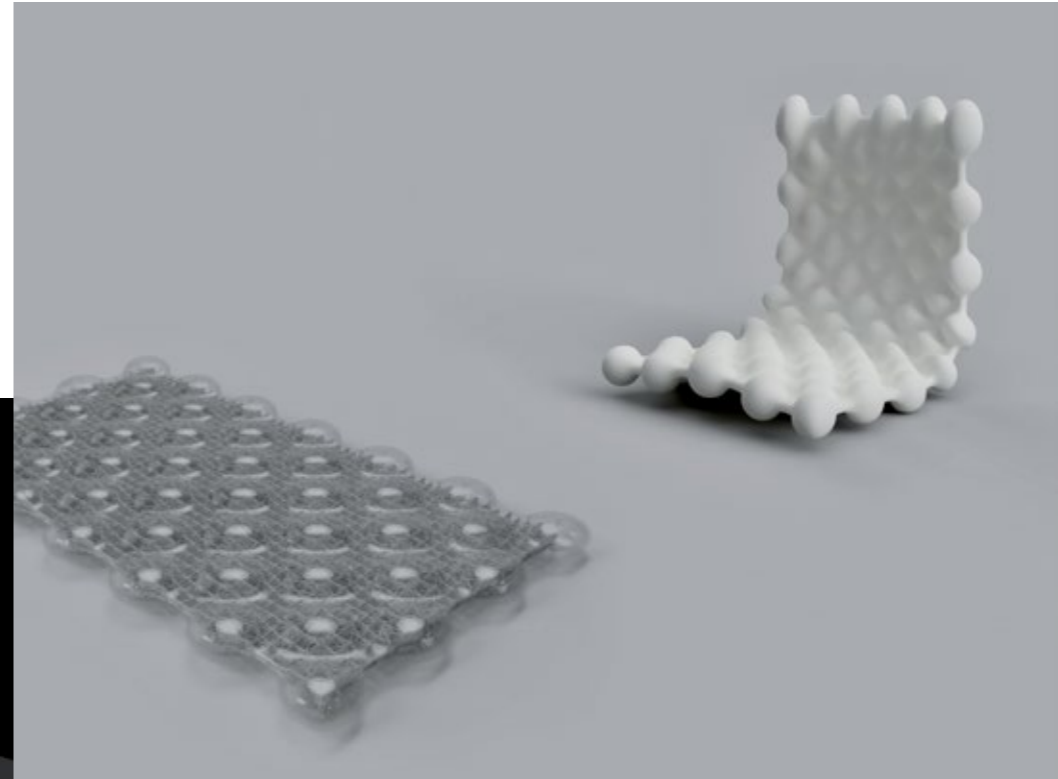
In this module, students are taught to develop new design concepts utilising Generative Design software. The applications range from simple form studies to applications in product design (i.e. acoustic panels or seat cushions), architecture (i.e. wall panels or dividers) or healthcare (i.e. artificial skin or face masks). Some design concepts may include lightweight design, advanced structures or bionic design.



Morpheus

Morpheus is a conceptual exploration of adaptive acoustic ceiling sculpture. It will morph and conform to the sound frequency, loudness and location which actively creates an optimised form to damper and absorb resonance noise. It functions both as a kinetic sculpture and sound dampening system.

Ye Jiajie, Chin Kar Fai, Nathaniel Ng



Boing! cushion



Boing! is a damping structure shaped for comfort and flexibility. With compressible lattices embedded within each bubble, this soft cushion is an ergonomic choice to rest on for long periods of time, making it a more comfortable alternative for the seating options in the SDE4 forum.

Ko Na Yeon, Valeska Tan, Vennessa Stevens, Wu Junyi



Tessa



The pandemic has shifted the ways we live at home, with spaces having to be fluid to accommodate different activities. Using parametric design, this partition allows users to segregate a space and adjust their level of privacy by controlling the opening of each module.

Choo Yuan Jie, Prasanth Kumaar, Emeline Ong

Electronics as materials

Instructor
Dr. Clement Zheng

Over the course of six weeks, students explored physical computing by crafting their own sensors and circuits out of simple materials. From this exploration, students were tasked to build bespoke game controllers that reimagines the interactions of playing the classic video game 'Snake'. This course culminated in a game festival that offered a myriad of tangible experiences on top of one game.



A precise controller



With directional controls situated at the far end of each maze path, players must navigate through intricate pathways to take control of the snake's movements. Comprising modular components, players can choose different game levels which provide varying degrees of difficulty.

Travis Ong

A milking controller



This controller is made up of touch sensors with water as its conducting medium. This project wants to recreate the experience of a stress ball in a more fun and silly way. This is achieved through the action of milking, the sound and occasional splash of water as a 'warning' when one gets too excited.

Wina Nashita



A cooperative controller



Changing the classic snake game to be controlled by two players greatly changes the game experience. The controller's directional buttons must be pressed by both players to move, increasing the level of challenge (and frustration) at times, but also allowing for moments of success that can be celebrated together.

Joseph Liew

Computing for design

Instructors

Yuta Nakayama, Dr. Clement Zheng, Akbar Yunus

This module introduced the elements of computational thinking and its application in design. Students acquired skills and knowledge in the use of computational logic and methods such as basic programming, data acquisition, and network architecture. Students learnt to apply computational thinking to solve design problems and used computational tools as part of their design process.



HuatMeow

Ready to Huat? This fortune cat is not your typical lucky charm, HuatMeow encourages individuals to save up their spare change and accumulate small wealth for a cheeky purpose: to generate lucky 4D numbers.

Chong Zi En, Chua Xixin



Outfield

Outfield is a website that decides the best location to host a game of soccer in Singapore by visualising publicly available weather data. It calculates the nearest location that meets the desired weather conditions, with visualisations to help understand onsite conditions that might affect the game.

Emeline Ong, Choo Yuan Jie

Design for prototyping

Instructor
Willie Tay

The aim of this module is to provide students with an aptitude in digital fabrication design. Students are to design an add-on using digital fabrication techniques that will bring a new perspective to an everyday object. The add-on may improve the primary function of the object or twist the function to define a new usage.



Fork hanger

Designed for camping, the fork hanger is compact and hangs both large and small items with the help of cutlery a traveller would already have. It capitalises on SLS 3D printing's ability to create living joints so users can orientate the forks freely for different uses.

Celeste Seah

Branching purpose



Did you know that recycling one glass bottle saves enough energy to light a 100W light bulb for 4 hours? You know what's better than recycling? Repurposing! Branching purpose is a project which explores the usage of a Vitasoy bottle in its afterlife - as the trunk, holding the new structure in place.

Wina Nashita



Spoon grip



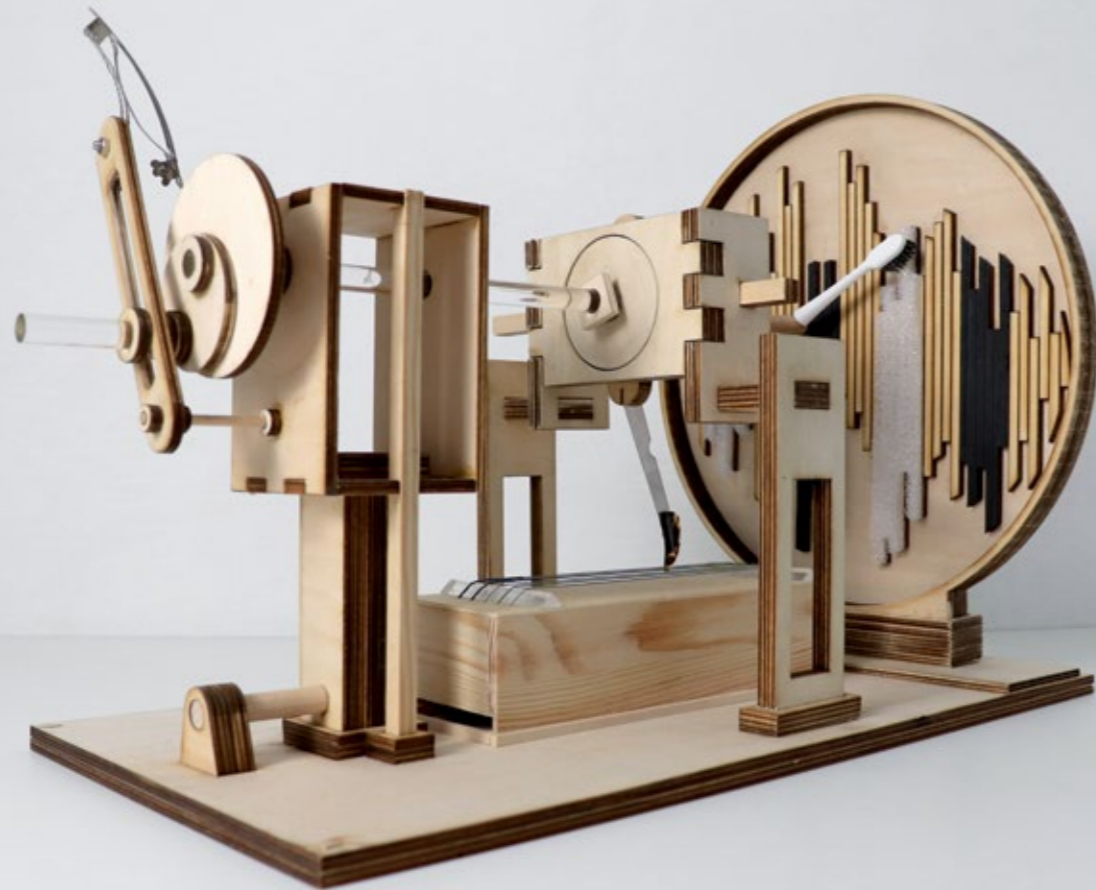
The spoon grip aids children in learning how to hold the spoon properly and when not in use, it can be removed to act as a spoon rest. Using 3D printing to create the organic form and small dowel joints, the product can be easily taken apart and reassembled from two pieces.

Lee De Wei

Modelling for design

Instructor
Jason Ong

This module covers several exercises in model-making techniques with the focus on precision, form studies and iterative process. The clay model exercise involves the understanding of fundamental elements of design through multiple refinements; whereas the automata construction using mixed material explores sound and motion design during the process of testing and trouble-shooting.



Sheryl Yeo



Luke Goh

The appreciation of woodcraft

Instructor
Jason Ong

This module introduces students to various wood-working processes through the fabrication of a small solid wood product and furniture. The syllabus covers instructional demonstrations on the use of hand tools, power tools and workshop machines; as well as the finer points on understanding and appreciating the material properties of wood and good finishing.



Ye Jiajie



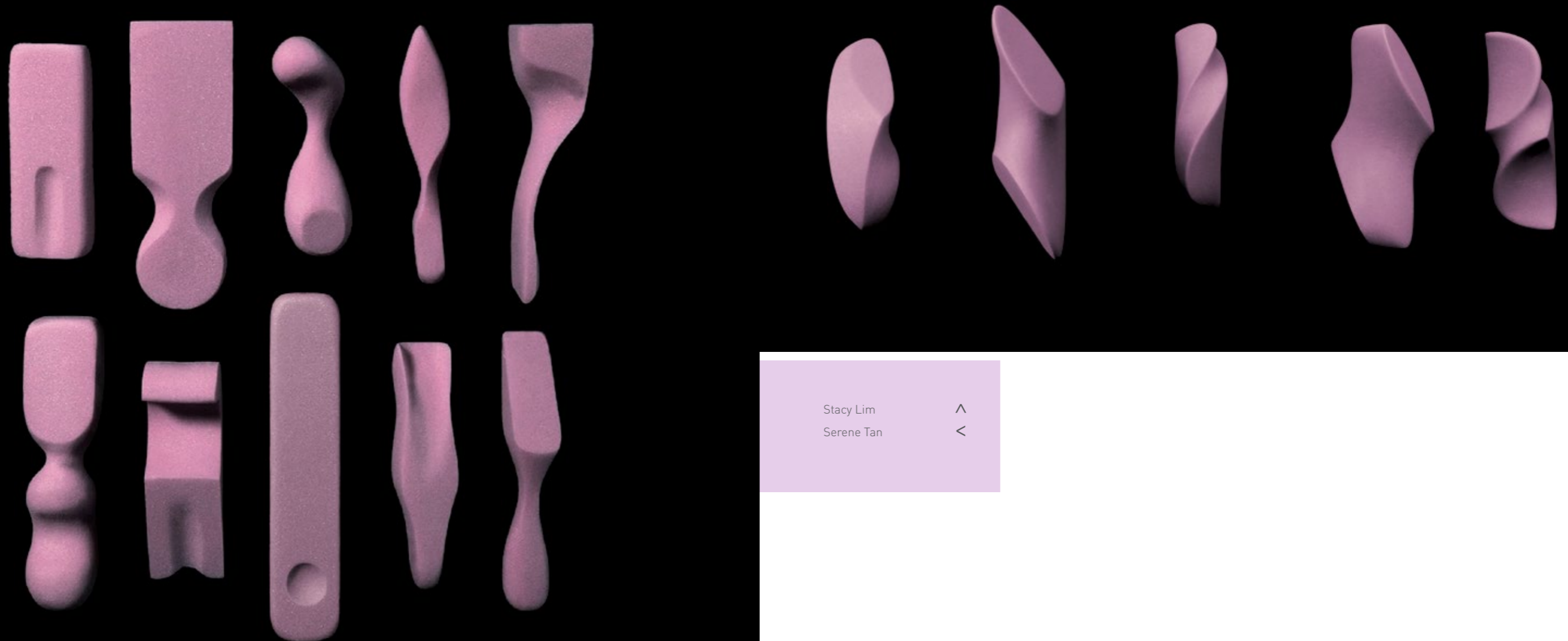
Alexandra Arguelles



Form finding

Instructor
Patrick Chia

The overall aim of this exercise is to develop perceptual form modelling skills to visualise and make value judgements on the quality of 3D forms, with respect to volumes, surfaces, and details. In part A of the exercise, students learn how to manipulate the material with simple tools, discovering and developing a wide variety of possible forms. In part B, students try to develop different expressions while keeping the same DNA of a selected piece.



Thinking through making: Fascinating flour

Instructors

Hans Tan, Grace Tan

Working with flour as key material and steam as fabrication method, each student is tasked to arrive at a fascinating piece of cooked flour. Immersing themselves into a hands-on exploration process, they take risks and brave failures, harnessing the creative cognitive link between their hands and brain.



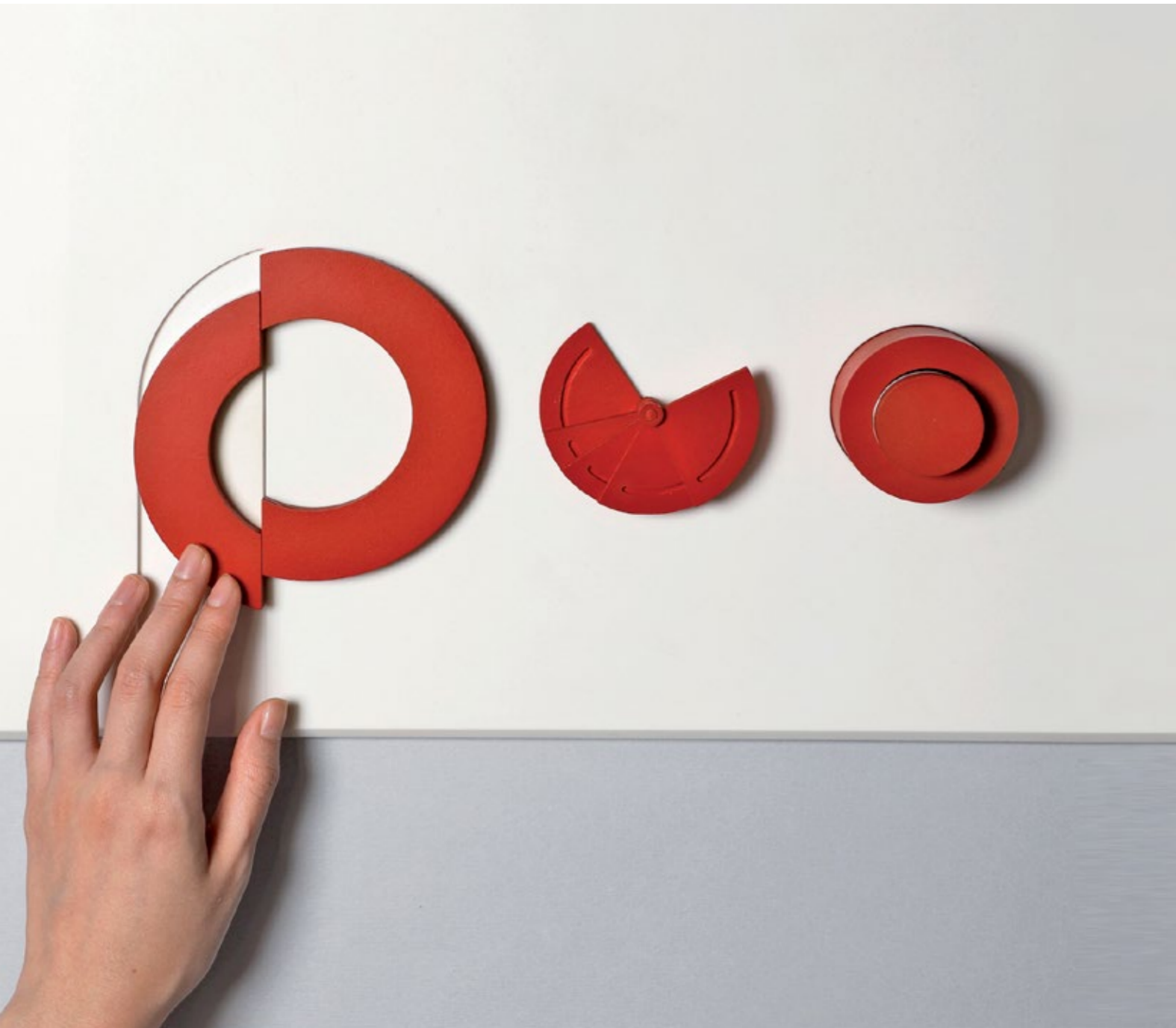
- 1 Kwang Yu Hang
- 2 Bradley Catampatan
- 3 Joseph Liew
- 4 Sheryl Yeo
- 5 Jonathan Low
- 6 Serene Tan
- 7 Ng Keng Wei

Conceptual design of button controls

Instructor
Dr. Christian Boucharenc

Teaching Assistant
Tan Sixiu

The aim of this discovery exercise is to develop a conceptual understanding of the physical attributes, control functions and visual signals of buttons used in general product design. Each of these buttons should have one of the following functions: to push, pull, swift, shift, etc. The presentation of the final prototype should be the closest representation of a real product in terms of form, ergonomics, colour and texture.



Kruge

Inspired by spirit of Enzo and the palette of Constructivism art, its form and mechanisms encourage users to complete each circle. This is achieved through layering of thin, sturdy materials and a bold, clean finishing.

Chen Yuxuan



Florasion

Florasion is a series of buttons that is inspired by the flow and movement of a dance. The form of each button is inspired by the fluidity of oceanic life and seeks to suggest interactions in their respective actions through the bending and twisting of each form.

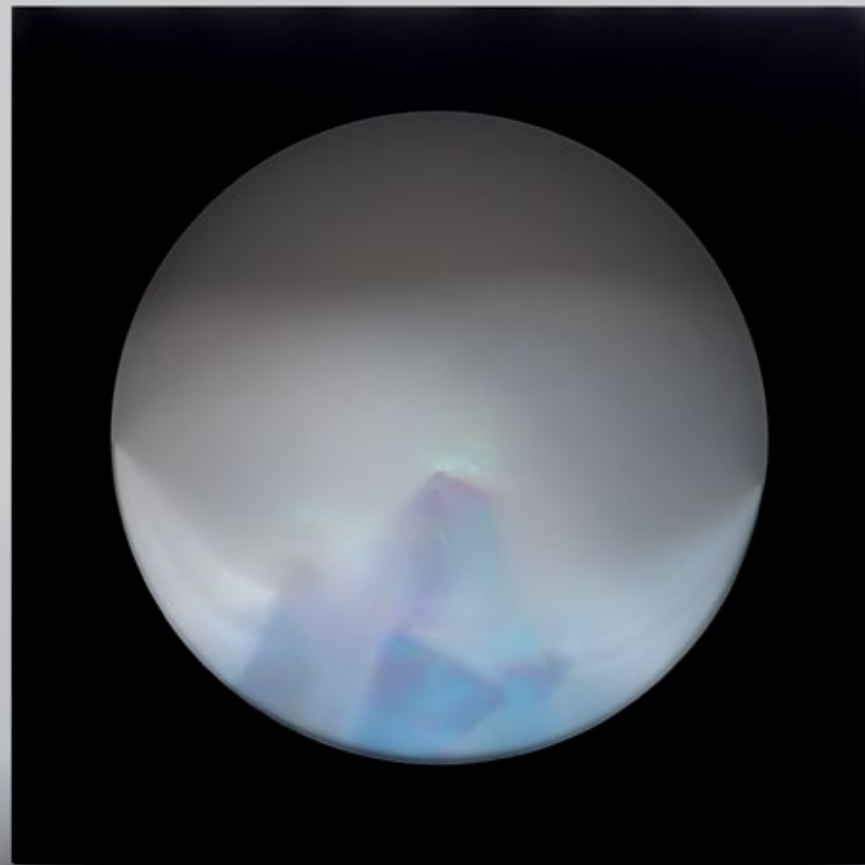
Stacy Lim



Objects for a windowscape

Instructor
Wendy Chua

Design an object for a windowscape: 1. Sketch site measurements. 2. Observe human interactions, behaviours and context. 3. Close your eyes. What do you hear? Smell? Taste? Touch? 4. Observe behaviours of natural elements: light, wind, heat, etc. 5. Sketch the people, objects, furniture, plants, little animals that are found in this windowscape. 6. Design an object for the windowscape.



Connectivity

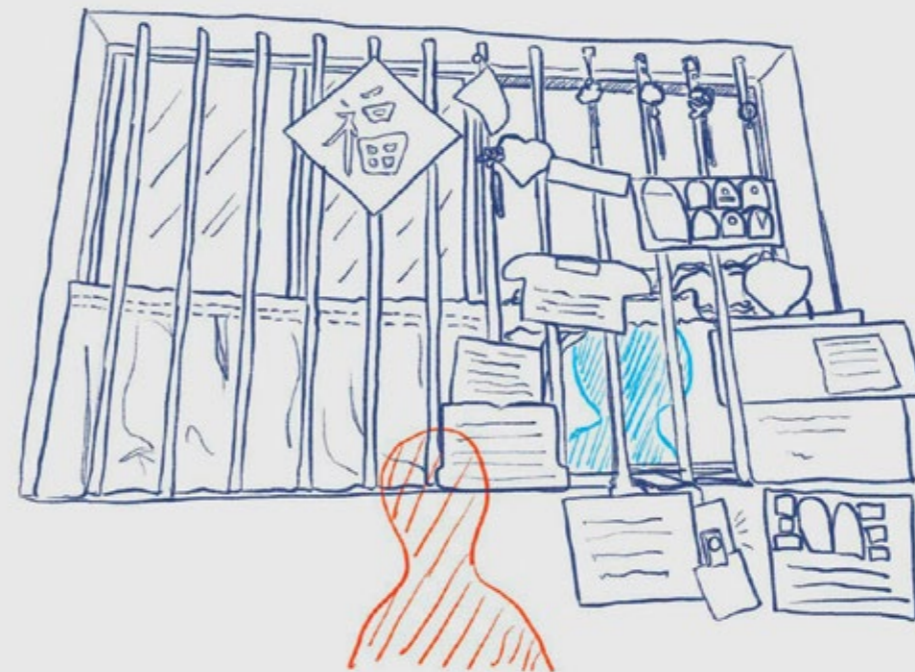
Sited within the volume of Design Orchard, the series of artworks displayed in the windows can transform the once lifeless, cold and raw space into a gallery space, which brings forth a sense of delicacy and whimsical wonder.

Sheryl Yeo

Garden in a window

The garden window is a private meditative space transitioning from a workspace and bedroom on the first floor of a condominium. It emphasises privacy while providing a space of therapy amidst external noise. Inspired by natural mossy landscapes, it incorporates the outdoors through various elements.

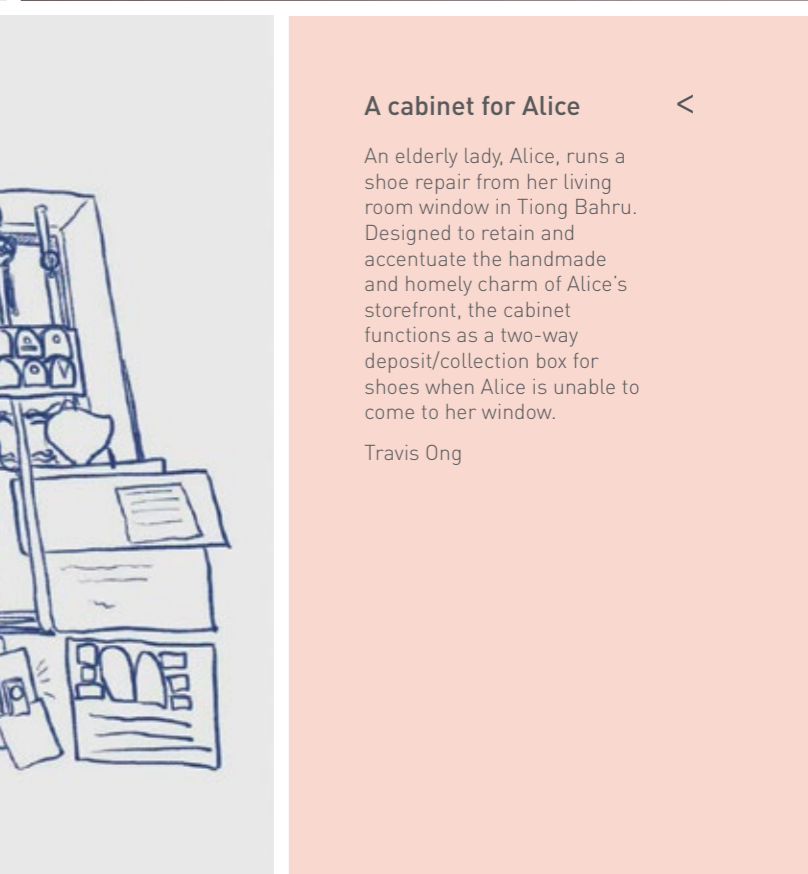
Celeste Seah



A cabinet for Alice

An elderly lady, Alice, runs a shoe repair from her living room window in Tiong Bahru. Designed to retain and accentuate the handmade and homely charm of Alice's storefront, the cabinet functions as a two-way deposit/collection box for shoes when Alice is unable to come to her window.

Travis Ong

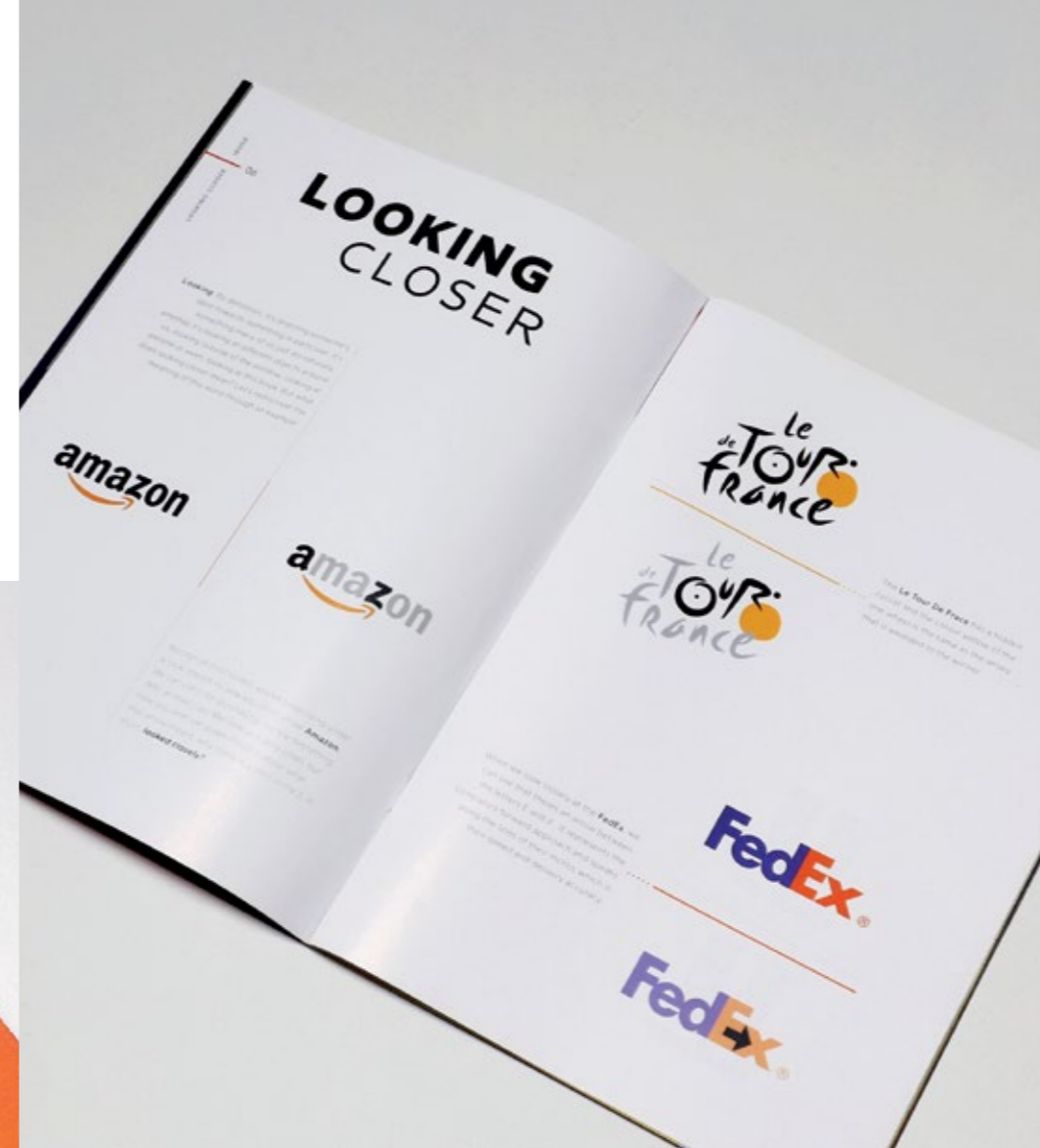


Visual literacy

Instructor
R. Brian Stone

Teaching Assistant
Jennifer Lim

This fundamental course focused on honing one's ability to interpret, negotiate, and make meaning from information presented in the form of images. Through a series of exercises on design synthesis, gestalt theory, colour interaction, rhythm and balance, organisational systems, typography, and communication hierarchy, students heightened their sense of visual literacy. Studies were then culminated into a booklet which described learning outcomes and reflection.



Tan Zhi Hui
Tanya Verma
Sheryl Yeo

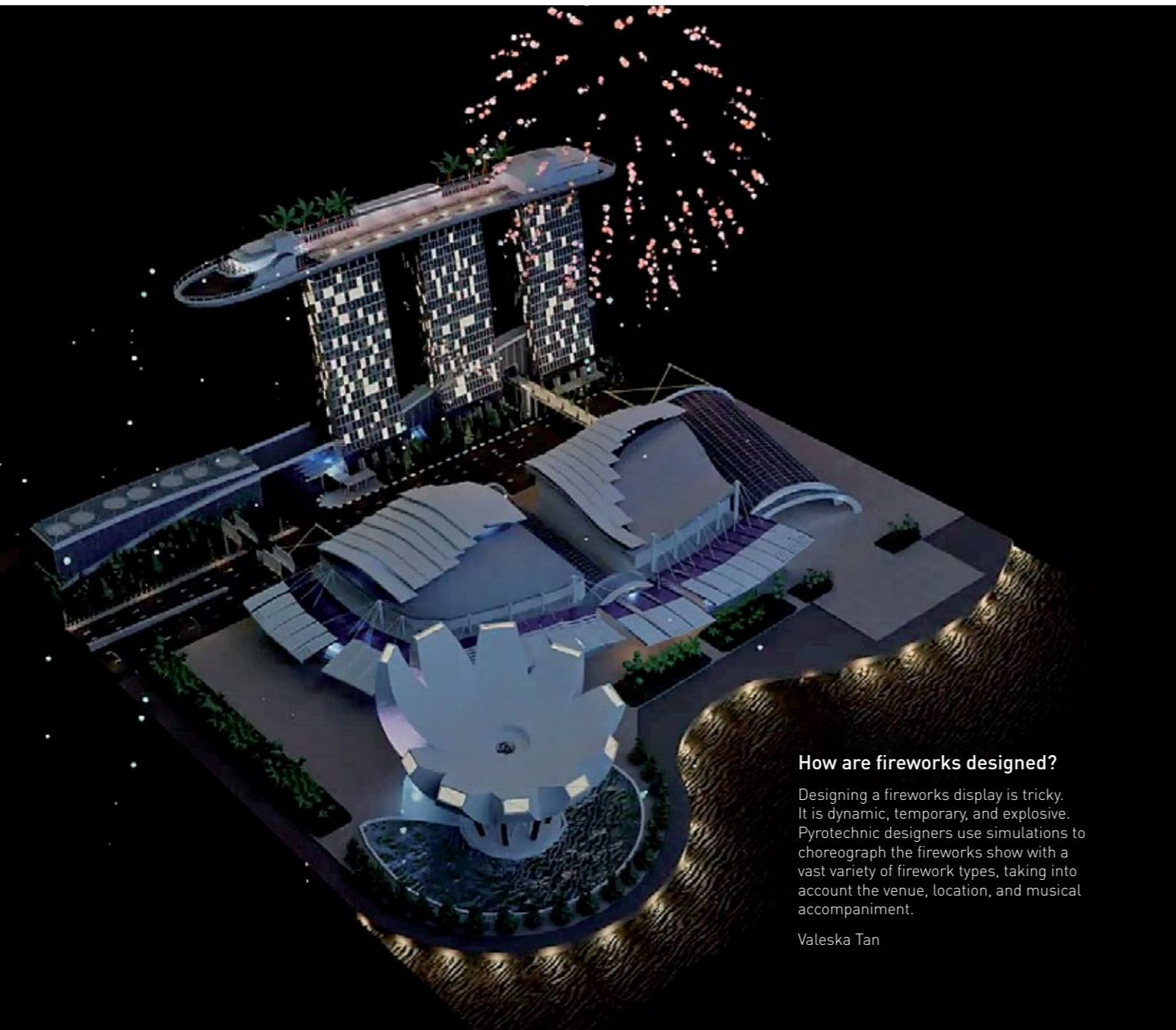


Visual communication design

Instructor
R. Brian Stone

Teaching Assistant
Jennifer Lim

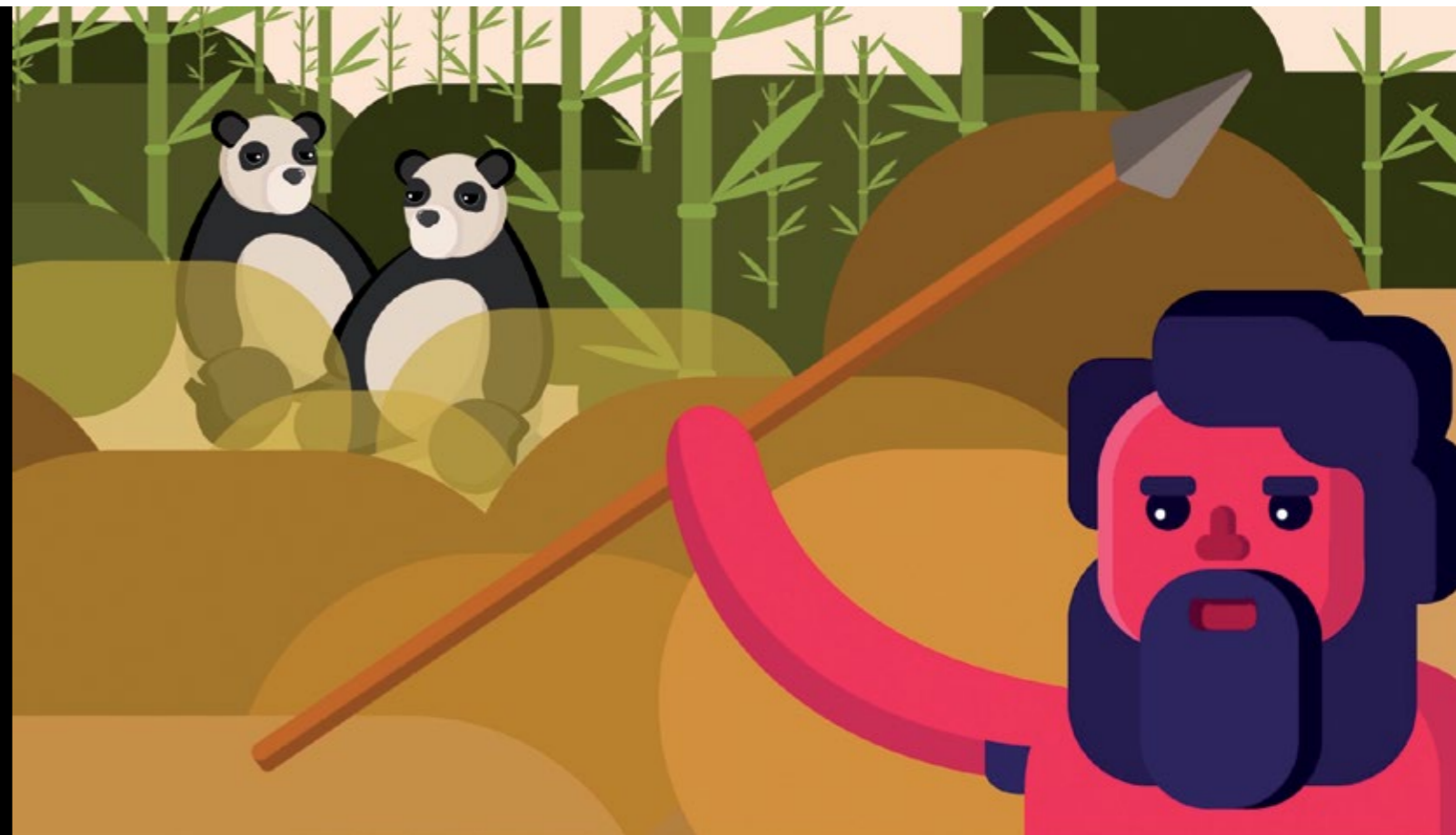
This module introduces students to the basic principles of motion design and how it is used to communicate and amplify messages. Students investigated narrative strategies through the use of spatial change over time, utilising the layering of temporal elements such as speed, sound, depth, and responsiveness. Their work culminated in an animation that depicted an interesting or compelling story.



How are fireworks designed?

Designing a fireworks display is tricky. It is dynamic, temporary, and explosive. Pyrotechnic designers use simulations to choreograph the fireworks show with a vast variety of firework types, taking into account the venue, location, and musical accompaniment.

Valeska Tan



Domestication

This narrative explains how animals are domesticated and how only a handful meet the criteria of feedable, friendly, fecund, and family-friendly.

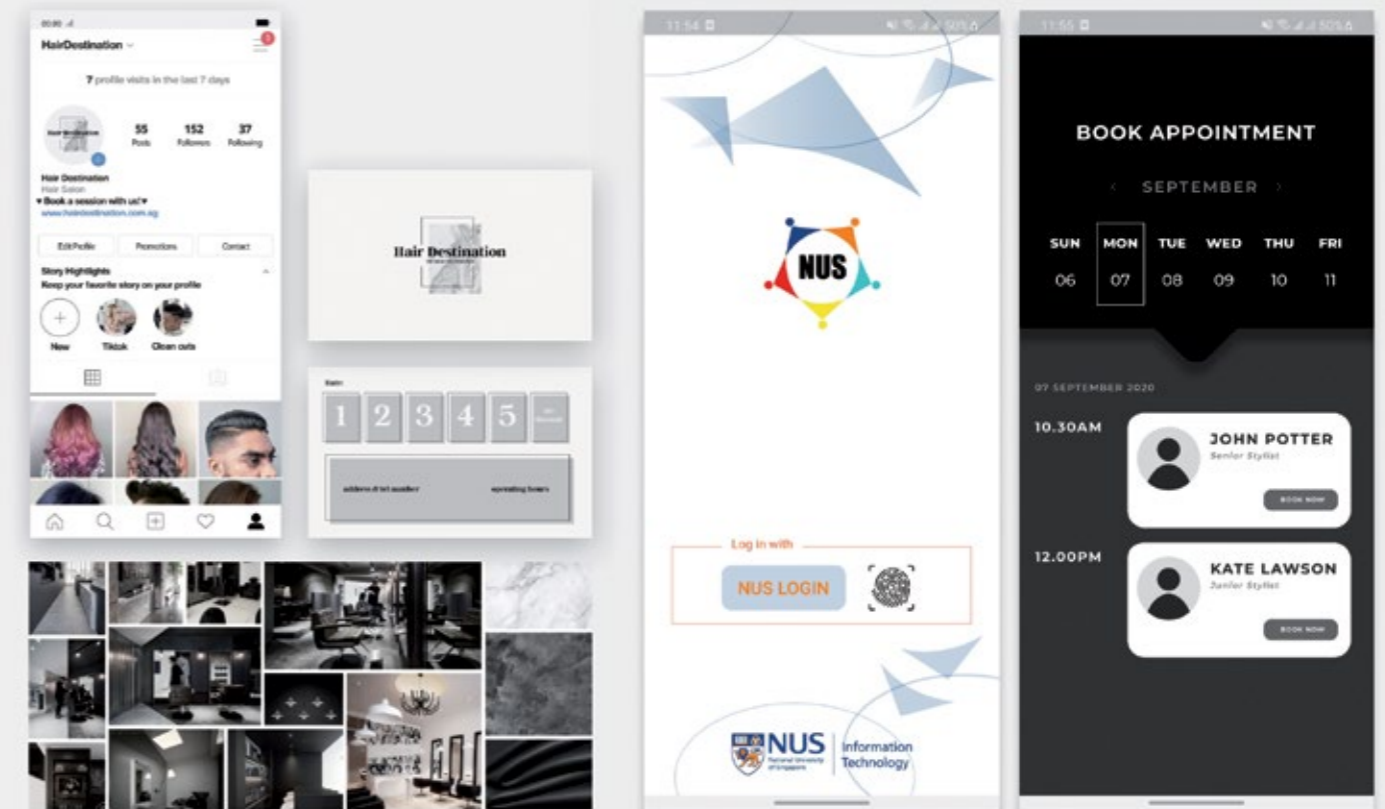
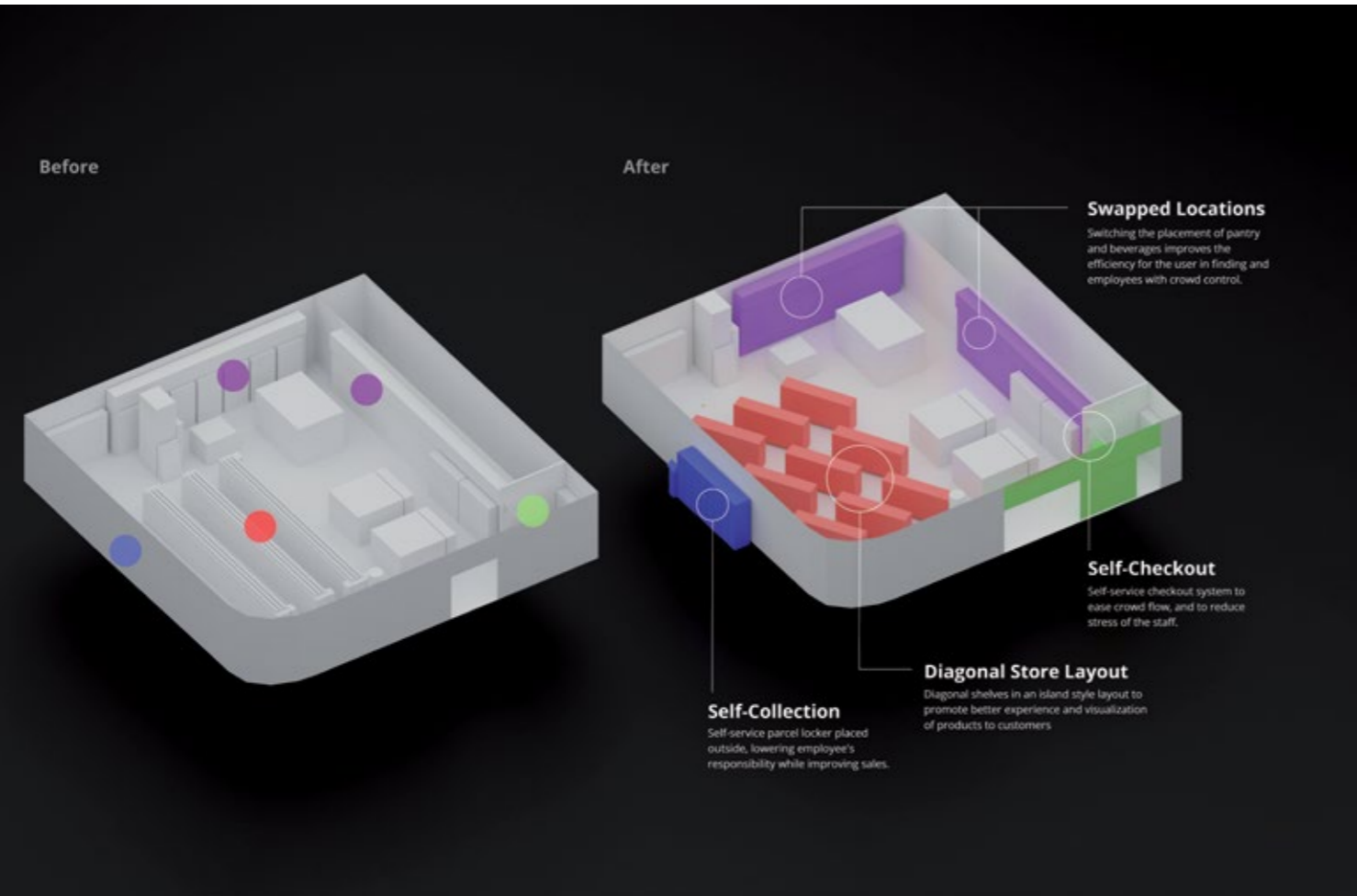
Cao Minh Huy

Human-centred design

Instructors

Dr. Jung-Joo Lee, Song Kee Hong

In human-centred design (HCD), first-year students learn to organise their mindsets and practices towards human needs and experiences. They learn about the evolution of HCD, from anthropometry, usability, user experience, emotional design to co-design and service design, and internalise their learning through design projects. The module aims to equip the first-year design students with essential skills for Design Platform projects.



1. Re-branding

2. Univus x Booking App Add-on

FairPrice Express analysis

With the intent to increase the sales of FairPrice Express through improving the efficiency of staff, a thorough research was conducted based on the staff's experience map to find opportunities to improve the workflow, focusing on three areas—store layout, crowd control, staff's responsibility.

Mok Zijie, Isaac Lim, Aileen Ooi, Claudia Goh

Hair Destination @ UTown

With the objective of establishing trust and valuing time for both customer and stylists, primary and secondary research was conducted to understand the business and personas involved. Design opportunities were identified through insights and pain points gathered to create relevant design proposals.

Chong Zi En, Edwind Tan, Nicole Tan, Celeste Seah, Syafiq Bin Rahim

DESIGN PLATFORMS

As part of our strategy to evolve constantly, a major component of the course is the Design Platforms.

From their second year, students can tailor their individual course of learning by selecting two concurrent studios from a variety of eleven to fourteen different design projects offered every semester. Topics of each design studio are in line with the department's strategic focus areas, consisting of Commercial design, Social design, Exploratory design and Discursive design. The range of different topics under these four focus areas reflect the pedagogies of the ever-expanding role of a designer in the current society. Presented here are student works, where students tackle both conceptual and real life projects with industry collaborators. With this constant engagement of industry collaborators, students are exposed to real industry working experiences and develop relevant skill sets.

The structure of the Design Platforms allow junior students and senior students to work together as a group, which we call 'the vertical format'. Students in a lower year will take up the role of a junior designer. Whilst senior students have the opportunity to assume the role of a senior designer. This arrangement reflects the prevalent importance of group dynamics in industry space.

M for mail

Platform Leader
Hans Tan

As a critical response to the digitalisation and immediacy of communication, we reimagine the experience of analogue mail. Beyond the use of words, the act of 'opening an envelope' becomes a medium of embodiment for the message it transmits. Instructions are produced for each mail so that anyone can make them with simple tools and materials. Each mail fits the local mail guidelines for letterbox post.



White-Out

White-Out packages the spellbinding charm of snow in a compact format. With every turn, salt floods the obscured letters, letting the message fade in and out of recognition. Through this ephemeral effect, it is a keepsake that compels you to pour over it again and again, without having to open it.

Deborah Loh, Nathaniel Ng

Kindle

Resembling a candle, Kindle is ideal for sharing a joyous message with a poetic touch. When lit, its hidden content is revealed over time and concealed upon cooling. Kindle's illuminating flame sets the scene for a slow reveal, suitable for hope-filled or heartfelt messages in an intimate setting.

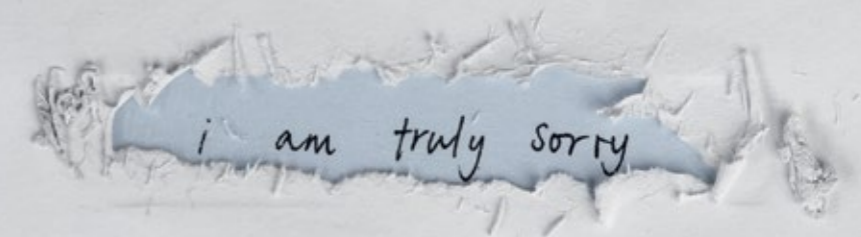
Felicia Lee, Celeste Loh



Rub

Rub allows recipients to open their mail by rubbing it with water, revealing a message beneath protected by a plastic sheet. The tearing of the membrane symbolises the removal of barriers between the sender and recipient – best suited for messages of apologies and senders in hopes of reconciliation.

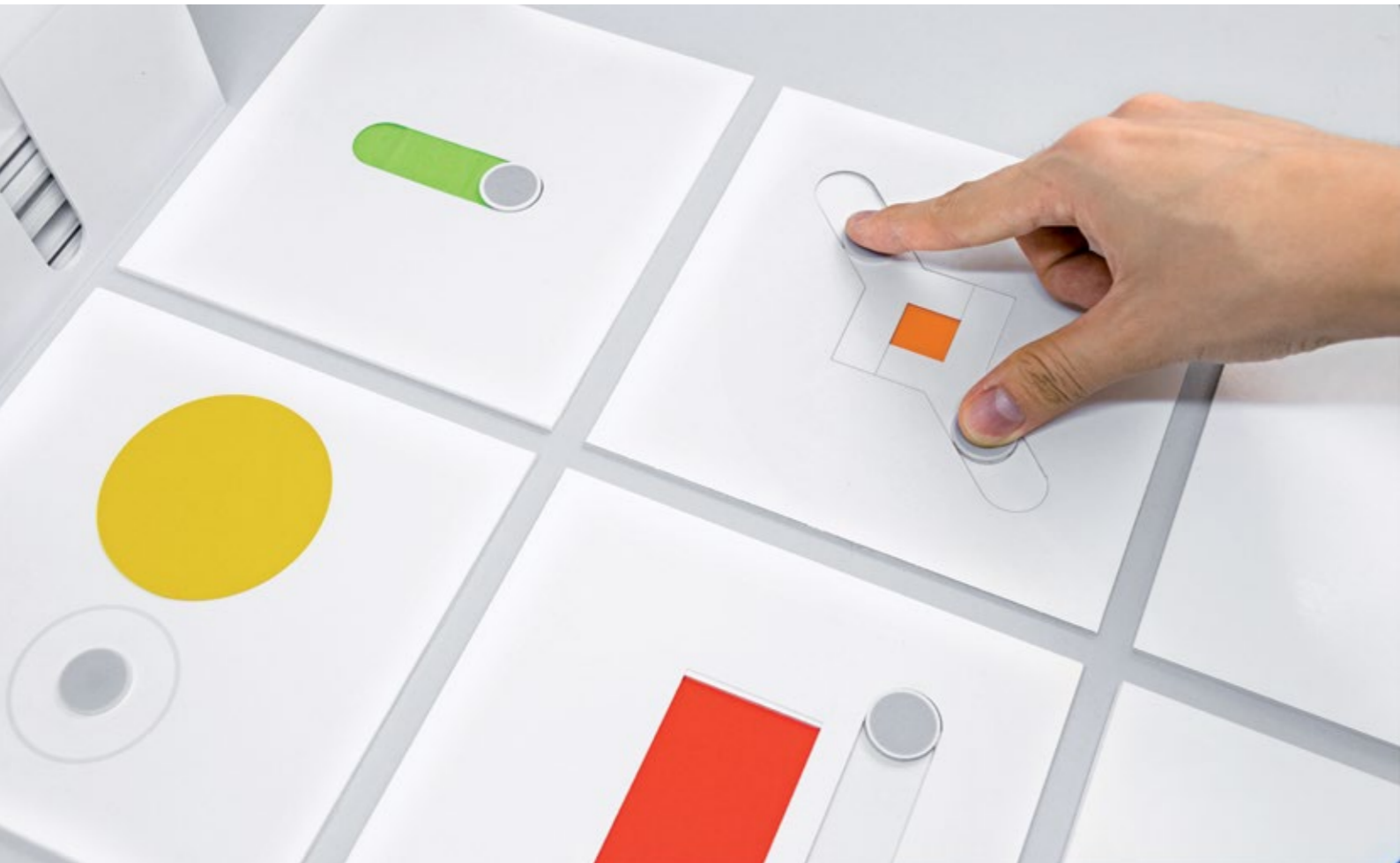
Li Si Yi, Colette Chan



Book object

Platform Leader
Grace Tan

This studio is a tribute to Bruno Munari's 'Libro Illeggibili'. A book without words and figures turns the book page and structure into active agents, transforming the book as a whole into an interactive, multi-sensory object. Students are required to deconstruct and rethink the book format and develop a 'language' or narrative mechanism for the book using materials and elements of design.



Unpack <

Based on a psychological study, Unpack ventures into the synaesthesia between colour and tactility. Unpack will be read through visual cues that guides the readers as they manoeuvre through the book, revealing the findings in a guided manner. The separate segments eventually form a nested structure.

Sim Lee Ting

Inkterface ^

Inkterface took inspiration from the evolved digital UI and translated its characteristics into a series of low-tech interactive square tiles. It sought to explore ways to recreate the familiar and intuitive 'feelings' that have shaped the way we perceive and act in today's world.

Ye Jiajie

IxGD: Interaction and game design

Platform Leader
R. Brian Stone

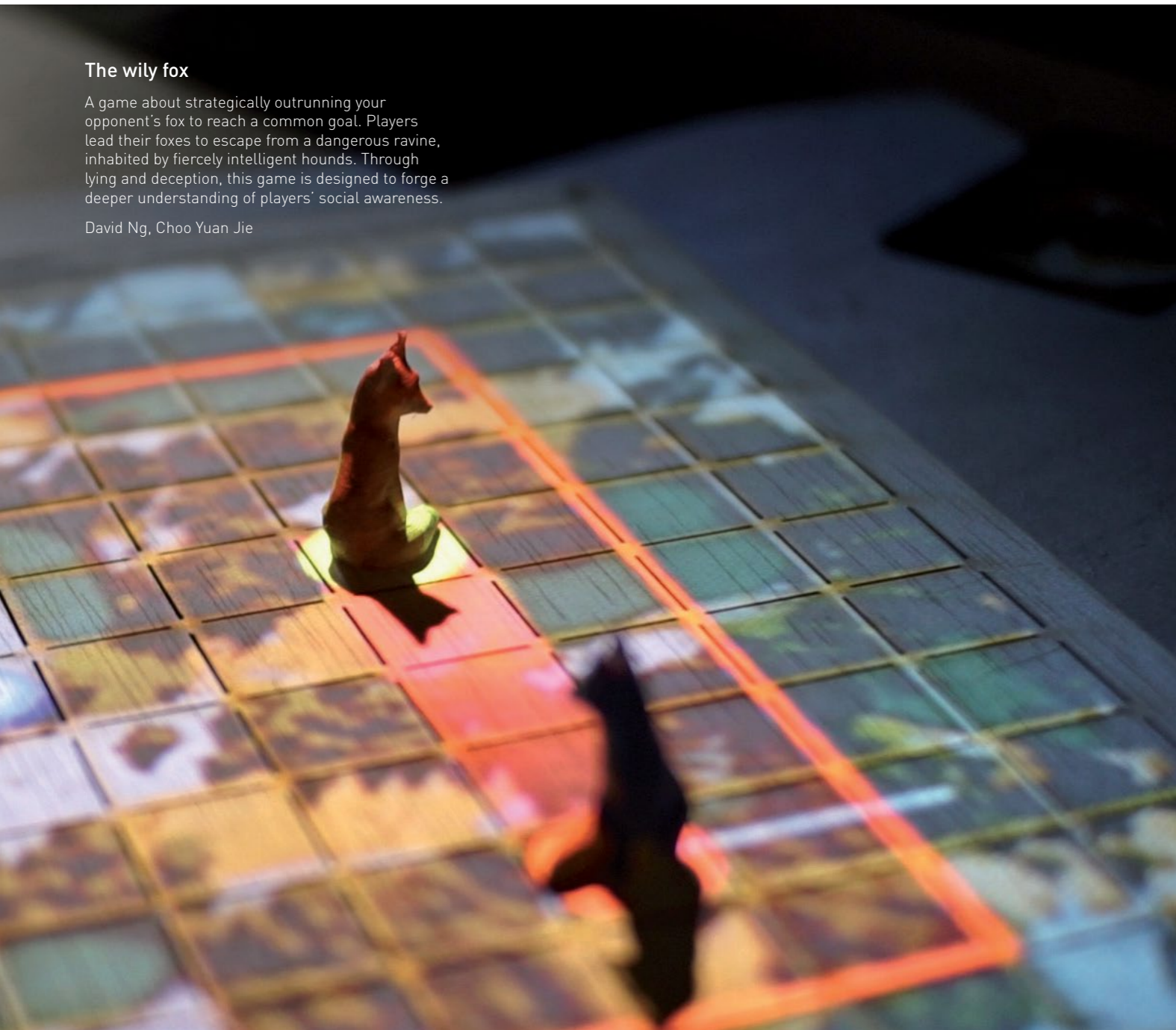
Teaching Assistant
Jennifer Lim

Everybody loves playing games. Our goal was to design great ones through the exploration of interaction in the context of game play. Games could be physical, digital or hybrid, and centred on strategy, skill, adventure, or fantasy. The main focus however was to understand and design meaningful cause and effect relationships and how these dynamics affect the perception of competition and fun.

The wily fox

A game about strategically outrunning your opponent's fox to reach a common goal. Players lead their foxes to escape from a dangerous ravine, inhabited by fiercely intelligent hounds. Through lying and deception, this game is designed to forge a deeper understanding of players' social awareness.

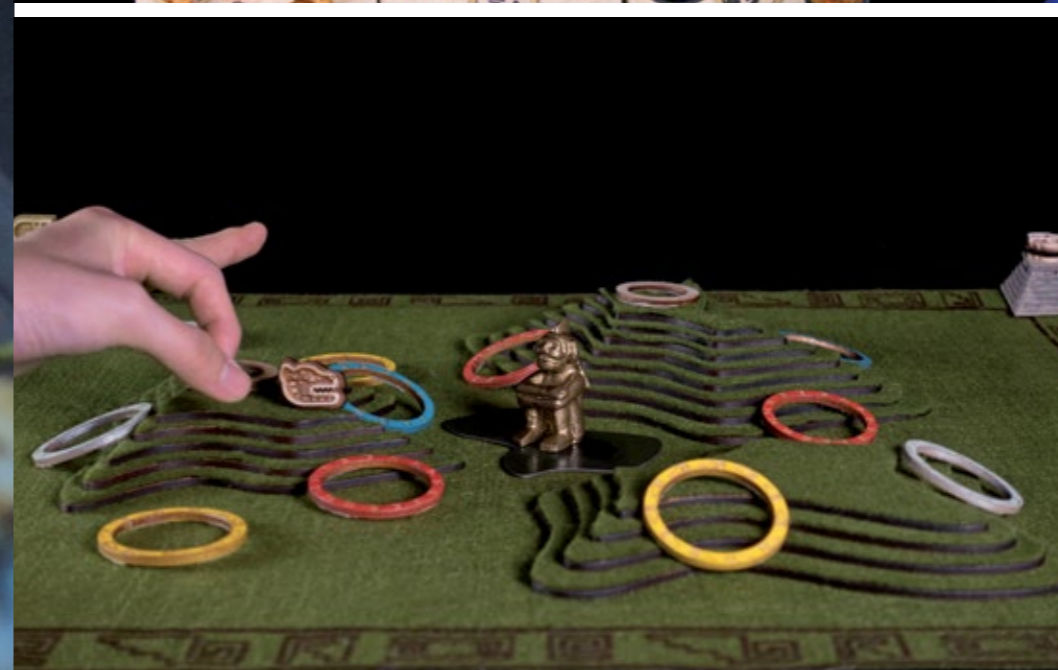
David Ng, Choo Yuan Jie



The 18 levels of hell

The 18 levels of hell is a game where players experience the horrifying punishments in hell, the realm of the dead in Chinese mythology. Players in the game are Sinners who navigate through the 18 levels of hell to repent for the sins they committed, before earning the chance to reincarnate.

Rachel Tan, Valeska Tan



Sacrifice to the gods

Sacrifice to the gods, a game of both strategic flicking and luck. Players traverse through the playing terrains as tribes, conquering opponent settlements as they challenge to gain the most blessings from the gods.

Lester Kum, Lewis Ten

DIY AR interface

Platform Leader
Dr. Clement Zheng

In this design platform, students explored fiducial markers and computer vision as a material for tangible interactions. Students then directed the insights from their exploration to develop tangible interactive experiences for a specific context. Inspired by the constraints imposed by the COVID-19 pandemic, these tangible experiences are deployed in a DIY fashion.



AruControls



AruControls connects DIY physical modules to a digital action, such as a keyboard press. The physical modules are made with fiducial markers, which enables the detection of a physical interaction (like the push of a button) using computer vision. When detected, the computer will respond accordingly.

Carina Lim, Choo Yuan Jie, Prasanth Kumar

Stickibeats



Stickibeats is a DIY AR kit to make a musical toy via cardboard interface. Children pick coloured stickers (fiducial markers loaded with music samples) to place on the toy wheel. As computer vision detects the unique markers, physical play is translated into musical beats and visualisation on the phone.

Chua Zixin, Kianne Lim, Lim Shi Yun

Everything a toy

Platform Leader
Donn Koh

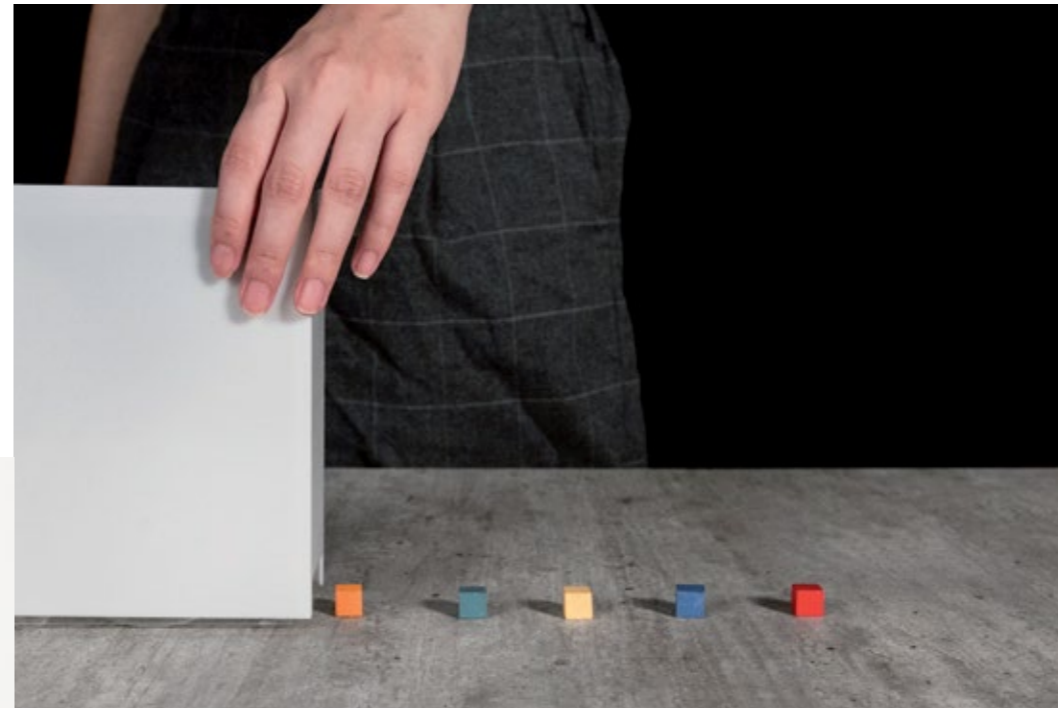
By obsessively taking inspiration from the format and properties of toys, students invent new objects and solutions that embody distinct imaginativeness, plausibility, and real market value. The works of this platform are surprising, and bring loose, playful ideas to a mature conclusion.



Mönchi

Inspired by the playacting property of toys, Mönchi is a friendly companion that coaxes children to eat unfamiliar foods. Afterwards, it functions as a lid to an airtight lunchbox, keeping fingers and food clean. With Mönchi, parents can single-handedly make mealtimes more effortless and fun.

Gabriella Edith Tan, Feng Guozi



Kolormatik



Kolormatik re-imagines colour picking through the lens of toys. By exploring surprising and satisfying attributes afforded by toys, Kolormatik enables users to generate random colour palettes on a whim. Kolormatik hopes to showcase how child-like fascination can open up new ways of seeing the world.

Lucas Cheng, Chua Zixin

Orbit



Inspired by the properties of toys, Orbit is a manual scent diffuser that affords a physically satisfying and visually immersive way of setting up the diffuser. Alongside its easy-dispense bottle, one is able to coat scented oil over a large surface for maximum diffusion with ease and satisfaction.

Colette Chan, Ho Yi Jing

Textile: Coded patterns

Platform Leader
Grace Tan

This platform explored textile as a relational material encoded with meaning which functions beyond the ornamental to present new modes of thinking, making and engagement. Students were required to develop a set of textile experiments and a final work that is reflective of our contemporary condition and environment through the use of material, construction method or pattern.



Loop

Loop is an interactive textile that activates light and sound when stretched. Conductive thread crocheted within its stitches translates changes in tension into resistance and can be used to trigger a light to dim down on Arduino or a sound file to play on p5.js when a circuit is created.

Vivien Tan, Nysha Tan

Kumihimo+



This project rethinks the possibilities of kumihimo braiding, by working with shapes, materials and colours. It instils the spirit of innovation that breathes new life to the art of Kumihimo.

Siti Hana Binte Amran,
Donaven Tan



Beauté Naturelle



Developed mainly through letting nature take its course, Beauté Naturelle embraces the beauty of irregularity. The traditional method of hand sewing using cotton threads with the unconventional material of orange peels serves to create a new form of sustainable textile.

Celine Chan, Sarah Tham

Everything is COVID

Platform Leader
Donn Koh

By obsessively taking inspiration from the way COVID-19 shifts our interactions with objects, spaces, interfaces, and people, students invent new objects and solutions in our lives that embody distinct imagination, plausibility, and value. The outcome may or may not need to address the COVID-19 pandemic, but it will be imaginatively inspired from it.



O-Case

By creating a case that can store, present and give the oranges gracefully without direct contact, O-Case allows us to preserve the act of exchanging oranges respectfully and safely amidst the COVID-19 Pandemic that has hindered our touch.

Ye Jiajie, Siew E Ian, Ashley Tan

Opal

Combining the joy of catching bubbles with the action of sanitising our hands, Opal brings an air of surprise and fun amidst COVID-19, seeing the disruptive preventive measures of everyday life not as obstacles, but as sparks for joyful possibilities.

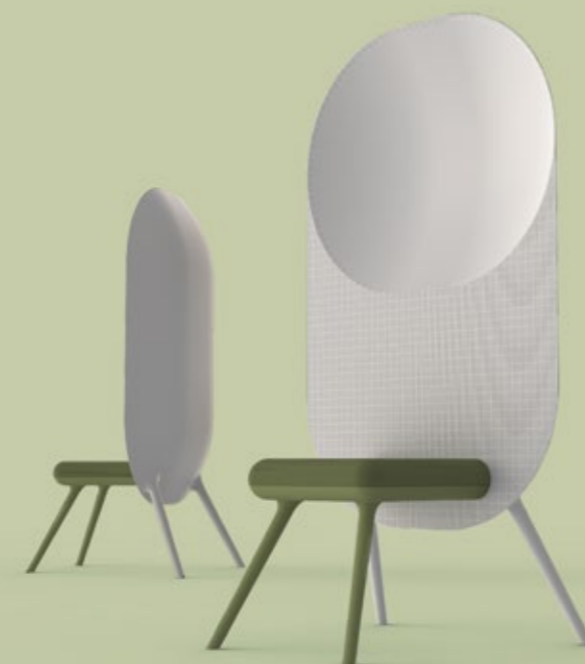
Gui Xixian, John Marie Tan, Ho Yi Jing, Edwind Tan



Loud Whisper

The quality of our conversations has not been great with the restrictions of COVID-19. With the rules of social-distancing, we strain our voices to be heard thus losing our privacy in public. Loud Whisper strives to bring back the comfort and privacy of personal conversations in a safe manner.

David Ng, Wong Eng Geng, Kwa Li Ying, Jiang Wanní



My Dyson

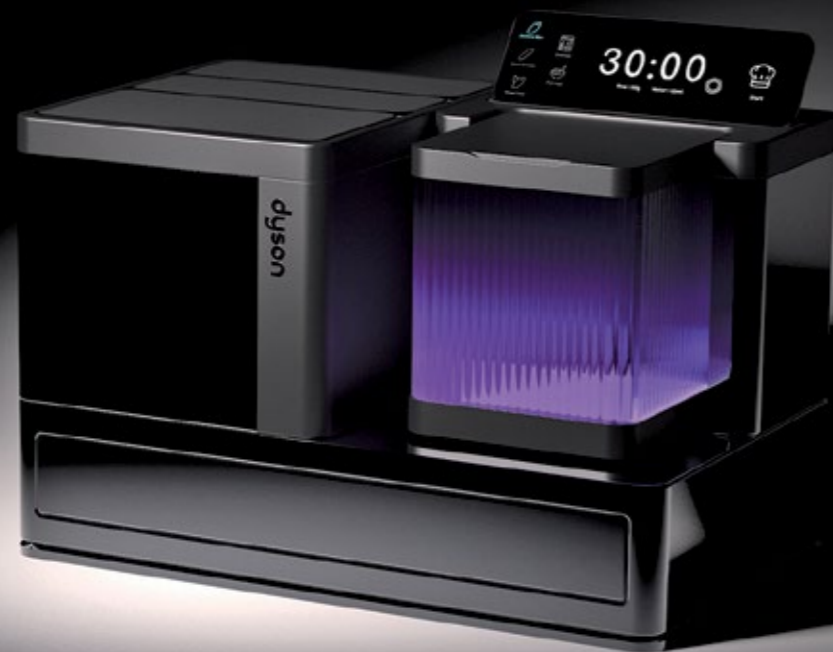
Platform Leader
Martin Danzer

This platform studio analyses the Brand and Product Development of the brand Dyson. Dyson products handle air or vacuum utilising the patented cyclone technology as the main functional principle. New product concepts shall be identified which either extend the brand or the product range. Engineering driven innovations are highly appreciated as they will fit into the company spirit.

Dyson R1 rice cooker

R1 emulates the enduring and innovative reputation of Dyson while respecting Asian culture. It demonstrates the art of cooking rice with a cutting-edge stirring mechanism, introducing the optimal air-to-rice ratio. With this procedure automated, enjoy Michelin-starred rice in the comfort of home.

Aaron Chooi, Charlotte Ho, Ko Na Yeon



Dyson Vortex



To blend efficiently, you need food off the surface. Comprising a non-stick vacuum chamber with high frequency vibration, magnetic blades and self-cleaning mechanism, Dyson Vortex removes the mess in the blend, creating a tasteful and seamless experience.

Cindy Evangeline, Jeraldine Low, Ong Wai Boon

Dyson Ultrasonic



A revolutionary leap in reliable, efficient home farming. Innovative airflow engineering shapes nutrient mist into gentle turbulent currents that weave through and permeate dense roots. Our newly developed Dyson Hermetic Seal ensures complete system isolation from pollutants during daily harvests.

Foong Haw, John Tay, Samuel Koh, Rachel Tan

Product design +

Platform Leader
Song Kee Hong

Good product design often requires more than stunning forms and emotional engagement. This module guides students through the attributes of usability, UX, aesthetic coherence and cross-disciplinary approach in the product design process.



Luft



Luft is an air cooler luminaire that redefines the archetype of traditional coolers. With a vertical airflow form and hygroscopic filter, Luft is able to triple the cooling performance of conventional coolers in humid regions. App integration allows the control and monitoring of Luft seamlessly.

Nathaniel Ng

S+: Making water coolers cool again



S+ is a response to the worldwide closures of water coolers due to the pandemic. It features a spoutless design and a gap between the drinking module and the sink to ensure a contactless experience, while its gridded sink minimises backsplashes and self-cleaning capabilities ensure it remains germ-free.

Ho Yi Jing



Iris



Inspired by Lego building blocks, Iris is a modular camera system optimised for media content creation. Equipped with the attachments needed by a modern creator, Iris ensures a smooth filming experience by focusing on compact equipment storage, battery longevity and seamless equipment transitions.

Edwind Tan



Product design +

Platform Leader
Song Kee Hong

A product and experience design studio to create unique products with well integrated touch points to enhance user experience. Module consists of usability, UX and form development workshops as learning scaffolds. Structure included multiple peer-driven critique sessions and industry feedback to stimulate independent learning.

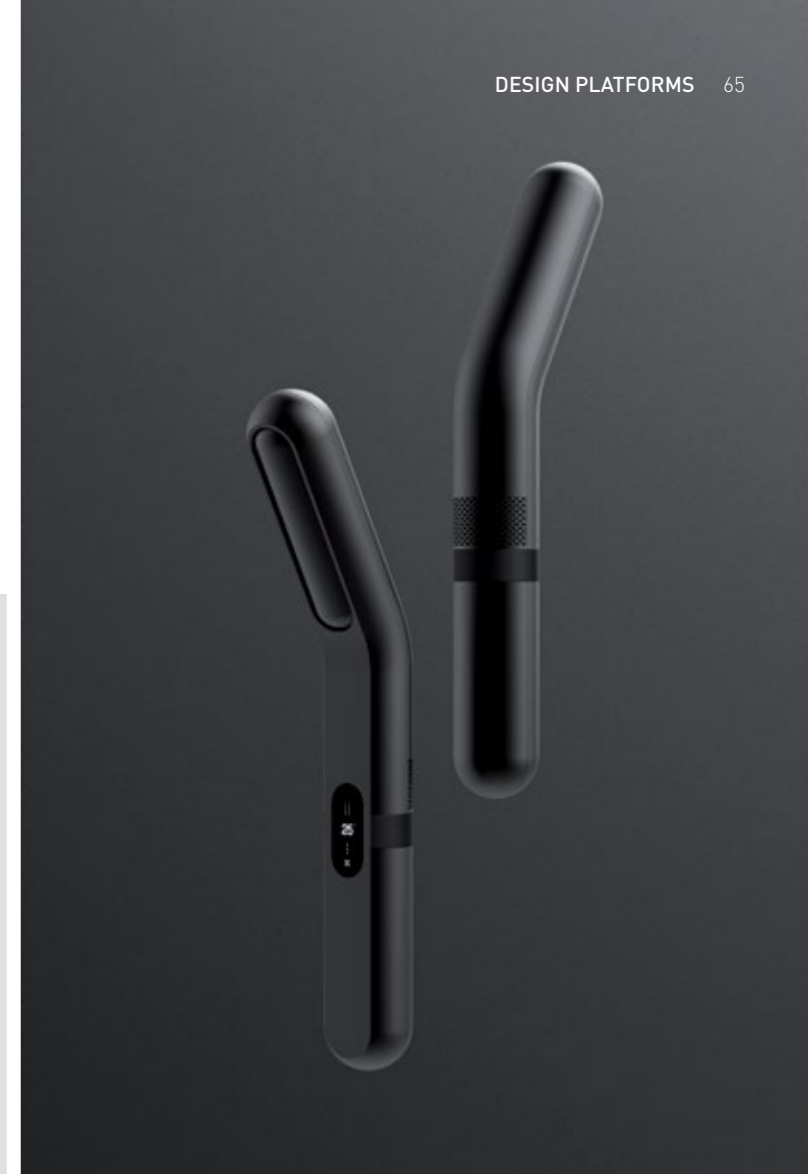


Tilt



Tilt is a hair drying system designed to aid people with limited arm mobility. Its ergonomic hair dryer is made to reduce arm and wrist fatigue, while the dock provides a hands-free feature with vertical adjustment and 360° rotation to assist users in drying parts that are hard for them to reach.

Siew E Ian

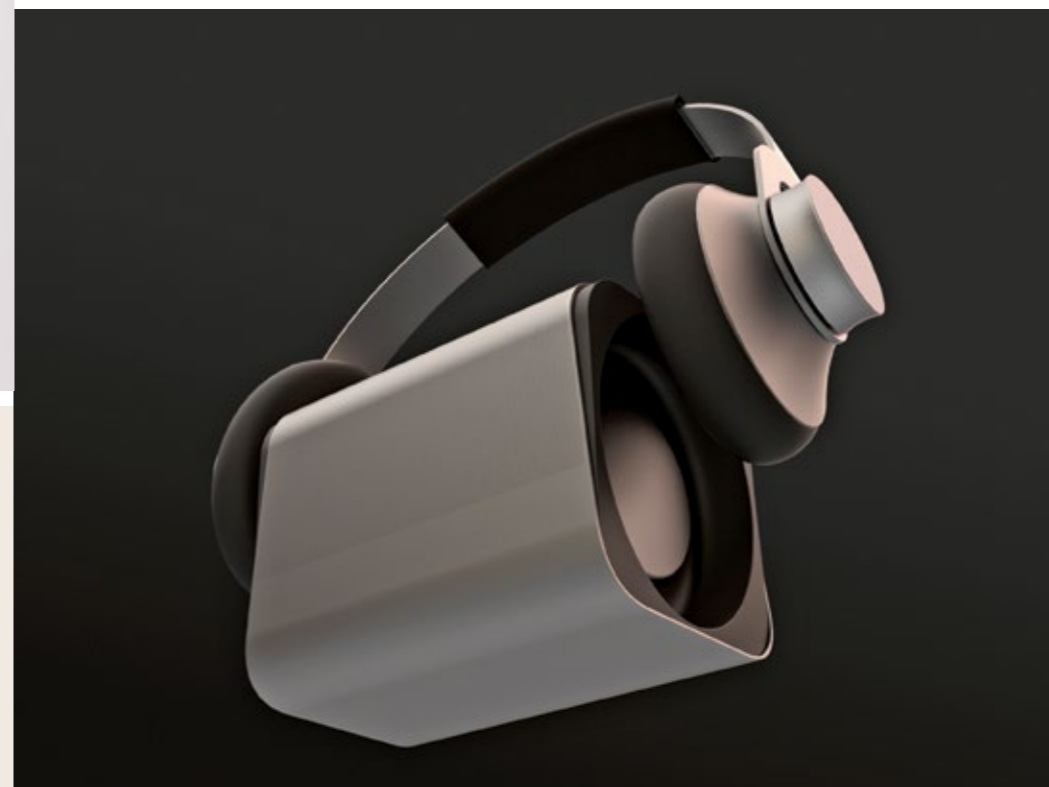


Duo



Duo is an integration between a headphone and a speaker. It is portable, allowing the user to use it for different occasions.

David Ng



Dremel +



The Dremel + resolves the ergonomic constraints of the existing dremel tool, whilst incorporating relevant technological possibilities that enhance user experience and efficiency.

Cao Minh Huy

Designanalysis

Platform Leader
Christophe Gaubert

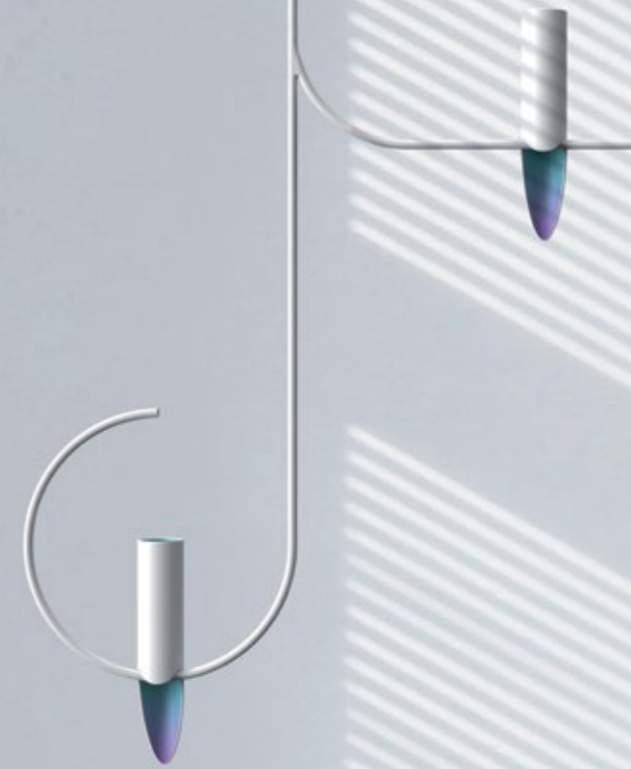
Teaching Assistant
Poh Yun Ru

This platform is the opportunity for the students to elaborate and define their style as a designer, and to apply it to a collection of products. Based on a methodic analysis of their personal universe, the students have to settle the principles of a design language, then to apply it to a full range of products for the home environment, from flat printed items to more complex objects.

The kitchen cabinet

This collection of kitchenware creates an opportunity to discover the characters and stories that exist in seemingly mundane everyday life. An opportunity for amusement in the simplest of places to fluff some lightness into our daily activities.

Yong Zhen Zhou



Aspire



Inspired by the mystical elegance of birds, this ceiling lamp plays on a virtual aura of light, as if landing on a fictional branch.

Loh Chu Wen

Alir



Signifying flow in Indonesian, Alir presents a collection of outdoor products, as this portable lamp, which encapsulates a poised balance between thoughtful adherence and careful deviation from conformity.

Cindy Evangeline



The shape of colour

Platform Leader
Christophe Gaubert

Teaching Assistant
Poh Yun Ru

Colour is the last thing designers consider in a project, yet it's one of the first elements that catch consumers' attention. To put subjectivity aside, this platform proposed a reverse process, taking colour as a starting point to design a product. The students had to reveal the DNA of specific tones they chose, weaving arts, history and semantics until identifying an evident function and building a precise art direction to embody the colour into a collection of meaningful objects.



Mother (Red DIC-2488) <

This deep red of strength and warmth is like a mother whose protective nature is materialised as a home security system. Her senses take on the form of cameras, sensors, and sirens that surround homes. She is always there, generously welcoming and fiercely protective.

Gwen Pang, Benjamin Chen

Hushed (Pink DIC-2011)

The Hushed collection is an embodiment of a shy, tender, and gentle colour. The lamp's warm and endearing glow peeks under its veil, evoking a hint of nostalgia that lies beneath the colour.

Clarissa Edeline Yu, Cao Minh Huy



Umile (Blue DIC-20) <

The Umile collection comprises home objects behaving like the perfect background for the stars placed in it. A stage for the mundane things which deserve the limelight.

Loh Chu Wen, Rachel Sim



Object, making and meaning

Platform Leader
Patrick Chia

As designers, we are motivated by the desire to create, to will an idea into existence. Through a process of acting, making, contextualising, benchmarking, measuring, adjusting, reflecting, reframing and remaking, we aim to create contemporary design objects to have something relevant to say, to make a connection, to behold.



Serial Daydreamer ^

A surreal collection of soft foam objects. Designed to fill up a gallery space, these oversized objects are graphical and unexpected. Consisting of a door, a stool, and a speaker, each interaction is unique and memorable, transporting the users to a different dimension.

Alexandra Arguelles

Wonder ^

A collection of objects created out of a sense of curiosity and embracing ambiguity.

Siti Hana Binte Amran

Please have a seat

Platform Leader
Patrick Chia

"A chair is a very difficult object. A skyscraper is almost easier." Mies, . R. L. What is a chair? Is it something to sit on? Or is it an invitation to sit? Sometimes it exists in pragmatic form, and others, borders craft and art. More often than not, it is an object that reflects the aspirations of society and technology. Our students were tasked to design a chair relevant to our time.

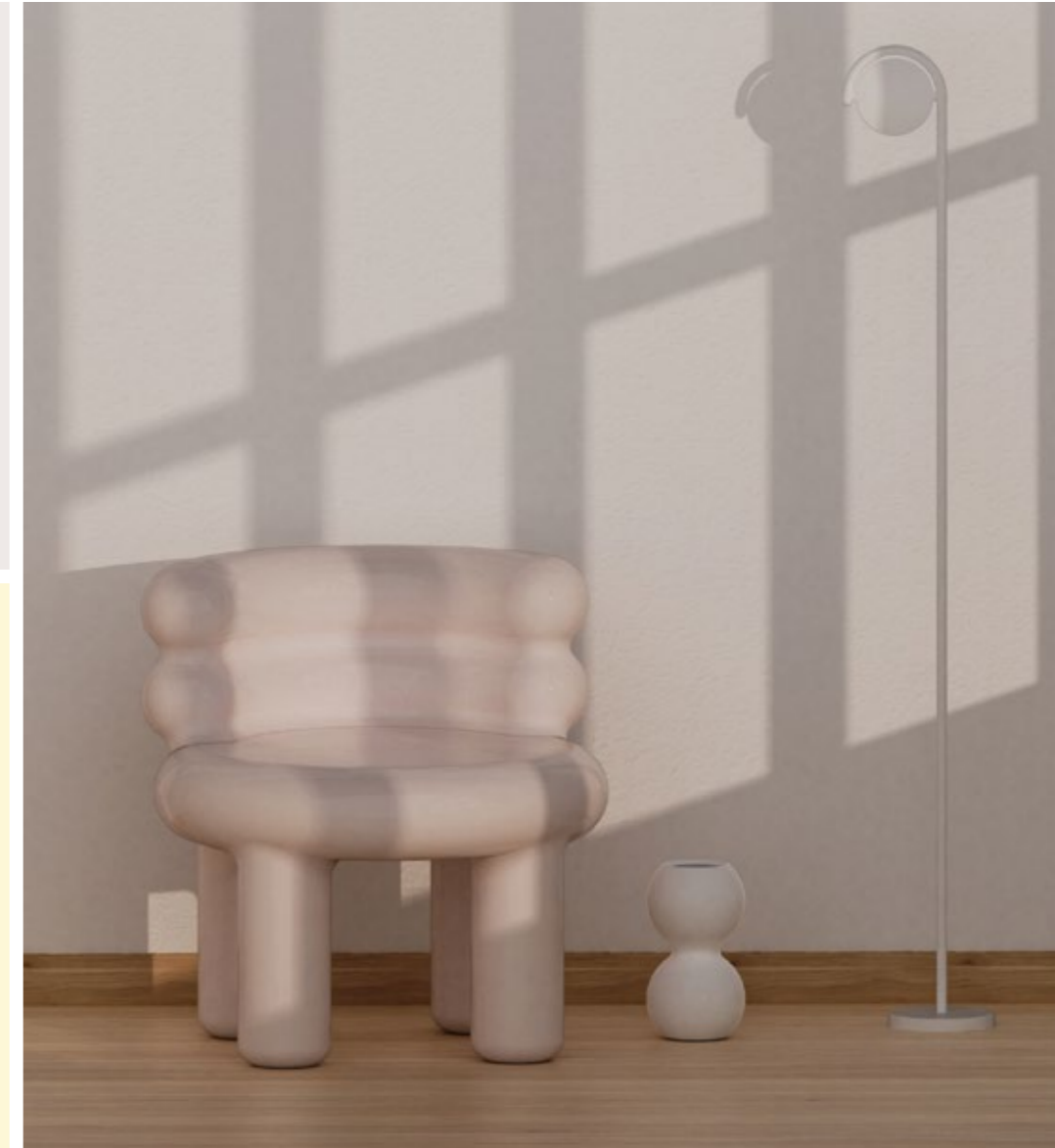


Creme



Ceramics are commonly found in pottery, tableware or sanitary ware, but rarely in furniture. Creme explores the structural potential of ceramics in a chair. It is designed to be as thick as possible to prevent breakage, with rounded surfaces so it can be slip casted. Its bulbous form defines and softens any space it is placed in, whether private or public.

Emeline Ong



Hollo



With its bold form and joyous colours, Hollo is here to bring a smile to your spaces. Hollo takes its aesthetics from the limitations of its manufacturing method, rotational moulding, which gives it a child-like quality, giving people a refreshing sense of nostalgia and familiarity.

Siew E Ian



The very chair



Ordinary enough to blend into the room while quietly uplifting the atmosphere. It gradually exudes liveliness and gaiety. Constructed through injection moulding, it is comfortable, weatherproof, lightweight and stackable. The versatile monobloc works universally and holds its own on sophistication.

Ye Xiaoxuan

Furniture stories

Platform Leader
Yuh-Hunn Wai

To design a chair for a parental figure. This platform is about design improvisation, cheap and cheerful hacks and playful making. This playful making will be in service of fleshing out the charming quirks, endearing rituals, quixotic motivations and also ultra-practical functionalities of him or her. The result will be a piece of intimate design that is an interactive portrait of the Parent.



A Chair for Anna

Always looking for interactions online, her mum fails to have quality family time, forgetting how everything has a time limit. Using her mum's back as a time-telling canvas through the disappearance of her silhouette and time on the back, this chair becomes a powerful reminder of finite family time.

Aileen Ooi, Ye Jiajie



The Receipt Chair

As acts of service to family members have become his form of self-fulfilment, the overdoing of services to family members has also resulted in added stress and exhaustion. Inspired by the usage of receipts in his former workplace, the receipt chair limits his acts of service by printing only what is sufficient for him.

Claudia Goh, Isaac Lim



Feng Shui stool



Feng Shui stool is a portrait of Mdm Neo Kee Buoy, whose daily ritual starts with sitting on a drum and perusing 4D numbers. The stool embraces her character quirks and encourages her to be the best version of herself by tapping into her rich inner world of 4D numbers.

Chong Zi En, Kianne Lim



Designs for Ikigai ecology

Platform Leader
Ash Y.S. Yeo

Designs for meaningful living question consumer habits of scalable social impacts. What values do designers-as-instigators draw out of precious materials, human attention and ideas of being? Slow movements vs object milieu-spins of stylist designers, engage sensibilities, curiosities, reframe intelligence, stretching idea-object chains of human UX, what then is a wealthy city?



Ge-tse

Ge-tse is a gift kit built with dear ones, gratitude memories gather, Moai scenes spark as poetry we chat... warmth of Fika, Gökotta, bit by bit added never so complete, home is being found.

Ong Kah Min

Irama

Upcycled furniture adopted into family tribes, can be improvised socially to embrace Moai connections, for communal Gotong-Royong rituals in leisure, music play, weddings and other customary rites, adding harmonious Ikigai spirits of Yugen, Toska and Wabi, bringing joy to our modern everyday lives.

Syafiq Bin Rahim

Kalos

Views through the kaleidoscopic cups slow transient beauties of our world into serendipity and wonderment. While enjoyed with dear ones over tea, we discover lights of unspoken emotional landscapes, deepening our relations.

Gabriella Edith Tan



Drawn to design

Platform Leader
Olivia Lee

Drawn to design returns to the tactile, messy, mark-making, laborious, rich, physical process of drawing — as the wellspring of originality, engine of observation, ideation and problem-solving for design. Students learn to generate visual languages based solely on their abstract drawings, then explore and translate them into design collections.

Infection

Infection was inspired by a series of paintings done during this platform that guided the formation of a personal design language. It led to a discovery of the beauty and the uniqueness of infections and fungus which grows on ordinary objects making them even more extraordinary.

Mok Zijie



Fuse

Inspired by the branching and reconnecting of slithering, snake-like forms, Fuse humbly explores the flexibility hidden within robust structures through a series of three versatile, modular household objects.

Cindy Evangeline



Squigg

A collection of powder-coated aluminium furniture pieces, Squigg demonstrates refined playfulness through extracted qualities of simple curves that are expressive and free. Each embodying a personality of their own.

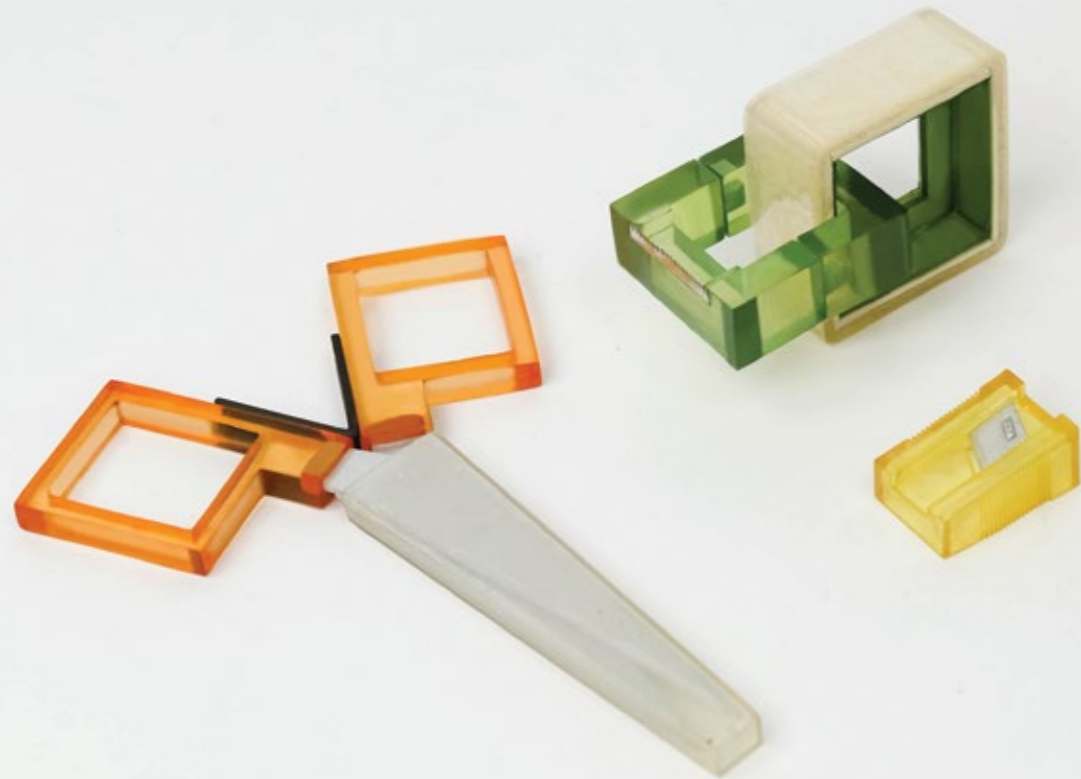
Koh Bei Ning



Fictitious forms

Platform Leader
Olivia Lee

Students are tasked to invent an imaginary premise and design a collection of utilitarian objects uniquely suited to that world. By applying their industrial design skills in the creation of diegetic objects (fictional design props), students demonstrate their ability to: reframe problems, interrogate context, extrapolate from research and communicate through sophisticated product storytelling.



Inordinary stationery

A collection of Inordinary stationery, in a world where circles are sacred and not permitted to be man-made. To replace the circles present, tape is dispensed using a turning mechanism, pencil sharpener shaves in a linear motion, and a 'v' mechanism is adopted for the pivoting of scissors blades.

Cynthia Chan, Emeline Ong, Tan Kah Kiat



Achromatopia



Reimagining instinctive traffic signals for a colourless world. The traffic light uses a rotational stencilled casing for routine signalling, the Moiré cone uses one's own movement to attract attention, and the gradual speed bumps increase in visibility and physical intensity to slow vehicles down.

Jonjoe Fong, Mervyn Chen, Clarissa Edeline Yu

Of sherds and sounds

Platform Leader
Wendy Chua

As design archaeologists, the students immersed themselves in the NUS Museum collection, exploring rituals of old through ancient artefacts, and imagining “fossils” of our present life uncovered in AD 3000. Future worlds are extrapolated not from the present, but from cultural histories. Asking: How might we excavate meanings from tools and rituals of the past to design artefacts for speculative futures?



Columbarium of tomorrow ^

In the near speculative future, land scarcity threatens the columbaria. Urban sculptures designed to encourage weed growth are placed in Singapore’s nature parks. Loved ones are encouraged to return and perform the ritual of clearing the weeds as a form of paying respects. The memorial changes with time, preserving bonds, remembering the forgotten.

Chua Zixin

Bobi: The not-so-smart companion >

Bobi is a robot companion that behaves like a pet. In a speculative future where pandemics are common and isolation is mandatory, Bobi provides safe companionship to isolated individuals, serving not only the practical but also emotional needs of the user.

Edwind Tan



Mello: A whistling aid artifact <

Inspired by old whistling communication techniques, Mello is a whistle aid device that would be distributed to everybody to communicate and signal their need for help and rescue situation; in a moment where there is no electricity and/or in times of disasters.

Chong Zi En

Bad design

Platform Leader
Tze Lee

Bad design, while seemingly counter-intuitive, often contains the spark of originality. This platform substitutes traditional problem/user-centric design, with a process (or non-process) that is counter-intuitive. We search for the bad, ugly, inefficient, absurd, dangerous—things that eschew the definition of 'good taste' in design—in order to find starting points for ideas that are disruptive and uncomfortably innovative.



Nest plant assistant



This project explores the possibilities afforded by tapping into plant senses and reimagines how a company like Nest and Google might harness the smarts of the Google assistant by combining the bio-sensing capabilities of plants into a smart-home product befitting their future product lineup.

Isaac Lim

Bus stop of conversations



The Bus stop of conversations is a dummy bus stop with an interactive 'advertisement'. It is used to facilitate conversation between the cosmetic surgery patient and their inner circle. The simple act of waiting for something becomes the drive for a dialogue to develop.

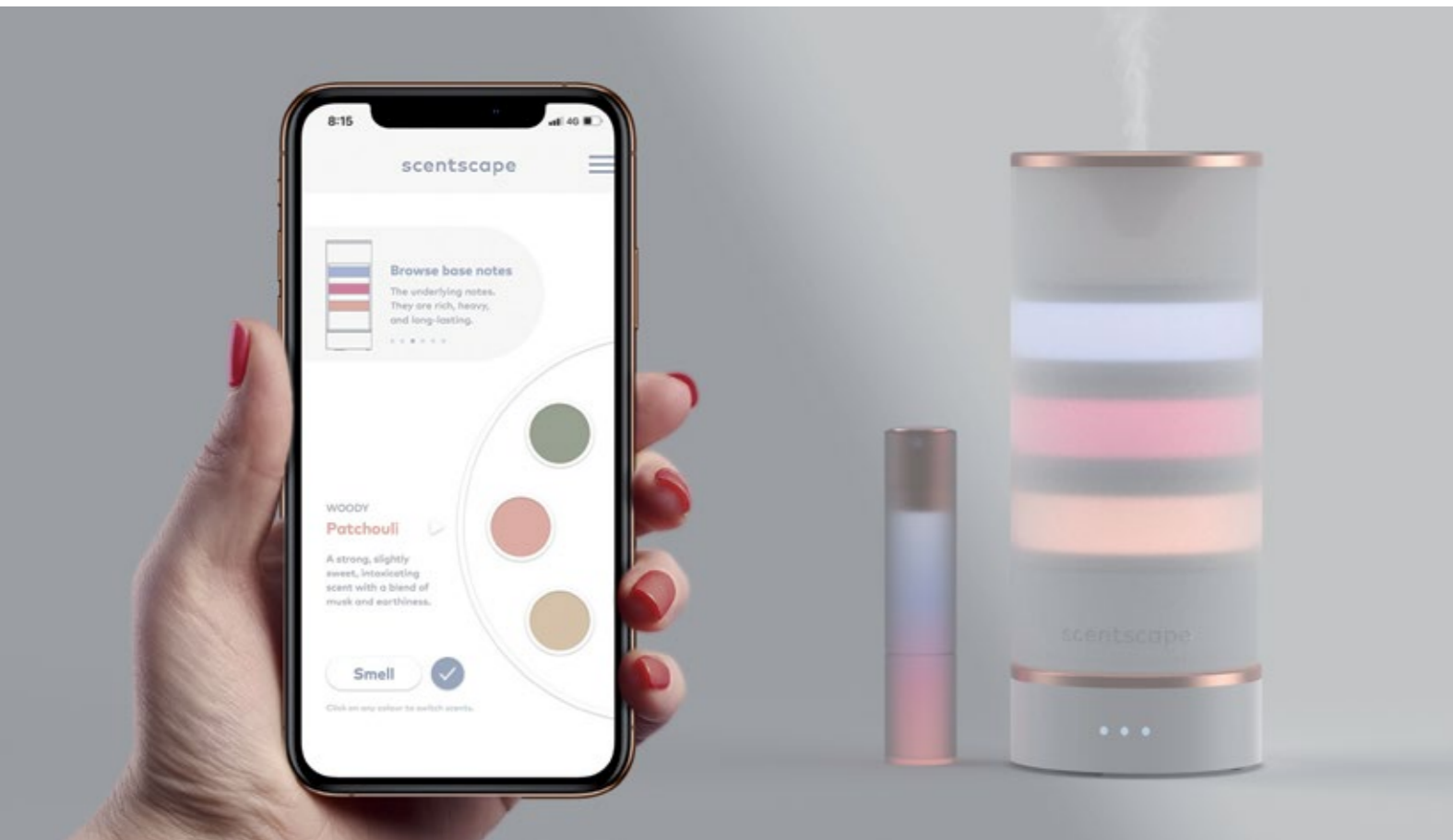
Wu Junyi



Affordances & boundaries

Platform Leader
Dr. Yen Ching-Chiuan

COVID-19 has influenced the way we interact with our surroundings, where intuitively designed objects are now disabling us. This platform teaches us to heighten our sensitivity towards user behaviour, identifying needs based on their physical capabilities, goals and past experiences and apply human centred design principles to create objects which dictate their intuitiveness surrounding a given boundary – objects with clear affordances in post-COVID-19 era.



Scentscape

COVID-19 has forced most shopping online, but scent persists as something that should be experienced in person prior to purchase. Scentscape, a smart fragrance mixer, enhances your perfume selection process by marrying emotional intuition with a system that uses layers and colours corresponding to industry standards.

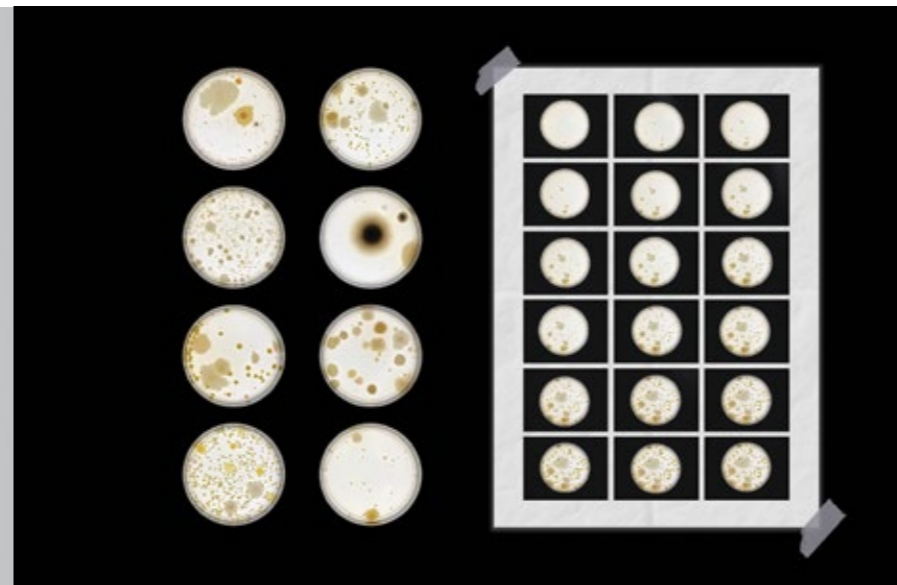
Karen Gan



Gridcity

Gridcity reimagines visual cues for a recovering society in the COVID-19 pandemic. Through the use of Computer Vision to capture data from tools such as a Kinect, Gridcity processes those data into tangible visualisations projected on the floor in the queue, and displayed online.

Choo Yuan Jie



Beyond the unknown



Beyond the unknown makes the invisibility of bacteria visible. Collecting bacteria samples from everyday things—hands, and other high-traffic surfaces—in an attempt to create an unconventional series of portraits of the city's complex ecosystem.

Claudia Goh



Improving everyday life

Platform Leader
Dr. Christian Boucharenc

Teaching Assistant
Tan Sixiu

Improving everyday life starts with discovering a problematic situation in our daily life. The student develops an acute sense in observation and problem definition, to devise a design solution or creative alternative to improve an everyday or ordinary day encounter. It presents an opportunity for students to consider people behaviours, mindsets, and lifestyle habits. The design outcome can be a new product, a built environment or digital application.



Five more ways of savouring Nutella

A case study inspired by the primitive behaviour of licking of the knife after applying Nutella. Through reiterations, along with inputs from a professional pâtissier, a series of five handcrafted crêpes with geometries specifically curated to elevate the experience of tasting Nutella was achieved.

Ong Wai Boon



Improving everyday sleep

Eclipur enhances our sleep experience through a sensorial and holistic way. Focused on the senses of hearing, breathing and sight, it features a built-in nebulizing diffuser, speaker and breathable lights. Compatible with smartphones, it can also track our sleep cycle.

David Ng



Glee

Platform Leader
Winston Chai

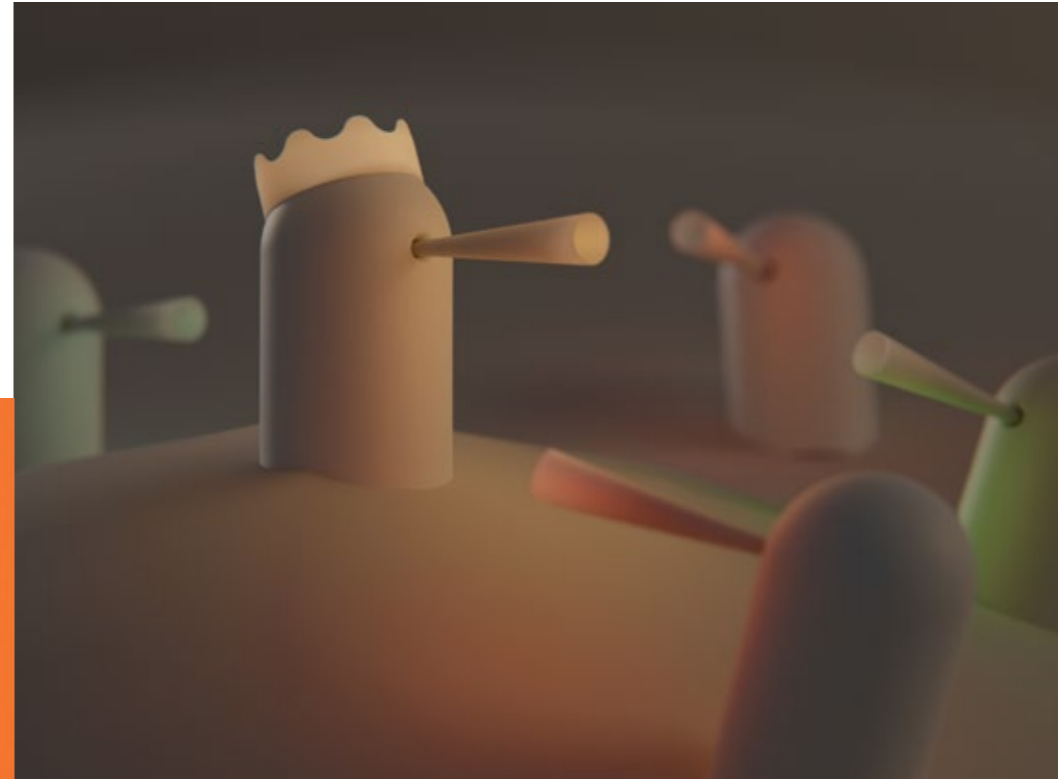
This studio challenges students to find opportunity statements, rather than problem statements, to enhance what already is a positive, joyous experience. Students will inquire on emotional experiences (in this context, joy) and through creativity interventions, design an object or an experience that catapults the state of joy to glee.



Maple pod

Maple pod enhances the act of pouring maple syrup to spark joy in dressing then eating the pancakes. The ability to burst the pod elevates a sense of satisfaction and accomplishment one gets, akin to placing that last piece of jigsaw to complete a puzzle.

Chantel Loh

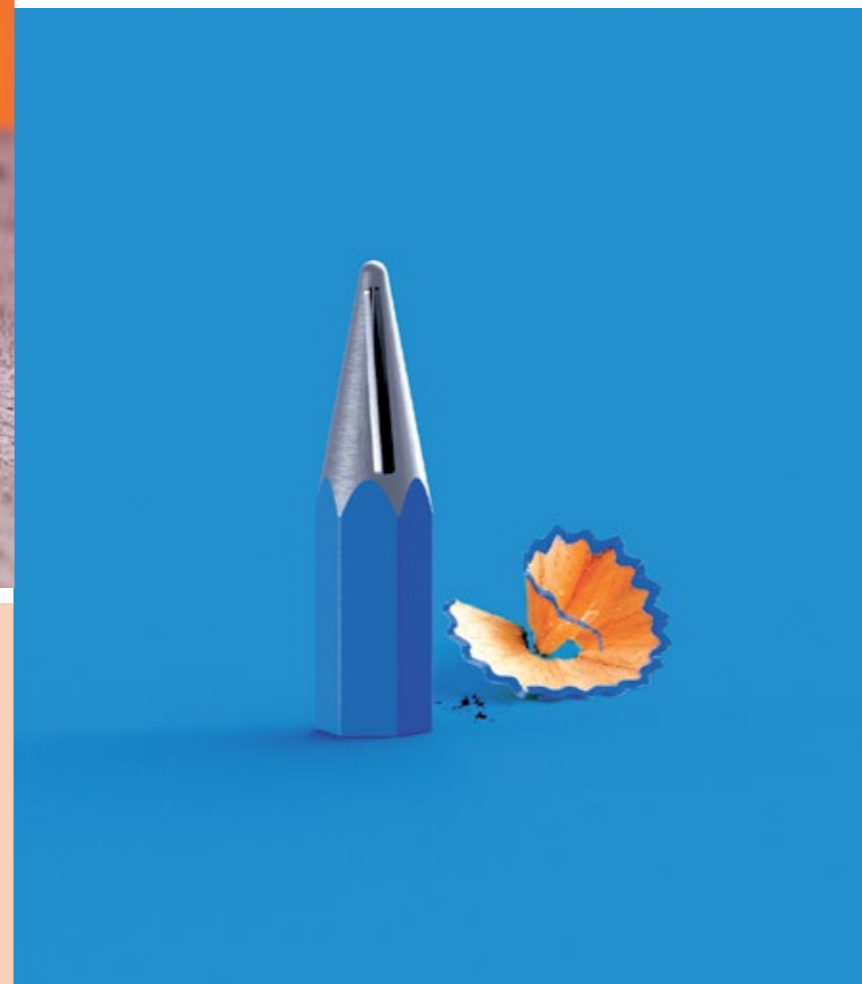


The attention hat & the belonging horn



What happens when party objects like the party hat and the party horn are paradoxically elevated by the spirit of celebrations? The attention hat accords its wearer the joy of being in the centre of attention whereas The belonging horn tangibilises the joy of being part of a group activity.

Feng Guozi



If objects were cartoons



Sharpy is inspired by how cartoon characters crash through walls, leaving an imprint of their silhouette in the aftermath. The form draws attention to the relationship between pencil and sharpener, a playful simplicity that is literal yet unexpectedly joyful.

John Marie Tan

One meatless day per week

Platform Leader
Wendy Chua

As the world grapples with food insecurity, the students investigate future foods and agritech systems to respond to Singapore's 30 by 30 target—to produce 30% of our food needs by 2030. Each student prototypes a home farming system that can sustainably produce nutritional supplements to one's diet. Speculative food concepts explore a future of entomophagy when eating insects is normalised.



Phlora

Phlora is a tabletop hydroponics system that enhances the dining experience. Its bowl-sized planters make the farm-to-plate process clean, convenient and convivial. Building upon the concept of social eating, interaction with food becomes more inviting and the popiah-making ritual naturally follows.

Celeste Loh



Habitat

Habitat is a modular aeroponics system that proposes new ways of sustainable living—with seven different planter units, this farming system allows for customisability within this compact 5 by 5 grid. With smart sensor capabilities, misting nozzles in the reservoir water the plants at regular intervals, allowing a constant supply of microgreens for a weekly cycle.

Valeska Tan



Kettopat

Kettopat is an embodiment of a double take, inviting cognitive simulation for dementia patients. While it embraces familiarity at first glance, new ingredients such as kelp, meal worm orzo pasta and microgreens come together to create a deep umami flavour, all in one soft and creamy bite.

Shanel Han



Surfaces beyond the surficial

Platform Leader
Grace Tan

The engagement with material surfaces is intrinsic to the practice of product design. Surfaces tend to be perceived as the superficial. But the concept of surfaces goes beyond the physical - what if surfaces have depth or are zones of transformations? In this studio, students are encouraged to engage with the materiality of surfaces and explore the relationship between humanity and surfaces.



Vessels of time

Vessels of time is a DIY recycling kit that explores the craft of meaningfully repurposing spent coffee grounds into a bioplastic material. Each vessel or container captures the beauty of the coffee grounds as unique surfaces that tell the story of its transformation through time as seen from its varying colours and textures.

Joel Teo



Pulpcorn

Bringing new perspectives to what people commonly see as waste, five grades of paper with varying textures are achieved from using corn husk as a material. By latching on to its self-adhesive properties when water is applied, they can be used for various packaging purposes.

Tan Kah Kiat

Agak agak

Agak agak is an experimental exploration book series that focuses on agar agar and combines common natural ingredients with it to make uncommon materials. Raising the question of the ability to explore further into unconventional surfaces that are not limited to the common materials we see around us.

Mok Zijie



Reimagining the unboxing experience

Platform Leader
R. Brian Stone

Teaching Assistant
Jennifer Lim

This platform focused on reimagining Instructions for Use (IFU) and the unboxing experience for three Eli Lilly pharmaceutical products — Kwikpen, Trulicity, and Cialis. Solutions may include a redesign of the product's packaging, IFU, or both. All solutions aspired to be transformative, communicate information accurately, and be useful and usable to its intended audience.



The adventures of Ella & Elliot

A series of interactive storybooks designed for newly diagnosed diabetic children and their parents. Through the use of storytelling and illustrations, the design transforms the usage of Kwikpen from one that may be scary and clinical to one that is friendly, comforting, and approachable.

Clarissa Edeline Yu

My humalog passport

Designed with ease-of-use and portability in mind, my humalog passport is a casing that keeps all essential items in one place, while the retrieval and disposal of the items remain as easy as a push or pull. By eliminating some of the hassles of diabetic management, the passport encourages users to 'journey on' in spite of their condition.

Loo Ziling



Audio box

The redesigned Trulicity box features step-by-step audio instructions and a single-gesture tracking system. It builds confidence through the reassuring instructions and graphics, and its presentation of a cohesive and hassle-free experience.

Huang Anqi

Moving brands

Platform Leader
R. Brian Stone

Teaching Assistant
Jennifer Lim

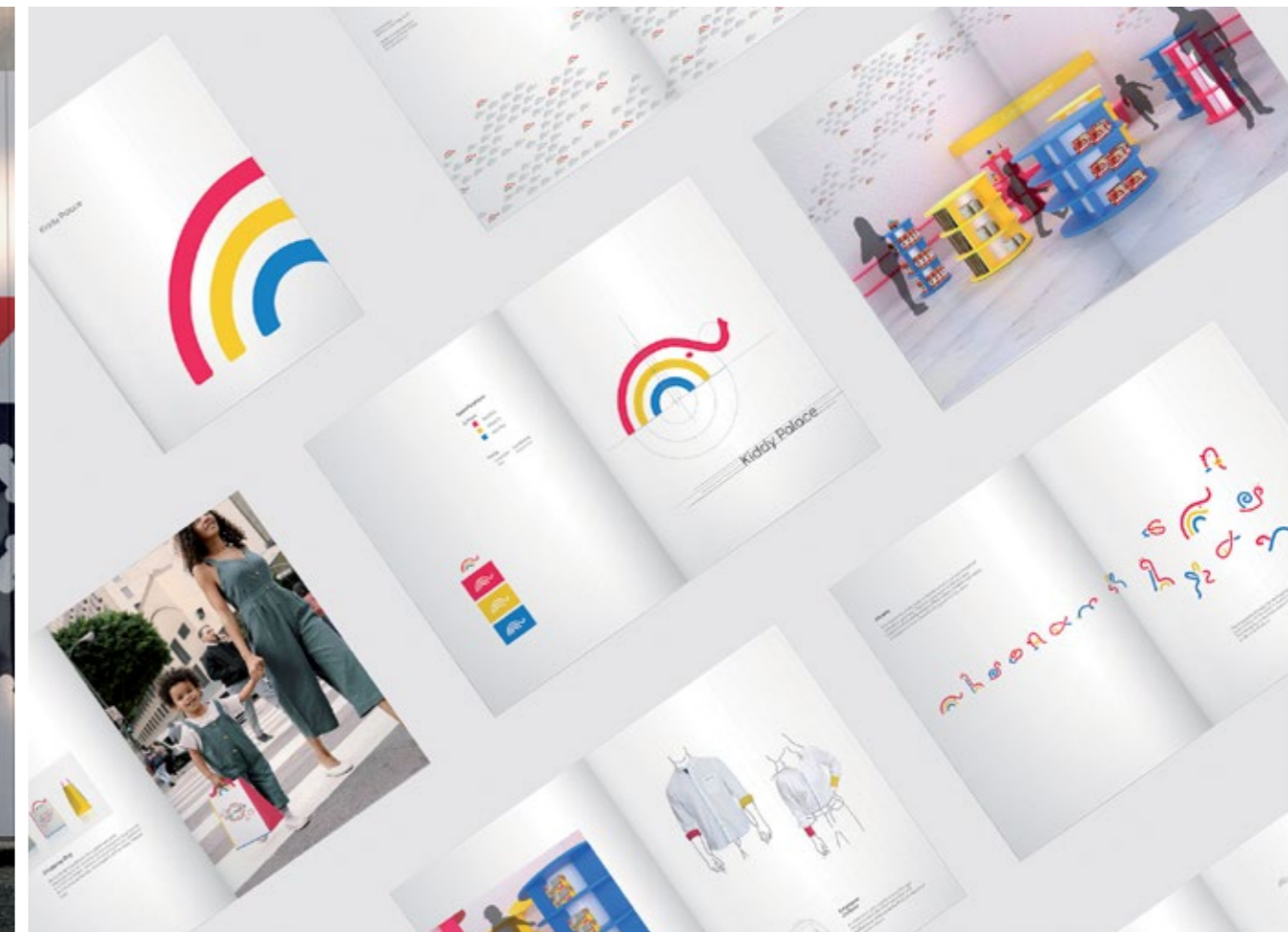
Students examined the process used to create identity programs through the development of a mark and visual language that tell the story of a brand. This was carried out in the context of an organisational rebrand. Students addressed ways of how to reposition an organisation or service through a comprehensive strategy and suite of applications inclusive of type, symbolism, colour, and narrative.



Singapore Postal Musuem

With the impending reopening of the Singapore Postal Museum, it is time for a new identity that better encapsulates the essence of the nation's first childrens' museum — dynamic and welcoming for children, yet grounded, as it maintains its reputation as a national archive for philately in Singapore.

Valeska Tan



Kiddy Palace

The reimagined Kiddy Palace logo embodies the fun and playful character of the children store. It features the kinetic and vibrant energy in bright colours and flexible lines, with the animal variations of the logo being brought to life through animation.

Saffren Choo



Tangible data

Platform Leader
Dr. Clement Zheng

In this platform, students investigated data as a material. We operated on the premise that representing data in more tangible and interactive ways will lead to alternative interactions and sense-making that facilitate how people explore a specific data set of type. We also critically examined the many technical and design challenges around designing with complex data and making them tangible.



Katalog. >

Katalog. is a series of 24 booklets that contain every product design Kickstarter project in 2017 (4563 projects). Its format affords multiple physical interactions to explore the dataset with each booklet's thickness representing the number of projects within and bleeds that display funding trends.

Ho Yi Jing



The Trumpet <

A newspaper series created from Trump's tweets, with six yearly editions. The opportunity to skim through his tweets yet appreciate each individual one. Headlines and titles feature his most used words while font styles correspond to the variables of each tweet. Discover the story behind his tweets.

Gwen Pang



.Show(); ^

.Show() highlights the individual uniqueness of programming languages by representing the same task using 50 different languages. By interacting with the website, code takes on multiple forms that feature different aspects such as length, form, time and similar aspects like commonalities.

Vivien Tan

Art ≠ Essential?

Platform Leader
Wendy Chua

How might we redesign museum experiences so the arts can remain relevant in a pandemic state of mind? By designing digital pivots and tangible experiences, the students reimagine museums as inclusive, participatory spaces for the arts. Through stakeholder interviews and participatory design methods, the students glean insights to curate, co-produce, crowdsource content for new museum experiences.



The museum of ordinary stories ^

We collate the stories of ordinary people and turn raw, intangible emotion into something more. Let your story inspire a song, illuminate common ground, and lend voice to those experiencing the same struggle. A shared anonymous space to be vulnerably honest, for the times we live and love and lose.

Karen Gan, Loo Ziling, Xavier Teo



Mü: The art of connection ^

Mü is an art initiative that brings art closer to the heartlands by empowering self-care and community care. Distributed through community mask vending machines, Mü's art therapy kits and its participatory online platform aim to evoke a sense of connection to self, others, and the environment.

Tan Ying, Xiao Jieying, Loh Chor Boon



Recite >

Recite showcases the stories of migrant writers through audio recordings of their original poems, allowing visitors to better understand their lived realities. Thus, Recite aims to give a voice to the migrant worker community, and advocate for writing as a form of therapy in the midst of a pandemic.

Jeraldine Boh, Aderes Chua, Lucas Cheng

How to build a wall

Platform Leader
Tiffany Loy

A wall is a boundary, buffer, physical surface, or a psychological barrier. It separates domains, dividing space, changing the trajectory of things physical or immaterial. If you were to build a wall in any way, and actually enjoy the process, how would you do it? The project encourages students to take on multiple approaches in developing a simple concept into a well-investigated project.



Float

This wall is an exploration of sculpting air with balloons as a medium. Its form is derived from the study of knots and combinations that allow for the most stable structure. The resulting tessellation can be made permanent through casting.

Emeline Ong



How to build a wall with light

How to build a wall with light explores the possibilities afforded by using light and perspective to blend both the physical and virtual. Physical structures serve as a platform for anamorphic projected layers, which are then used to reveal new spaces and volumes beyond the existing physical surface.

Isaac Lim



Lotus

Lotus is a series of tessellating facades that explores how a surface can interact with light as it alters its transparency through motion. A modular design that can be expanded indefinitely, with intricate moving parts providing both shade and sights.

Ong Wai Boon



Envisible cities

Platform Leader
Ash Y.S. Yeo

Design futures flow as milieu spins, along with complexes of time, changing global issues, contexts, shifting behavioural tastes, technocratic cultures, and economic opportunities. A designer as first a curious questioner, then investigator, commentator, curator and then editor, intervenes with apt and responsive instigations, inspires sustainable values envisioning.



A fresh water smart-city haven

Envisioning the future where human and nature co-exist in harmony, we celebrate joyful living amidst rising water levels and climate change while increasing self-sustainability and energy sufficiency in an intelligent city.

Rain Tay



Blooming

Envisioning a more social and environmentally sustainable city by developing compassionate individuals through the incorporation of greener infrastructure, as well as a three-pronged educational approach that builds on the symbiosis of the youth, elderly and the sanctity of animal life.

Annabelle Chan

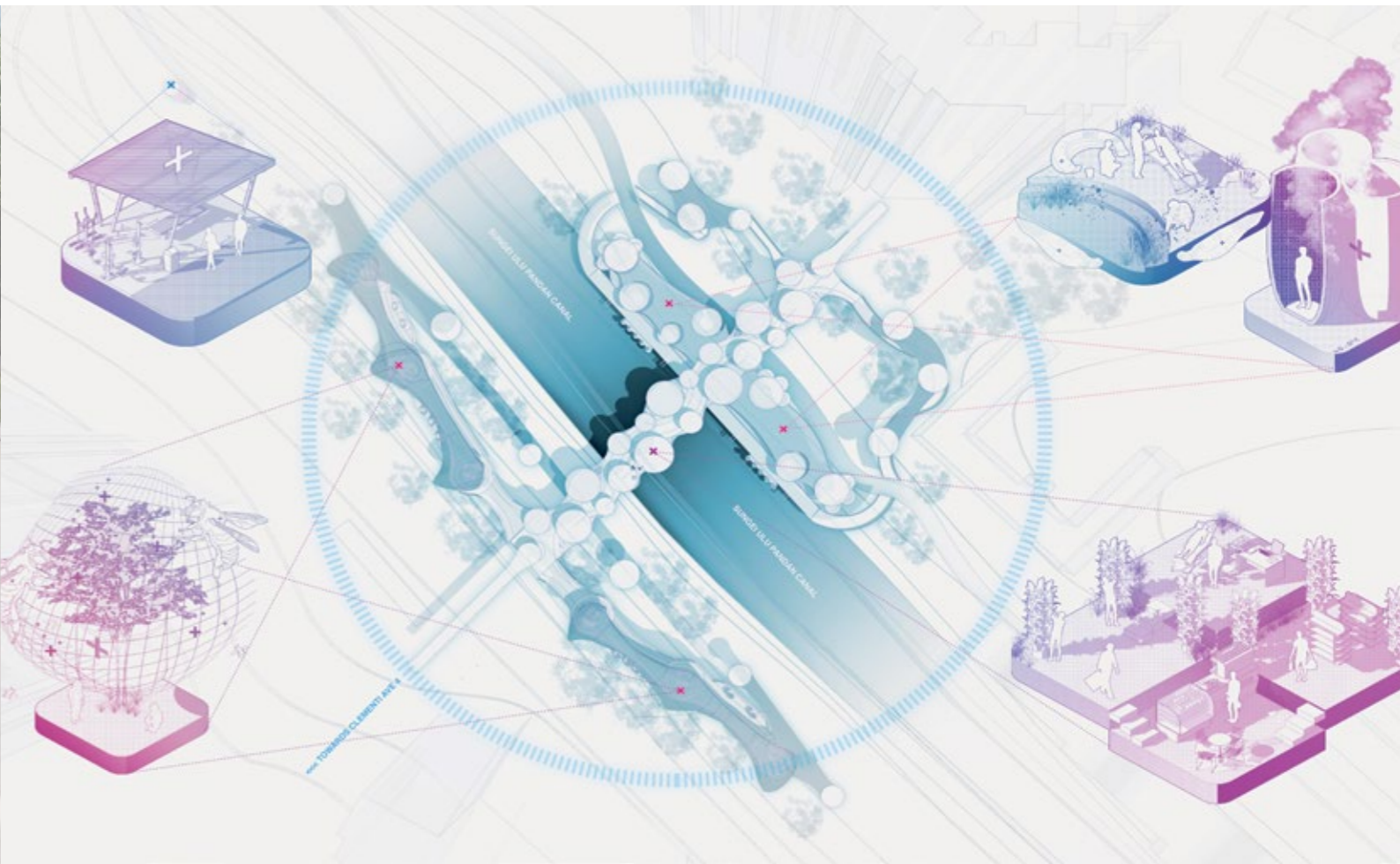


Distributed healthcare 2030

Platform Leader
Dr. Yen Ching-Chiuan

Teaching Assistants
Thomas Kong, Nigel Geh

Vision exploration of healthcare as a distributed system, speculating the evolution of healthcare environments influenced by changing societal behaviours and new care delivery.



Fysio 2030: The future of lifestyle rehabilitation



Fysio is an open playground designed for patients but made accessible to all so that the road to recovery can be a shared experience with loved ones. A hyperconnected network of transformative technologies work hand-in-hand to cater to Fysio Park, while reaching out to the neighbourhood for social support.

Loo Ziling, Nathaniel Ng, Huo Yujia, Jaslynn Ho

The diabetes care hub



Consisting of plug-in models distributed across the park connector network, this project aims to reimagine diabetic care services by utilising augmented reality UI/UX, seamless data collection, alternative treatments, screening points and more to reduce the burden on the healthcare system in 2030.

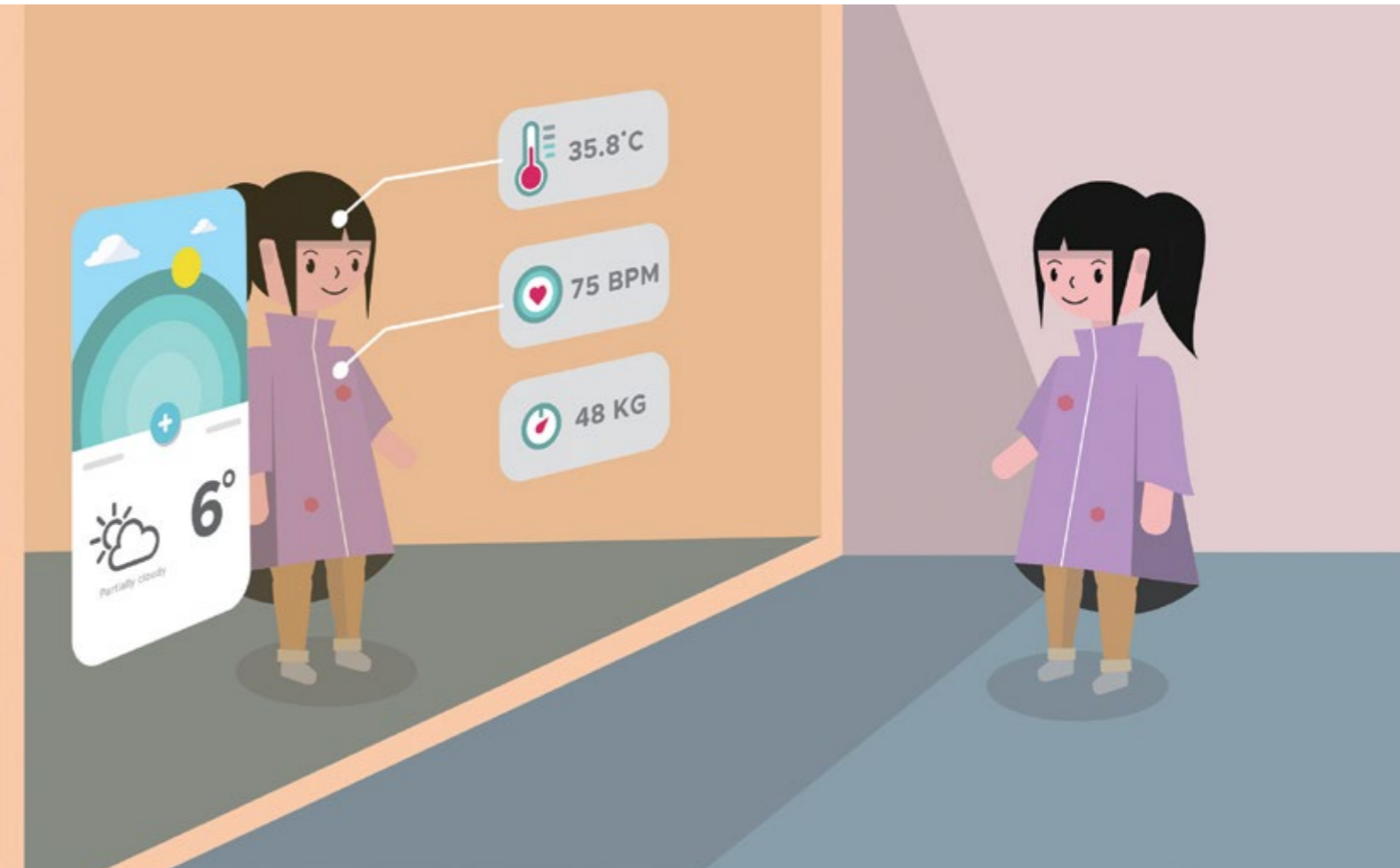
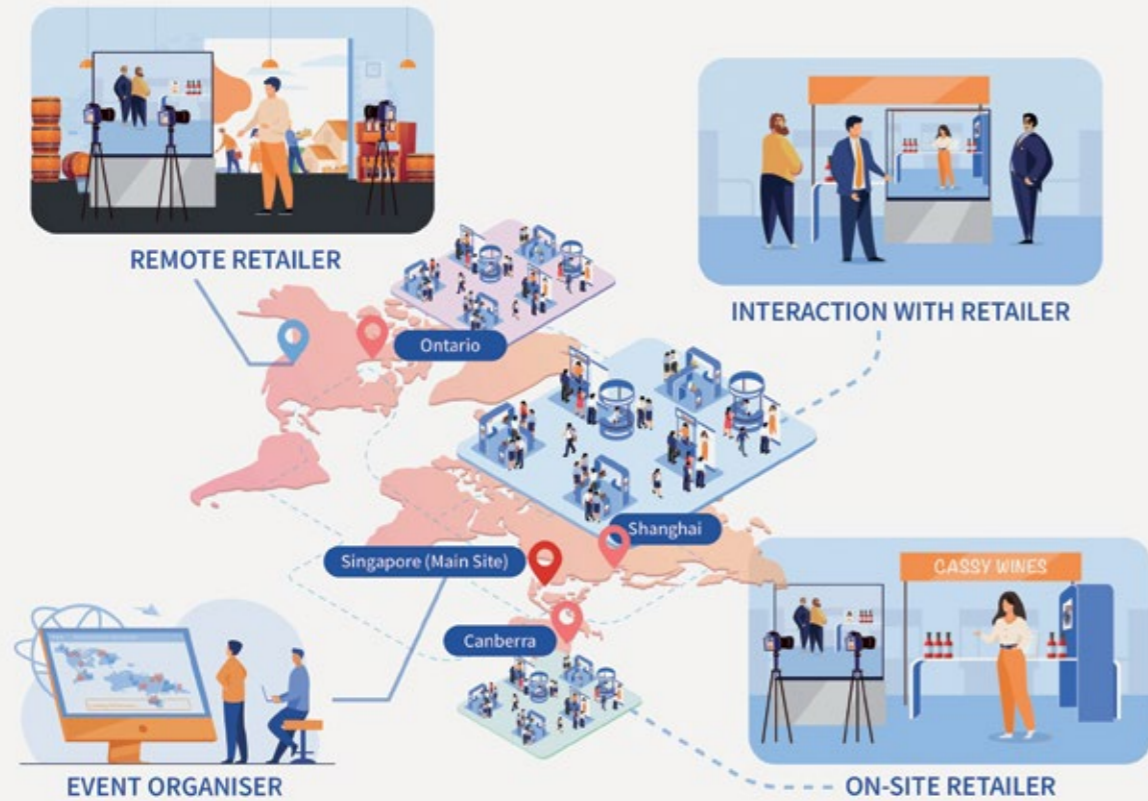
Chin Kar Fai, Prasanth Kumaar, Sharmaine Lee, Joanne Wong

Design for reset

Platform Leaders
Dr. Jung-Joo Lee, JiaYing Chew

Teaching Assistants
Christine Yap, Delia Lim, Tse Pei Ng

Design for reset aims to turn challenges from the pandemic situation into opportunities for social innovation. We see this as a chance to reimagine existing services, systems and lifestyles to be more sustainable and resilient. Scan the QR code to watch the concept videos.



Imagined futures: MICE tradeshows in 2025 ^

Set in 2025, MICE events are now decentralised, with the option to attend physically or remotely. This hybrid mode of events seeks to retain the essence of physical events, while introducing new structural systems that enhance the event experience.

Donaven Tan, Germaine Tan, Tay Ying Qi

The Future of Travel ^

The COVID-19 pandemic took the world by surprise, and the travel industry has taken the biggest plunge. Using the global pandemic as a reset to design, and technology to embrace timeless values, travel will be safe, seamless, and inspire assurance, all while keeping us connected to our loved ones.

Gwen Pang, Ashley Huang, Syafiq Bin Rahim

EXCHANGE PROGRAMME

Exchange programme

To broaden the students' exposure, two-thirds of each cohort goes for a semester long overseas exchange programme during their 3rd Year (Semester 6). Students are exposed to different working processes abroad at partner design schools.

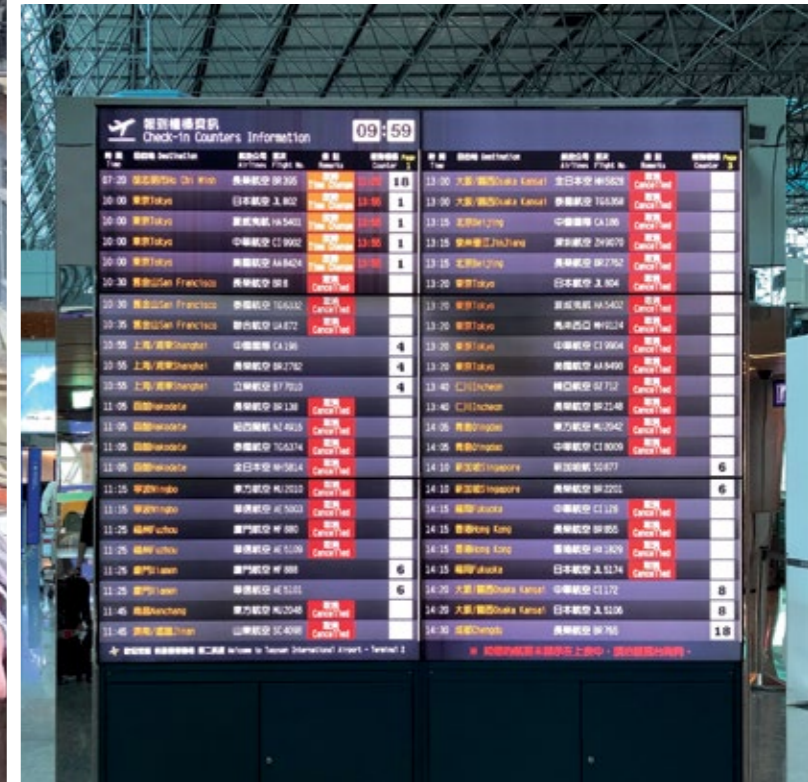
Due to the global pandemic situation this year, many students had to cancel their exchange, sometimes at the last minute, or were prematurely repatriate to Singapore.



Georgia Institute of Technology

Travelling such a long distance away from Singapore to a city in the States has expanded my creativity and enriched me both in education and personal life skills. Though adapting to the 12 hours time difference and cold weather took some settling-in time, it did not hinder my desire to explore a new city I have never been and be awed by the plethora of food and new experiences.

Joel Loo



NUS Overseas Colleges

NUS Overseas Colleges is a university level unit of the NUS Enterprise cluster that manages the highly innovative NUS Overseas Colleges programme. The programme targets NUS undergraduates with the academic ability and entrepreneurial drive, keen to be immersed as interns in start-ups located in leading entrepreneurial and academic hubs of the world. At the same time, they will study entrepreneurship related courses at highly prestigious partner universities. The aim is to cultivate and nurture them into enterprising, resourceful, independent self-starters that will eventually blossom into successful entrepreneurs.



Beijing



I got to experience what it is like to expand and adapt to the Chinese Market through the lens of a successful Armenian start-up—PicsArt, and immerse myself in the resplendent entrepreneurial scene in Beijing. Weekend hackathons, city-hopping, too many hotpots, and a harsh winter later, it will remain as one of the best memories of my university life.

Ashley Huang | BJ21

Stockholm



Living in Stockholm was a profound chapter of my University experience. I grew in confidence working as a young designer for a prototyping agency, discovered my Singaporean-ness while being immersed in Scandinavian culture, and basked in the warmth and kindness of Swedes amidst the cold winter snow.

Carina Lim

Internship

The work experience internship programme, aims to imbue students with real work experiences and exposure to industry by partnering with prestigious organisations that can empower our students with the realities of industry and the constraints of the marketplace.

Amidst the tumultuous times of the COVID-19 global pandemic, we would like to thank our partner organisations in providing our students with new enriching internship opportunities, which challenged our students working in the new norm of the work from home environment.



Dell Technologies

The Dell Technologies internship programme allowed me to not just hone my design skills, but also opened my eyes to designing in a corporate environment. This includes the considerations of market positioning and social impact. It was an amazing opportunity with equally amazing people.

Aaron Chooi

2021 GRADUATING STUDENTS

The design thesis provides students with the opportunity to demonstrate their industrial design abilities through the execution of a major design project. The thesis ensures that students are sufficiently competent in research, which is an integral part of the design process.

At their final year, students would learn to form and evaluate value judgement on design decisions that ensure design proposals meet with rationalised and functional criterion as well as less tangible qualities of aesthetic. Successful graduates will demonstrate competency in commercial design, service design, exploratory design and discursive design.



Aaron Chooi

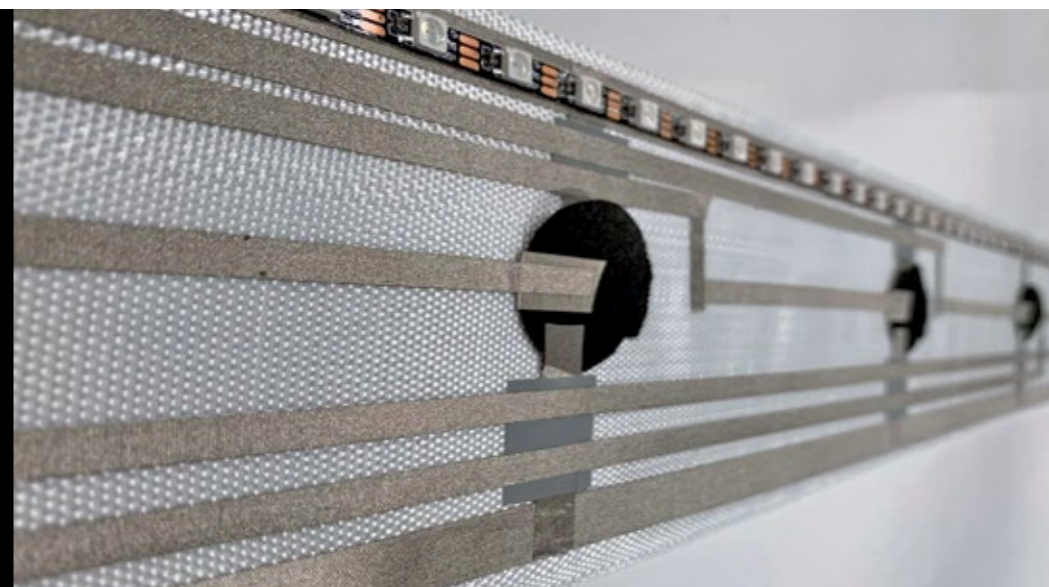
Aaron is an industrial designer with a keen interest in designing products and experiences novel to the field of Human Computer Interaction (HCI). A strong believer of learning through doing, Aaron hopes to merge both scientific and design inquiry methodologies in his body of work.

ar.chooi.aaron@gmail.com | [linkedin.com/in/aaronchooi](https://www.linkedin.com/in/aaronchooi)

Fiberglass +

The exploration of fiberglass as a material in the design of a tangible user interface, through this inquiry, two prototypes were developed. The first, a thin direct manipulation fiberglass bar, exploiting the flexural capabilities of fiberglass. The second, a location sensing fiberglass — LED strip, showcasing the micro-compressions of layered fiberglass, through the pressure sensing capabilities of the material.

Under the supervision of Hans Tan



Development

By identifying a collection of favorable materials to laminate within fiberglass, pressure sensing was identified as the most versatile input modality. In this specific sample, LEDs were used as internal outputs for location sensing on this fiberglass strip.



Explorations

A total of 475 explorations were conducted over the course of nine months in order to find a suitable angle for the project. Various input modalities were considered from auxetic structures to computer vision. However, the final direction of interaction was found within the craft lamination of fiberglass.



Cynthia Chan

Cynthia deeply believes design is the bridge that forms a relation and connection between people. Her design practice is based on finding inspiration in everyday experiences — conversations, objects and places.

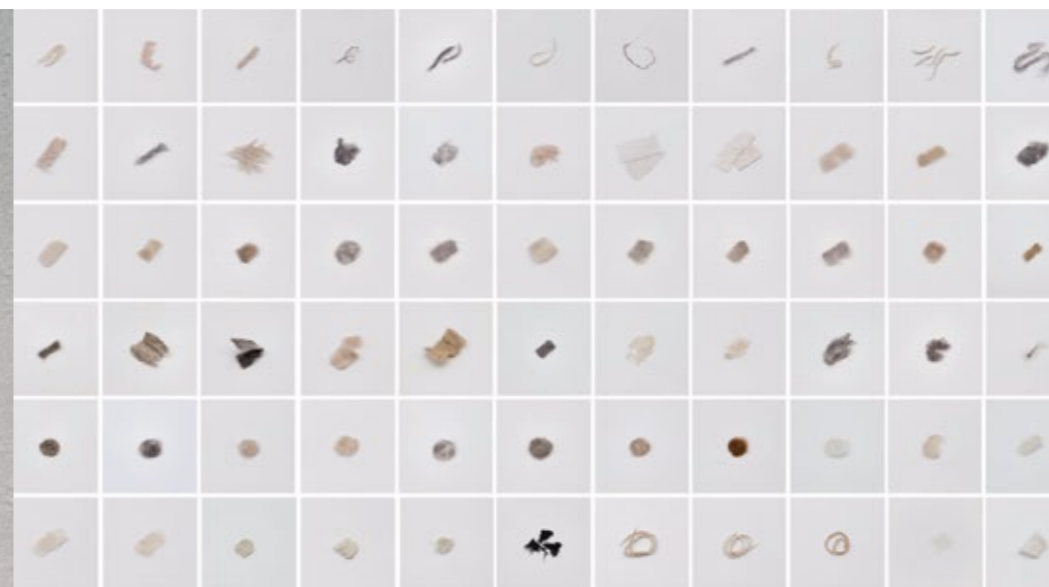
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Furmidable

Furmidable proposes and encourages the use of chiengora fibres. By acknowledging the amount of dog fur going to waste on a daily basis, and seeing clipped dog hairs as a renewable and sustainable resource, this repositions preconceptions and pushes the threshold of material possibilities. In addition to that, Furmidable draws upon the phenotypic variation and unorthodox genotypes, to implicitly complicate and question the fine line between nature and nurture.

Under the supervision of Hans Tan



Explorations

Explorations were done to push dog hairs as a material, to further investigate its properties and expand its possibilities. This opens up an avenue to formulate various fabrication techniques with the same material, which could lead to an end outcome of a series of textile enabled products.

Development

An instructional guide is produced in hopes to stimulate the imaginations of professionals such as textile artists, fashion designers, artisans, textile companies to consider chiengora fibres as a medium for further investigation and a plausible alternative to fur.



Michelle Loh

Michelle is a multidisciplinary designer with a knack for experimentation. She is never afraid to push the boundaries of what is thought to be possible and is always keen to explore new and exciting materials and techniques.

hello@michelleloh.studio | michelleloh.studio

Explorations

Close-up of glass shards fused together. The sharp edges of the glass have melted down into rounded spheres and fused together, creating a textured piece. The piece is fired in the microwave kiln, together with a graphite mould. The properties of graphite allows the glass to be removed without adhering to the mould.



Making to unmake

Making to unmake is a material exploration project that wishes to explore the glass scene in Singapore through the lens of unmaking. The project is an autoethnography compiled into the form of a book and an exhibition. The content of the book includes different explorations with glass at home, dialogues with experts, and discourse on the glass scene in Singapore. The project hopes to inspire makers and designers alike to re-think their relationship with the material—glass— around them, and hopefully create a more sustainable making cycle.

Under the supervision of Dr. Clement Zheng



Exhibition

Showcase of experimentations using the microwave kiln and unmade objects while speaking to the different glass experts in Singapore.

The exhibition includes explorations of glass and other materials such as clay, graphite, jesmonite, plaster, and rocks.





Jeraldine Boh

From a small book to a large gallery space, Jeraldine believes in creating meaningful and memorable experiences through design. In doing so, she hopes to change the way people see and interact with the world — one illustration at a time.

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Glo

Glo is a two-part kit that features a sequin-embellished glove and a light device. When worn, Glo stimulates a child's imagination by encouraging them to explore the beautiful colours, patterns and reflections that appear as they move their hand around the room. The intuitiveness of Glo makes it suitable for free play, but parents can choose to engage their child with the guiding prompts in Glo's Starter Kit.

Under the supervision of Donn Koh



Explorations

Different arrangements of reflective surfaces were explored to find the most suitable medium for children to explore light and shadows in a meaningful and engaging way. To ensure that users have maximum control, the archetype of a glove was chosen due to the natural flexibility of the hand.



Development

From a handheld light wand to an attachable light device onto a wrist strap, numerous rounds of user testing and iterations were carried out to determine the final form of the light source for Glo.



Gui Xixian

Dreamer by day and designer by night, Xixian sees design as a process to seek the simplest way to realise the craziest idea. To her, design is an unspoken language that communicates and connects. Through creating little joyful and meaningful moments, she finds design to be a journey of self-redefinition.

guixxwmf@gmail.com | be.net/guixixian



Explorations

Drawing inspiration from observations of how wind manipulates daily clothings, Puff intends to amplify these interesting nuances, turning things that are often overlooked into something surprising.



Development

To achieve the balance between exaggerated inflations and unassuming resting state, numerous experiments with materials and rounds of iterations with dimensions were carried out to complete the overall look of Puff.

Puff

Puff is a playful wind-reactive apparel that offers children a physical dimension to interact with wind - natural or self-generated. Wind, which was once thought as transient, now lasts for a longer time in Puff. By exaggerating visual and tactile effects of the garment in the presence of wind, perhaps more vivid outdoor experiences could be made.

Under the supervision of Donn Koh



Ian Tan

Ian is an industrial designer with a background in fine arts who loves to work at the intersection between the technical and the poetic. With an affinity for both hands-on and digital exploration, and a perceptive eye for aesthetics, he believes that design should imprint meaningful experiences on people.

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Workshop 1

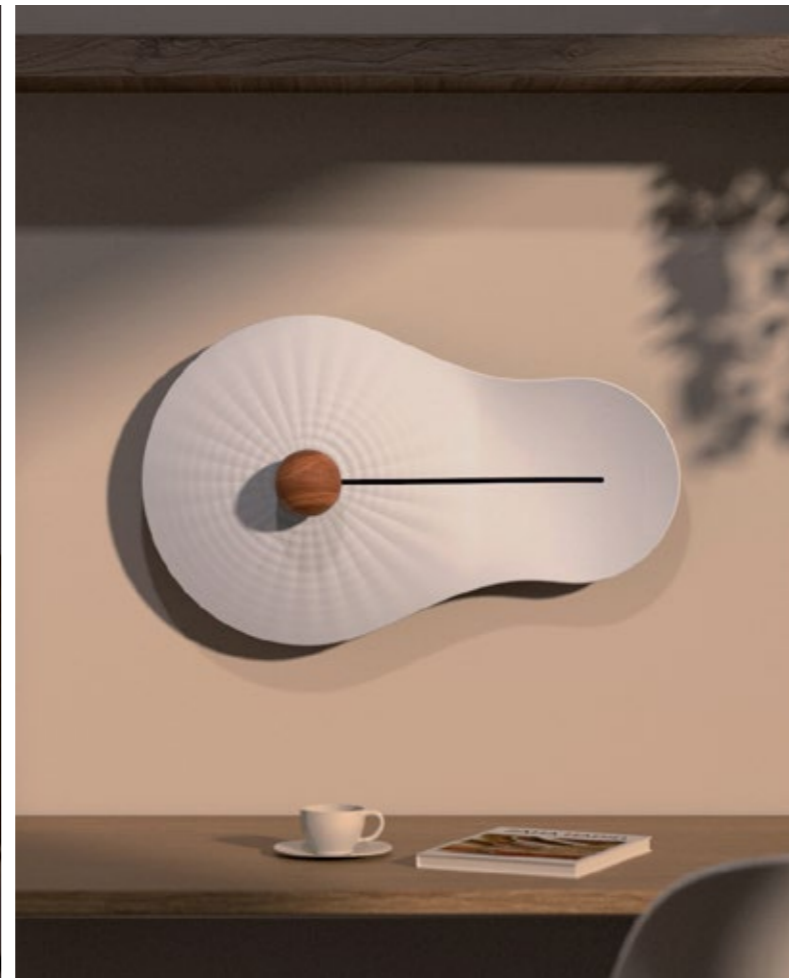


Workshop 2



Explorations

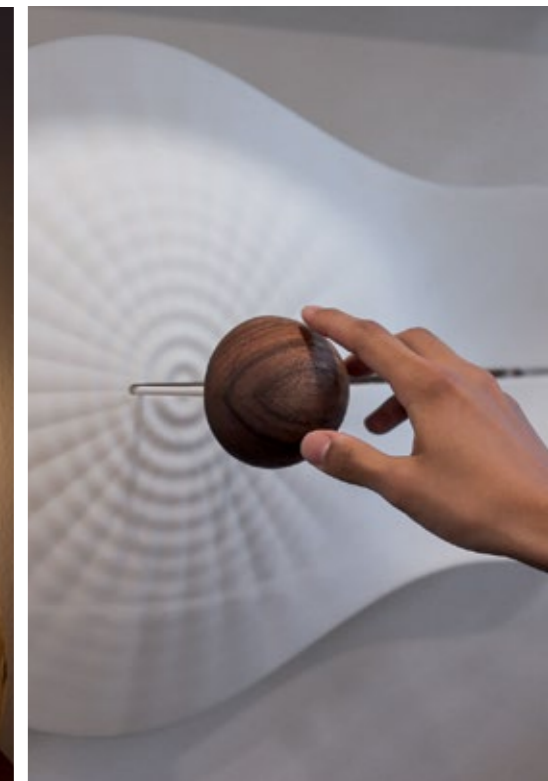
As a starting point to explore physicality, two workshops were designed to investigate gestures, the primary means through which we communicate with objects. Workshop 1 was a study on gestures with familiar objects, while workshop 2 examined gestures with abstract objects.



Development

Ascend (left): The pulling gesture determines the duration of illumination provided; the further the lamp sphere is pulled, the longer the user is rewarded with light.

Ripple (right): The sliding gesture shifts the speaker between the concave and convex surface, producing either focused or diffused sound.



Ascend & Ripple

An exploration into re-imbuing physicality in our manipulation of technological objects, Ascend and Ripple is a series of domestic objects that embody the convergence of interaction, form, and function. The Ascend lamp features a light sphere that is pulled to provide light for a desired duration of time, altering the atmosphere of light as it retracts upwards on its journey home. The Ripple speaker features a slidable speaker module that leverages on the surface quality of a porcelain reflector to alter the atmosphere of sound for different modes of work and play.

Under the supervision of Christophe Gaubert



Winnie Lim

Intrigued by human behaviours and fuelled by emotions, Winnie enjoys creating design with meaning and a story to tell. She believes that design is a lifelong journey of discovery, learning and sharing. In pursuit of curiosity and understanding, she has explored various fields of design and dabbled in performing arts.

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Key Message



With the message baked into an artefact, it may be funny, shocking, pointless, or even come across as real products to the audience, but the ultimate goal is to incite a reaction to ponder who might actually need this nonsense of an object and to create introspection on our relationship with time.

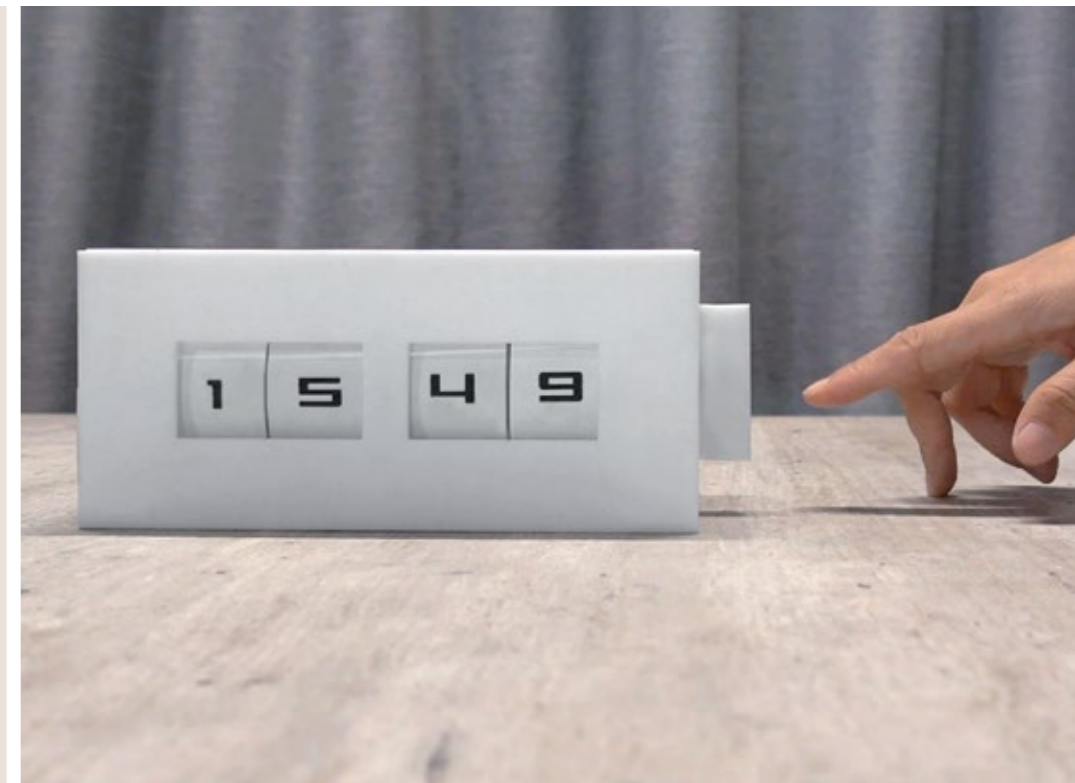


Communication



Each artefact is communicated through a comedic clip with slapstick humour for the key message to be more digestible.

View here: bit.ly/retelltime



Re-tell time

A clock tells you the time, but what is a clock that informs you of your relationship with time? This 4-part series, titled Re-tell time, treads a thin line between being functional and provocative, jolting us with its weirdness and to consider our relationship with time. Time Loop generates paper with a printed timestamp based on the user's time spent on social media, Time Whisperer tells the time based on the input frequency, Time Stamp informs another person of their poor respect for time and lastly, Time Turner updates time only when the user turns the knob.

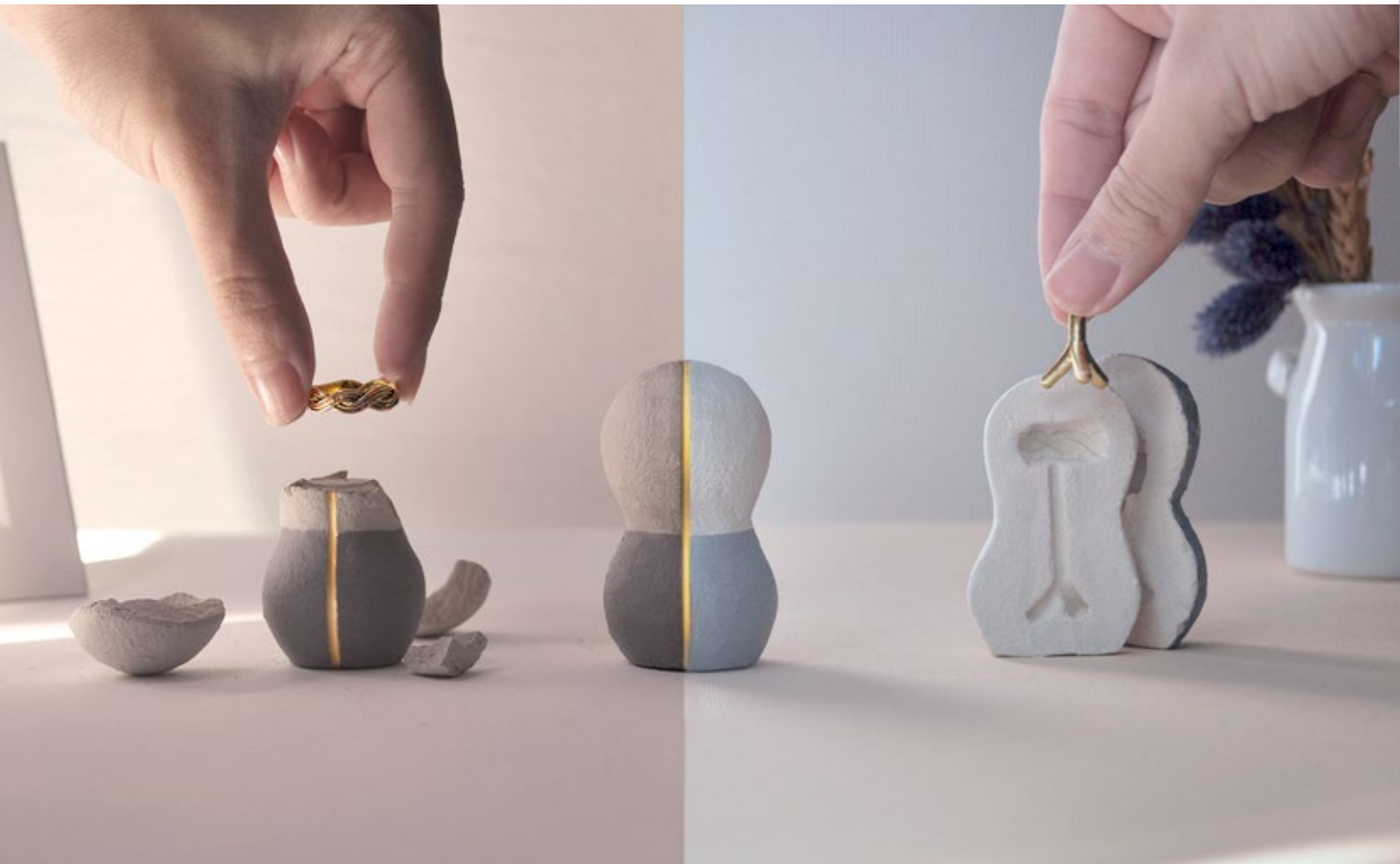
Under the supervision of Donn Koh



Sen Fong Ling

Fong Ling believes that the beauty of design is being able to share a connection with people through shared ideas and experiences. She enjoys creating designs with simple twists and exploring new mediums of craft in her free time.

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Development <

Using the ancient Ashanti lost-wax casting method, the two choices are sealed into a single clay cast.

The top holds the choice to preserve the gold jewellery. Conversely, the bottom holds the decision to renew, as the gold melts into the sprues, ready to grow into its next shape.

Key Message >

By designing 'choice' into the ritual, it brings consciousness to the receiver about their relationship with the object.

Is the gold jewellery a holder of memories? Or is it a vessel of potential and value, for them to create something of their own?



Encase

Gold jewellery, a common legacy object in many cultures, has the potential to be melted infinitely, without losing its quality or value. By sealing the gold in a cast, Encase reimagines the ritual of passing down gold jewellery—where one is given a choice. One can either break it, to retrieve the original jewellery, or fire it, melting the gold into a token, a blank canvas to create the next piece of jewellery. A choice between preservation and renewal, questioning the relationship between the giver and receiver.

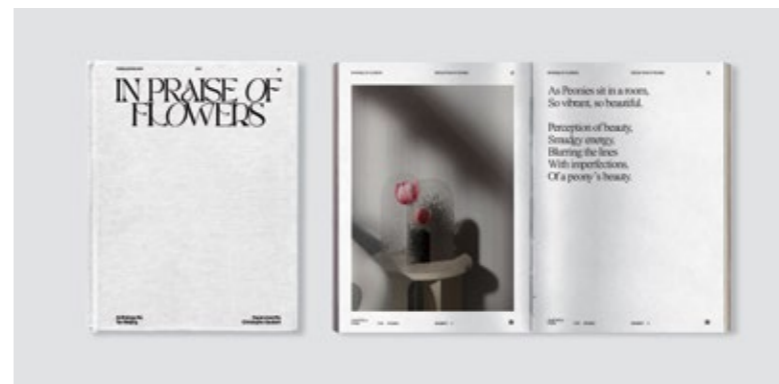
Under the supervision of Christophe Gaubert



Tan Wei Jing

Inspired by calmness and beauty, Wei Jing's design explores the interaction between a play of negative spaces, geometric shapes and bold wireframes. From hand-held products, lifestyle pieces to illustrations.

meoweijing@hotmail.com | be.net/meoweijing



Communication

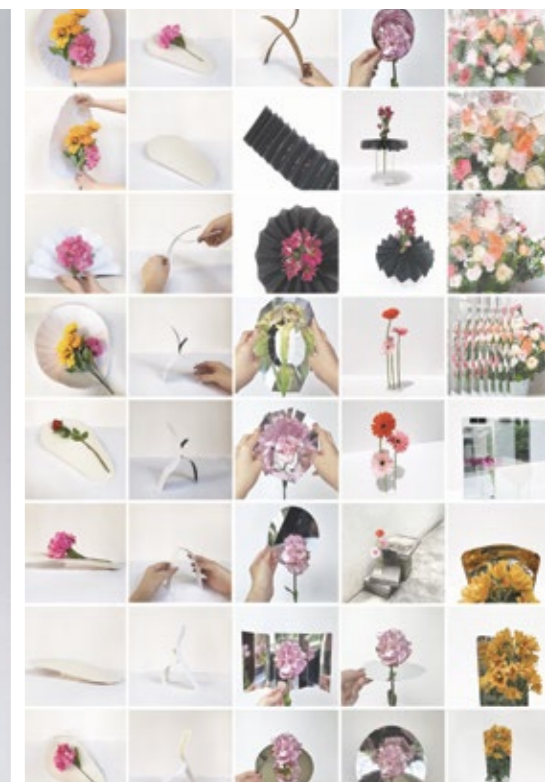
Each chapter in In Praise of Flowers opens with a short background story of the flower, which is then accompanied by images of these flowers, along with their respective vessels, and a poem for you to remember.



In Praise of Flowers

Flowers may seem like a simple and light topic. However, looking past their beauty, flowers come from multiple complex dimensions, such as historical stories, symbolism, archetypes and needs of a flower. In Praise of Flowers is a series of vessels dedicated to nine different flowers, inspired by their individual various dimensions — (Left to Right) Hydrangea, Orchid, Daffodil, Baby's Breath, Lavender, Rose, Lily, Peony and Tulip.

Under the supervision of Christophe Gaubert



Explorations

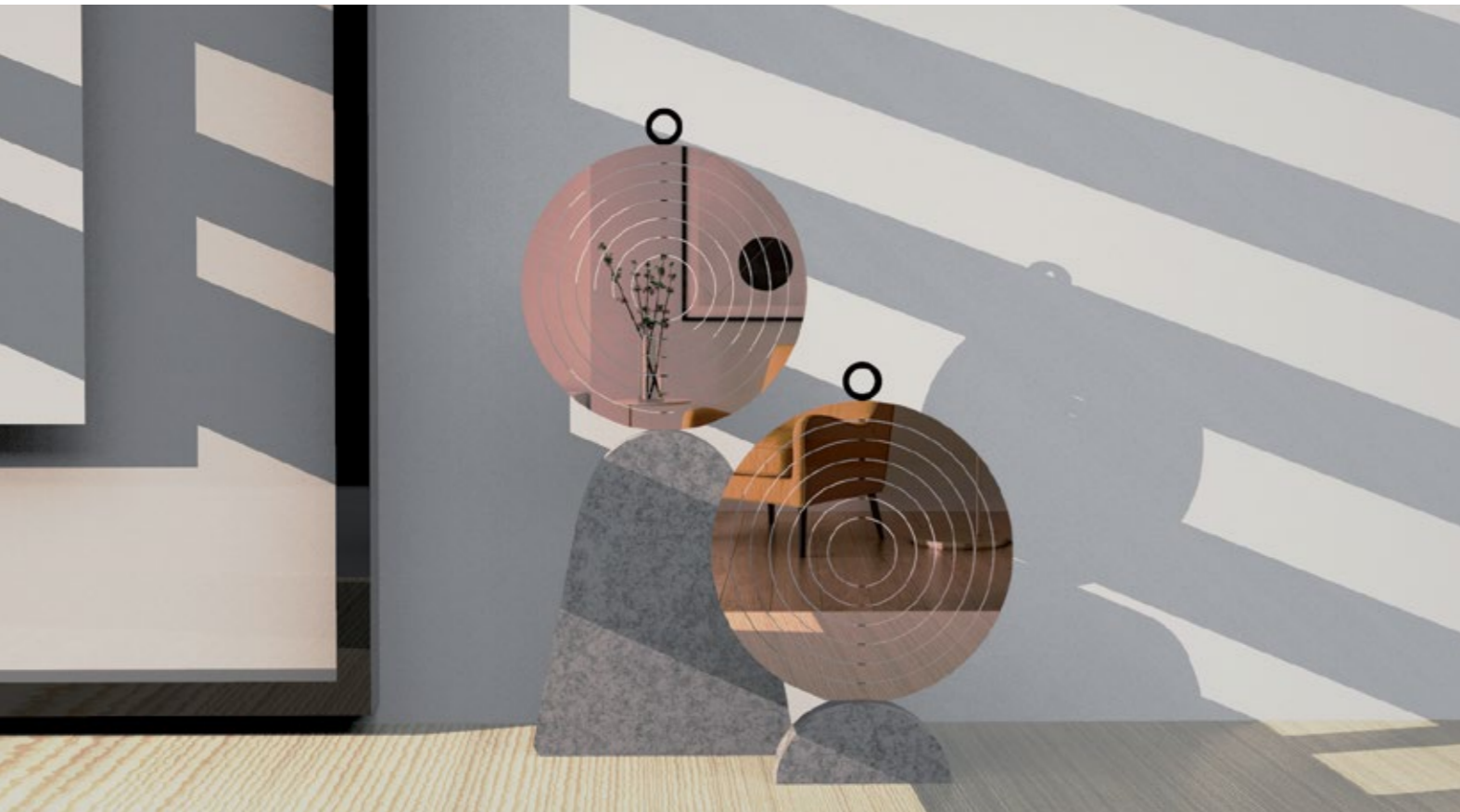
A series of 1:1 scale explorations and prototypes with actual flowers derived from creative questions and design ideations for the nine flowers.



Nurul Syazwani bte Shapuan

Syazwani is an enthusiastic learner and likes to approach things with optimism. She is a people person and believes that design should both be enjoyed and improve everyday life, even for the tiniest of detail.

nurulsyazwani.syz@gmail.com



Explorations



By layering mirror quality and a thin aluminum-lacquered sheet (similarly found on CDs), the shadow, light and colour reflections cast upon hitting sunlight, casts a subsidiary work.

Dreamer

This project aims to provide a visual rest during our short break. Made from polished steel, at rest, it stands as a tabletop mirror — a common must have accessory for the office worker. Activated upon a simple touch, it spins to form rhythmic movements which mesmerises. This object promotes actively “clocking in” your break, while providing a different medium of rest as opposed to our usual mobile phones, giving the eyes momentary rest from digital screens.

This project was designed in consideration of workers and students who spend too much time on screen.

Under the supervision of Dr. Christian Boucharenc



Contextual Use



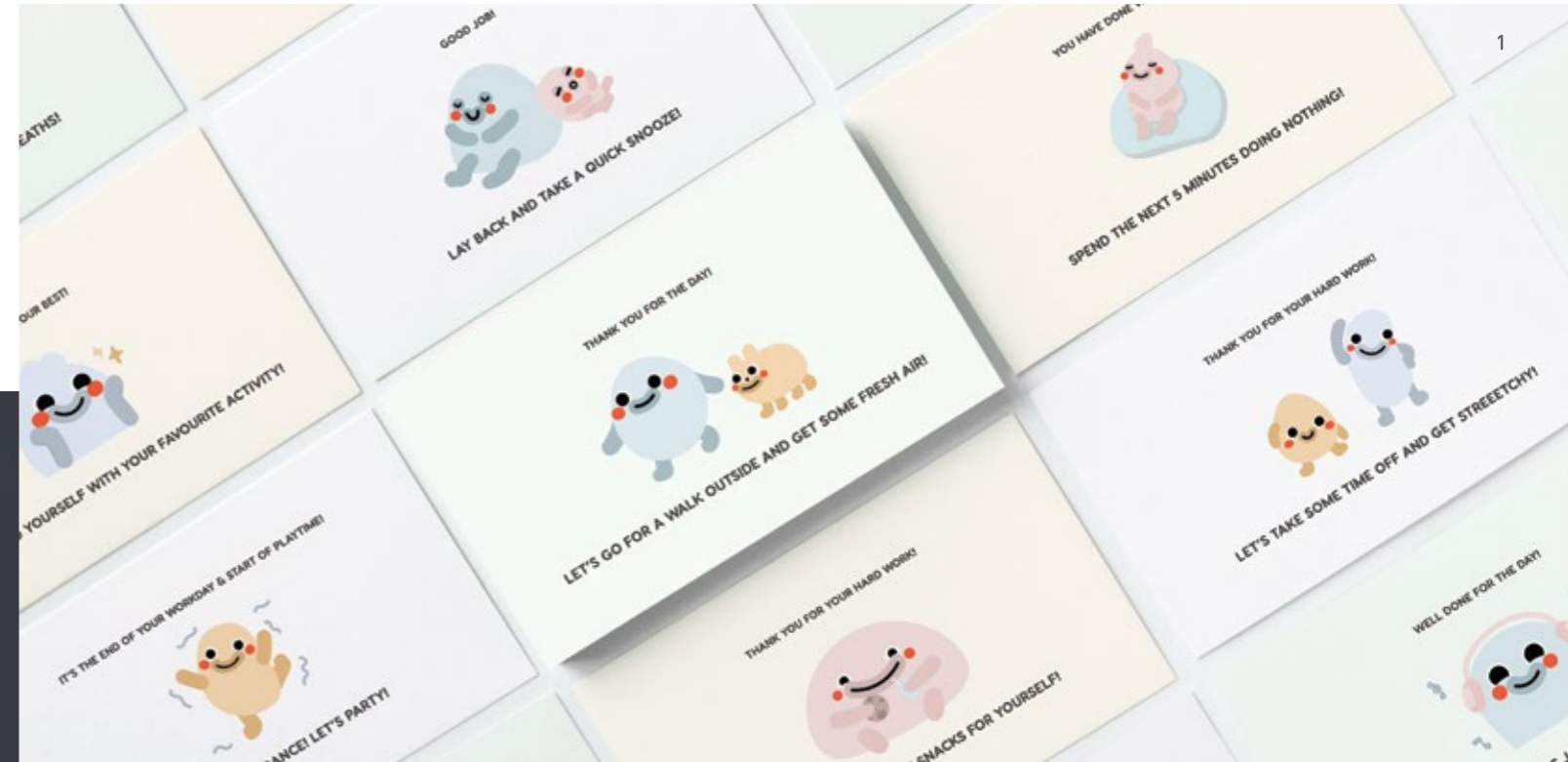
Users are able to enjoy both the mesmerising movements of the spinning sculpture, with the added effect of a mirage of dancing lights forming on the tabletop surface, depending on the brightness of the work space, bringing colour and creativity within the formal office walls.



Pang Shijie

Shijie is a fan of 2D illustrations and enjoys drawing during her free time.

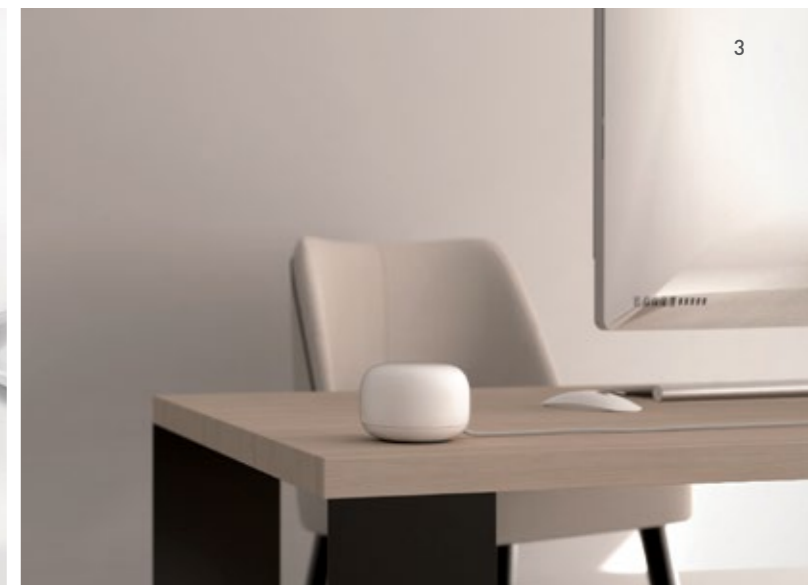
shijie97@gmail.com | [instagram.com/pangbangbao](https://www.instagram.com/pangbangbao)



Bam

The off switch from work to help one build a better work-life balance. Through ritualising a sense of closure from work, Bam empowers people to take small steps to overcome their unhealthy work-from-home habits that affect their health and lifestyles over time. By placing Bam on the home work desk, it immediately reminds users to mentally and physically unwind after work by letting go of work-related worries and productivity guilt.

Under the supervision of Patrick Chia



1 UI/UX

Appreciation quotes evoke profoundness as if the workspace is thanking you for your day of hard work.

2 Development

Bam's physicality is a key feature, making it an environmental cue and every user interaction intentional.

3 Key Insight

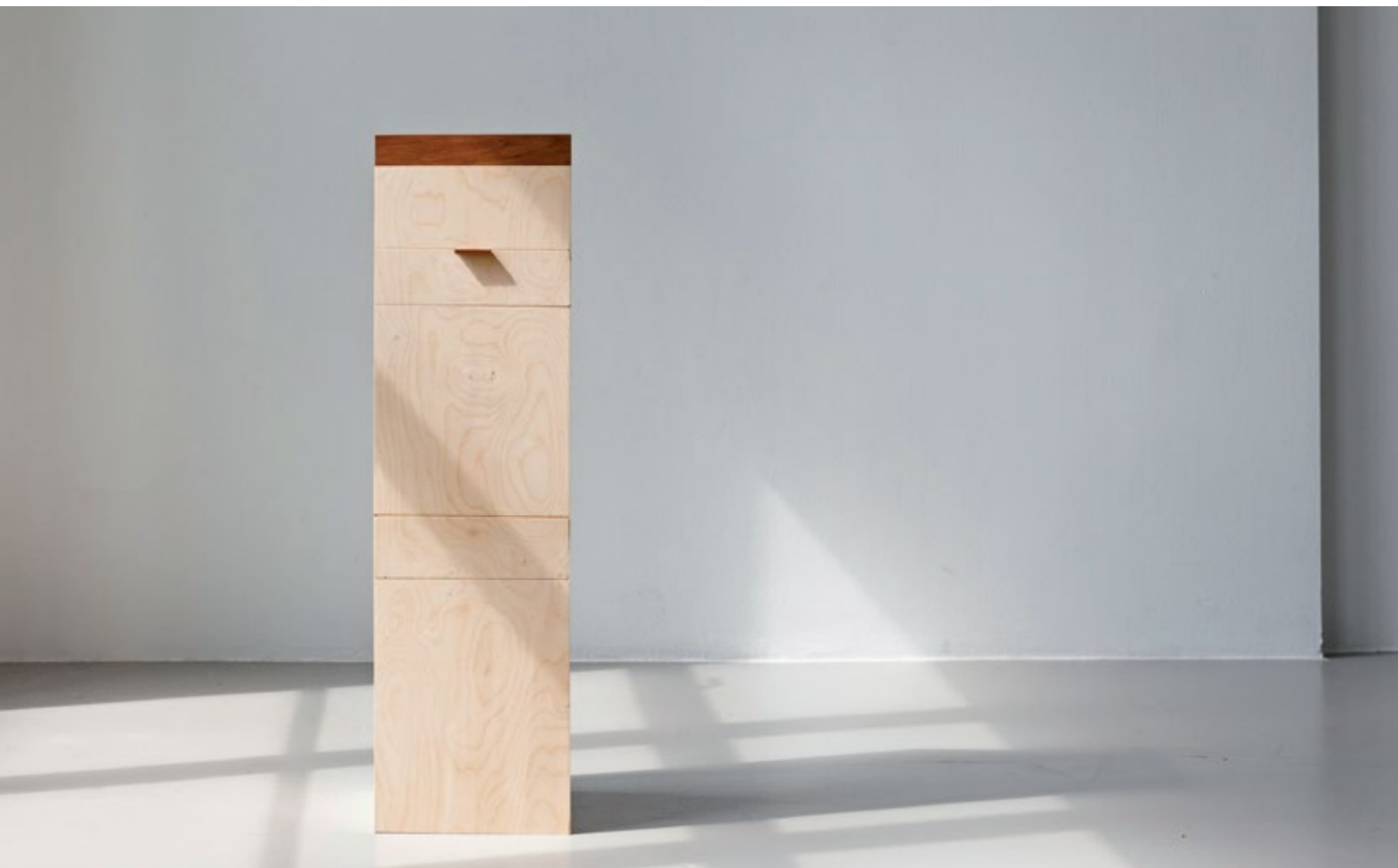
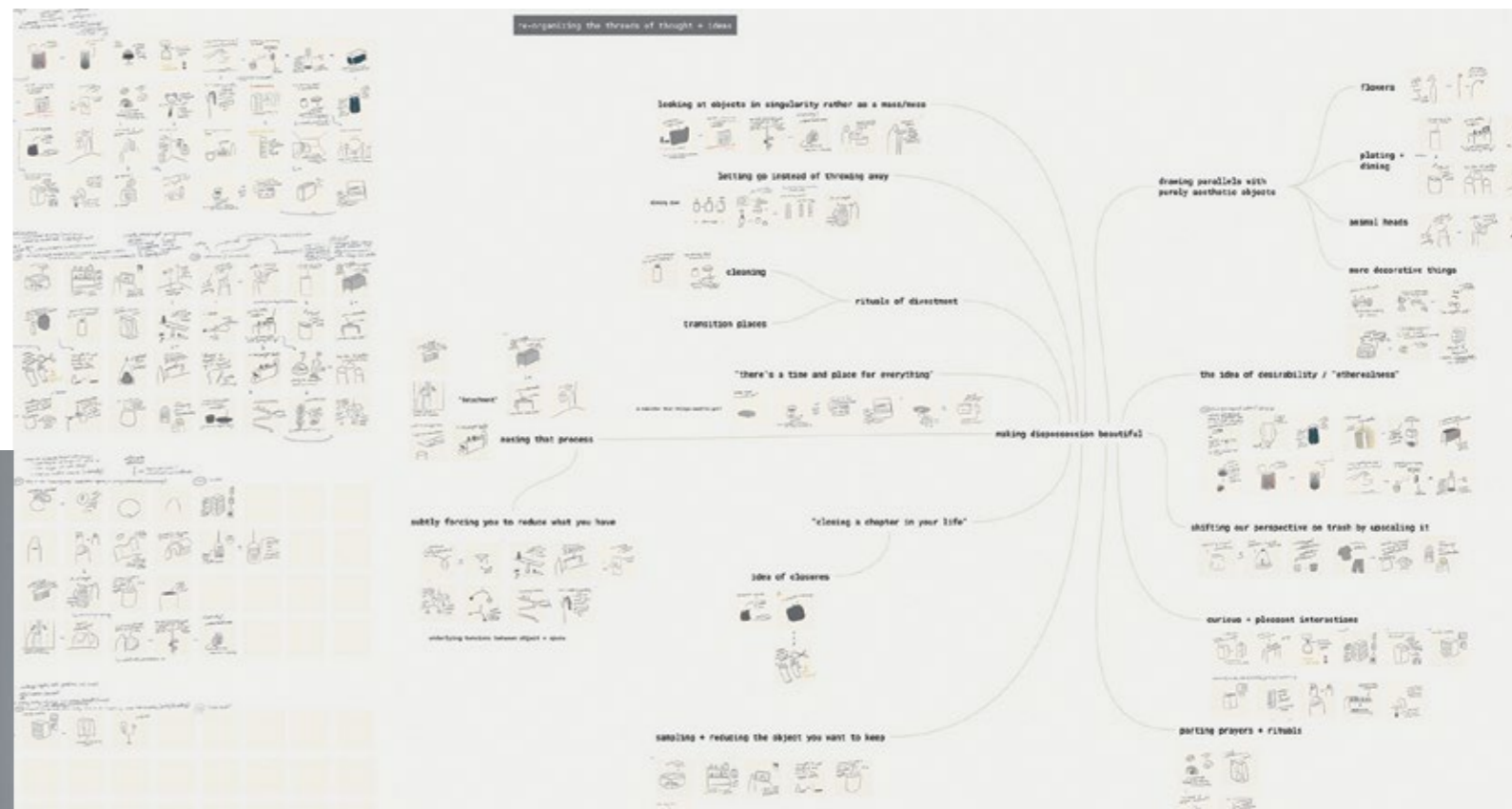
Built-in timer provides a gradient for onboarding, which helps to set up one's habit into small actionable bites.



Deborah Loh

Deborah believes that designing is an invitation to view life in a different light. With a sensitivity to words and eye for aesthetics, she navigates unorthodox concepts with grace and ease, whilst manifesting them with clarity.

hello@deborah-loh.com | deborah-loh.com



Explorations

This project was a coalescence of seemingly inane concepts such as the phenomena of the plinth, as well as weightier topics of discourse revolving around luxury, minimalism and the nuances of dispossession.

Key Message

Contrary to its deceptively simple appearance, objects placed within the drawer disappear permanently once closed, taking the phrase "out of sight, out of mind" to the next frontier.



Withdrawal

Homes have long been characterised and inundated by our belongings, but what if they could be a respite from the noise of stuff? Withdrawal is an experimental piece of furniture that presents itself as the antithesis to storage — one that eases and legitimises the ritual of dispossession in our lives.

Under the supervision of Hans Tan, In collaboration with Kjung Woodwork & Un Studio



Xavier Teo

Xavier believes that every product experience should start from the people and work itself back to the current technology available. In today's world, it is easy for us to get caught up with trends. This is a reminder for us to get back to the basics of good, simple design — this is Xavier's way of practising what he believes in.

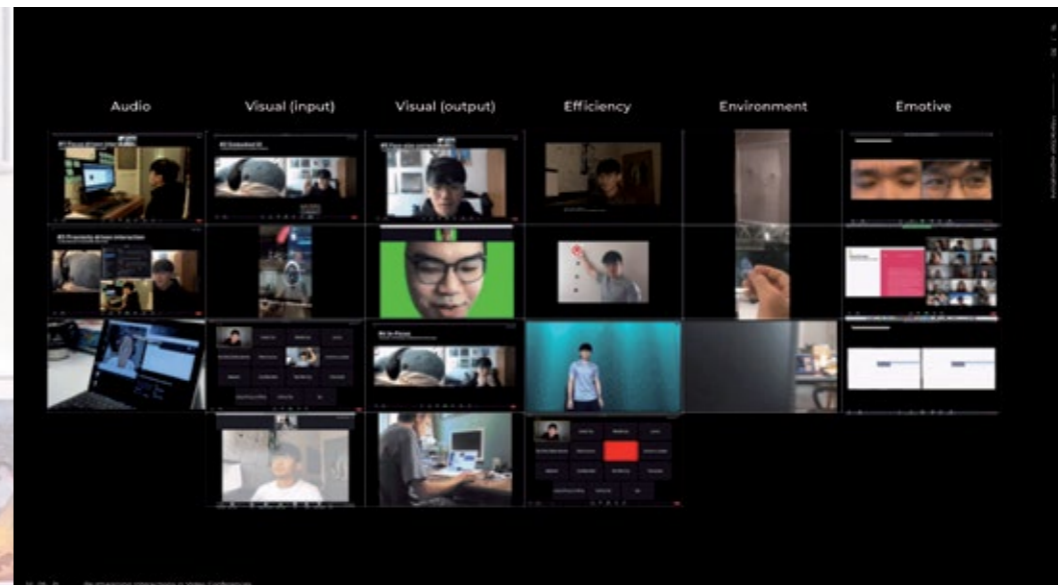
xavierteodesign@gmail.com | xavierteodesign.com



Frame

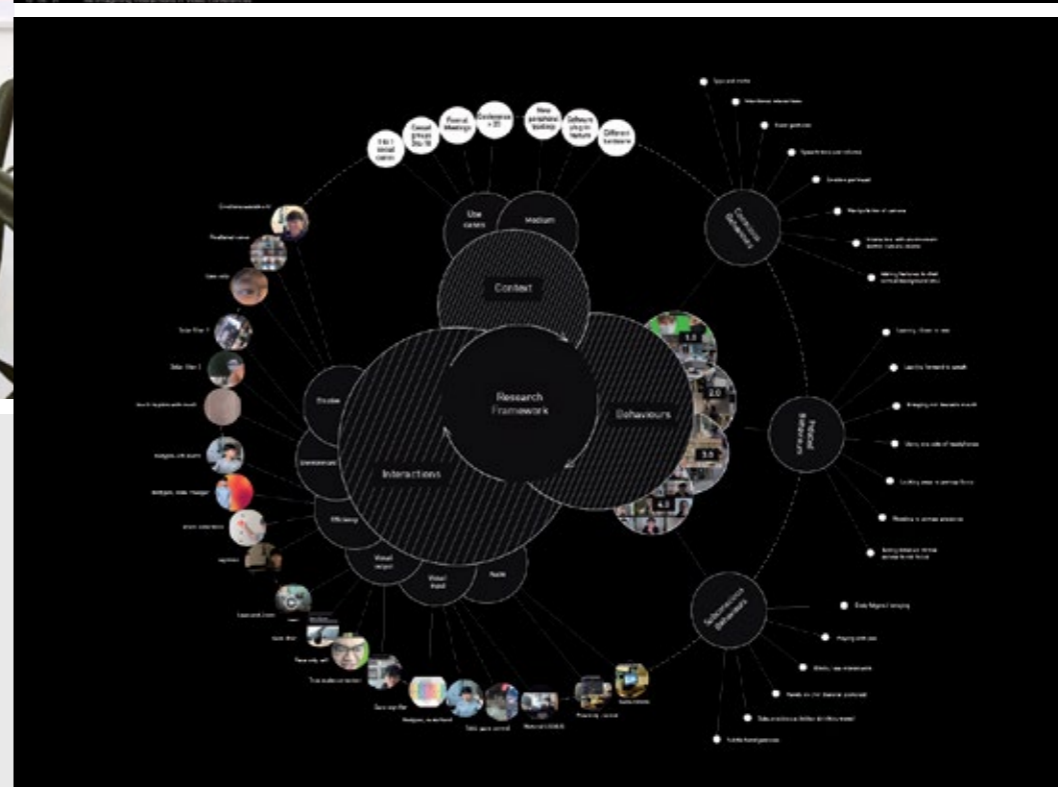
Frame is the result of research that looks into video conferencing behaviours. Considering two extreme user types, elderly and children, Frame provides a more natural and intuitive control system in replacement to complicated user interfaces in most video conferencing apps. Frame presents 3 key features: a camera that follows you around, a gesture-operated camera, and volume adjustment with proximity. These features leverage behaviours commonly identified in a video call.

Under the supervision of Dr. Yen Ching-Chiuan



Development

Up to 20 natural user interactions were explored to replace the use of peripheral devices with more intuitive behaviours. Six key areas of interactions were explored - Audio, Camera Input, Screen Output, Efficiency, Environment, and Emotive.



Explorations

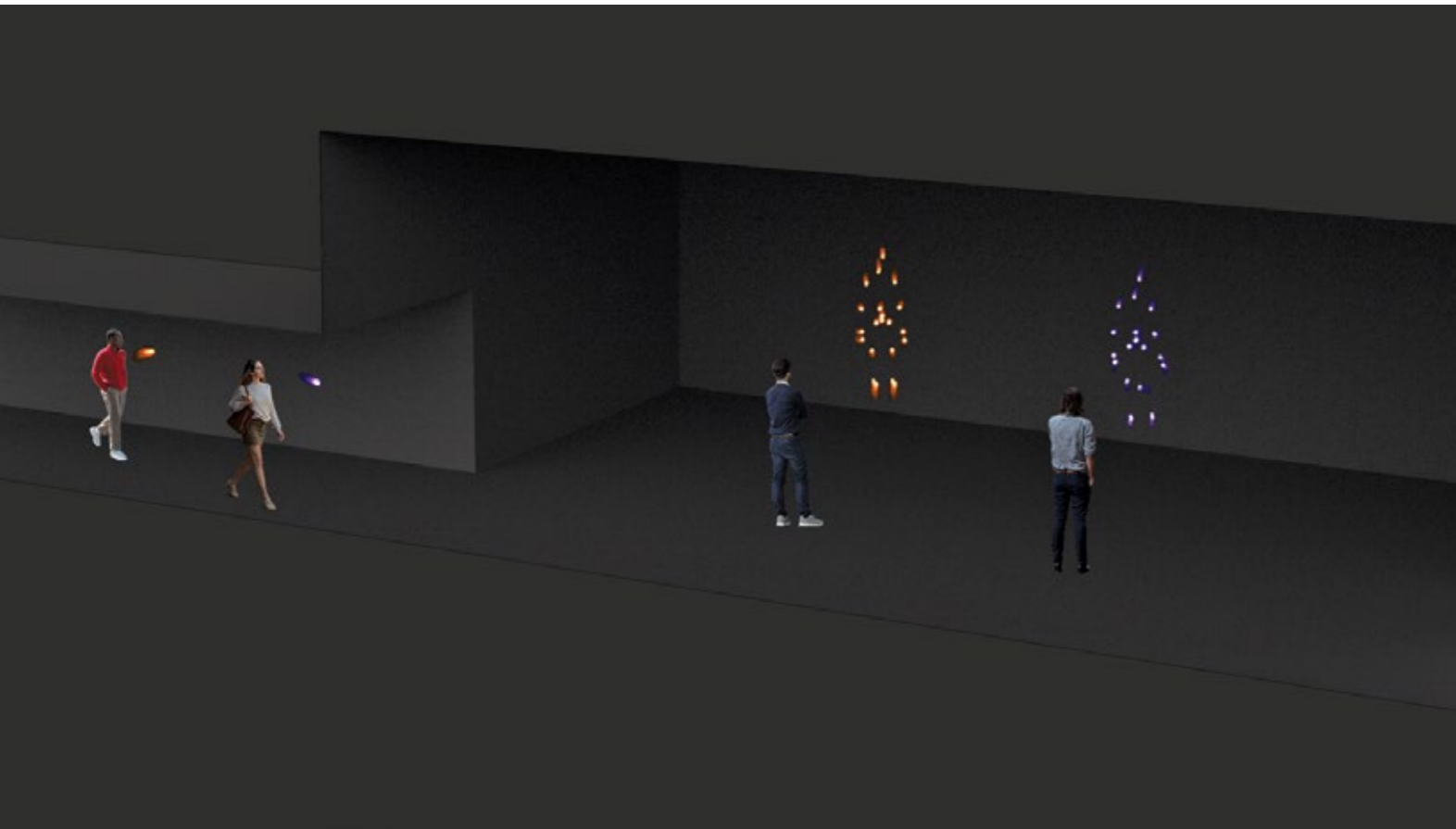
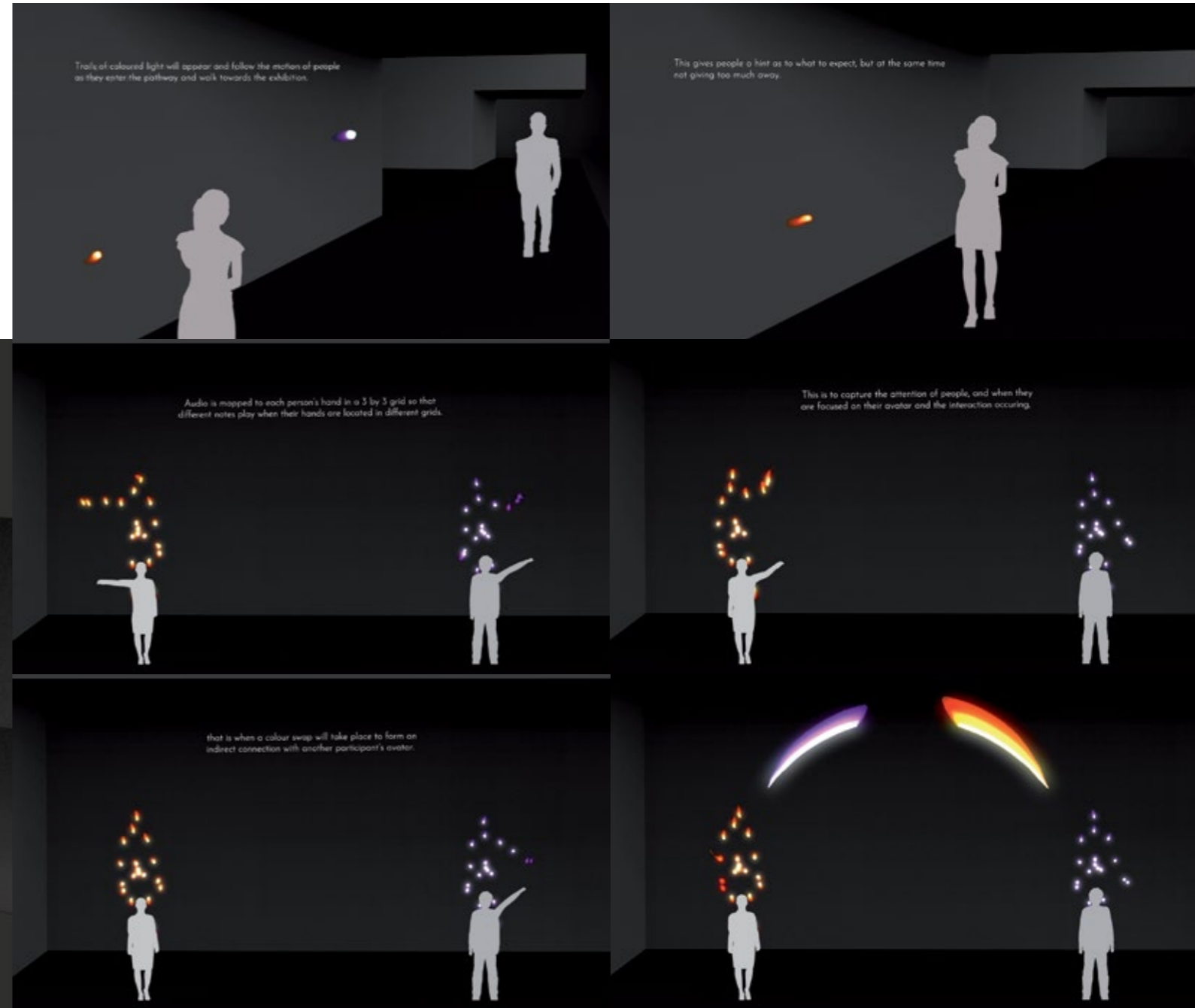
A range of experiments was conducted to figure out key differences in interaction behaviours in video calls. These behaviours are categorized into three different behaviours types, where each provides its advantages. Novel ideas were then derived from the experiments' insights.



Chang Zi Xin

Zi Xin believes in creating things that are simple, yet significant. She enjoys designing unique experiences that move people away from the procedural and implicit memories of how they do things — things people do routinely without having to think — and move them towards more explicit, declarative memories that are stored for the long run.

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Dynamic Hues

Using experiential design to explore new forms of interaction using physical motion, with the intent to form indirect connections between people through digital visualisations of themselves.

A novel, fun experience with a surprise factor so that the intrinsic mental barriers we have when interacting with people are lowered, creating opportunities for us to share spur of the moment, transient, playful, meaningful interactions.

Under the supervision of R. Brian Stone

Development

The idea behind this is that in a dark, immersive world created, people will feel more comfortable and able to form a connection with others in a way that their inhibitions usually will not let them do. And this visual connection between avatars will lead to connection between the people involved, since they have claimed the avatar as their own and are aware that it is a direct digital representation of themselves.





Mireille Lee

Mireille enjoys problem-solving and generating solutions that marry the needs of various stakeholders. She believes that design should improve our lives and bring delight to users.

mireille.lje@gmail.com



Development <

Common forms of touch between loved ones was observed, and various forms and materials were explored to best convey the metaphor of physical touch. Integration of technology was also heavily explored.



Critical Angle >

Leveraging the ability of touch to communicate comfort and compassion, Touch proposes a more visceral manner of remaining connected to loved ones at a distance.



Touch

Touch is a gift for a remotely located loved one that brings comfort through self-soothing and serves as a proxy for physical presence. Touch heats up in response to interaction on the paired device - a metaphor for sharing physical touch, reinforcing connection between loved ones. With 3 key stages indicating rest, presence and connection, Touch evokes feelings of comfort and connection both synchronously and asynchronously.

Under the supervision of R. Brian Stone



Germaine Tan

Germaine is a value-driven designer with an interest in behavioural science. She enjoys observing peoples' response to different stimuli and often wonders how ethical nudge designs can shape user behaviour. On a typical day, she can be found hiding at home — reading about human psychology, cognitive science or just about anything.

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Berry-like-jumbo

In remote learning, it's common for students to feel unmotivated and delay starting on work. Berry-like-jumbo is a social presence network that lets you know which of your friends are currently at their desk, and for how long. It aims to discourage procrastination by simulating the experience of doing work with friends — capitalizing on the mechanics of motivation contagion to effect positive attitudes among peers.

Under the supervision of Dr. Yen Ching-Chiuan



How It Works

Berry-like-jumbo collects real time proof-of-presence at either side of the device. Each user is characterised by a circle, which grows in size the longer they remain at their desk. When they leave, their circle fades into an outline. Frequent fidgeting is captured by the number of dots.



Development

A simulation device made with an IoT Arduino board and simple LEDs. Participants found this real-time presence indication reminiscent of a study companion, which proved useful in getting them to procrastinate less.





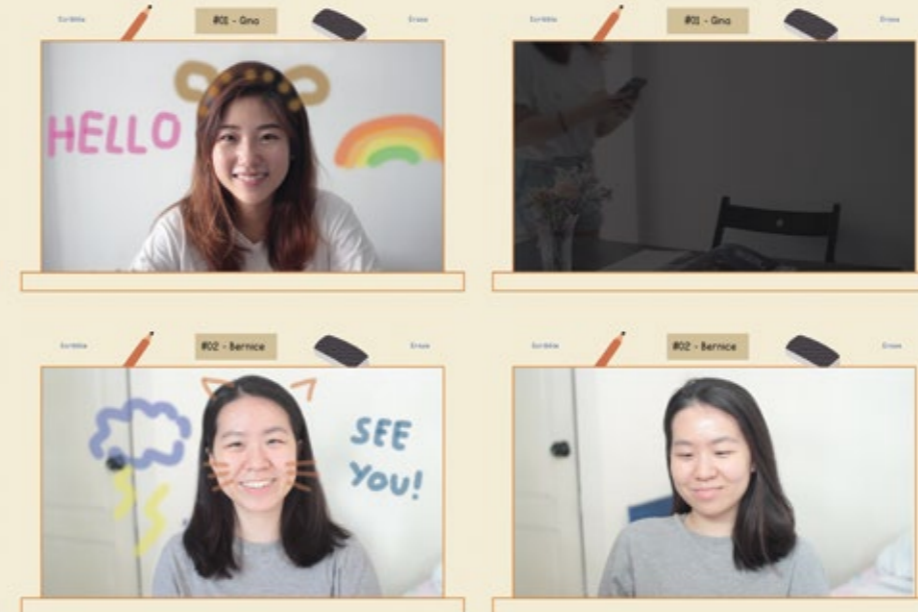
Felicia Lee

Felicia believes that likened to life, design is all about the learning process. She aspires to bring joy to people by weaving their needs into meaningful connections through her small creations. In her free time, she enjoys exploring the hidden parts of Singapore.

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Contextual Use

Designed with the intention for passive video calling, users can interact with one another both synchronously and asynchronously.



How It Works

Left: Users can use the pen tool to write and leave messages for one another.

Right: When a user leaves her seat, her screen gradually darkens to inform the other of her absence.

Coco

The COVID-19 pandemic has forced everyone to stay home, apart from their loved ones. As socialising online became the norm, how might design step in to bridge the physical to digital? Coco is a video calling companion for our close friends and family. The platform captures non-verbal cues subtly present in our face-to-face communication and translates these nuances to reflect the human presence lost from isolation.

Under the supervision of Dr. Clement Zheng



Nur Diyana Aqilah Salam

From the world of painting to the world of industrial design, Diyana is a creative soul who enjoys exploring different mediums and disciplines. As a designer, Diyana believes in creating fondness and delight in all the products, systems and proposals that she embarks on.

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highlight

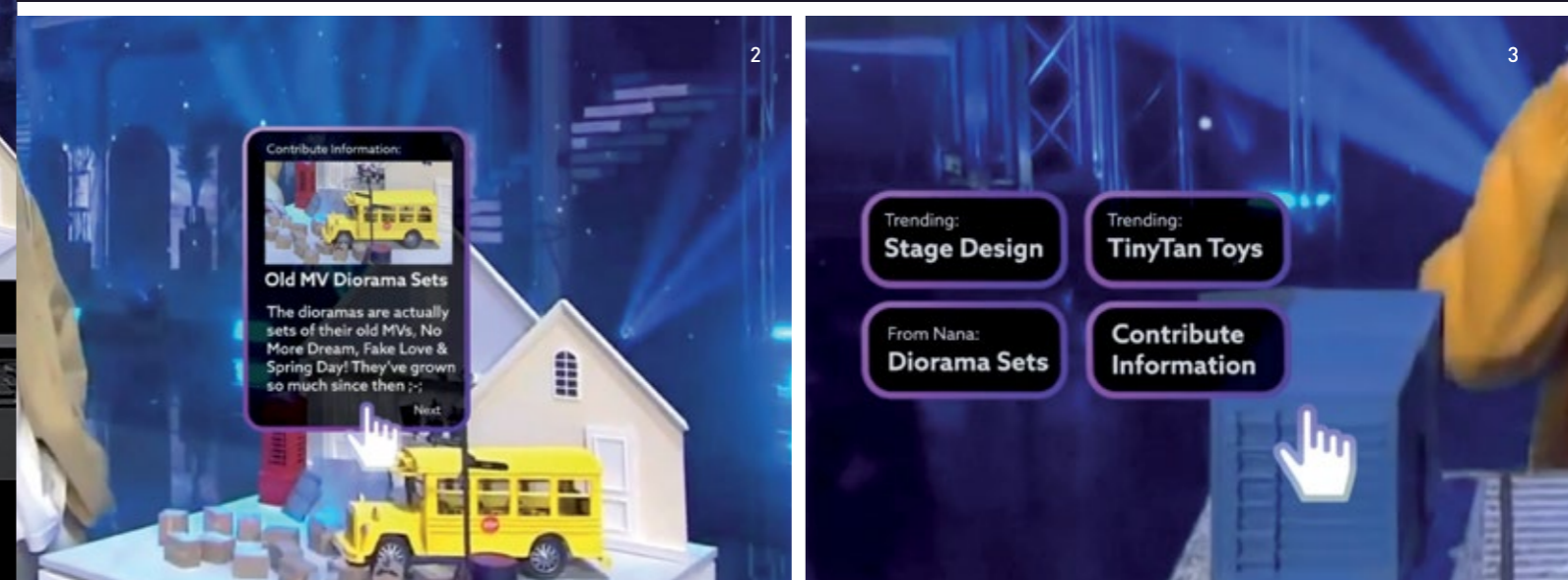
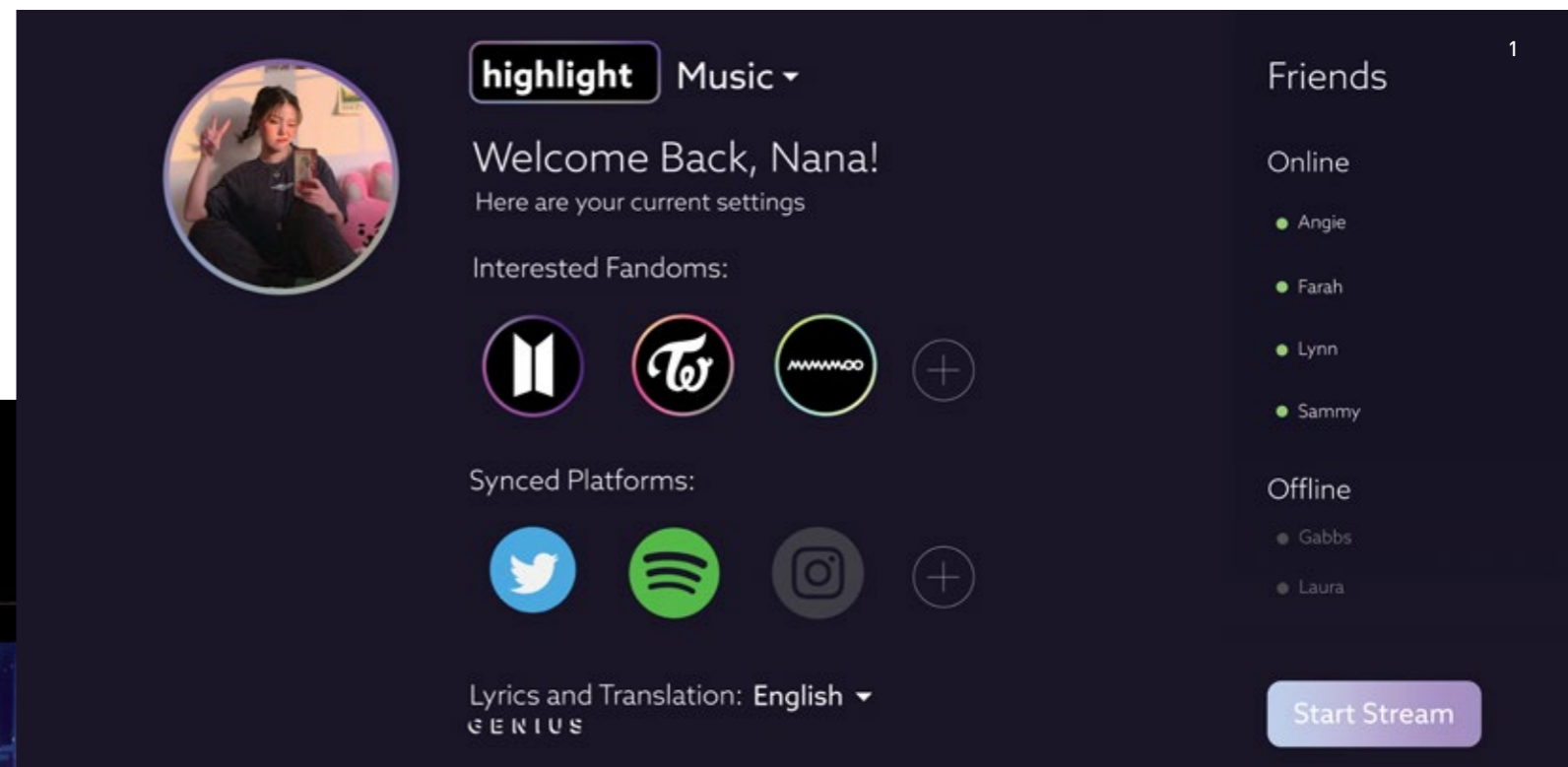
Live stream entertainment plug-in for sports and concerts



Sports Version



Concerts Version



Highlight: Live stream entertainment plug-in

Highlight is a live stream entertainment plug-in for concerts and sports. It works with Google Chrome and other internet browsers. The plug-in illuminates fans with both official and exclusive fan-only information. Highlight aims to heighten the involvement of fans by letting them dive into and contribute to content during the live stream events.

Under the supervision of R. Brian Stone

1 UI/UX

In the profile page, the fans' preferences are synced so that curated information is delivered during the live stream.

2 UI/UX

Fans showcase and share their expertise by contributing to the live stream for other fans to learn from.

3 UI/UX

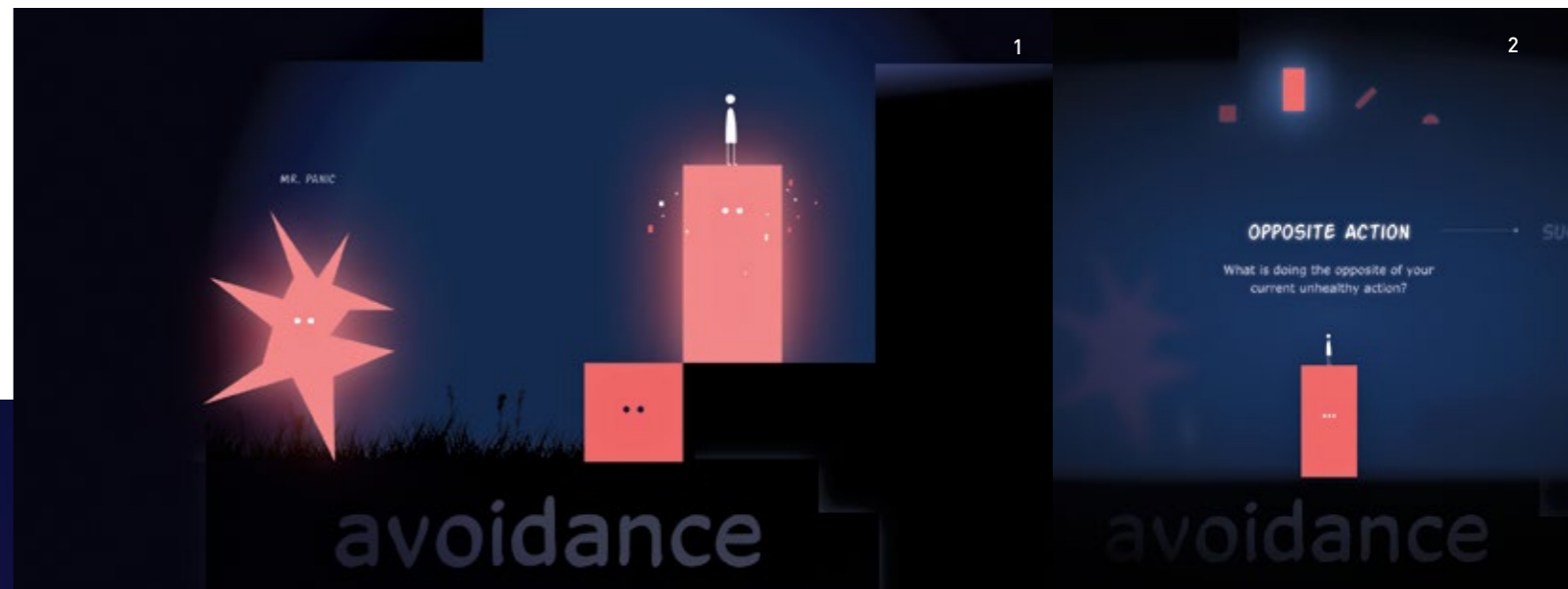
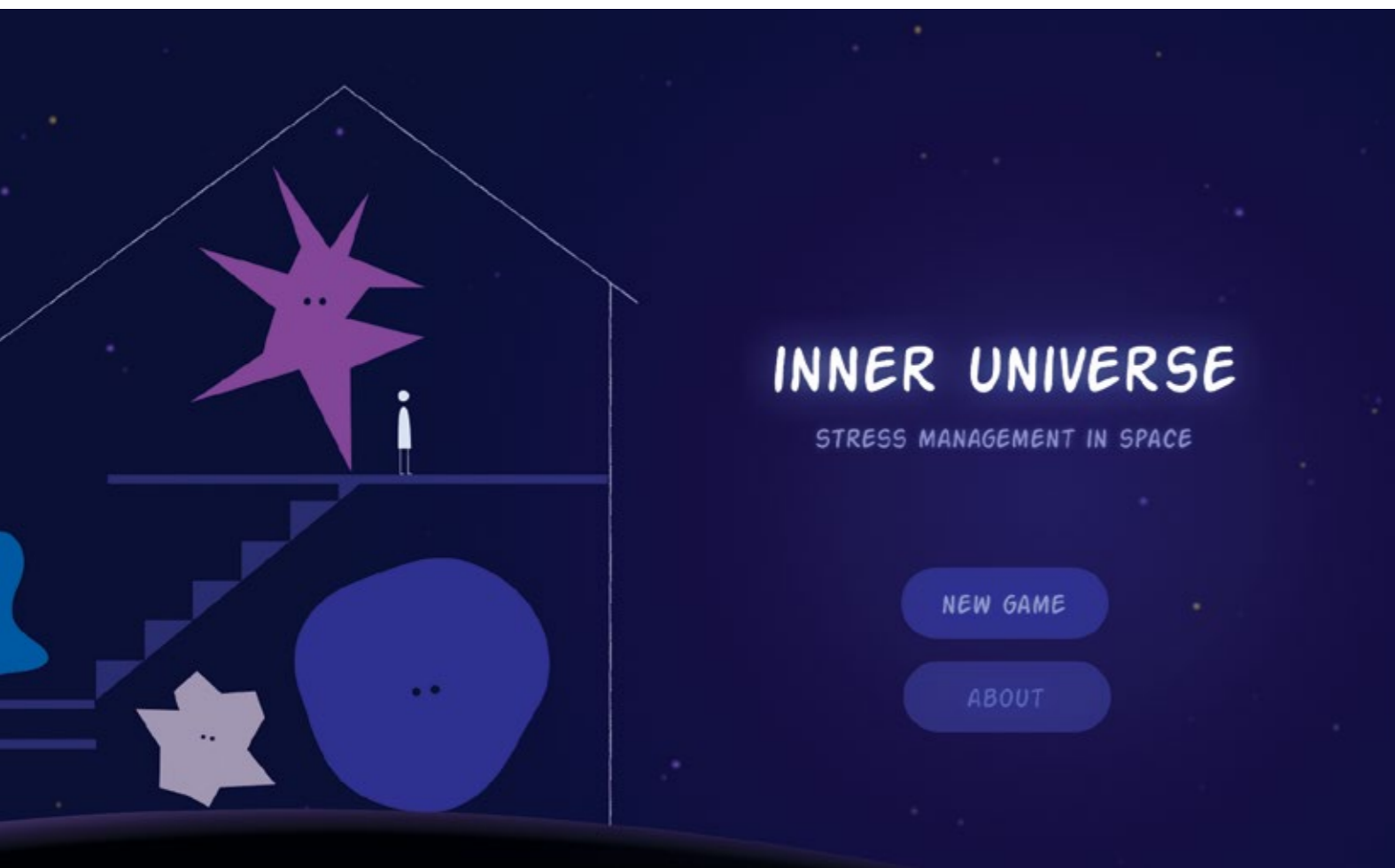
Fans acquire up-to-date knowledge about their artistes from their synced social media and friends list.



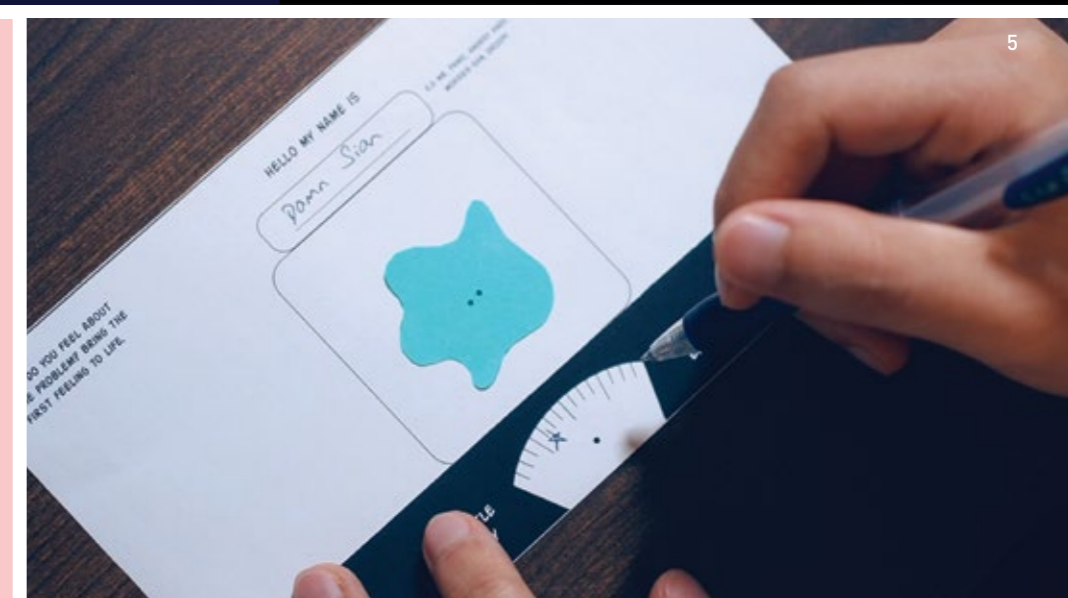
Gracia Fei

Gracia is a gremlin who observes the world from under a bridge. She wants to design things that can enchant everyday experience, take silliness seriously, and make complicated things easier to learn. She takes inspiration from anything that makes her laugh.

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- 1 UI/UX
- 2 UI/UX
- 3 UI/UX
- 4 UI/UX
- 5 User Testing



Inner Universe

Inner Universe is a single-player game about learning to manage our feelings. It is intended to help young adults get better at handling stress on their own through a medium that is playful and undemanding, but also rooted in concrete problem-solving approaches from therapy.

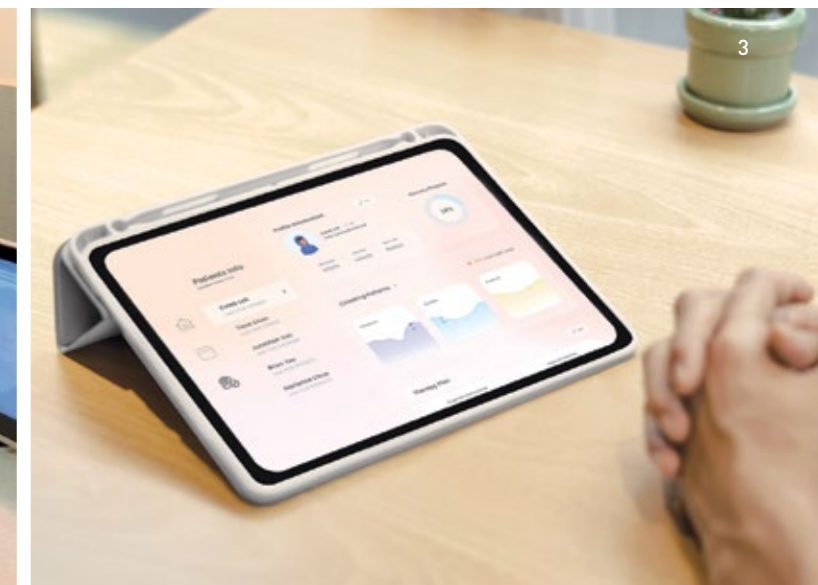
Under the supervision of Dr. Clement Zheng



Janna Tan

With a curious and empathic spirit, Janna aspires to create meaningful experiences between products and people.

jannatan98@gmail.com



Portrait

Even with therapy, coping with compulsive mirror-checking can be a daunting struggle for patients diagnosed with Body Dysmorphic Disorder. Designed to support greater success of in-home recovery, Portrait leverages pre-emptive and mindful cues in empowering patients to independently manage their recovery journey with renewed confidence.

Under the supervision of Patrick Chia, In collaboration with NUS Clinical and Health Psychology Clinic (CHPC)

1 Key Insight

Refocusing emotions and visual attention when prolonged checking arises.

2 Contextual Use

Gradual tint serves as a gentle nudge to step back during a check.

3 UI/UX

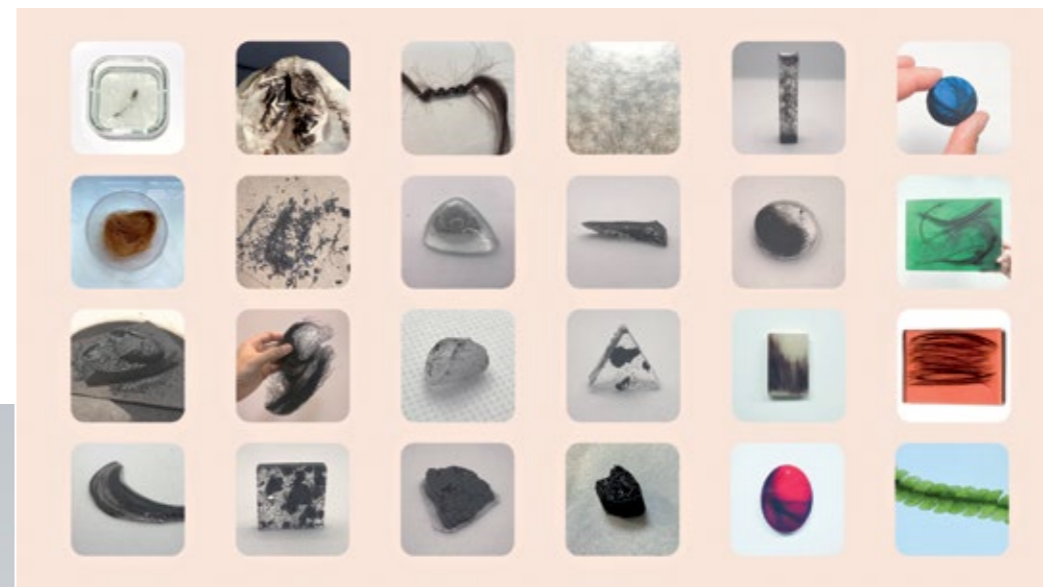
Real-time feedback loop between patient and therapist.



Jeraldine Low

Jeraldine strives to design for social impact with empathy and kindness. Driven by her intuition, she pursues the big picture to connect the dots. She also seeks pleasure in simplicity and enjoys meaningful interactions.

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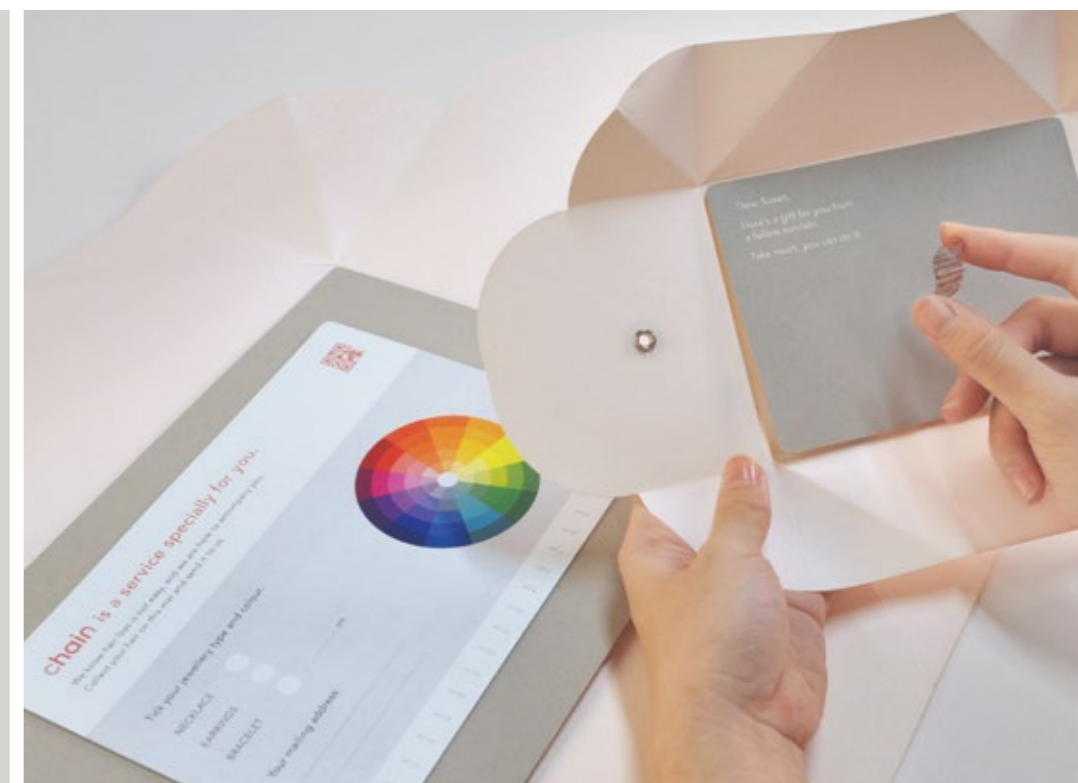
Explorations

A myriad of methods was explored to manipulate hair into jewellery, including heating, soldering, fusing with glass, bleaching and casting with resin. Casting into a block with resin and colourant, followed by CNC cutting, was finally chosen to achieve scalability, abstraction, personalisation and modularity.



Communication

Prior to chemotherapy, patients receive this kit along with a gift of support from a fellow survivor. They can transform their hair into Chain, and connect it with the piece from the survivor. Chain will accompany them through their journey of healing. Upon achieving remission, they can pass on the hope to support another patient.



Chain

Chain empowers female chemotherapy patients who are facing hair loss, by offering them the service to collect and transform their hair in a dignified manner, while receiving the support of other survivors. The jewellery is worn as a symbol of strength while preserving elements of femininity, identity and familiarity from hair. Connected with a piece from a survivor, Chain will be passed on to empower other patients when one achieves remission.

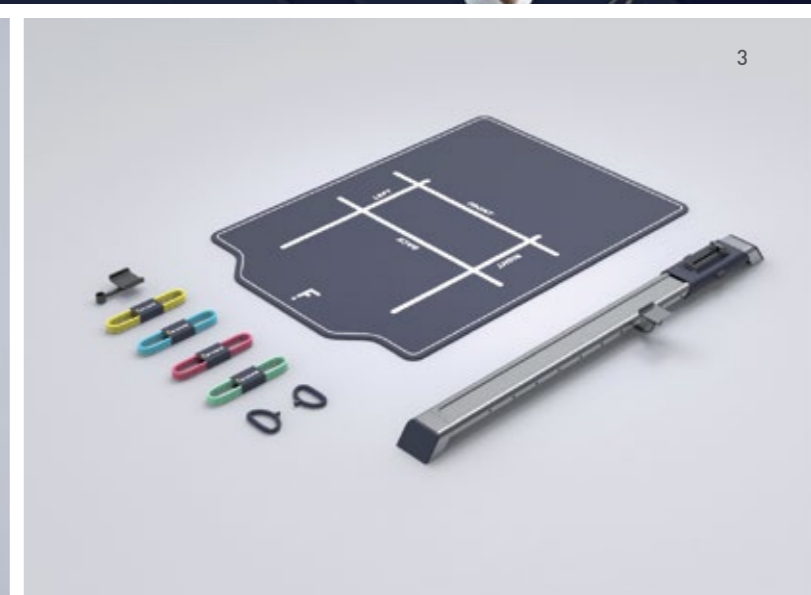
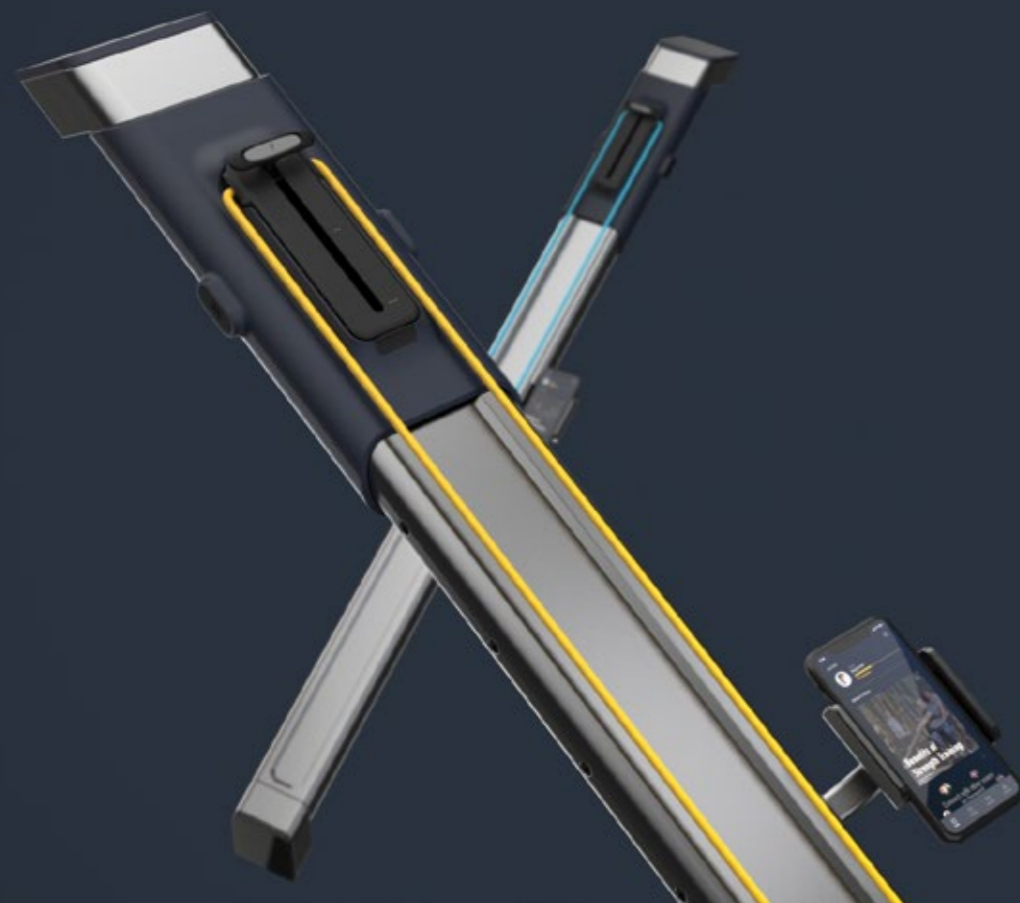
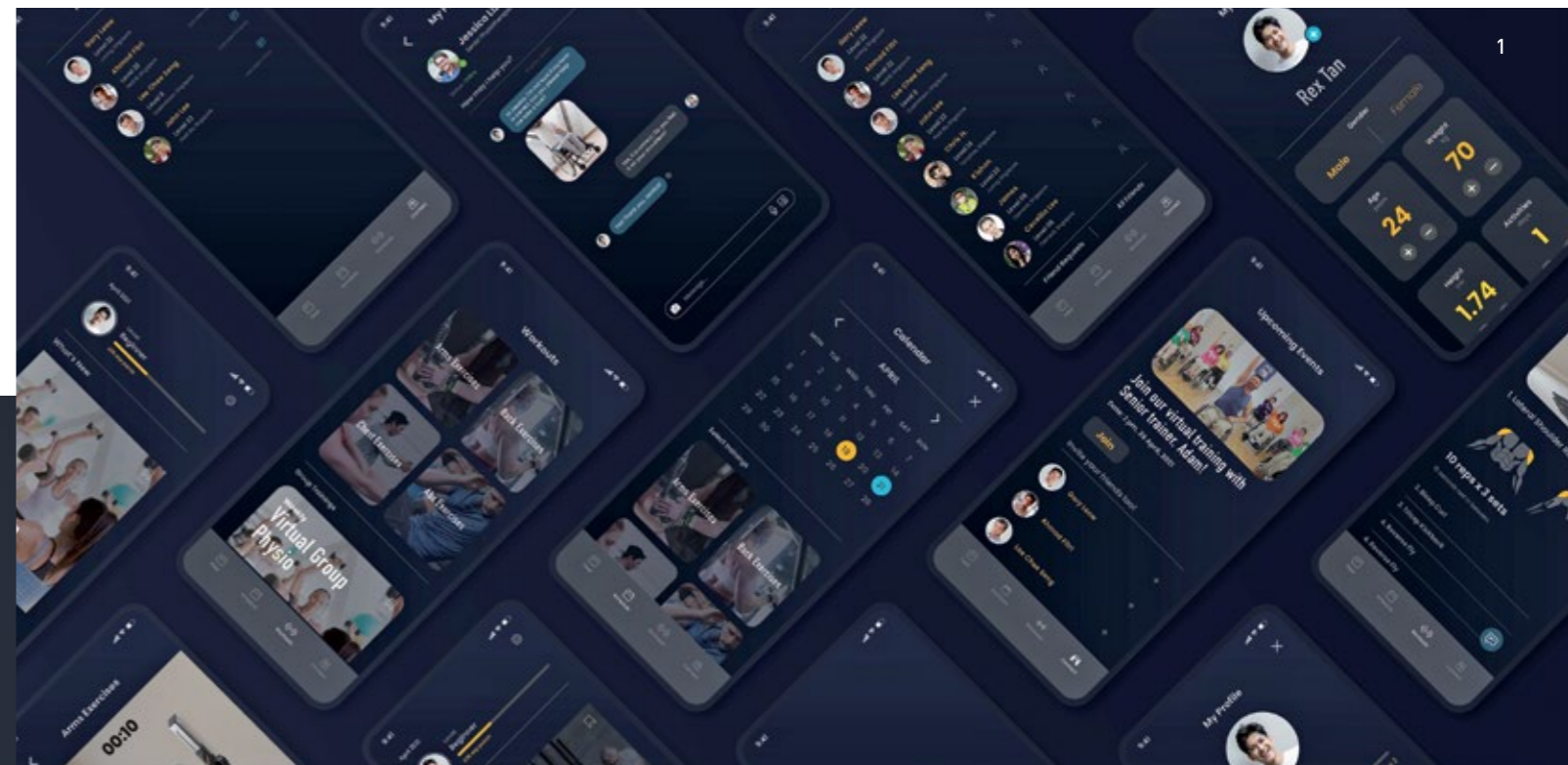
Under the supervision of Christophe Gaubert



Tan Kah Wee

Kah Wee's design is guided by a strong belief in improving one's life. He believes that through design, we are able to form relationships between ideas and reality, connecting the dots between people and objects.

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Forward

Forward is designed to be a piece of economical home-based training equipment to empower users who aim to achieve physical independence. Paired with a customised app, it allows them to watch and execute training independently with demonstrations, connecting with other paraplegics to motivate each other on the journey to regaining physical independence.

Under the supervision of Song Kee Hong

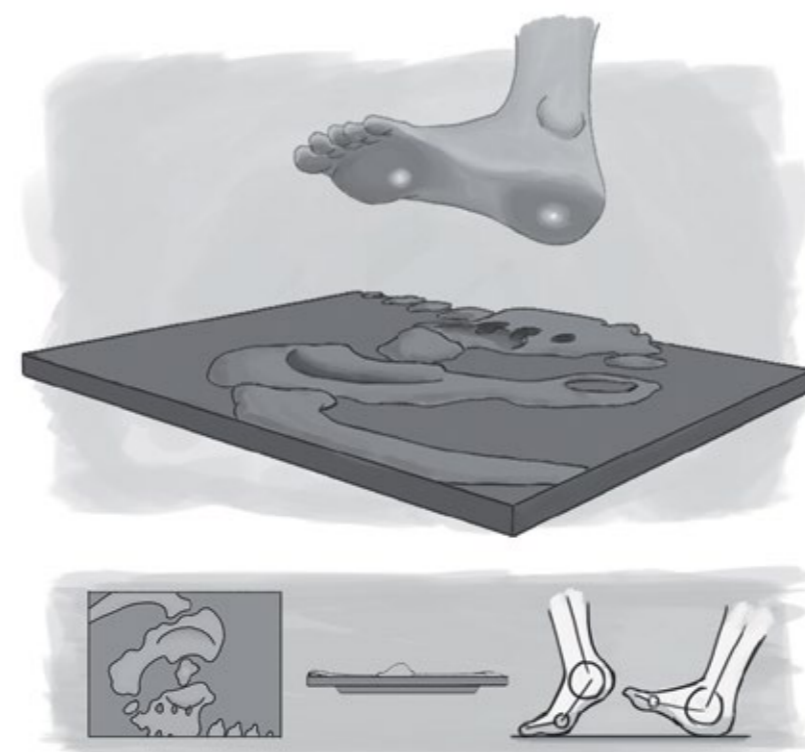
- 1 **UI/UX**
Enhanced training experience for paraplegics.
- 2 **Prototyping**
Designed to be easily installed with minimal components.
- 3 **User Testing**
Essential equipment for enhanced home training.



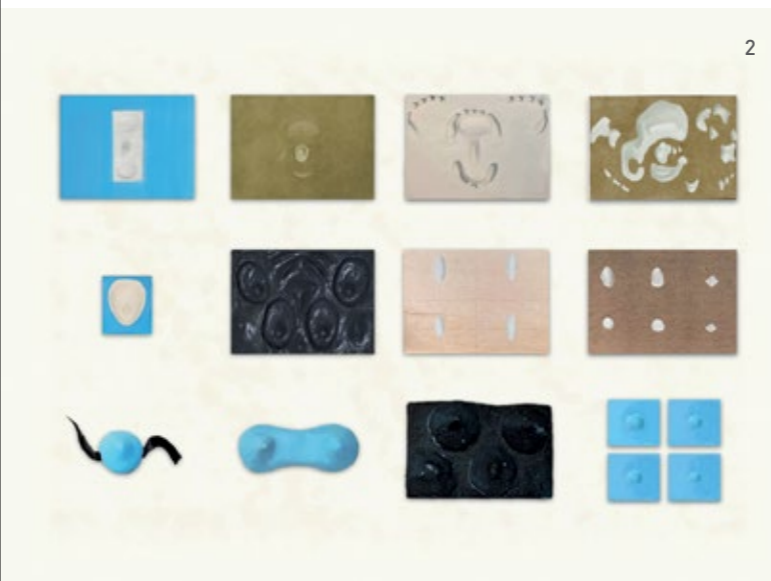
Foong Haw

Foong Haw believes design at its core is the process of making dreams possible; by learning about problems in the user's contexts, solutions are crafted to improve their lives. He enjoys analysing problems and existing solutions, imagining new possibilities. A self-taught illustrator in both physical and digital domains, he hones his artistic skills in his spare time.

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 KuaFu



KuaFu

Stress is a common afflicter of numerous physical and mental issues on the human body, especially for those approaching seniority (age 50s-60s). Asian workplaces tend to stigmatize mental issues, resulting in a difficult environment to de-stress and relax. Targeting meridian points, KuaFu was designed as a discreet and portable solution that may be deployed unobtrusively at the workplace, helping users relax when needed.

Under the supervision of Dr. Christian Boucharenc

1 Development

Countless sketches and form studies were made in pursuit of better form and function.

2 Prototype

KuaFu went through numerous iterations to achieve a suitable form.

3 User Testing

User testing helped determine the optimal shape for effective stimulation of meridian points and ease of use.



Lim Shi Yun

Often found in a studio, making things, talking to people, or dancing. Shi Yun enjoys learning through challenges and explorations of uncharted grounds in design. She believes that having a honed design intuition and the heart to empathise with people are the key aspects to good design.

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Kinetic Soul

Dance is an art we often look at to understand and connect with one another. To the visually impaired, however, connecting with someone's dance is hard without sight. How might we redesign the way we experience a dance? Kinetic Soul is a platform which enables the visually impaired to experience dance via kinetic feedback. Using a computer vision based system, a dancer's movement is tracked, translated and conveyed through kinetic pins felt by the palms.

Under the supervision of Dr. Clement Zheng



Explorations



This platform conveys a dance through 32 dynamic pins. The kinetic feedback on one's palms is 3D in nature, making it clearly perceivable through touch. Explorations on patterns formed by the pins, breaking down of dance, and forming of languages have been done and tested to understand how such feedback is perceived.



Development



Two languages—L01 and L02. L01 conveys the flow of dance while L02 communicates details of the deconstructed dance. With either languages, one can experience a dance in real-time, or relive one through a pre-recorded video, where they can pause and slow down their experience to appreciate the details.



Tan Ying

Tan Ying is a purpose-driven designer. Through simple and intuitive solutions, she hopes to design everyday products and services to be more accessible and inclusive. Her interests lie in designing for social good, service and UI/UX Design.

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Sens: Creating assurance in digital payment for visually impaired

Sense of uncertainty and insecurity are key barriers for e-payment adoption among visually impaired users. As such, Sens aims to provide assurance in digital payment for the visually impaired. Designed with non-visual micro-interactions, Sens anticipates user's behaviour, allowing payment to be made faster, smoother and safer. More than just payment, Sens imagines a world where visually impaired can feel at ease doing everyday things.

Under the supervision of Song Kee Hong

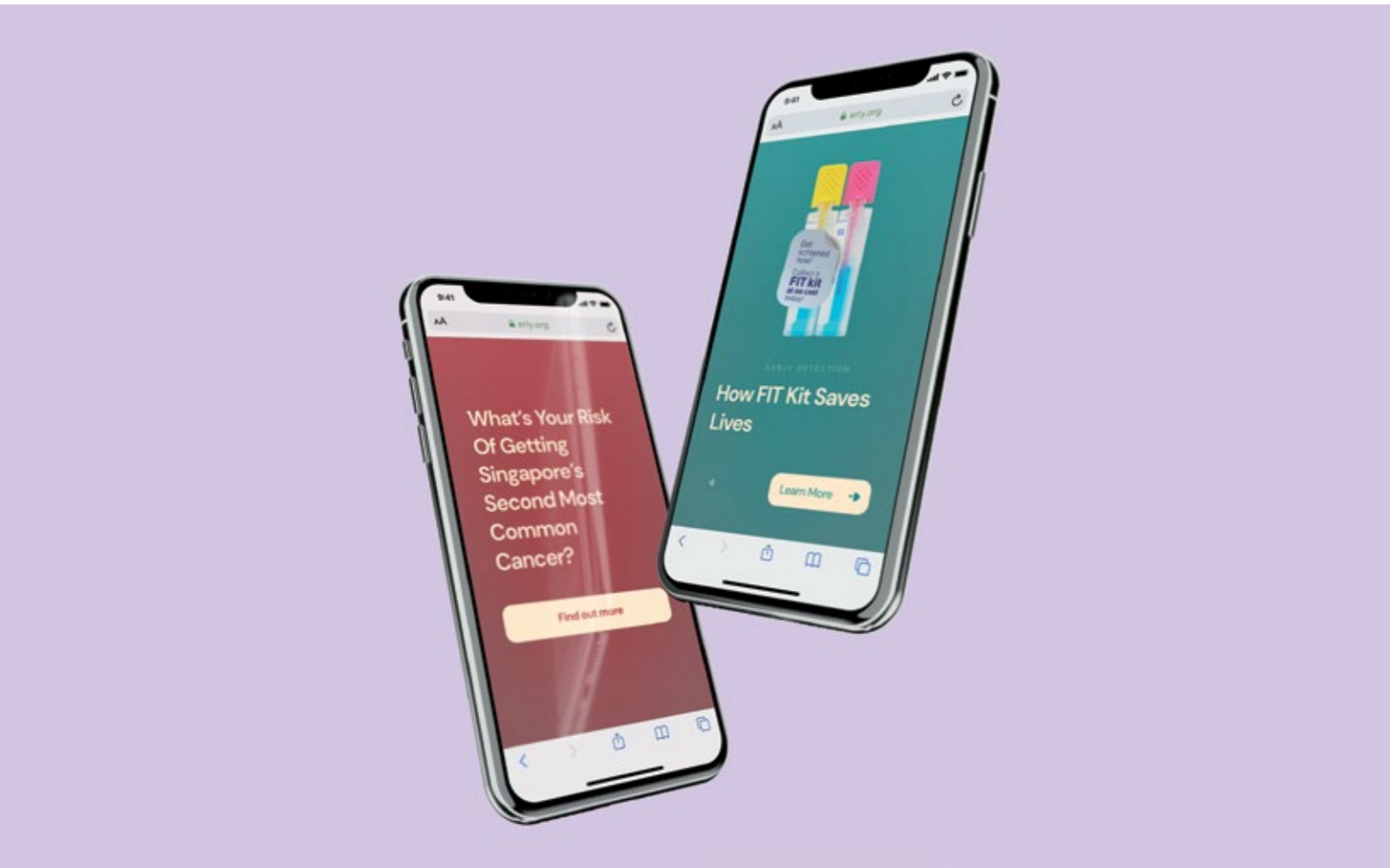
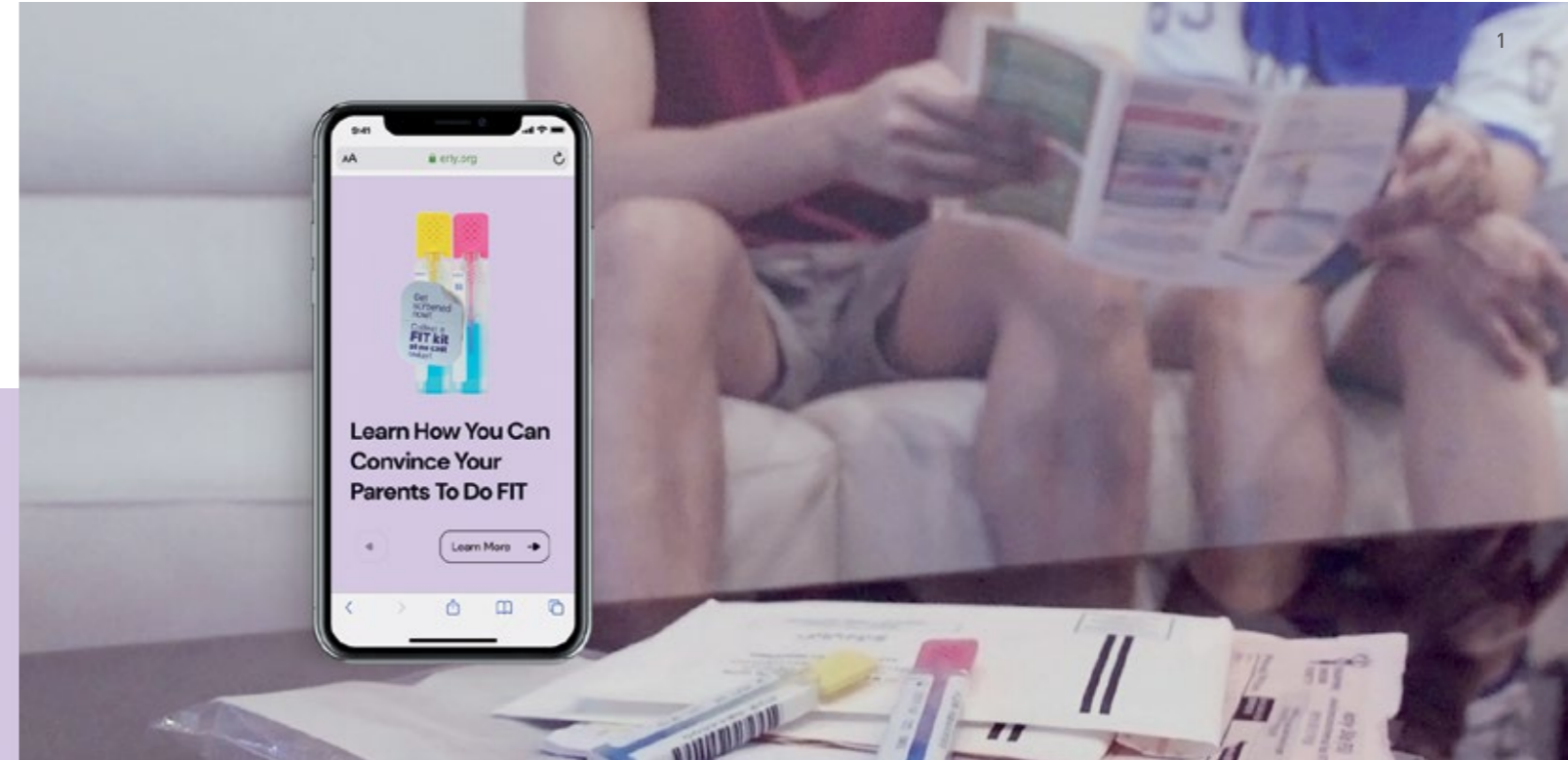
- 1 **Research**
Explorations of different user experience and micro-interactions in digital payment for the visually impaired.
- 2 **UI/UX**
The app interface is designed consistently in a list layout to complement the linear nature of screen readers.
- 3 **User Testing**
Working closely with the visually impaired community and organisations for user feedback.



Lim Jing Jie

Jing Jie started his design journey with product design but found his love for startups. Since then, his designs are focused on achieving sustainable business outcomes.

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Erly

Erly is a platform that educates young adults and parents about early cancer detection. It captures the attention of young adults with animations and interactions while educating them about cancer detection. The platform consists of a voice recording feature, bite-sized information and a reminder system that helps to afford for genuine interactions between parent and child.

Under the supervision of Dr. Jung-Joo Lee

1 User Testing

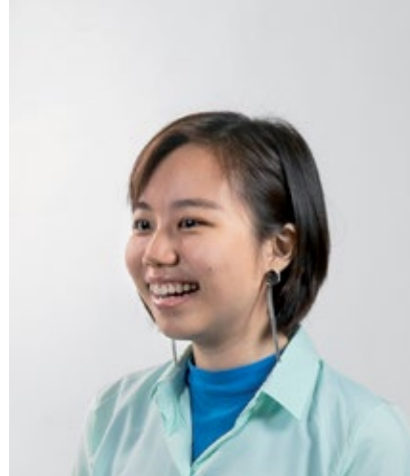
Young adults try to convince their parents after going through the entire journey.

2 Key Insight

Users that take the FIT kit from Guardian for their parents have a better chance in convincing their parents.

3 UI/UX

8-bit graphics were initially chosen to convey the meaning of animation.



Tan Zhi Ru

Zhi Ru is an extroverted introvert who enjoys unexpected interactions with people, despite her fear of meeting new people. For her, the most important part of design is unquestionably the people the design is for. She believes that fun and functionality need not be mutually exclusive.

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My Little Magic Handbook

Performing magic tricks is more than just knowing the secret. My Little Magic Handbook is a 3-part interactive toolkit to teach children with ASD and younger children social skills and helps them gain social confidence in a fun way — through learning magic tricks. It consists of a social story that teaches social skills in the context of magic tricks, focusing on the skills involved when interacting with others such as having awareness of their audience; a visual instruction guide to practice and perform the magic trick; and a guided reflection section.

Under the supervision of Hans Tan

1 Prototype

Various prototypes were made to find the most suitable content, graphics, format and medium.

2 Key Insight

Magic tricks are a lot harder than expected, and the designer tried many tricks before choosing a most suitable one.

3 User Testing

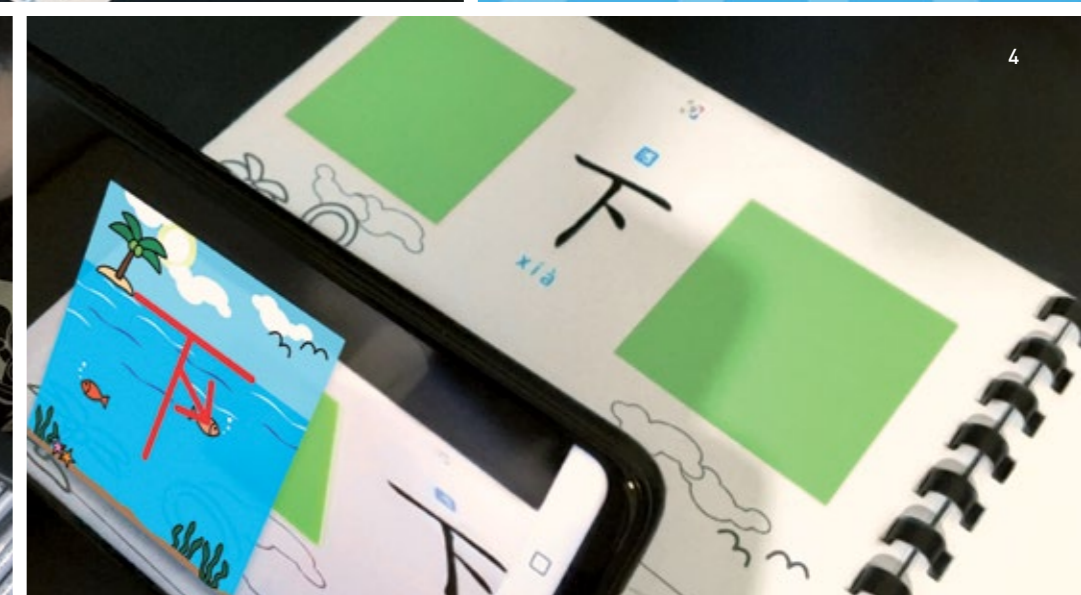
User testing was done with both neurotypical children and children with ASD to better understand the various users.



Teng I Ling

I Ling believes that the process of designing should start off as usable for herself, then modified further to suit other users. The final design should be functional and enjoyable pieces for everyone.

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- 1 Scanning Interface
- 2 Book Cover
- 3 Customisation
- 4 Basic Learning Level
- 5 Advanced Learning Level

VocabScan 听写扫一扫

VocabScan is a supplement tool that aids lower primary school students in their Chinese vocabulary learning. Using contextual storytelling animation allows children to gain a better understanding of the word. Mix & match supporting word cards to form phrases that allow in-depth understanding of the word usage. The animations are available in the AR scanning system to allow children to understand the vocabulary and phrases through interactive contextual learning.

Under the supervision of Dr. Yen Ching-Chuan



Hoi Bing

Hoi Bing believes that a product is made meaningful through a cohesive and interconnected set of experiences. He is ever curious about the relationship between people and seeks to help build meaningful bonds through interactions.

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StoryTell

StoryTell is an interactive book that allows parents and children to communicate learning outcomes with each other. It consists of an interactive story book with Montessori-inspired activities. A character card allows the children to document their learning journey which aid parents in spotting challenging topics and find ways to help their children learn.

Under the supervision of Dr. Yen Ching-Chuan



- 1 Research
- 2 Research
- 3 Development
- 4 Development
- 5 User Testing

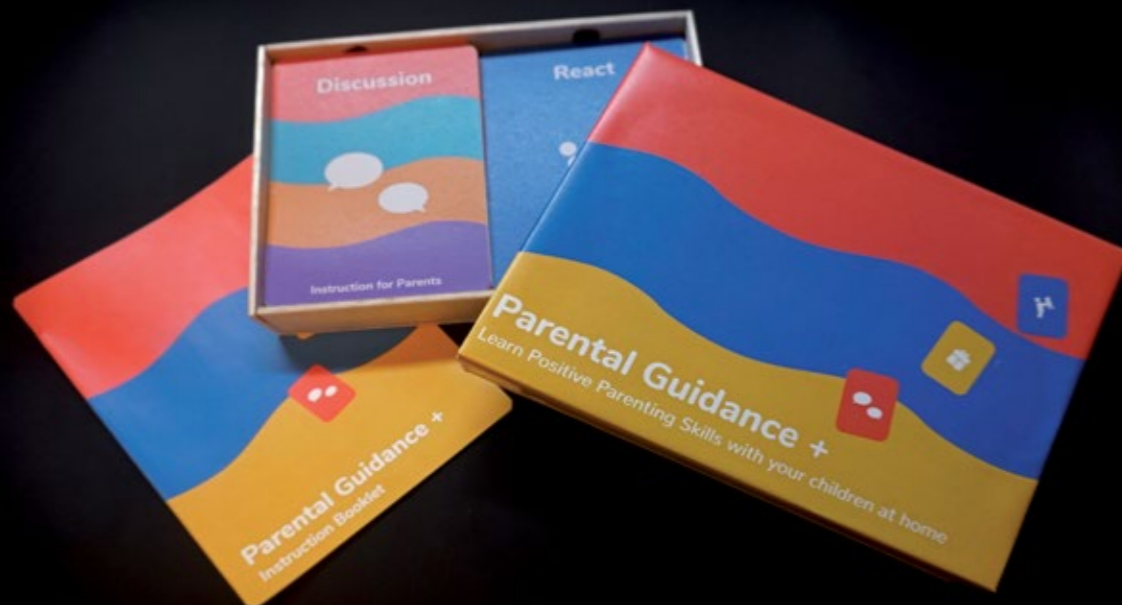




Ashley Tan

Ashley Tan is a designer who strives to create design that engages and enriches people's lives for the better. He believes that with empathy and creativity, he can bring positive experiences that adds a little more to people's lives.

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Parental Guidance +

Parental Guidance + is a physical card kit for parents with children aged 12 and below to learn Positive Parenting Skills in a simple and digestible manner. Parents can be equipped with the basics of skills taught in the Positive Parenting Program independently at home directly with their child. This format allows parents to be less overwhelmed and instead provide a stepping stone for them to become a more confident parent.

Under the supervision of Patrick Chia, In collaboration with Fei Yue Community Services

1 Key Insight

Electronic devices are a big distraction so the physicality of cards draws the parent and child together to interact.

2 Prototype

Designs were refined through discussions with experts and parents to enhance learning of positive parenting skills.

3 User Testing

Parental Guidance + is used to equip parents to be more confident in nurturing their child at home.



Jonjoe Fong

Jonjoe enjoys challenging bored narratives and maximising the human experience. An avid social and experience designer, he especially finds meaning in responsible and inclusive design. With hope, empathy and patience, he aspires to make life a little more delightful for the people he cares about.

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Lehdio

The elderly often spend long periods of time alone at home, experiencing loneliness. Based on the familiar analogue radio, Lehdio functions as a regular radio by itself, and transforms into a social platform connecting elderly friends when one's phone is docked. The device gives the elderly an excuse to interact by enabling spontaneous encounters with friends who tune into the same channel. By leveraging on the radio and phone as objects of familiarity, Lehdio empowers the elderly to stay connected as they age-in-place, while remaining relevant and meaningful to their lives.

Under the supervision of Patrick Chia, In collaboration with Fei Yue Community Services

1 Key Insight

The elderly wants to know of one another's availability. The number of friends connected at any one time is displayed.

2 UI/UX

Act of tuning between channels, each serving as a different common space in which friends can gather and interact.

3 Development

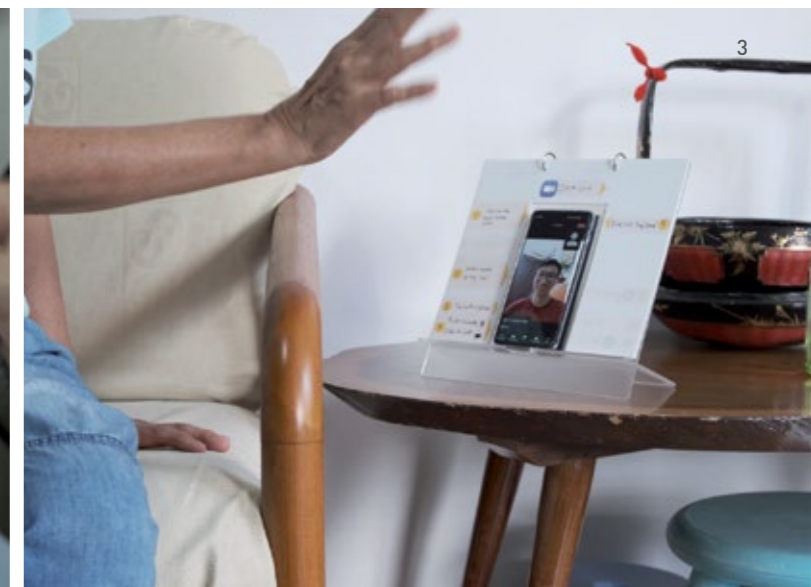
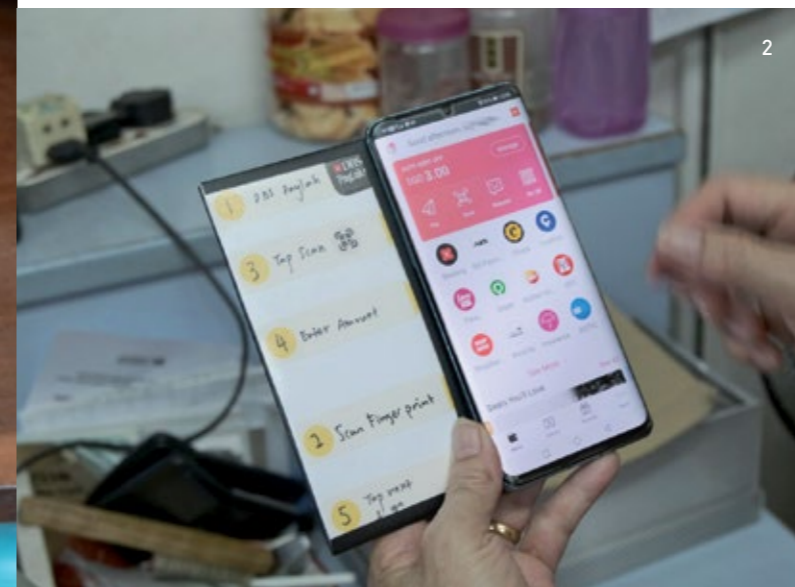
Core function as an analogue radio bridges the introduction and sustained adoption of a new social concept.



Andy Tang

Andy Tang is a designer that enjoys creating simple and delightful user experiences even in complex systems. He believes that human-centred design is integral in creating meaningful interactions that influence how we interface with the world.

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Memo

Memo is a digital learning kit designed for seniors to learn digital skills more effectively. The kit facilitates note-taking in class and frames the notes into everyday objects that blends into the lifestyle of the seniors. The first object is the flip note which attaches to the phone and is designed for on the go, just in time reminders when the senior is outside. The second object is the phone stand which caters to task which are done comfortably at home. The objects are designed to integrate into the senior's lives and this allows them take their learning beyond the classroom.

Under the supervision of Dr. Jung-Joo Lee

1 User Testing

The digital learning kit was tested with real-life users where users made their own notes.

2 Contextual Use

The flip note providing on the go reminder on using DBS PayLah!

3 Contextual Use

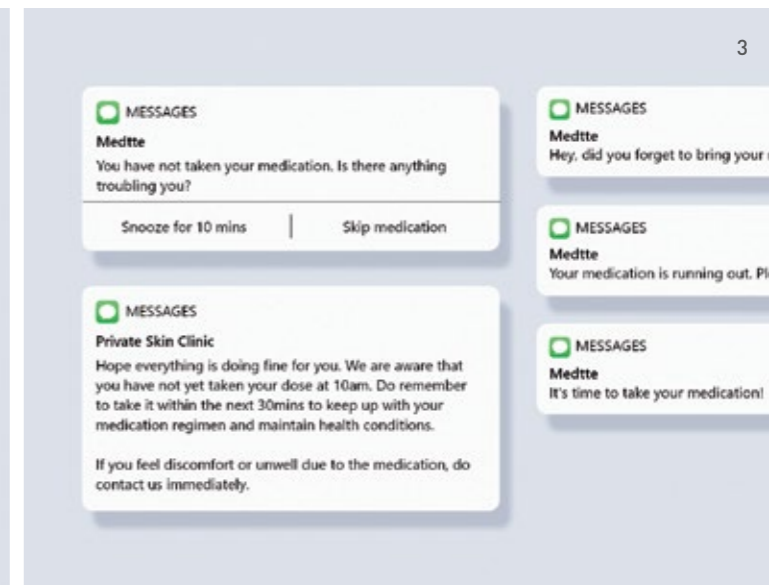
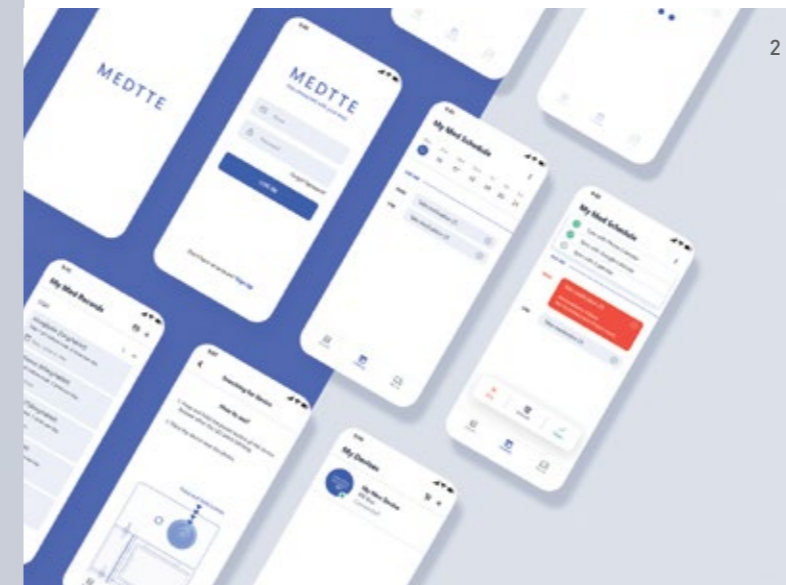
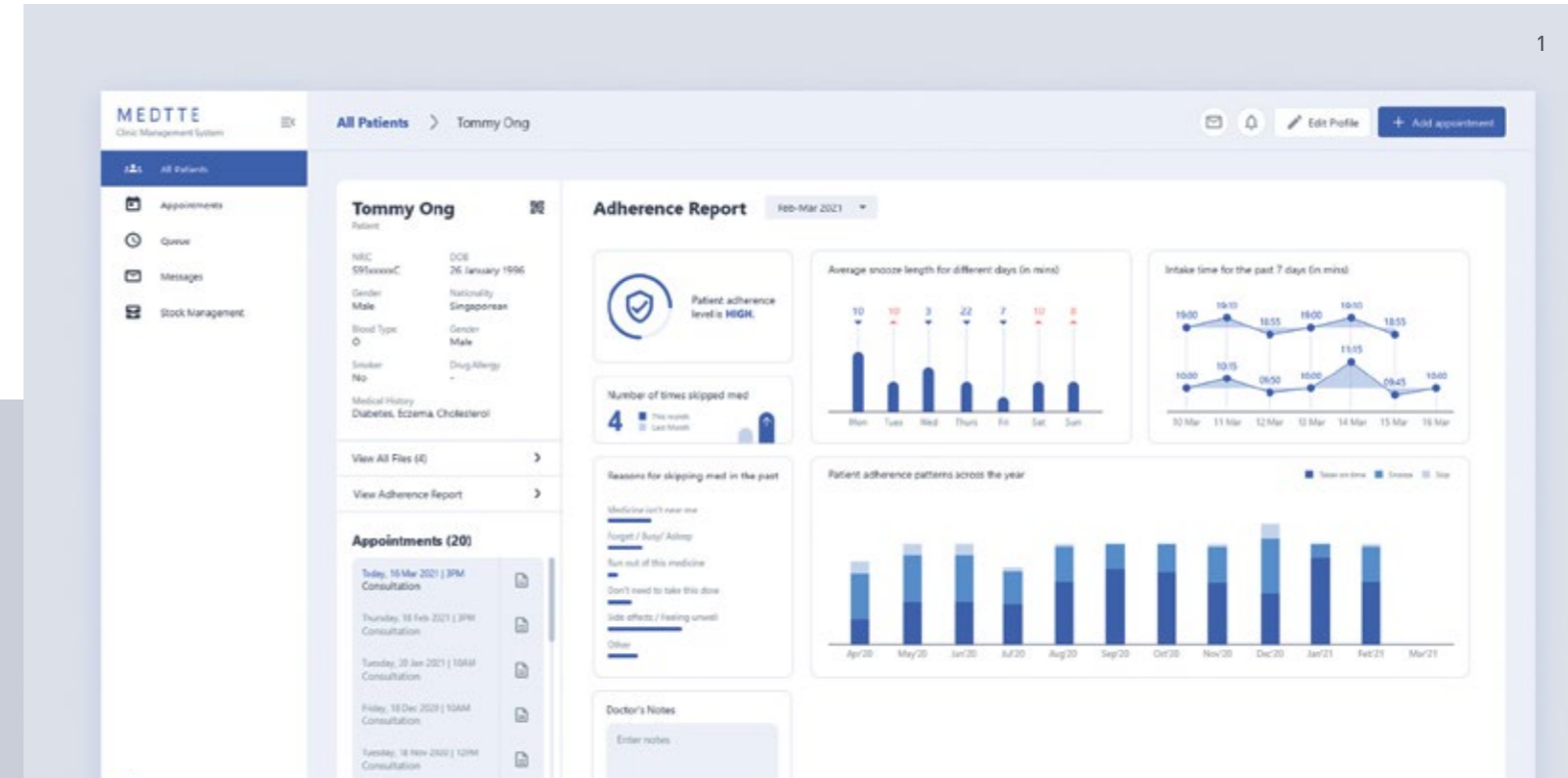
The phone stand being used for a Zoom call.



Tan Hwee Peng

On her journey from engineering to design, Hwee Peng uses design thinking to solve problems and improve people's lives. She capitalises on her creativity in practical ways and gears towards functional design. She adopts a structural approach to design and pays special attention to usability, feasibility and sustainability.

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MedtTE: A medication adherence system for chronic patients and healthcare providers

Unintentional non-adherence (i.e. forget or inaccurate with timing) accounts for slow treatment processes, leading to health issues and death. MedtTE leverages existing technologies to track non-adherence; i) detects Bluetooth disconnection when medication is not with the patient, ii) detects non-presence of pills in compartment using IR sensor when medication is taken, and iii) syncs with personal and work calendars to predict possible occurrences.

Under the supervision of Dr. Yen Ching-Chuan

1 UI/UX

An extension built in the clinic management system to generate insights for doctors to understand patient barriers.

2 UI/UX

One-stop service to access complete medication records for patients who are admitted to multiple hospitals/ clinics.

3 Key Insight

Patients need to be reminded at the right time based on their real-time context.



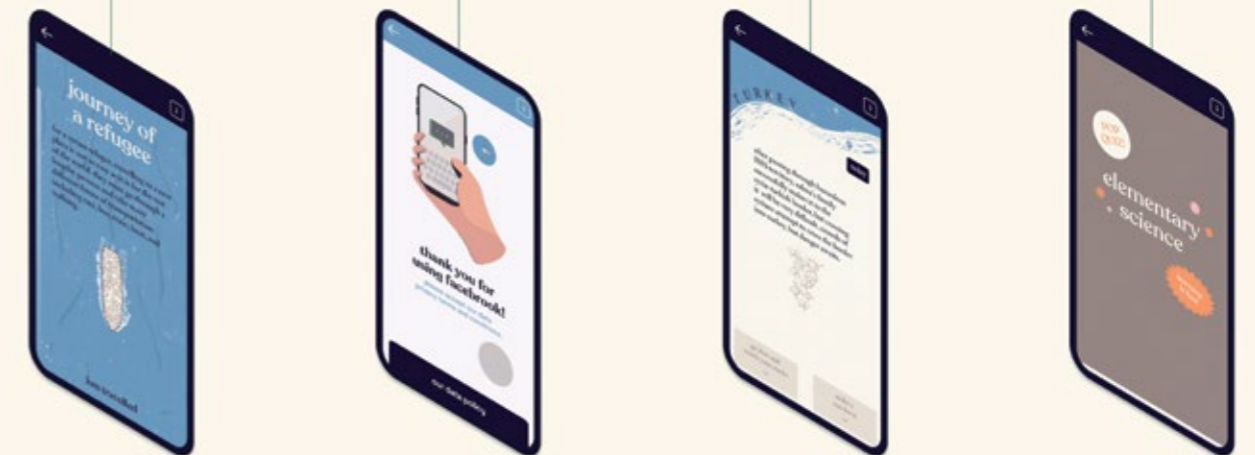
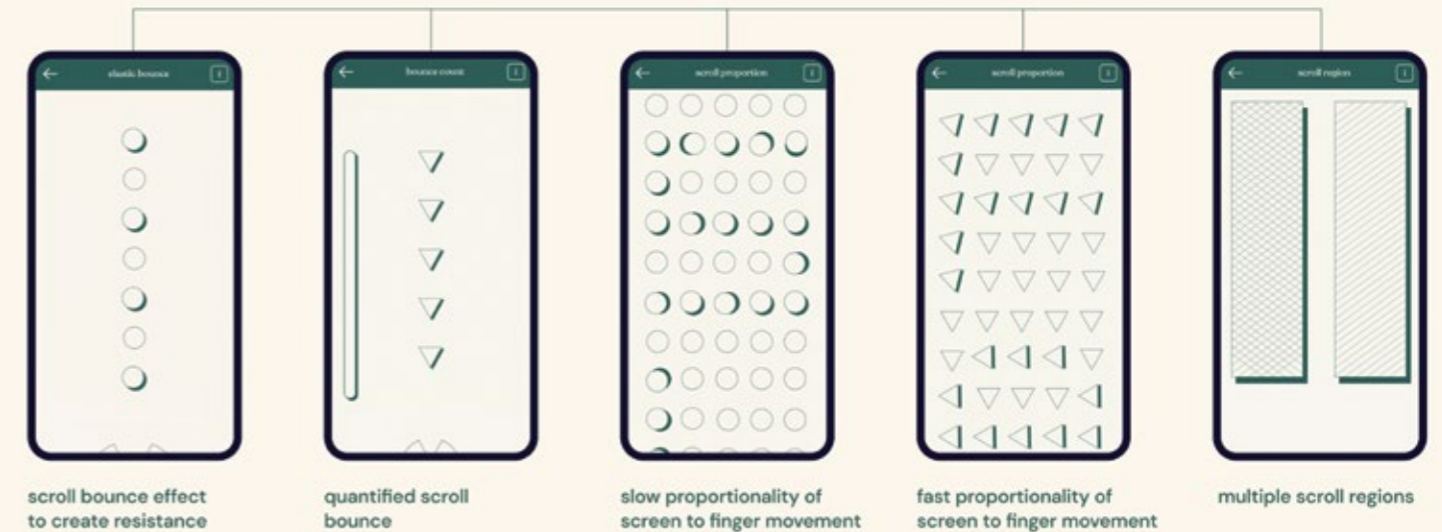
Carina Lim

Carina enjoys designing to fuel her curiosity of our shared humanity – the way we live, think, and connect with the world around us. She strives to continue expanding her world view by designing critically and compassionately, through design methods that are systematic yet embrace serendipity.

carinalyshan@gmail.com | carinalyshan.com



taxonomy of new scrolling patterns



case studies

Scrolling against (de)faults

The current paradigm of scrolling follows usability defaults promoting qualities like efficiency, seamlessness, and ease of use. While this seems to make sense, it has also perpetrated the attention economy and addiction to digital devices by being overly use-able. In this project, the scroll is challenged in various ways to become more present and noticeable. Through digital pattern swatches and thought-provoking case studies, a new fertile space of meaning-making and embodiment through scrolling is created.

Under the supervision of Dr. Clement Zheng

Discovery

Subversion of scrolling expectations was used as a key ideation strategy as it creates a tension that makes the scroll noticeable. This was followed by a deconstruction of the scroll to derive a taxonomy of new scrolling patterns as shown above. Following this, specific case studies that highlighted the new UX opportunities from each scrolling pattern were designed. This body of work is now a mobile online resource for designers on tinyurl.com/scrollingagainst (only on mobile and chrome).

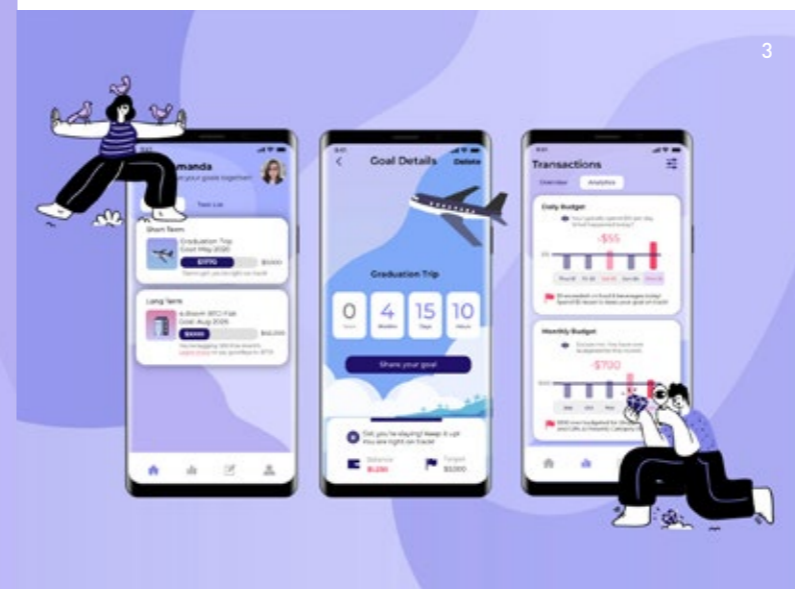
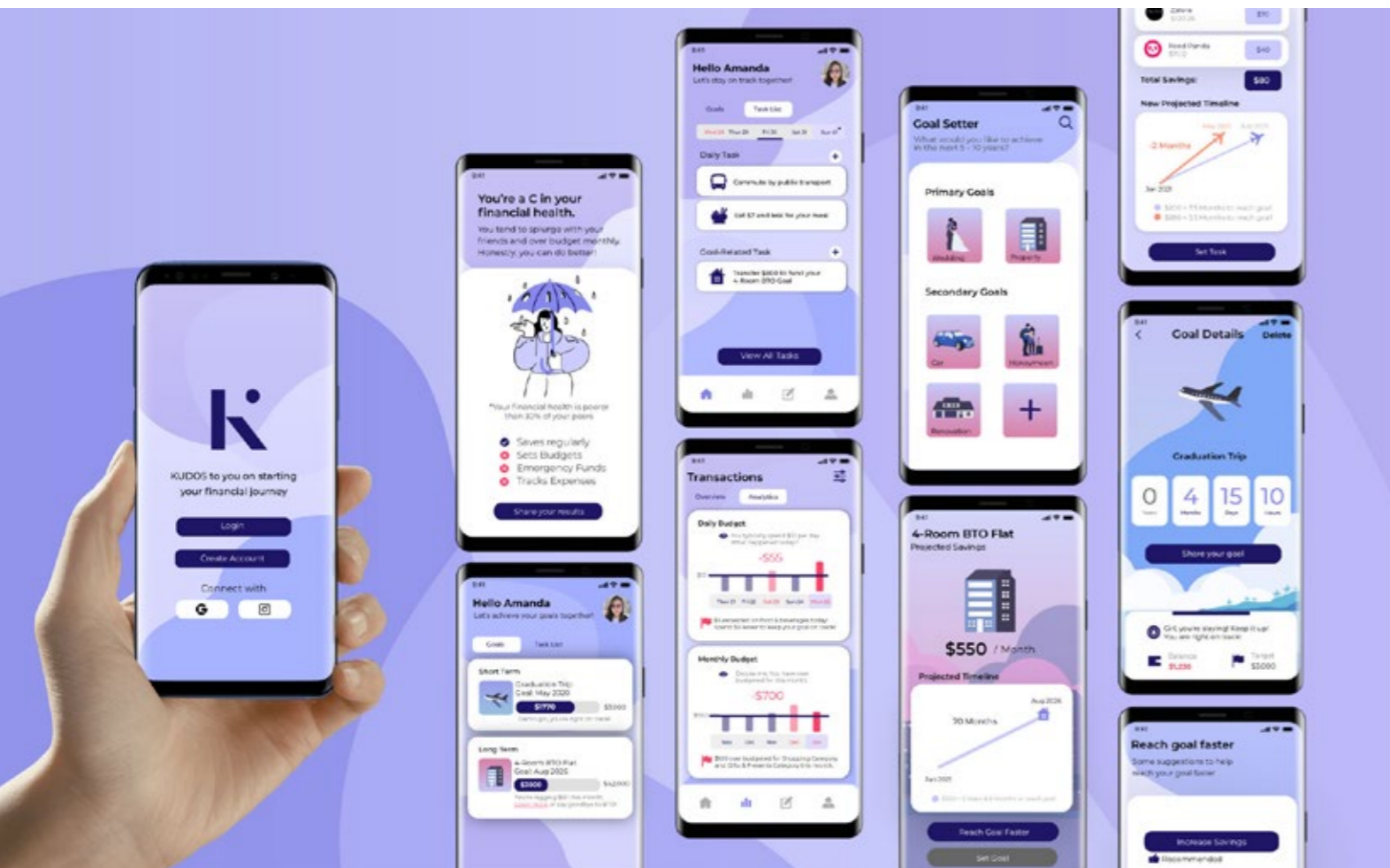
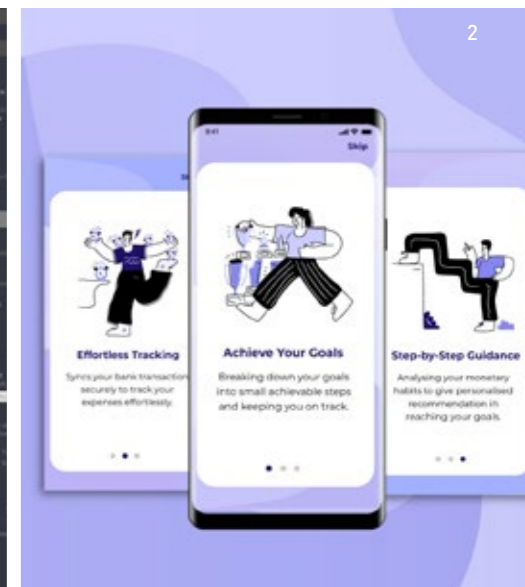
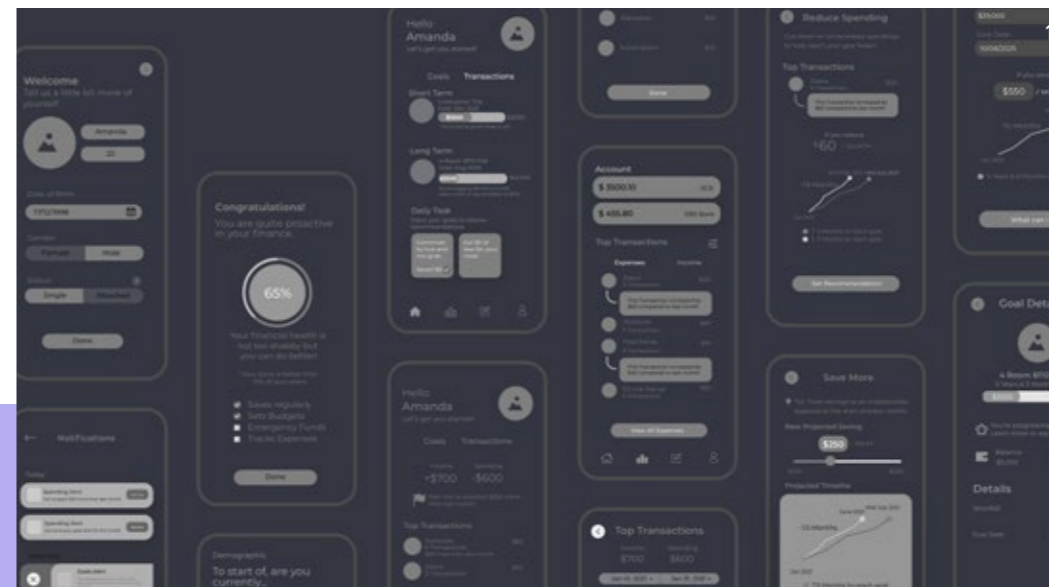




Shermaine Boh

Shermaine believes that her role as a designer is to use storytelling to evoke emotions and create memorable experiences that extend beyond first impressions. Her drive to understand users and her uniqueness in visualising and conveying ideas help to bring harmony between research, visuals, business vision and users' needs.

shermaineboh@gmail.com



Kudos: Empowering young adults through their transition to adulthood

Kudos is a financial planning and literacy application that empowers young adults aged 18–23 years old to confidently achieve their financial goals by developing their financial literacy. It is a companion that learns with you on your spending habits and creates awareness and amendments to your finances through recommendations and actionable steps to reach your goals. Ultimately, Kudos shapes the mindset towards finance through their behaviour and actions. This results in a healthy, happy and secure future when they are in control with their money.

Under the supervision of R. Brian Stone

- 1 Prototyping
- 2 Onboarding
- 3 Visual Language
- 4 User Testing
- 5 User Journey

Amanda's User Journey

- 1 Present Self**
Amanda is curious and unsure on how to manage her finances.
- 2 Onboarding**
She sets up her profile with a fun and enjoyable quiz to assess her current financial health.
- 3 Syncs Bank**
KUDOS provides key insights such as her subscriptions and recommendation that helps Amanda better understand her finances.
- 4 Short-Term Goal**
Encouraging her financial planning starting with her graduation trip, she starts small by eliminating her drinking habits so she could reach her goal earlier.
- 5 Long-Term Goal**
KUDOS changes dynamically with her such as allocating more savings to fund her house goal when she gets her first full-time job.
- 6 Future Self**
She feels empowered and in control with her money where she leads a happy and secure lifestyle.

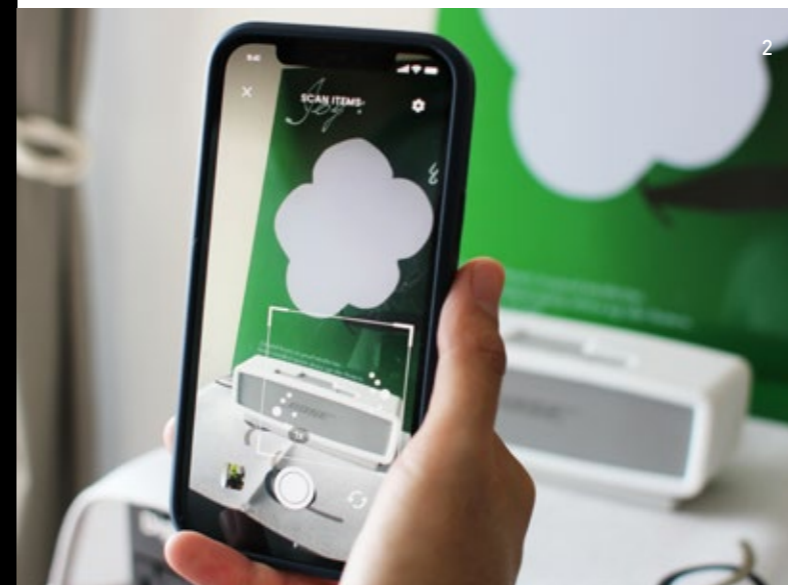
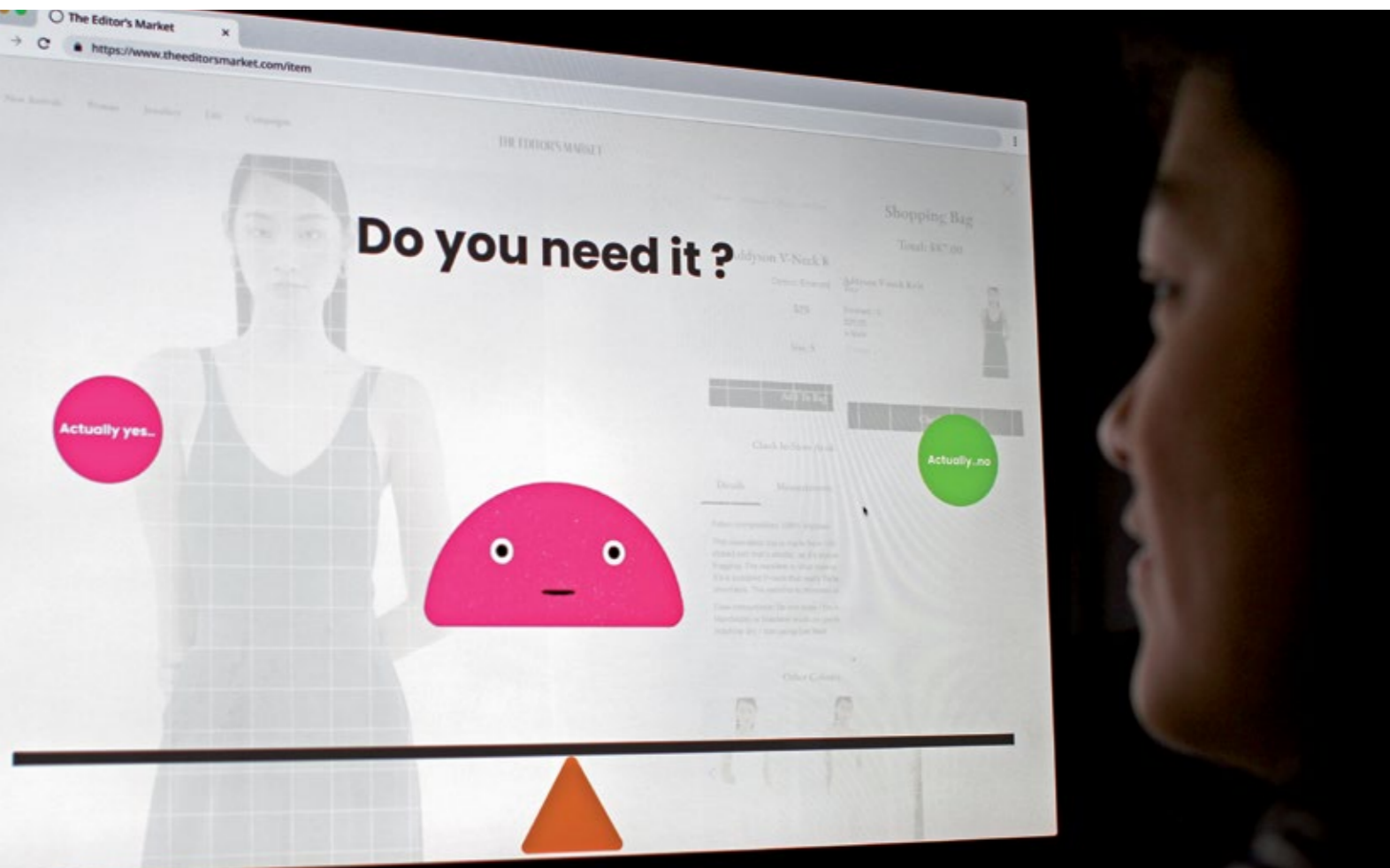
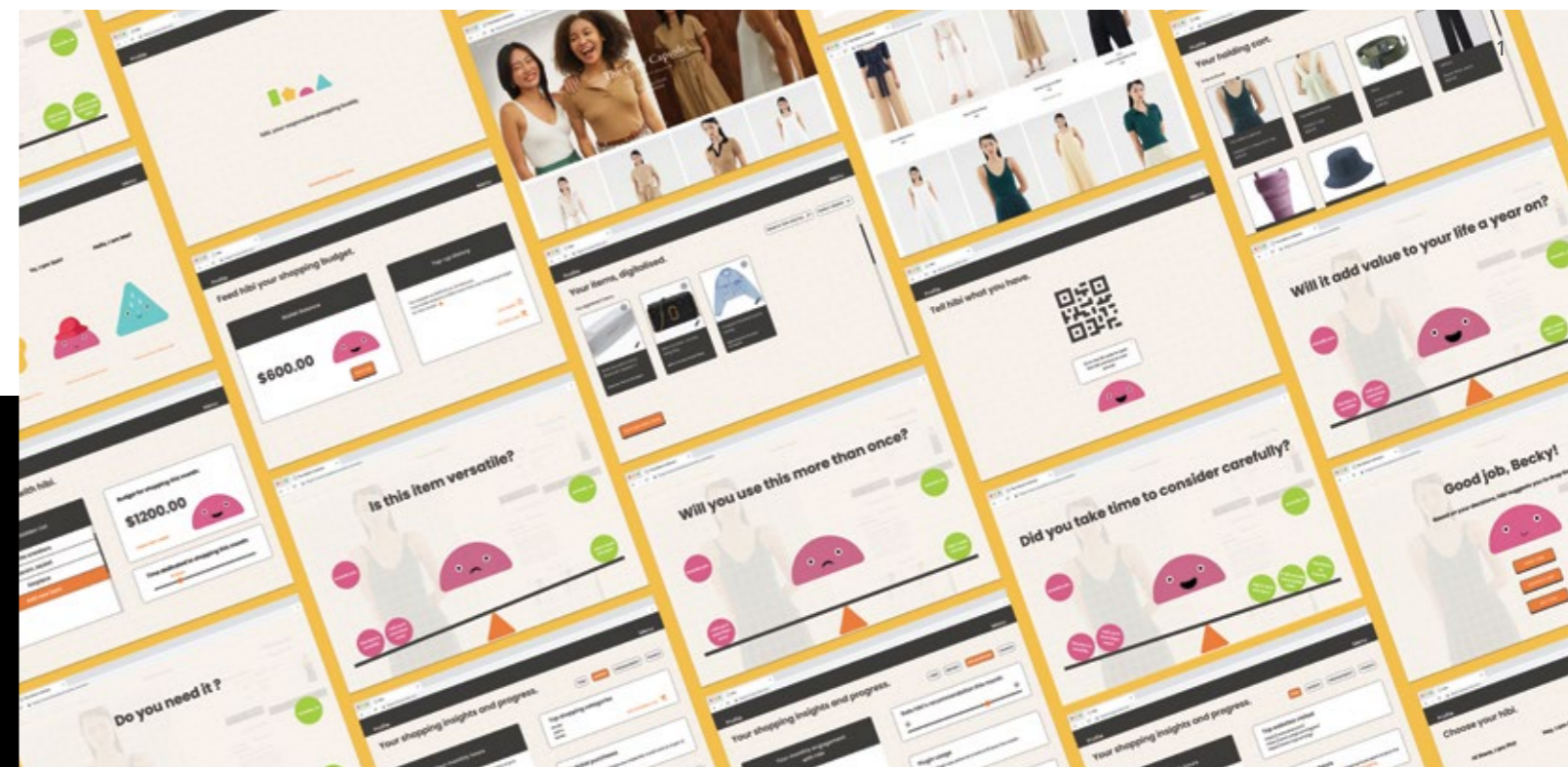




Ashley Huang

Ashley is a third culture kid who is curious about the people and things around her. She enjoys observing the way people respond to everyday life, and is interested in turning such observations into meaningful design opportunities. With experience working in Singapore and Beijing, she is most inspired by multi-disciplinary backgrounds and cultures.

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Hibi the shopping inhibitor

Hibi is a friendly shopping inhibitor that helps you gain clarity over your possession and purchases, co-makes real-time decisions with you while motivating you through goals and behavioural insights. With Hibi, young adults have the freedom to make more mindful shopping decisions and shape their shopping behaviour according to their goals.

Under the supervision of Dr. Jung-Joo Lee

1 UI/UX

The main features of Hibi are designed together with bright colours and use of characters for a gamified experience.

2 Contextual Use

Hibi is used on both desktop and mobile in the form of a plug-in and progressive web application.

3 User Testing

Final user testing and validation was conducted with Dr. Lui Yit Shiang from National University Hospital (NUH).



Zephania Lim

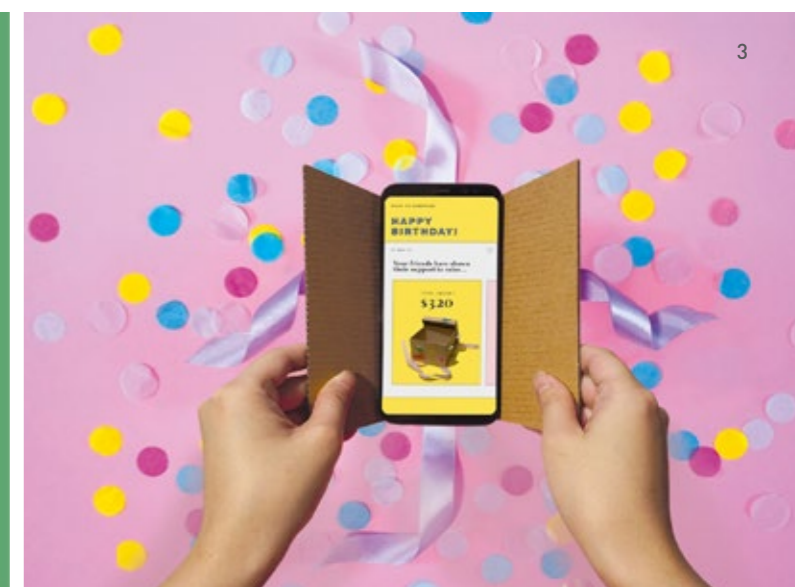
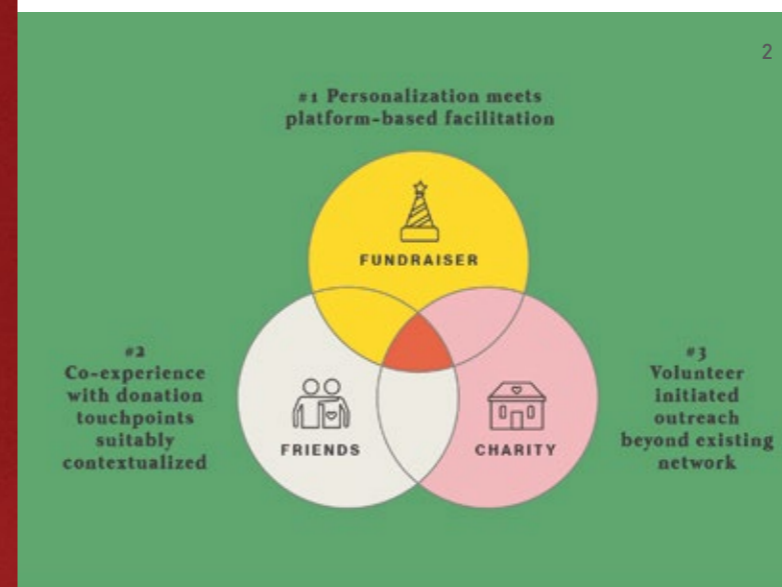
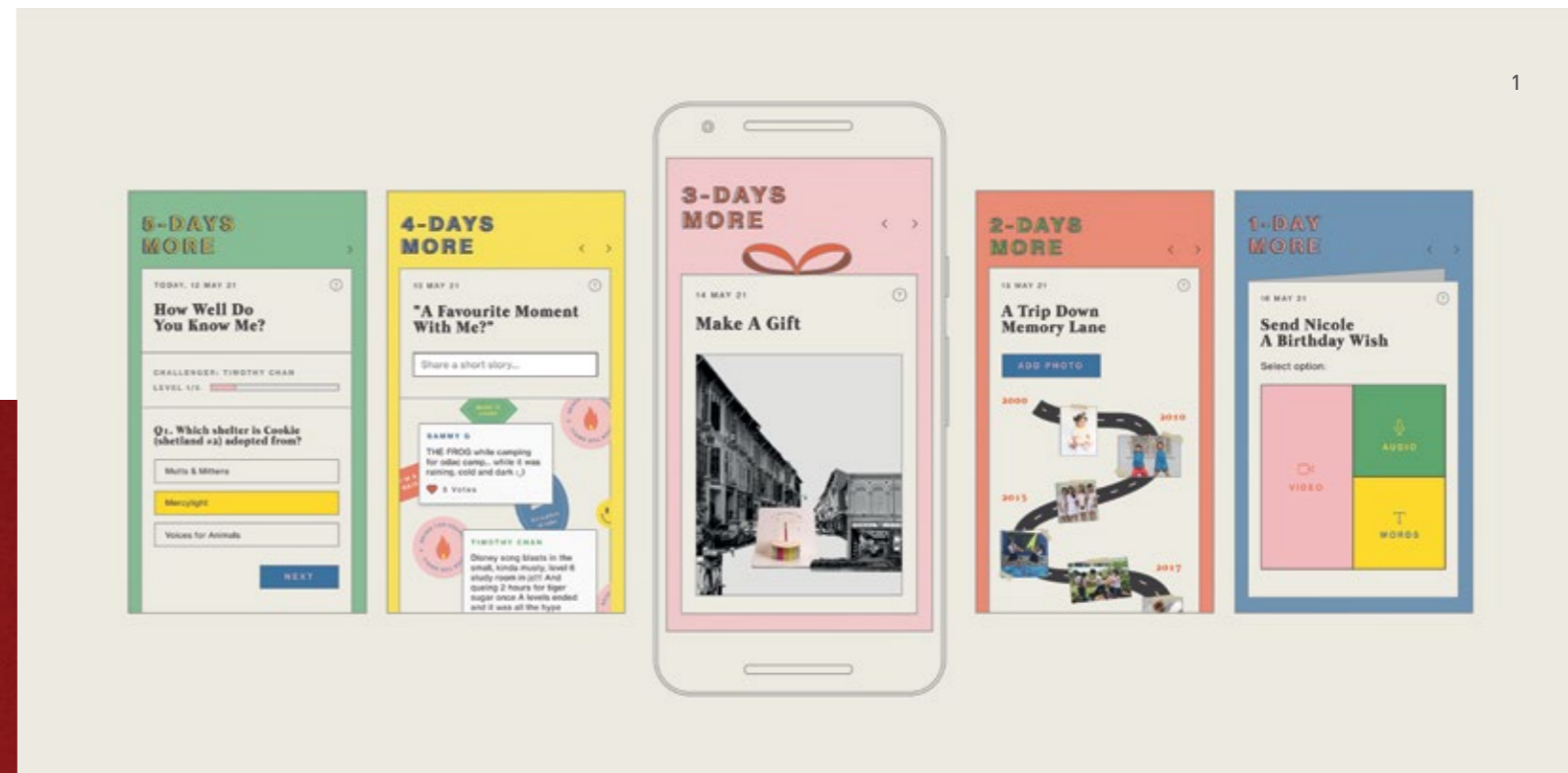
Zephania is a designer who enjoys exploring different perspectives and new ways of doing things. She believes that design should play a visionary role to shape lives for the better.

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Everyday

Everyday is a peer-to-peer fundraising platform that aims to make donating a fun experience, especially for the younger generation. Tapping on the opportunity of special occasions, Everyday provides customizable activities for fundraisers to countdown with their friends to their big day. Friends not only get to celebrate together, they also learn more about the charity and can make a donation in place of a gift.

Under the supervision of Hans Tan



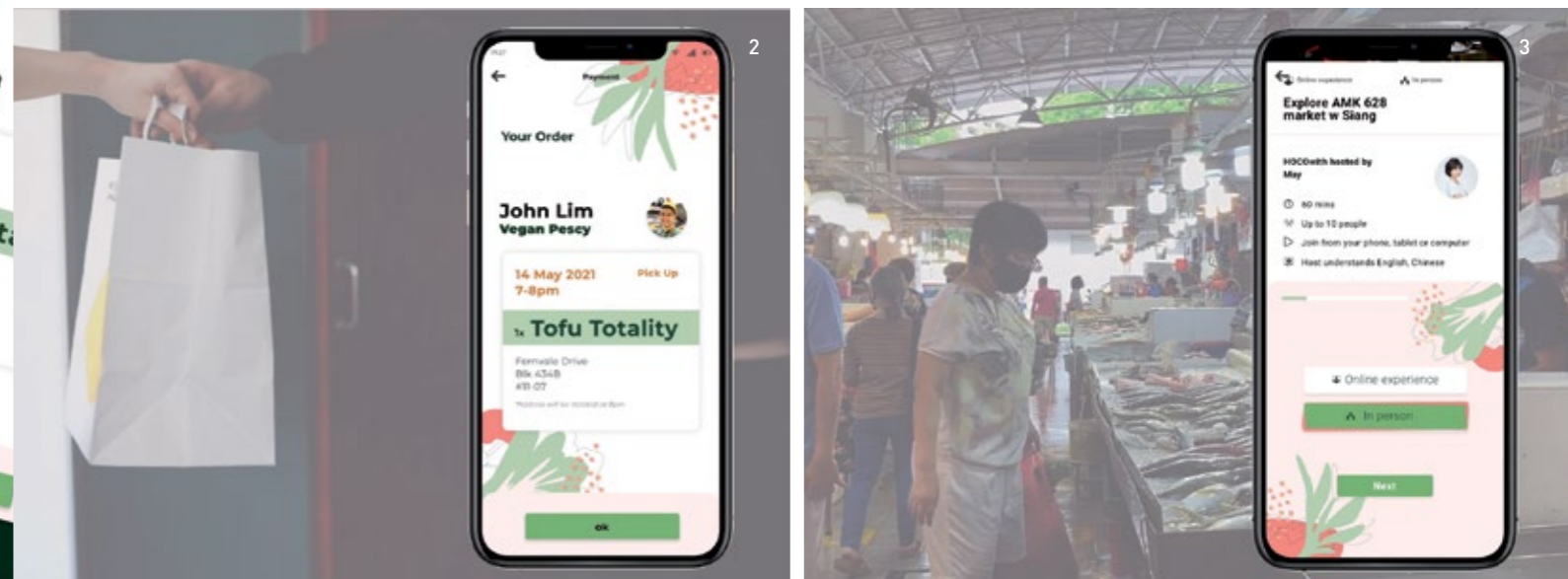
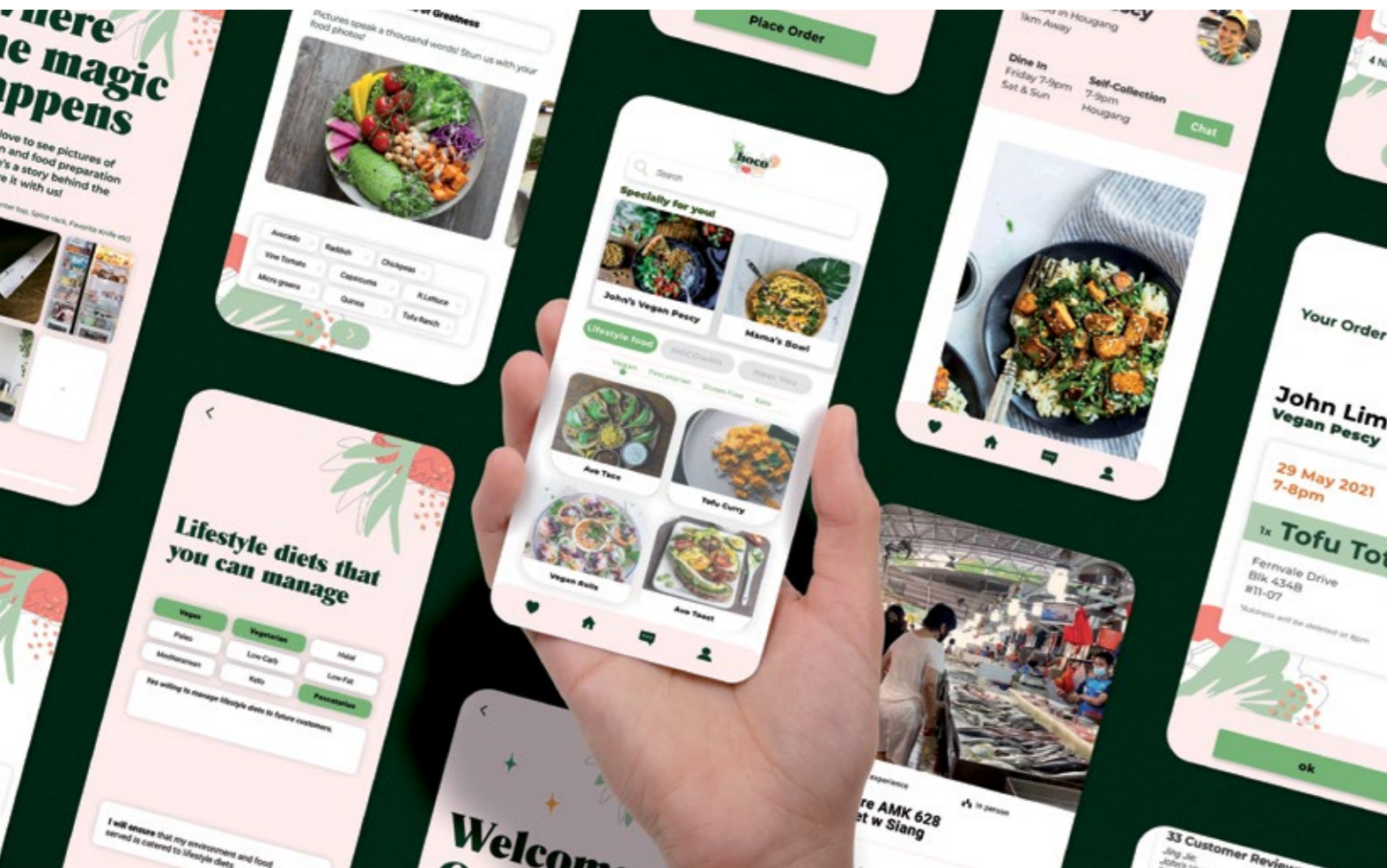
- 1 **UI/UX**
Overview of the countdown experience and customisable activities to engage friends.
- 2 **Key Insight**
The core value that Everyday provides each stakeholder with.
- 3 **UI/UX**
Everyone only finds out the total amount raised on the actual day of the occasion, keeping it a surprise!



Jereme Tan

Jereme thoroughly enjoys the creative process of design to create delightful and impactful solutions. With human centricity at the core of it, he loves asking questions to learn and discover more.

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Hoco

Hoco is a platform to directly connect home chefs to customer with dietary needs. Joining Hoco as a Hoco chef, you can sell your food online to customers with peace of mind that logistics will be taken care of by the platform. Users can also deepen their knowledge and experience more through Hoco. With Hoco chefs can host experiences like grocery shopping or cooking lessons based on lifestyle and dietary preferences.

Under the supervision of Song Kee Hong

1 Research

Growing demand from customers seeking personalisation of food and functional foods suitable to their bodily needs.

2 UI/UX

To facilitate the experience from the mobile application to real life with strong visual hierarchy on the food order.

3 Key Insight

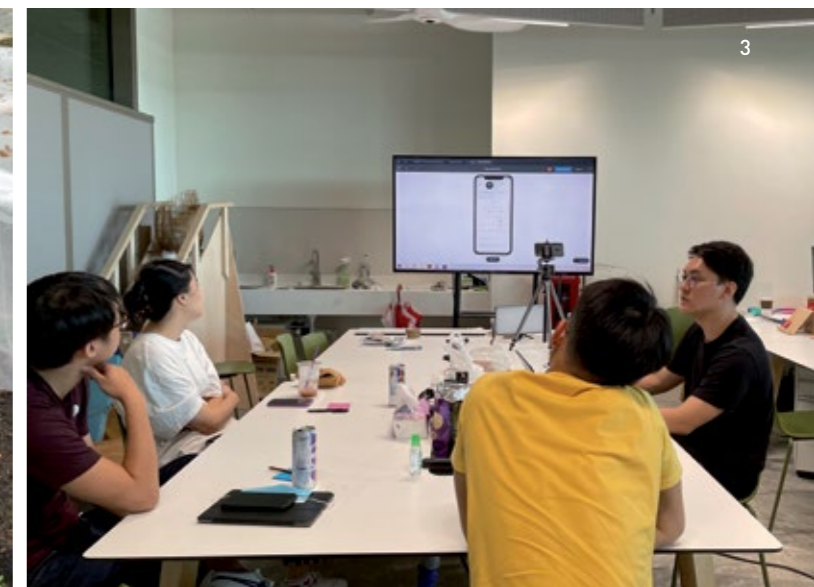
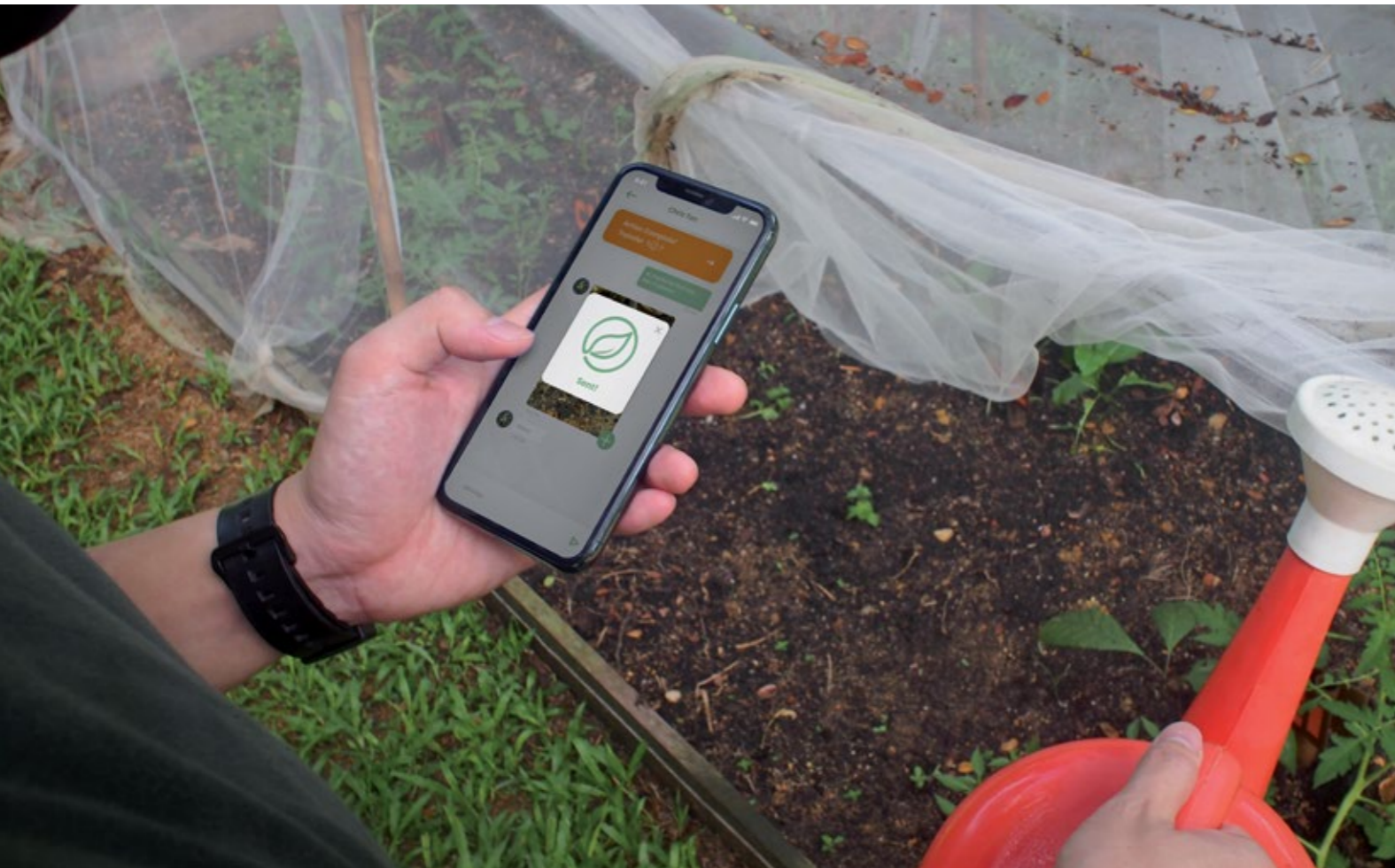
Users want to maintain a lifestyle diet but do not have enough knowledge and expertise to make it sustainable in the long term.



Keith Lee

Keith believes that design is the way to problem-solve with creativity and innovation. Within his four years of design education, Keith has actively sought to diversify his experiences by tackling different types of design challenges. He believes that by learning the different approaches of design thinking, he is better equipped to deal with more complex problems in the future.

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Plotto

By augmenting the physical community gardening experience with a digital infrastructure, Plotto facilitates a community gardening experience that caters to the lack of time young adults face when gardening. Plotto allows users to trade pockets of time in order to get help caring for their plants when they are unavailable. This way, Plotto creates a 'pay-it-forward', voluntaristic culture while allowing users to experience physical community gardening.

Under the supervision of Dr. Jung-Joo Lee

1 App Architecture

Creating a digital infrastructure with features that facilitate the time trading and engage users to stay motivated.

2 User Testing

Experience Prototyping at a physical community garden for 2 months, while tracking transactions through Telegram.

3 Development

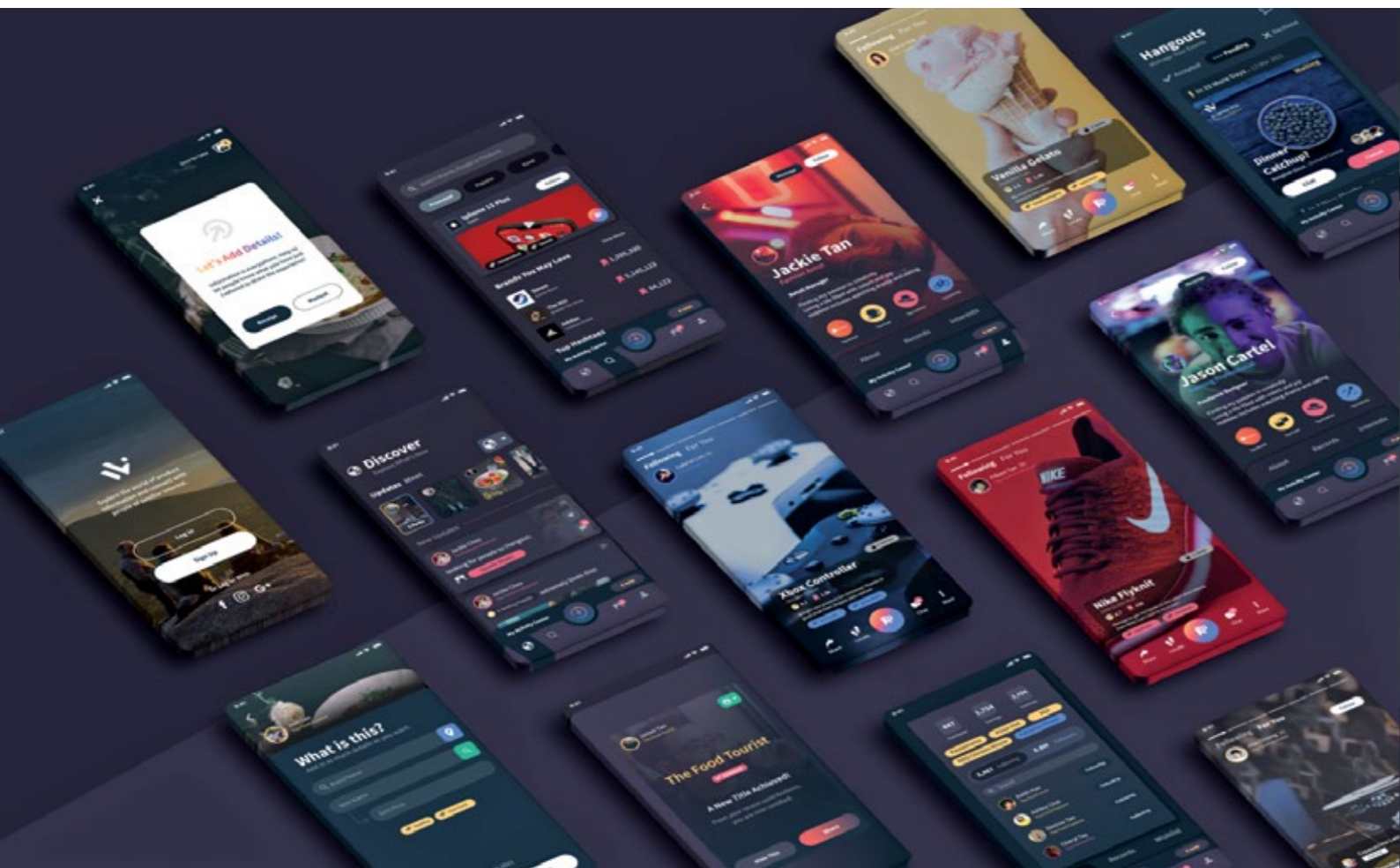
Through user interviews, Plotto features were refined to better fit the needs of young adults.



Joel Loo

Joel enjoys discovering the way people behave and how they interact. He takes pride in creating digital design innovations that enhance usability through powerful information and system architecture.

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Application



Unlike current social platforms, ViVi transforms personal profiling into one that continuously grows and develops alongside one's experience. With the addition of insightful information, users can reflect and learn more about oneself and people in the community.

ViVi

ViVi sets out to reshape the framework of current social platform system by focusing on highlighting a person's individuality as they track and define the things they like. Users are also able to invite like-minded people who share similar interests to connect even more in person through the Hangout feature.

Under the supervision of Song Kee Hong

Development



ViVi was strategically designed to incorporate features to make it more convenient and simple to use. Features such as Wishlist allow users to capture and define their interests using public posts they see without a need to spend their money or record their own media at all.





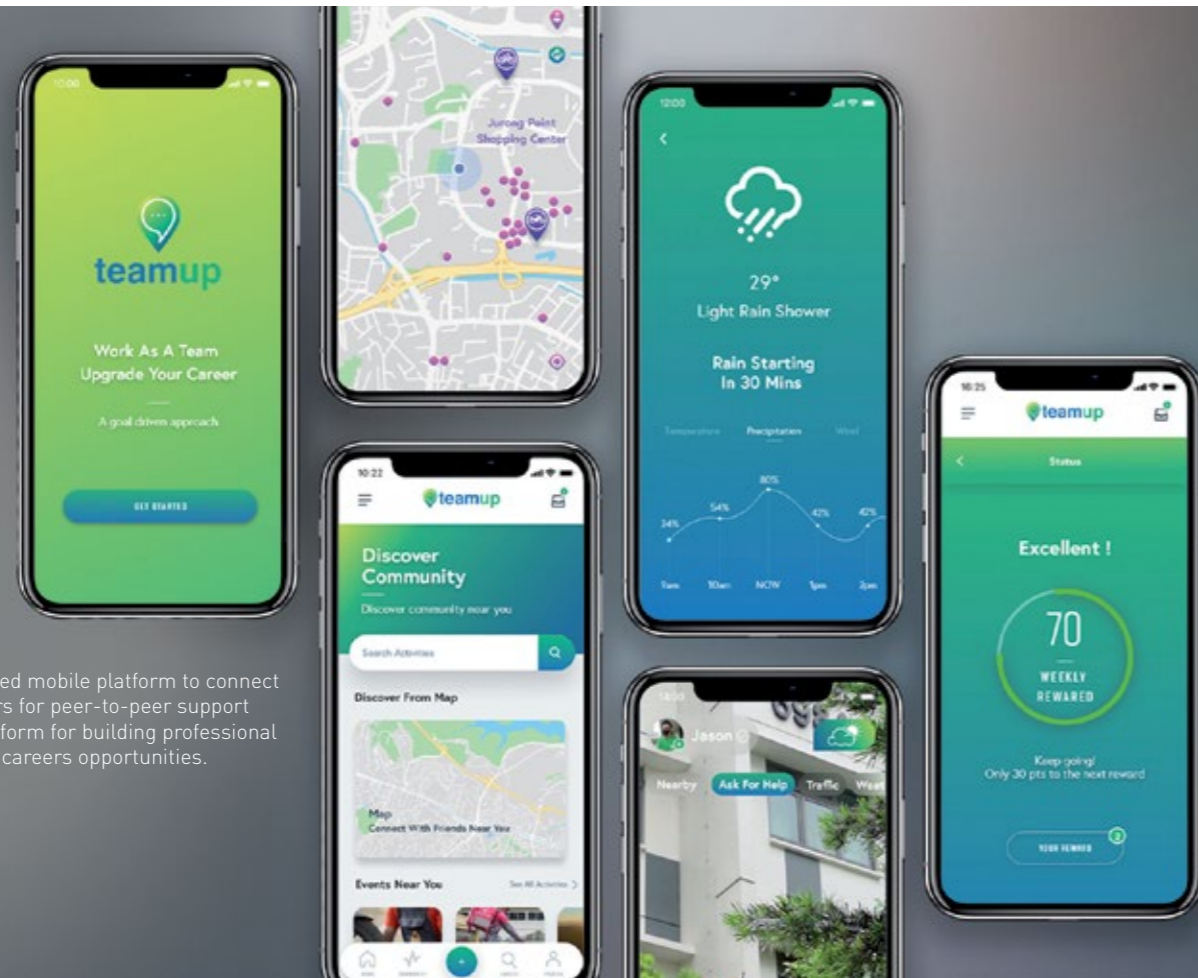
Jiang Wannu

Wannu is a passionate, optimistic and fresh designer with a focus on creating meaningful experiences through design. She is a content creator who loves video production and storytelling. Seven years of exposure to design learning has shaped her into someone who is good at strategic thinking and generating creative content.

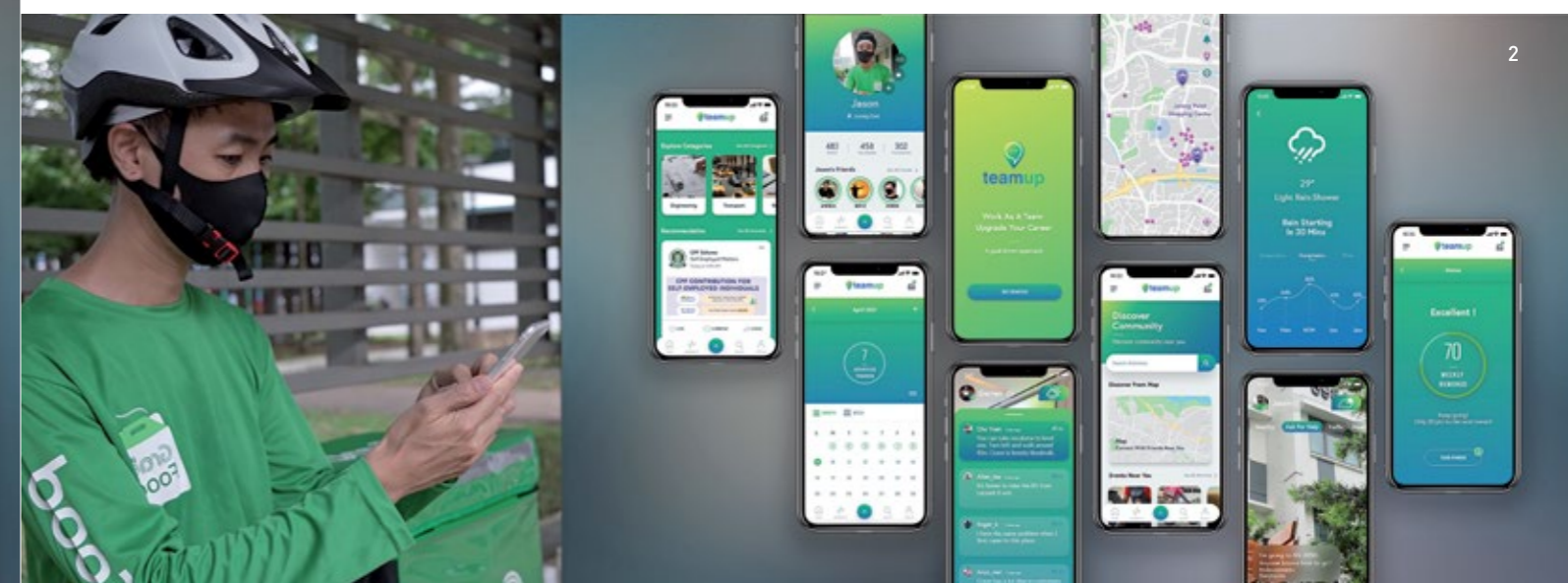
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1



A community-based mobile platform to connect food delivery riders for peer-to-peer support and provide a platform for building professional relationships and careers opportunities.



2

- 1 Development
- 2 UI/UX
- 3 Key Insights

3



Team Up

Team Up is an area-based community app that helps to connect food delivery riders working in the same area. It provides peer-to-peer support by sharing knowledge, experiences and coping strategies, and earning strategies. The app also provides a platform for building professional relationships and career opportunities. The interface is designed to maximise readability when users have to switch between multiple apps during their delivery.

Under the supervision of R. Brian Stone



Ana Zeng

Ana believes that design is a tool, a means to an end. The current systems are no longer working, and they are not meant to work for a long time. Ana believes that the free will humans have is the most powerful, and we can be the change we want to see in the world.

anazenpom@gmail.com | [instagram.com/o.ana.o](https://www.instagram.com/o.ana.o)



- 1 REAL at Pek Kio Market
- 2 REAL Circular Eco-system
- 3 Stakeholder Map
- 4 Making Eco-Enzyme Detergent

Rejuvenate earth with active living (REAL)

REAL is an ethical initiative founded based on a shared goal of advocating for circular economy within our urban food landscape. REAL seeks to upcycle the unavoidable fruit waste into an eco-friendly detergent for use back in F&B establishments to close the waste loop.

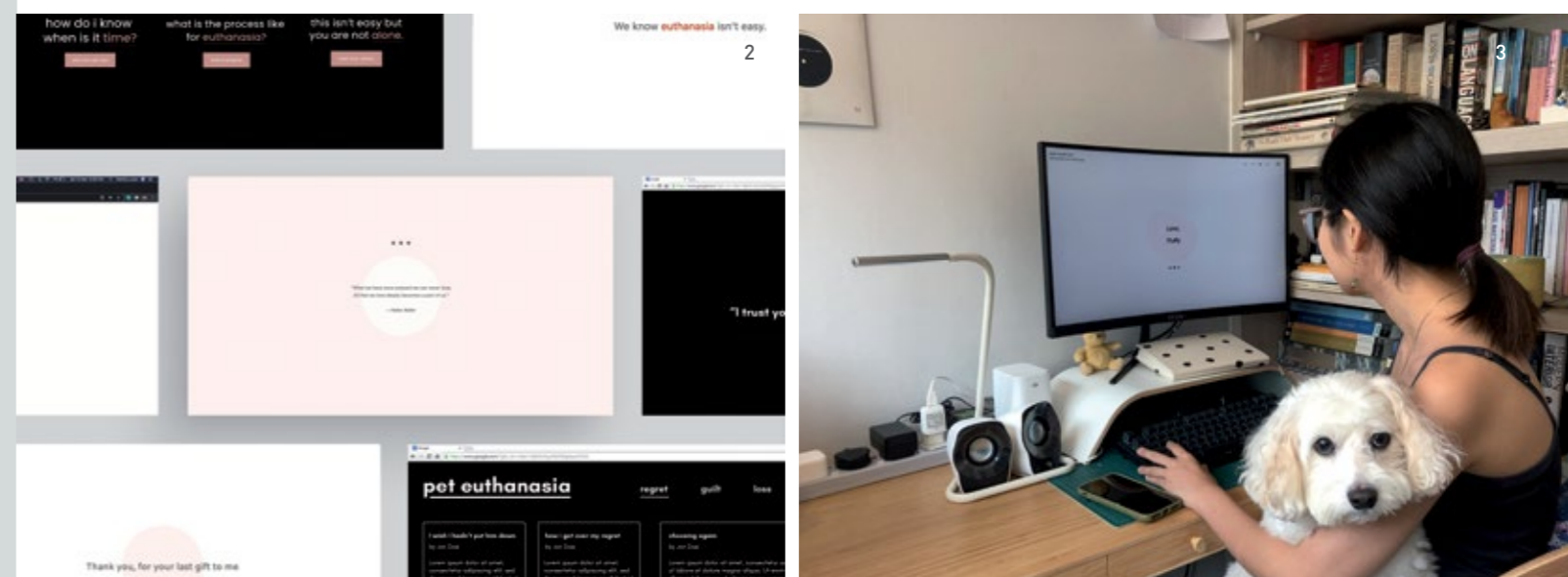
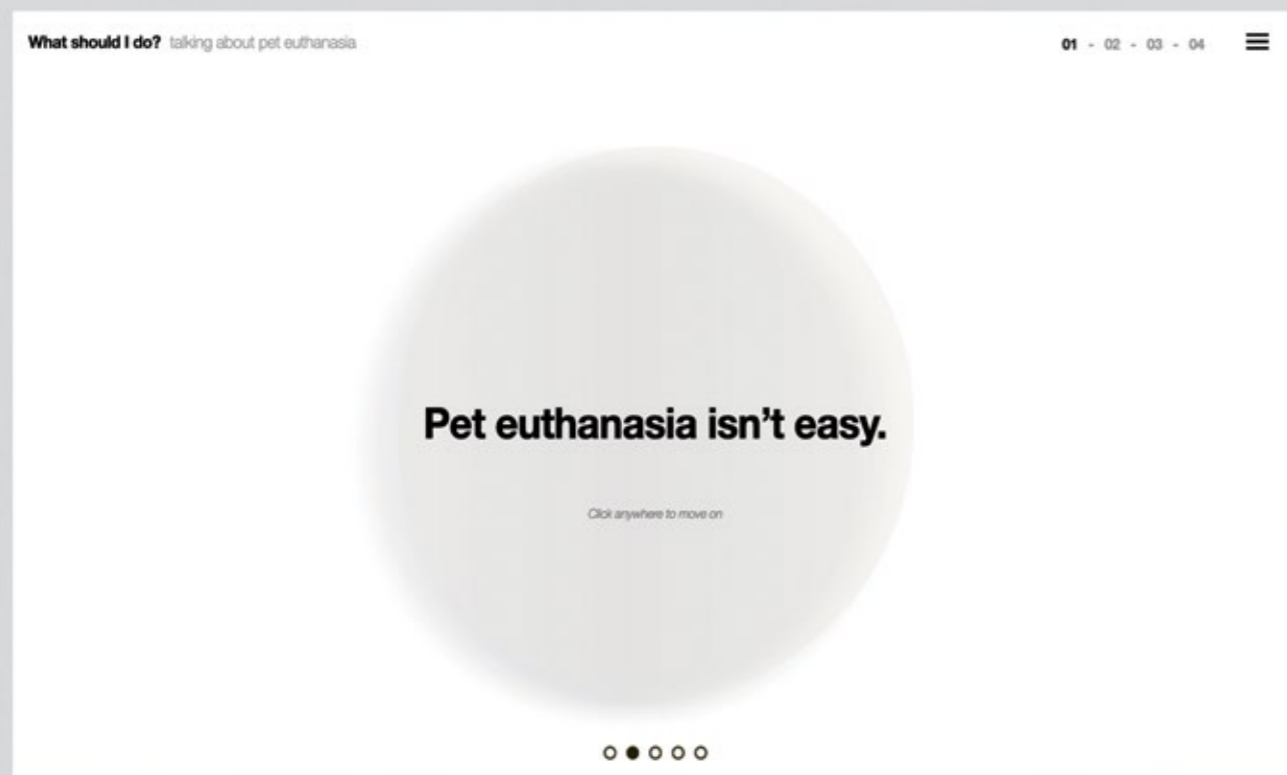
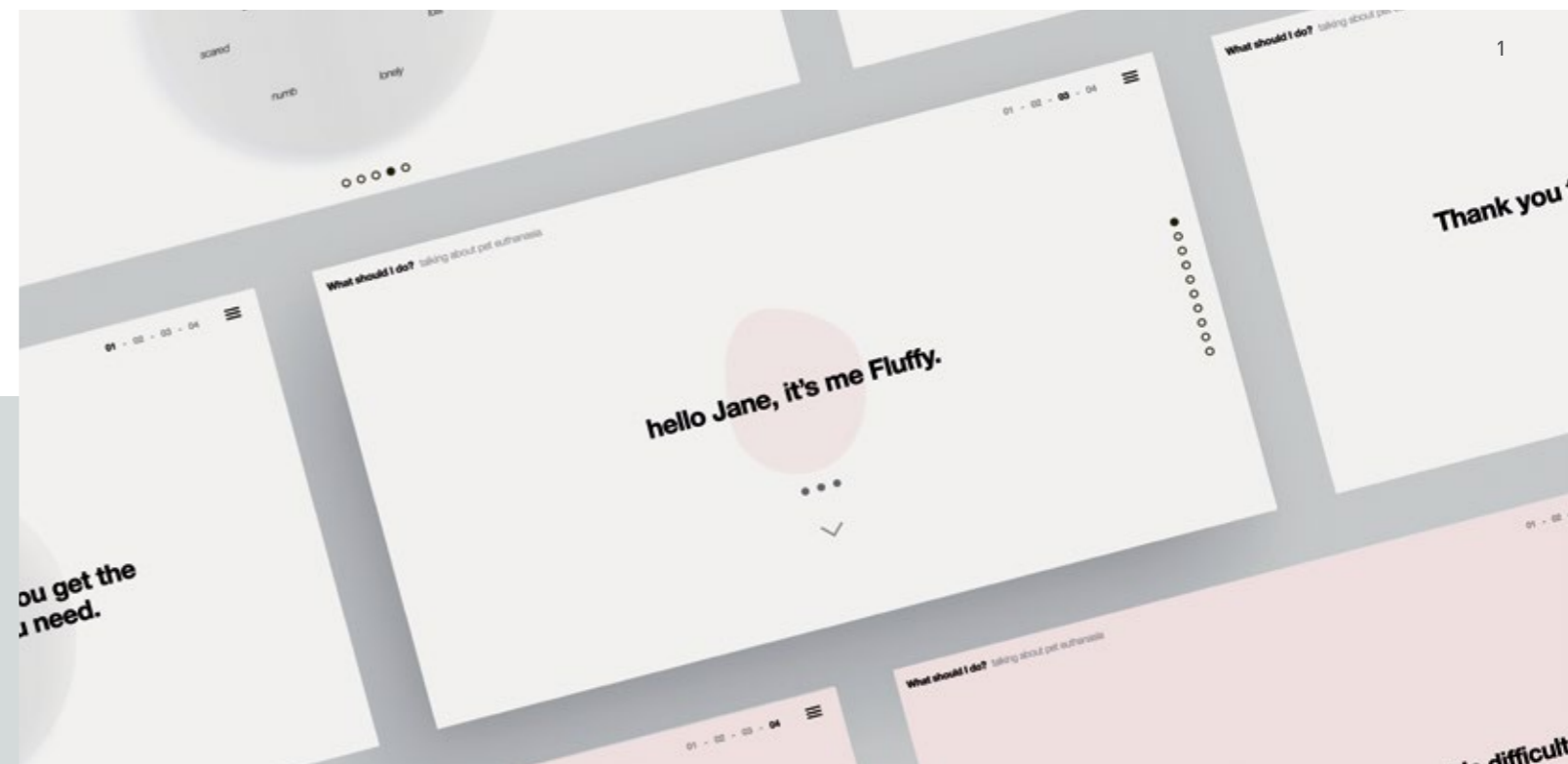
Under the supervision of Wendy Chua, In collaboration with Ms Mok Shuyi, Base of the Pyramid Hub and Go Green Hackathon



Petrina Leow

Petrina's first question to anything in life is always 'Why does this matter?', followed by 'How can I help?'. A highly relational and perceptive human, she works out of a conviction that an empathetic life-centred perspective brings value to any project from start to finish.

petrina.leow@yahoo.com | petrinaleow.wixsite.com/petridished



The dilemma of pet euthanasia

Pet owners who have to consider euthanasia for their pet often experience feelings of turmoil, confusion and stress. If not dealt with properly, this can lead to post-death trauma, regret and guilt. Through searching for answers and support on this weighty topic, those who chance upon this website will be guided to process their role and responsibility as the caregiver of their pet through an empathetic voice. They are then gently empowered to continue on in their research to making sound judgements and decisions.

Under the supervision of Donn Koh

1 UI/UX

Using an empathetic voice, user's feelings and struggles are validated from the unique perspective of their pet.

2 Development

Various ways to represent a pet, and suitable colour schemes and fonts were explored and simplified.

3 User Testing

Previous and current pet owners were deeply moved and empowered to make their next action step.

POST GRADUATES RESEARCH

The Master of Arts (ID) and Ph.D (ID) are full-time graduate programmes by research that serve to advance the study of design. Postgraduate research at NUS DID embraces various areas of design research, across Creative Interaction Design, Design for Medicine, Service Design and Design Management, and Value-Sensitive Design. The students are assured to be immersed in their thesis projects under the guidance of supervisors who are domain experts. They employ various modes of design research, such as research-through-design that uses the design process and artefacts for intellectual inquiry and research-into-design that studies design as a phenomenon.

For more information:
www.sde.nus.edu.sg/did/programme/postgraduate/

Creative Interaction Design

Through their creative skills, human-centred thinking and technological knowledge, our students study human interactions with technological systems and design for new interactions that benefit humans and society. In collaboration with Keio-NUS CUTE Center, the students develop a series of interactive prototypes that generate new knowledge on interaction models and practical applications.

Chen Yang

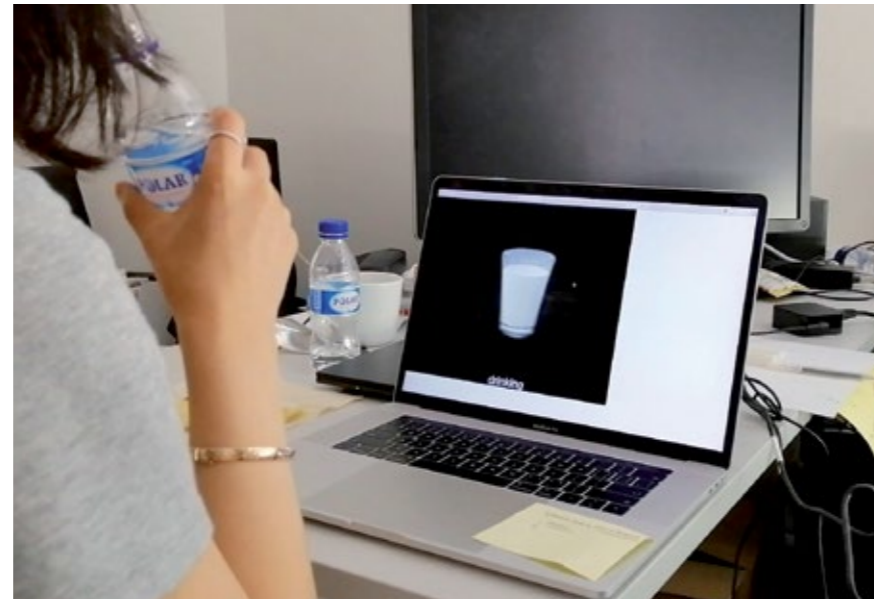
Factors affecting eating rate as potential preventive strategies for obesity.

What is the motivation of your topic?

There is increasing evidence that associated dietary intake patterns with obesity, so this project seeks to explore and identify the determinants that influence individuals' eating rate as a promising preventive strategy for obesity.

What is the key highlight of your PhD study?

My study identifies opportunities of the underexplored areas in eating behavior intervention and provides design implications for preventive strategies in the healthcare context.



Design for Medicine

Our program has a good history of collaboration with NUS School of Medicine, School of Dentistry and National University Hospital (NUH). This multidisciplinary, translational design research contributes the development of new technologies and methods for medical practices and research. The students who work in the design for medicine closely collaborate with doctors and medical experts through iterative prototyping and experimentations.

Raymond Hon

A Novel Dynamic Traction Splint Design for the Management of Proximal Interphalangeal Joint Dorsal Fracture and Dislocation (PIPJ-DFD): A Feasibility Study

What is the motivation of your topic?

Injuries to the PIPJ are often neglected and underestimated, the complications that follow can greatly impede hand functions and affect the quality of life of the patient. My work focuses on the development of a splint design that uses the principles of managing dorsal fracture and subluxation of the PIPJ to provide the necessary mechanical and biomechanical conditions.

What are the key highlight(s) of your PhD study?

Throughout my PhD study, I had the privilege of collaborating with experienced surgeons from the initial development to the evaluation of the developed splint design.

What impact do you hope to bring through your research?

I hope to explore the possibility of developing a device that allows for the management of PIPJ-DFD without surgical intervention whenever possible to potentially reduce complications.



Liu Xin's exploration on flexible interactive materials for rehabilitation training [Supervisor: A/P Yen Ching-Chiuan]

Liu Xin

Interactive devices for rehabilitation through advanced manufacturing technology

What is the inspiration of your topic?

There are various training tools for stroke survivors to restore the lost functions, but patient motivation and participation rates in rehabilitation programmes are low as most training equipment is monotonous, difficult and non-standard.

What is the key highlight of your PhD study?

Currently, I am exploring and developing interactive design of flexible materials which will be applied to rehabilitation training.



Raymond Hon's work on the application of additive manufacturing in management of proximal interphalangeal joint dorsal fracture & dislocation. The two images show how the condition is improved after applying AM (the image on the right).

[Supervisor: A/P Yen Ching-Chiuan, Co-supervisor: A/P Hans Tan. In collaboration with National University Hospital]

Service Design and Design Management

Service Design and Design Management are increasingly required expertise in Singapore and a global context. Through service design projects, participatory action research and case studies, our PhD students create new concepts and methods for designing for the public sector, businesses and social innovation. Their work helps the government organisations and firms transform their culture and work processes and achieve human-centred innovation.

Alvin Chia

Empowering Silent Designers in the banking industry: A study of three banks in Singapore

What is the inspiration of your topic?

My dissertation is inspired by my previous experience working at one of the local banks. By explicating the phenomenon of human-centred design's implementation in banks, I hope more of them will be encouraged to embark on their transformation journey.

What are the key highlight(s) of your PhD study?

My PhD study's key highlights are the three in-depth case studies of how banks in Singapore have implemented human-centred design and the detailed findings on the current struggles and opportunities to help silent designers better innovate.

DESIGN LEADERSHIP DIMENSIONS AND DESIRED LEADERSHIP BEHAVIOURS*

* DERIVED FROM LITERATURE REVIEW



Debbie Ng's research framing on design leadership in the public sector [Supervisor: Dr. Jung-Joo Lee]



Alvin presenting his PhD research on Design Thinking in the banking industry at the IASDR 2019 conference in Manchester. [Supervisor: Dr. Jung-Joo Lee]

Debbie Ng

Design Leadership in Public Organisations: What kind of design leadership do we need at the Singapore's public organisations to enable change and sustain the adoption of design?

What is the motivation of your topic?

Human-centred design has been a critical enabler to support public sector transformation in Singapore. Yet, there are organisation barriers such as bureaucracy and lack of senior leadership in the public sector inhibiting the effectiveness of design. How would leaders need to prepare themselves to enable change and sustain the adoption of design?

What is the key highlight of your PhD study?

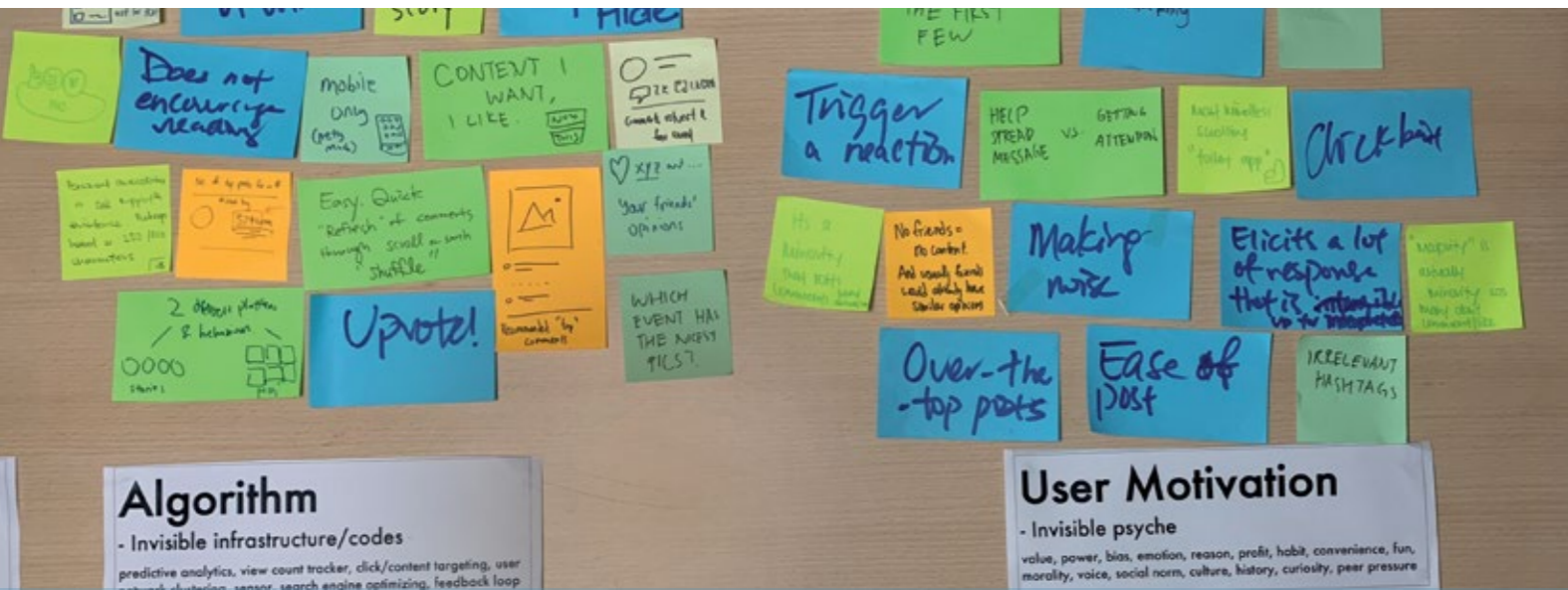
A design leadership assessment was created based on a literature review to study the current state of leaders' design leadership behaviours in the pilot case study organisation. Also, an experiment in coaching is to be conducted to influence the leaders in adopting more design leadership behaviours.

What impact do you hope to bring through your research?

Public sector leaders in Singapore and worldwide could adopt the design leadership behaviours to help them lead teams in the VUCA world. By clarifying how to lead teams inspired by design leadership when applied in the public sector, there is hope that there will be a more significant impact and sustainability of design.

Value Sensitive Design

Value-sensitive design is a concept that advocates the consideration of human principles and standards when planning technology. It aims to consider the values not only of the users but all others impacted by the technologies. DID brings this critical approach to design research and our students explore concepts and methods for designers to do more socially and ethically responsible design.



A sample of findings from Will's pilot exploratory workshop. He is currently developing new conceptual tools and testing them at upcoming local and international workshops

Will Zhang

Designing for empathy to address empathy deficits in our polarised world

What is the motivation of your topic?

In our increasingly polarised world, disagreements over cultural, ethical, and political differences tear societies apart. Social media technologies and digital interactions add fuel to fire and worsen interpersonal empathy deficits. I believe empathy is a social product that can be gained or lost through design outcomes. I try to design for empathy from human-centred and value-sensitive design perspectives

What is the key highlight of your MA study?

My design workshops are spaces for interdisciplinary innovations. You'd see designers, psychologists, philosophers, technologists, and/or policymakers join forces to co-create design tools and frameworks for designing for empathy.

What impact do you hope to bring through your research?

I see myself as a designer for designers. At this stage, my contributions are more methodological or metacognitive. My prior training was in the humanities and social sciences, so I straddle different intellectual domains and explore how exactly they can add up and elevate the field of design.

PhD of 2021



A highlight of Yvonne's PhD journey - ServDes 2016, the very first conference she attended as a PhD candidate. [Supervisor: Dr. Jung-Joo Lee, Co-supervisor: A/P Yen Ching-Chuan]

Dr. Yvonne Yeo

Mapping Design Capabilities of Singapore Public Service Organisations: A Tool for Collaborative Reflection

Tell me about your project, and the motivation for your topic.

The motivation of my research is to explore ways to assist the Singapore public organisations in gaining a better understanding of their current design perceptions and capabilities to strategise appropriate plans to embed design sustainably. The research focuses on the Singapore public sector for its continuous emphasis in public sector transformation to ensure that the public service is agile, innovative, and relevant. A design capability mapping tool has been developed to capture and amplify clarity around the Singapore public sector's propensity and aptitude to embed design.

How do you see your work contributing to the design community and industry?

My research generates practical contributions through an applied tool to map design capabilities and motivations of individual public officers, teams, and organisations, through which they can set learning goals by envisioning what knowledge and skills to develop. The mapping tool allows the invisible conditions and fragmented processes recognisable. I hope the findings will inform a holistic view of other government agencies in Singapore to design and advance their future strategies.

What advice would you give to anyone pursuing their PhD?

A PhD is not just another degree or pursue of a higher certification. Do not underestimate the rigour, time, and psychological support needed to comprehend and complete a PhD. It is such a profoundly personal battle to understand and better oneself. Your relationship and commitment towards your thesis supervisor will enrich your PhD journey. S/he is part of your support group, being the constant cheerleader and providing necessary critiques to your work.

SERVICE DESIGN LAB

Service Design Lab Singapore (SDL) is a service design research and education platform that runs collaborative projects with government agencies, companies and non-government organizations. In SDL, service design is not a mere method to design intangible services but a holistic logic to enable human-centred innovation at a system level, often accompanied with various tools and transdisciplinary collaborations.

Since 2015, SDL has been working closely with collaborators such as the Ministry of Manpower, the Ministry of Education, GovTech, OCBC Bank, DBS Bank, Port of Singapore Authority (PSA), Rolls-Royce Marine, Jurong Port, and Ang Mo Kio Family Services Centre. The development of educational programs, design methods and theoretical frameworks for academia and industries is the core to our work.

SDL pioneers advanced scientific research projects on service design for ageing, public sector innovation, autonomous vehicle services etc., and is proactive in international collaboration.

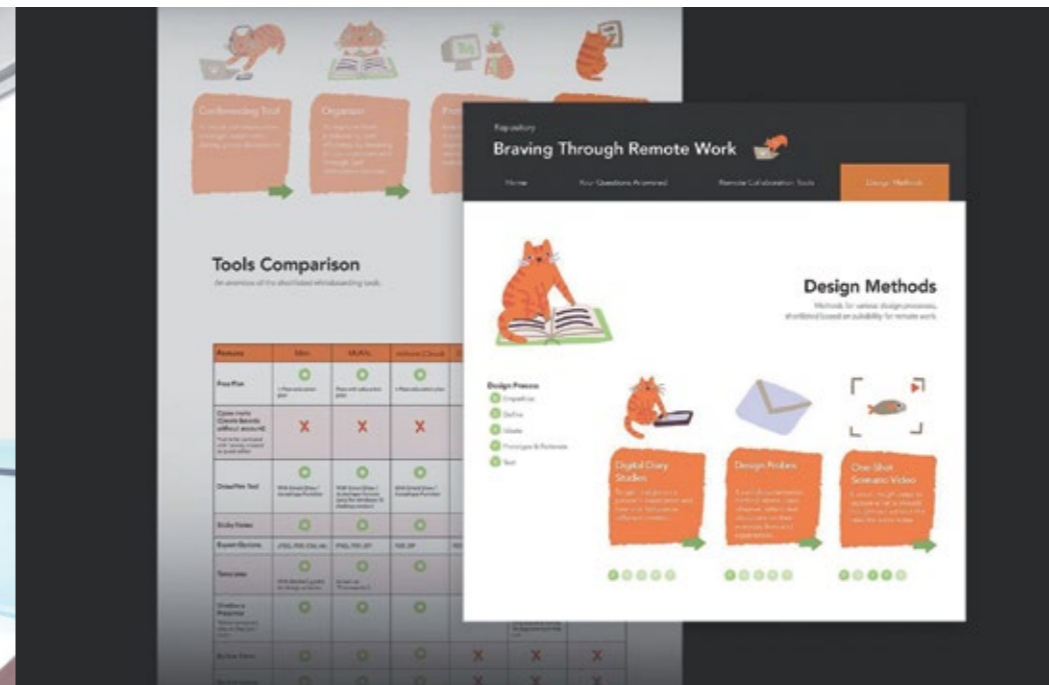
www.servicedesignlab.net



The Team

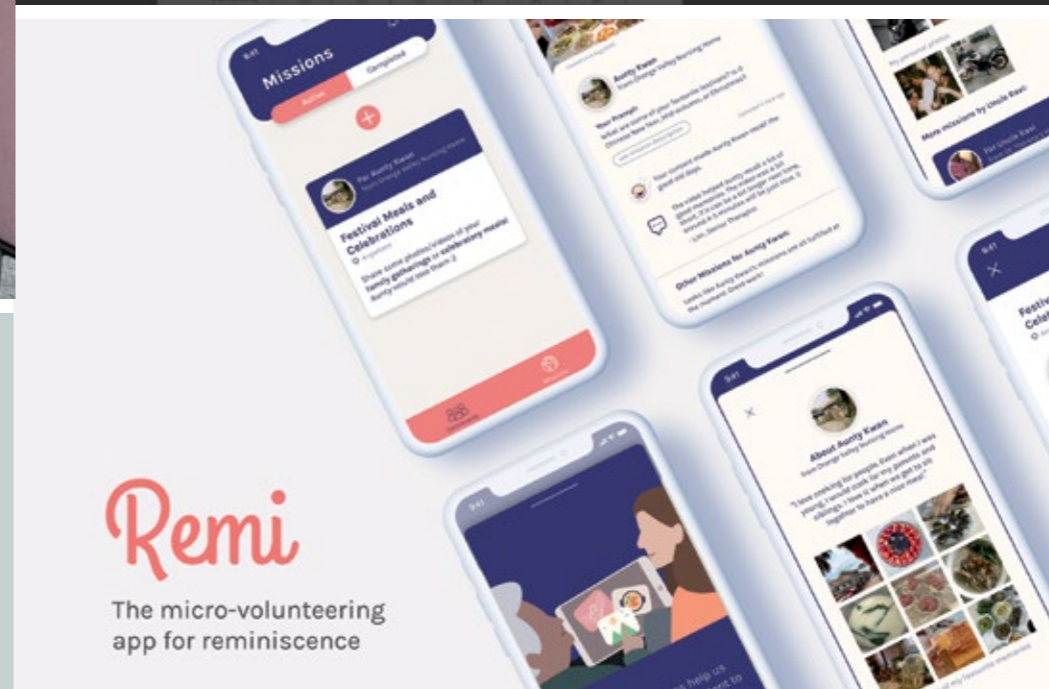
Dr. Jung-Joo Lee (Director and Principal Investigator)
 JiaYing Chew (Design Strategist)
 Tse Pei Ng (Design Researcher)
 Christine Yap (Design Researcher)
 Delia Lim (Design Researcher)

Joel Loo (Student Researcher)
 Nysha Tan (Student Researcher)
 Kianne Lim (Student Researcher)
 Ashley Tan (Student Researcher)
 Pang Shi Jie (Student Researcher)



Empowering Student Designers for Post-Pandemic Design

The shift towards remote work has brought about challenges for design teams working with face-to-face user engagement and collaboration. As part of SDL's efforts to equip designers with new skills and sensitivities towards post-pandemic design challenges, SDL's summer intern Pang Shijie developed an online repository of remote design methods and tools recommended for design students. This repository can be accessed at servicedeslab.wixsite.com/remote-design



Remi
 The micro-volunteering app for reminiscence

Designing for Future Elderly Care Services

SDL's founder and director, Dr. Jung-Joo Lee, co-lead a multi-disciplinary research project funded by the National Research Foundation (NRF) under the Land and Liveability National Innovation Challenge (L2NIC). Together with SDL's design researcher, Tse Pei, and colleagues from NUS Architecture, GERI, and NUHS, we developed a set of comprehensive design principles for person-centred care, a micro-volunteering app to connect nursing homes with the community, and presented a future service model integrating aged care services into HDB housing.



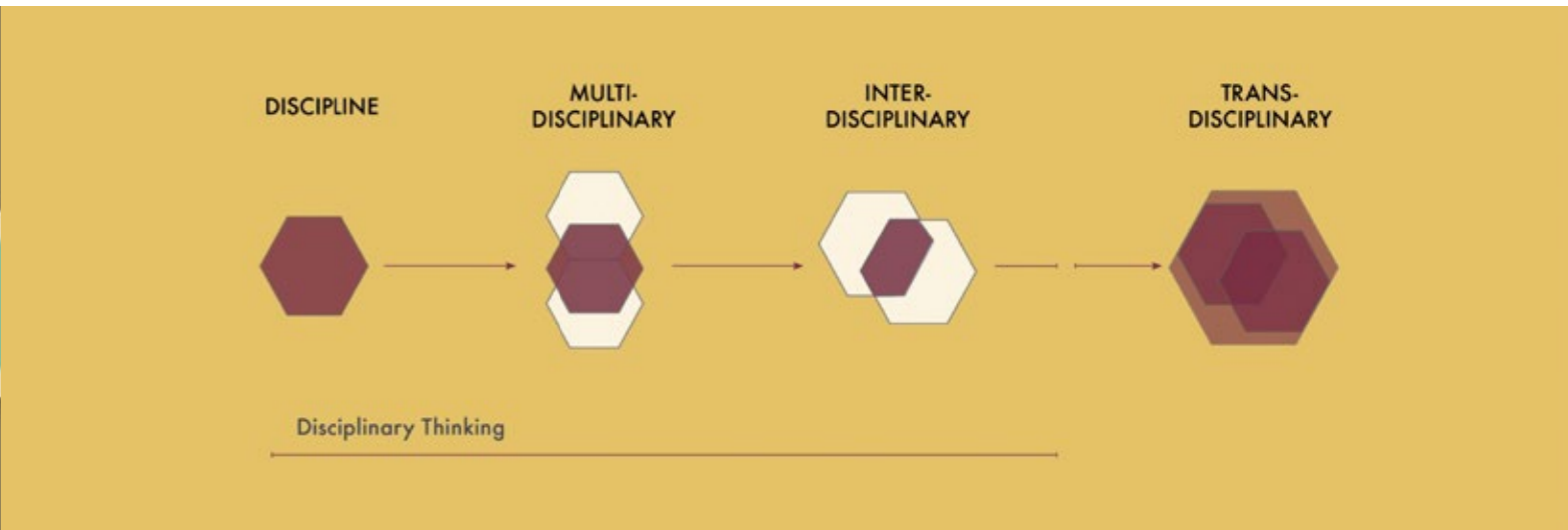
Embedding Design Capabilities within the Public Sector

A core aspect of our work at SDL is in building design capabilities with and for our industry and government partners. SDL has offered various design capability building programs with MOM, MOE, IRAS, IMDA, ESSEC, Hyundai & Kia Motors and so on.



Integrating Service Design in the HCI community

Service design has recently gained traction in the field of Human-Computer Interaction (HCI) to design for complex systems, like social computing or Internet of Things. SDL's founder and director, Dr. Jung-Joo Lee has been part of an international team delivering courses and workshops teaching service design to interaction designers. SDL's design researcher, Christine Yap is also involved in ongoing systematic reviews on the adoption of service design in the field of HCI.



Tool Development for Service System Design

Our team constantly explores ways to be, and educate better service designers through the creation of new tools and methods to engage in every phase of the design process. Of our recent developments, the "System Design Ladder" is a tool intended to guide students through the process of designing for future scenarios by zooming out their solutions at a system level. To help students empathise with the various stakeholders they are designing for, we also developed the "Character Building Template" alongside scenarios crafted for role-playing exercise.

With the wave of data-driven design, data literacy is becoming increasingly important for designers. We developed "Datastorming", a design game that turns data into tangible design materials, supporting hands-on ideation in creating new service concepts enabled by open data. SDL's design researcher, Delia Lim, is currently looking into creative data literacy and is involved in the development of tools and methods for designing with data.

Discover more tools at our website: www.servicedesignlab.net/methods-tools-



Towards Transdisciplinary Design Education

Leveraging design's innate quality of transcending disciplinary boundaries, we explore ways in which designers can better assimilate to settings outside of design. At SDL, we equip our design students with an understanding of transdisciplinarity by exposing them to opportunities for knowledge exchange and integration. We do so by featuring role-play and co-design around thematic challenges, where students are required to be 1) agile in picking up new skills and information; 2) adaptable in learning how to integrate and apply knowledge from other related disciplines; and 3) future-oriented in their approaches to problem-solving.

SDL's design researcher, JiaYing Chew, is currently pursuing a PhD in the area of design-driven transdisciplinarity at the University of the Arts London, London College of Communication.

Read more about our take on transdisciplinary higher education: dl.designresearchsociety.org/drs-conference-papers/drs2020/researchpapers/118/



DESIGN INCUBATION CENTRE

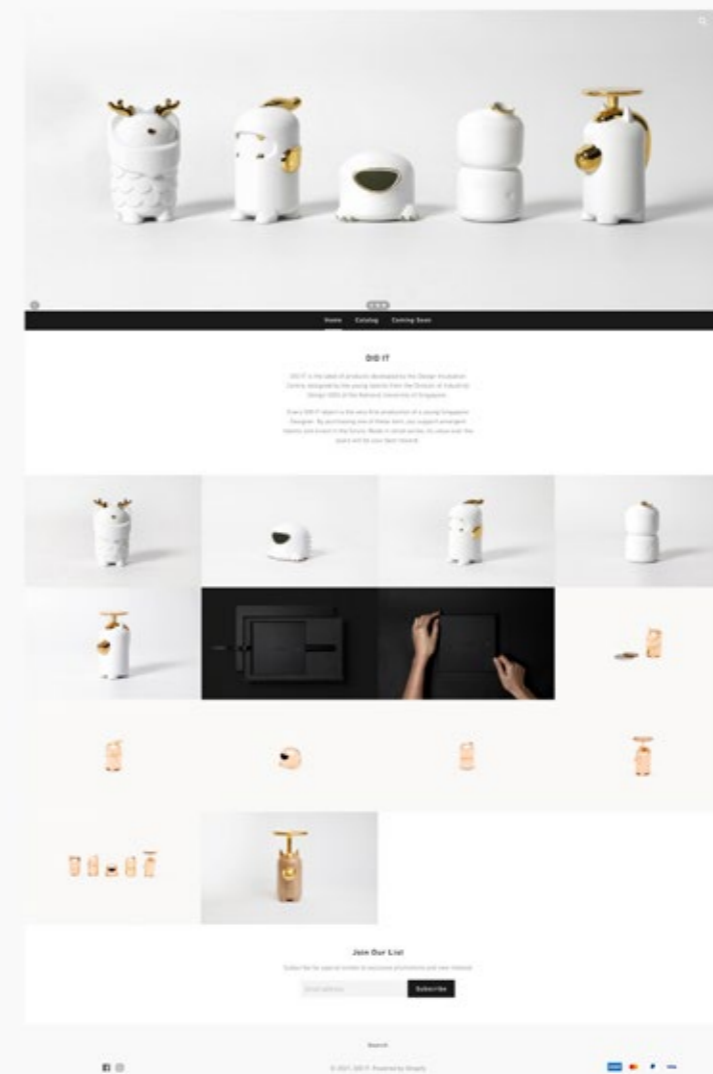
The Design Incubation Centre (DIC) takes part in the emergence of a new generation of Singapore Designers by helping the NUS design talents to develop and achieve their ideas through the incubation of their projects, until production and commercialisation. By also developing research and probe projects, DIC contributes to identifying the new industrial, social and cultural territories where Design will tend and take action in the coming decades. Thus, DIC has the mission to feed, inspire, support, reveal and promote the students and young designers from the Division of Industrial Design by actively participating in its pedagogy.



Team

Permanent Team: Christophe Gaubert (Director), Willie Tay (Lead Designer), Yuta Nakayama (Design Engineer), Poh Yun Ru (Designer), Ricky Ho (Graphic Designer), Yeo Wan Jun (Business Development Manager), Rachel Chee (Senior Executive), Colin Thiam (Lab Specialist), Chen Chee Keong (Lab Specialist).

Designers under incubation (2021 batch): Sheryl Ang, Anh Nguyen, Stacey Yip, Shawn Ng.



www.didit.sg



DID IT is the label for the products resulting from the incubation program. They are produced in small series to communicate, showcase and disseminate the outcomes of the young DID talents, through our online store and many premium stores in Singapore.



Visions of the future



Three incubation projects have been selected among the seven showcased in the National Design Centre to share « visions of the future ». These projects demonstrate that Design can explore complex areas, such as memory stimulation therapy (Rewind by Poh Yun Ru), the notion of protection, insulation and comfort between clothing and furniture (Looft by Sheryl Teng), and the modernization of traditions and secular beliefs (Ji Jian Wu by Lin Qiuxia).



Tree whisperers ^

These interactive music trees give a voice to wood (as a material) by using melodic beats to convey the impact of climate change on different tree species.

The pitch and tempo of beats reflect the extent of climate change on each tree – a higher pitch and quickening pace of (faster) beats reflects a tree that is becoming more distressed. By introducing a visual and auditory reference to time as heartbeats, these objects call to confront the urgency of climate change in the context of tree deaths.

Design by Sheryl Ang & Yuta Nakayama

Project awarded by the Conversation about Climate Change international competition organised by the Timber Trade Federation, and showcased in London



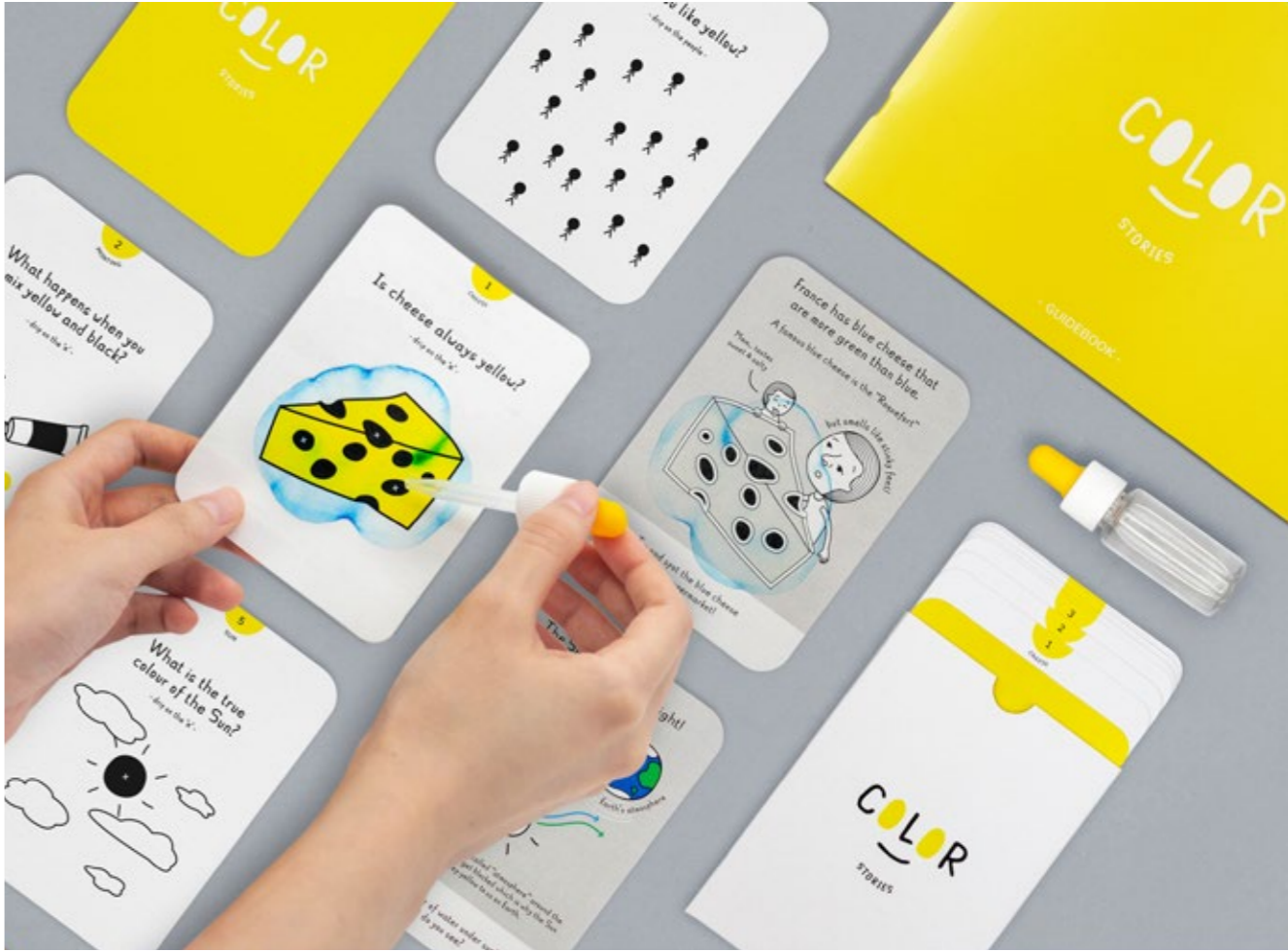
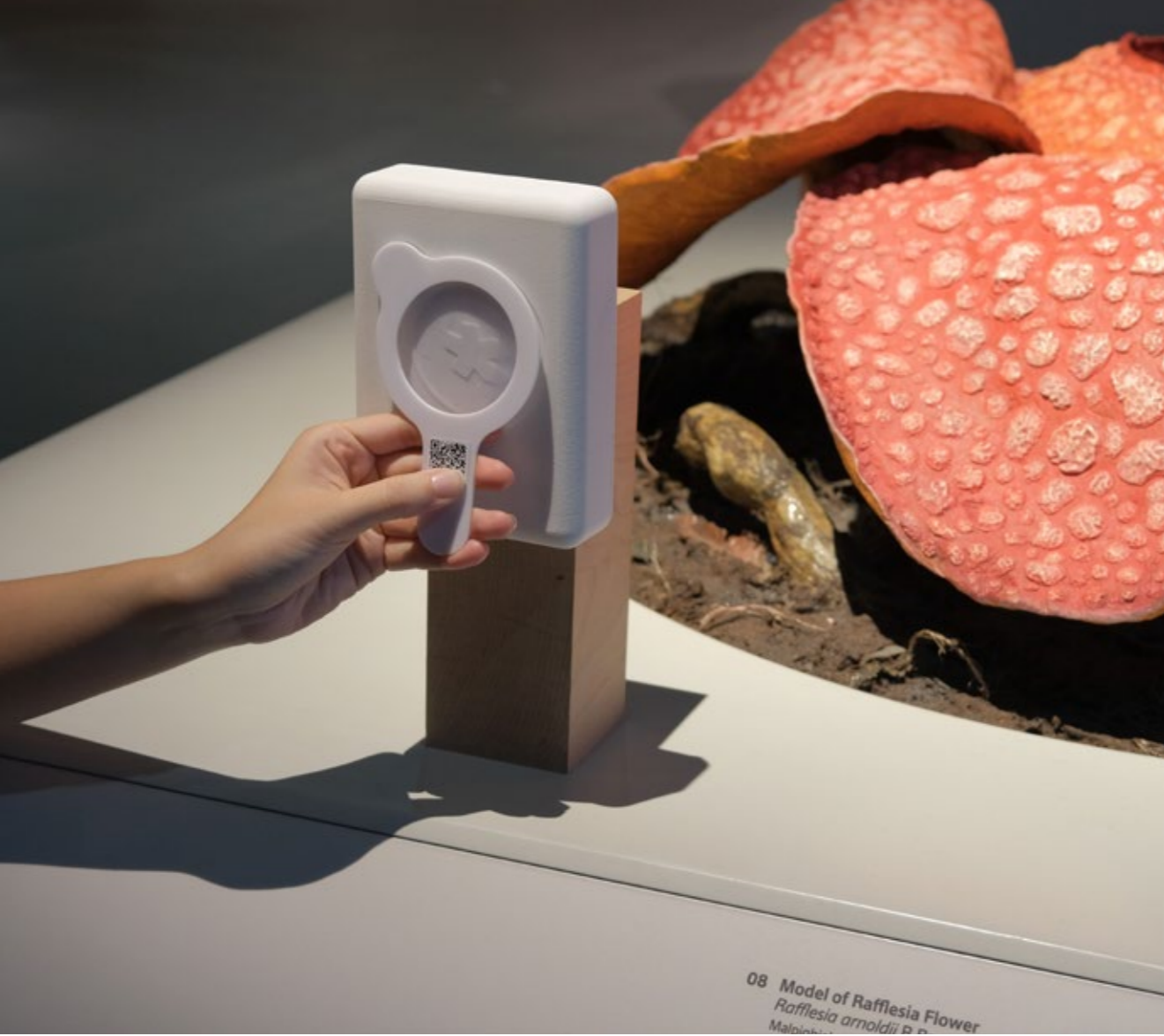
Aline chair ^

This chair is part of a collection initially designed and developed to be the signature outdoor furniture of the first Net Zero Energy building in Singapore, hosting the School of Design and Environment. Based on a standard diameter of aluminium tubes, the design allows very light pieces of furniture, long-lasting resistance to tropical weather, low carbon footprint, and stackability for better management in public places.

Design by Willie Tay & Christophe Gaubert

Winner of the Red Dot Award 2021 in the Product Design category





Musee* <

Musee* is a pro-learning museum journey for accompanied children. Starting with digitally augmented activities that enhance the family learning experience within the exhibition, Musee* proposes to extend the visit with a game-like app and digital rewards to gain deeper knowledge beyond the museum. With information offered daily in manageable portions through fun pursuits, learning becomes an enjoyable habit that motivates users to come back to the museum and discover even more.

Design by Anh Nguyen

Color >

The Color Program opens the discussion to the socio-cultural perspective behind colours. The two modules approach the subject from vastly different perspectives and use special learning probes tailored to the topic. In "Colour Stories", a deck of interactive cards, activable with water, reveals a broader knowledge of the colours around us. While in "Colour Language", a true story of a culture with no words for colours coupled with playable booklets teaches an alternative way to describe colour through its context.

Design by Stacey Yip



Caregiving101

Caregiving101 is a toolkit seeking to facilitate conversations between caregivers through notion of Solomon's Paradox—that one can think more sensibly about other's problems than one's own. They work together to project their experiences through the lens of a fictional caregiver, taking distance from their situation. This helps uncover new insights and build actionable plans for the character which could be applied to their own.

Design by Shawn Ng

In collaboration with National Council of Social Service (NCSS)



Wei!

Inspired by the diversity of Chinese cuisine, Wei! is a tableware series that uses form and texture to visually express the five flavours of food. Since five flavours were traditionally incorporated to encourage a balanced diet, this project explores a new medium and context for communicating this intangible tradition. Using generative design, each piece is customised for specific dishes.

Design by Sheryl Ang



ACHIEVEMENTS

Achievements - Student

Tappi >

European Product Design Award™

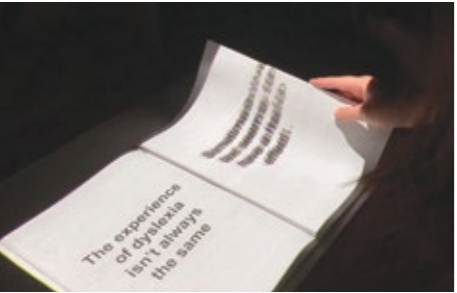
Tan Zhi Ru & Ong Kahmin



Recycle Right Bins <

- IDA Design Award 2020 Bronze Winner
- ISCN 2021 Excellence Award - Cultural Change for Sustainability Category: Towards Zero Waste NUS 2030

Tommy Cheong



Dyslexperience <

Red Dot Award 2020 Best of Best (Branding and Communication)

Yong Zi Fong & Ng Ai Ling



Union: Dual Purpose Insect Repellent <

Outdoor Design Award 2021

Tan Kah Wee & Roger Goh

Care to Play? ^

NUS Resilience and Growth Innovation Challenge 2020 Winner

Jaycelyn Ye, Rachel Chan & Nghiem Si Phuoc

Cradle >

- Red Dot Award 2020 Winner
- IDA Design Award 2020 Silver Winner

Jereme Tan, Kwa Li Ying & Shawn Ng



Mirage ^

Red Dot Award 2020 Winner

Tommy Cheong

Salus: Modular safety system ^

Golden Pin Concept Design Award 2020 (Product Design Category)

Chua Kah Yeow & Keith Lee

Fiber Sense >

The Craft of Interaction TEI 2021 Swatchbook & Publication

Aaron Chooi



Colour Splash <

Golden Pin Concept Design Award 2020 (Spatial Design Category)

Valerie Tan, Jiang Wannan & Yap Zining



Fruit for Thought <

Good Design Australia 2020 Good Design Award Winner
Accolade in the Social Impact category

Claire Chou

Recipient of SkillsFuture Study Award for Design ^

Kwa Li Ying

Life Beyond Plastic ^

TEDA Cup International Design Competition 2020 Bronze Prize

Pang Shijie & Ye Jiajie

Libero >

Samsung Solve for Tomorrow Singapore 2020 (1st Runner-Up)

Cindy Evangeline, Mohamed Rizwan & Ong Wai Boon



Aeri: Smart Home Aeroionics ^

Circuit Disrupt: Igloohome Design Challenge 2020 Smart FoodTech Winner

Koh Bei Ning & Kianne Lim

Achievements - Staff

Exhibitions



Recipient of SkillsFuture Fellowships 2020
Academic Teaching Excellence Award 2021
Donn Koh



DesignSingapore Scholar 2020
JiaYing Chew

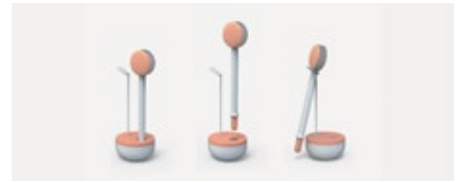
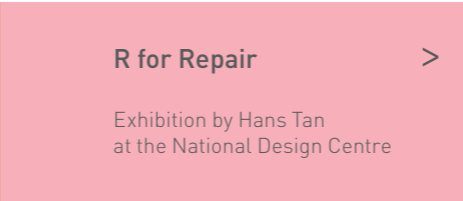


Design in Asia: The New Wave
Featuring our DID alumnus and current teaching staffs:
Hans Tan, Olivia Lee, Yuh-Hunn Wai, Studio Juju, Gabriel Tan

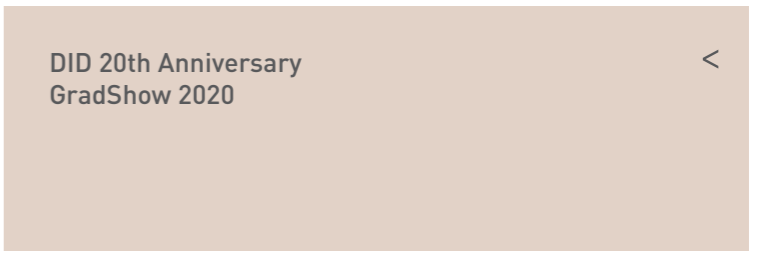
Academic Teaching Excellence Award 2021
R. Brian Stone



Forager Things
Exhibition by Hans Tan at the National Design Centre



Global Grad Show Dubai Design Week 2020



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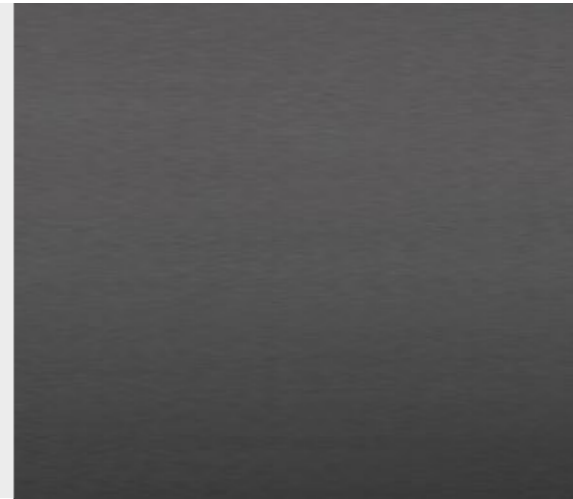
STAFF INDEX

Permanent Faculty



Dr. Christian Boucharenc
Head & Associate Professor

In his academic and professional career as an architect and designer, Prof Boucharenc has immersed successively in French, Finnish, Danish, Japanese and Singaporean culture. His main teaching expertise is in Design Fundamentals, based on three teaching principles, namely, parameter controls (design variables and constraints, economy of means and time), descriptive dimensions (syntactic, pragmatic and semantic), and finally intuitive approach (no copying, no fixed rules and no imposed forms).



Song Kee Hong
Deputy Head (Admin & Finance) & Associate Professor

Kee Hong is a practising educator focusing on simplifying interaction complexity between people & technology; relevant in our increasingly service and AI driven environment. His industry experience in consulting and corporate design organisations spans across diverse sectors; from consumer electronics to mission-critical domains in healthcare, industrial and security systems. Kee Hong's multi-disciplinary work has received over twenty international design awards including iF, G-Mark and Red Dot.

Dr. Jung-Joo Lee
Deputy Head (Research) & Assistant Professor

To JJ, design is a game changer. With her experiences in service design, she explores how design can bring human-centred transformation to society, business and public policy. She engages in students and industries in this process to co-create methods and impacts for design-driven transformation. JJ believes an increasingly important role of designer is a 'creative facilitator' who translates people's needs and experiences and facilitates creative collaboration among various disciplines.



Dr. Yen Ching-Chiuan
Associate Professor

Ching-Chiuan is Dean's Chair, Co-Director of Keio-NUS CUTE Center, and Deputy Director of AM.NUS. He possesses an excellent ability to combine theoretical thinking and design practise in design education and research. His interests lie in methodologies for design, and he champions a "pluralistic dimension" of design study and research, in particular, design for healthcare. He has collaborated with many companies, including BMW Designwork USA, Coca-Cola, DELL, Tupperware, VISA, etc.



Hans Tan
Deputy Head (Academic Affairs) & Associate Professor

Hans believes that everyone is creative, and he cannot draw. As a practising designer, his work tiptoes on the boundaries between design, craft and art, making use of utility as a pretext for visual discourse by disrupting archetypes, materials and fabrication processes. As an educator, his penchant for pedagogy centres on the significance of "deforming" as a starting point for imaginative thinking, exercised at the intersection of thought exploration and hands-on experimentation.



Christophe Gaubert
Associate Professor

Christophe Gaubert is a French product designer, seeking for elegance in everything or everyone. Developing a global approach to design, his teaching leads the students to fully explore the problematics to identify impactful design opportunities, more than just solving short-term problems. He believes in design as a new kind of philosophy for training visionary people, designers able to analyse and anticipate societal, cultural and technological mutations.

Permanent Faculty



Patrick Chia
Associate Professor

Patrick believes that designed objects and experiences are shaped through a designer's sensitivity to human nature and people's instincts, creating a conversation between user, design and designer. Being the founding director of Singapore's first dedicated industrial design research laboratory, Patrick has ushered in multiple generations of designers, and has co-authored concepts fundamental to design teaching today. As an educator, he believes in sculpting talent through retrospective learning.



Donn Koh
Senior Lecturer

Donn Koh is the inventor of the bend-and-snap mechanism of the Microsoft Arc Touch Mouse, and the lead industrial designer of the Air+ Smart Mask and the HTC Evo 4G. He co-founded the acclaimed STUCK Design. As a distinguished practitioner with the ability to teach, Donn wins numerous teaching awards alongside his design awards. His twin passions are to create imaginative solutions and to help designers become extraordinarily creative and effective.

R. Brian Stone
Associate Professor

Brian's goal as an educator is the growth and long-term success of students. He believes that teaching is about sharing, building, and exploring. His passion in the classroom is a result of his genuine love for communication and design. He promotes dialogue, play, interaction, empowerment and discovery. He believes that budding designers should be curious, resilient, empathetic, collaborative, and diverse — enabling them to develop novel ideas and innovative solutions for an intended audience.



Dr. Clement Zheng
Instructor

Clement is a design technologist whose teaching and research focuses on computational design, digital fabrication, and tangible interactions. He firmly believes in learning through making and research through design. His explorations often lead to new tools and techniques that facilitate designing and building functional interactive systems. When he is not at work (and sometimes when he is) he enjoys playing and overanalysing video games.



Martin Danzer
Associate Professor

Joining NUS in 2015, Martin Danzer continues to establish Computer Aided Industrial Design (CAID) in the design education. In his perception NUS provides an ideal framework for research and teaching in Industrial Design. Martin's teaching philosophy of CAID is to make students aware of the methodology of digital product design and to train them in a virtual product development process. He is holding several patents in the areas of pneumatic gripping, lattice structures and mobility applications.

Part-time Faculty



Ash Y.S. Yeo

Seeing well the end, as essentials invisible to the eye, hacking heuristics as design's always in milieu movement, less as objects, not under-esteeming anything, anyone, not even self, always dignifying "betters." Future's adage: Going tacit gives choices we never knew we had. Celebrate the unseen for allegorical values, as it blends with the pure & meaningful: hunting for the axiomatic lapis philosophorum. Know him as lightly treading, in alumni's forgettable "ashperiences."



Tiffany Loy

Tiffany Loy is a woven textiles specialist who graduated from the Royal College of Art, on a DesignSingapore Scholarship. Since the founding of her eponymous studio in 2014, her experimental works have been exhibited internationally, at venues such as Singapore Art Museum and La Triennale di Milano. Loy's background in product and textile design has led to her unique approach in creating materials with minute details, while keeping in mind their overall impact in the larger, spatial context.

Grace Tan

Grace Tan began her practice in 2003 under kwodrent. Led by a hands-on and research-based approach, her interest in materials and construction culminated in works that span across different mediums and disciplines. She was conferred the President's Design Award in 2012 and the Young Artist Award in 2013. Grace firmly believes in the symbiotic relationship between her role as a practitioner and educator while she strives to engage her students as unique individuals.



Wendy Chua

A seasonal nomad travelling between Singapore and Buenos Aires, Wendy Chua is a multi-disciplinary designer, curator and educator. Through her practice Forest & Whale, she designs products and systems with longevity in mind and envisages future narratives for museums. Her work covers a spectrum that encompasses social design for community engagement and participatory theatre, creative pedagogies for early childhood education, and curatorial research.



Lee Tze Ming

Bringing business perspective coupled with broad domain knowledge via active innovation consulting practice, Tze fluidly bridges conceptual innovation with market pragmatism. His teaching emphasises doing in order to think. To experience in order to discern and make better design decisions yourself. Wynton Marsalis said it better: "Don't adopt my prejudices; develop your own."



Winston Chai

Design is not just about finding solutions to problems. The power (and thrill) of good design lies in finding new opportunities, reimagining the status quo while making appropriate connections and relevant relationships. Winston believes in reigniting the imaginative spirit in students as well as honing storytelling skills, as part of the design process, so that novel designs created can connect and relate well with their intended audience.

Olivia Lee

Olivia Lee leads an award-winning multi-disciplinary design practice. Her nuanced and narrative-driven approach is agile and distinct; attracting diverse commissions from global clients such as Hermès, Samsung and Wallpaper* Handmade across sectors as diverse as luxury, technology and craftsmanship. Olivia encourages a spirit of adaptivity and empathy. She believes that design education must foster a spirit of auto-didacticism as agile-thinking is key to empowering our future creative leaders.



Yuh-Hunn Wai

With teaching, Hunn Wai brings his insights and experience from his practice Lanzavecchia + Wai, an award-winning Italian-Singaporean industrial design studio who has worked with important brands like Zanotta, Hermès & Capitaland. Having spent a decade as an educator, Hunn skilfully coaches students to flesh out their personal philosophies of design, to be refined by rigorous research & prototyping, and manifesting them into impactful formats. "It can be fantastic, as long as it makes sense."



Staff Index

Permanent Faculty

Dr. Christian Gilles Boucharenc
Head & Associate Professor

Song Kee Hong
Deputy Head (Admin & Finance) &
Associate Professor

Hans Tan
Deputy Head (Academic) &
Associate Professor

Dr. Jung-Joo Lee
Deputy Head (Research) &
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Dr. Yen Ching-Chiuan
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Martin Danzer
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Associate Professor

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Associate Professor

Christophe Gaubert
Associate Professor

Donn Koh
Senior Lecturer

Dr. Clement Zheng
Instructor

Winnie Chin
Manager

Nur Nadirah Binte Haron
Assistant Manager

Part-time Faculty

Tan Sixiu

Tiffany Loy

Kwok Wai Chiau

Ash Y.S. Yeo

Muhammad Akbar Bin Mohd
Yunus

Vincent Leow

Yong Sheng

Chan Zewei

Jesse Nicholas

Jason Ong

Yuh-Hunn Wai

Winston Chai

Timothy Hoo

Celia Wong

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Yong Jieyu (Stuck)

Grace Tan (Kwodrent)

Daniel Pillai (Lasalle)

Olivia Lee (Studio Olivia Lee)

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JiaYing Chew
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Tse Pei Ng
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Christine Yap
Design Researcher

Delia Lim
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Director

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Willie Tay
Senior Designer

Ricky Ho
Graphic Designer

Poh Yun Ru
Designer

Yeo Wan Jun
Business Development Manager

Rachel Chee
Senior Executive

Chen Chee Keong
Specialist Associate

Colin Thiam
Specialist Associate

