

The Open
University

**DESIGN &
INNOVATION**

**STUDENT
EXHIBITION
CATALOGUE
2020**

U101 - Design Thinking
T217 - Design Essentials
T218 - Design For Engineering
T317 - Innovation: Designing For Change

DESIGN & INNOVATION 2020

Brief

Generate Evaluate

Explore

Generate Evaluate

Explore

End



TABLE OF CONTENTS

WELCOME	4
IDENTITY	6
FINDING AND SOLVING PROBLEMS	18
SUSTAINABILITY	44
SERIOUS PLAY	58
SITE SPECIFIC.....	70
HUMANITY.....	86
HACKING A PRODUCT.....	118
SOCIAL TECHNOLOGY	126
CREDITS	142

WELCOME TO THE OU DESIGN EXHIBITION



I go to work every morning with the possibility that I might learn something I don't already know... You should look at every problem and think, 'what can I learn by doing this?' And if you think you can learn nothing, forget about doing it.

Milton Glaser, Designer



INTRODUCTION

Welcome to this exhibition of Open University Design Students' work.

Our exhibition showcases work from across all levels of study. Each year more than 2000 students study design modules at the OU. The work you see here is from students who entered posters into the competition associated with the exhibition. You will find there are winners at each level of study. The brief for the competition is simply to present a poster of work that the student is proud of, from this year's study. You will see that this leads to a variety of designs from graphics to products and through to explorations of systems and services through games.

Design teaching at the OU introduces students to many different areas of design, our focus is on developing design thinkers who can apply their creative thinking skills in a wide range of contexts. Our students study the design modules at a distance, through a combination of online teaching and print materials. We are very proud of our students, most of whom are studying whilst working full time, many also have caring responsibilities as the majority are mature students.

This year is the first time that our exhibition has been presented wholly online, we hope that you enjoy it.

This exhibition has been selected and designed in conjunction with students. Our thanks to the following:

Rachel Baker –
Selection Committee

Kamjeet Kaur –
Selection Committee

Iestyn Jowers –
Selection Committee

Annette Beckett –
Exhibition design

Abigail Jackson - Exhibition design, Social Media design, Catalogue design

Rebekah Manston - Exhibition design, Social Media design

Mar Reyes - Exhibition design, Social Media design

Leo Rees-Evans -
Exhibition design

Anna Ward-Stancheva -
Exhibition design,
Catalogue design

**Dawn Correia,
Nicole Lotz, Georgy Holden** -
Exhibition Organisers



IDENTITY

Exploration of identity is a starting point for students studying design thinking at the OU. The outcome is expressed in the design of a T Shirt.





CLAIRE COOK

U101

Design Thinking

This embroidered T-shirt design reflects a mindful activity that involves the fine motor control of the hands. The activity balances the fear of living through uncertain times and produces intricate designs.





University Design Module

2020. Peak
pandemic.
TMA01
a time when
to isolate. I
access to a
r

passion of mine

Phase 1 Here I
am performing
blackwork.



Every
Thursday
during
TM
we
elapped
thank you to
our Key
Workers



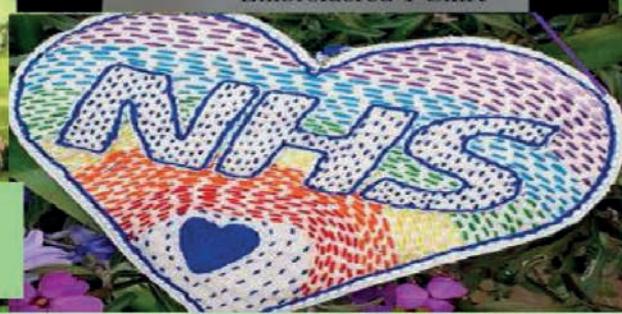
Phase 2
Frightened
image of my
hand

repeating a shape to create a new image. Hand
s and brain to work together. This kind of fine motor
ul, relax, and keeps my fingers nimble.

Reap what you
sew – Hope is
contagious



Phase 3:
Embroidered T-Shirt



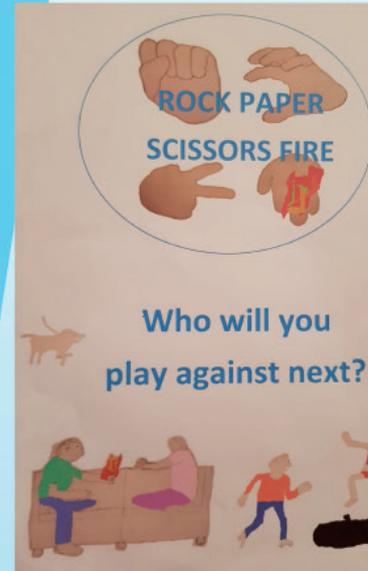
CHRISTIAN SMALL

U101

Design Thinking

Adapted from images of the designer's hands this light-hearted t-shirt design presents a modified version of the traditional rock, paper, scissors game in an arcade game format.

Rock, P



U101 ETMA01 - Submis
The remit for my ETMA incorporating my tutors the right. To enable my the comical effect of th place. The layout has n various details of the tw mechanics such as name weapons each of the tw two new weapons , air a battle, throwing differe printed on to a t-shirt



Paper, Scissors, Fire T-shirt

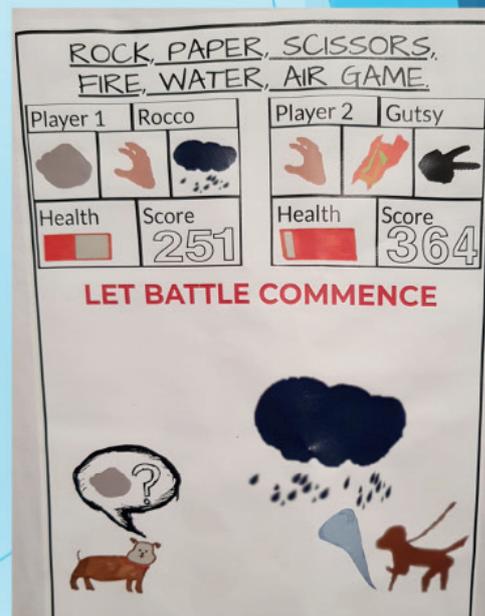
Designed by J C Small, module U101

U101 TMA01 - Submission

My concept originally started with the diagram on the left, with numerous individual aspects arranged in the design shown. I was inspired to play with and adapt the fun game of rock, paper, scissors, extending it to include a fourth aspect, fire. The four symbols, at the top of the page, began as photos of my own hand, which I computerised. The designs on the lower half are hand drawn sketches of different people and animals playing the game. This design was intended to illustrate my own playful creativity, depicting animals and people bonding together in fun in different scenarios. The design was printed out onto a t-shirt.

Submission

was to develop and improve my original submission, ' feedback. The revamped version is illustrated to t-shirt to clearly depict my design while adding to the image itself several major changes have taken place. Now has the appearance of a computer game with two opponents. The top half shows the operating system, health and score for each player, with the symbols for each dog has available to use. The new design features fire and water. The lower half shows the two players in a battle scenario.



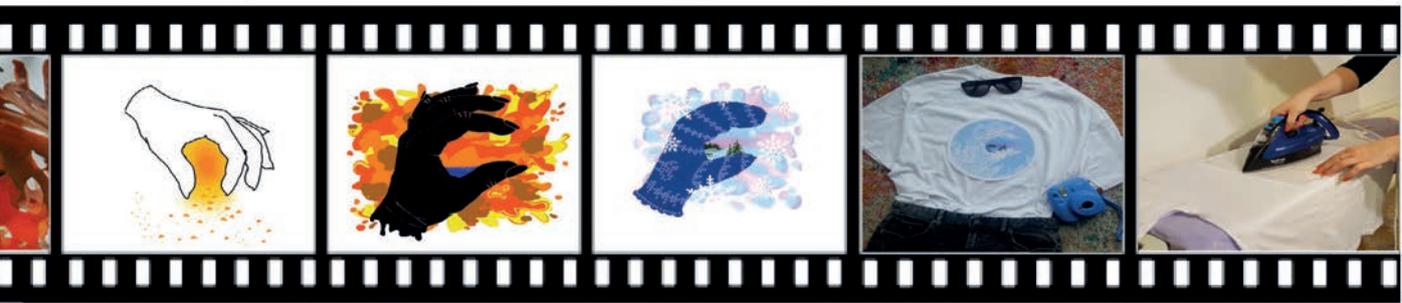
SANITA VECELE

U101

Design Thinking

The intricate frost pattern created by the encircling hand on this t-shirt represents the designer's childhood memories and the idea of wanting to protect their 'safe space'.





Always in my Heart

Hello, reader!

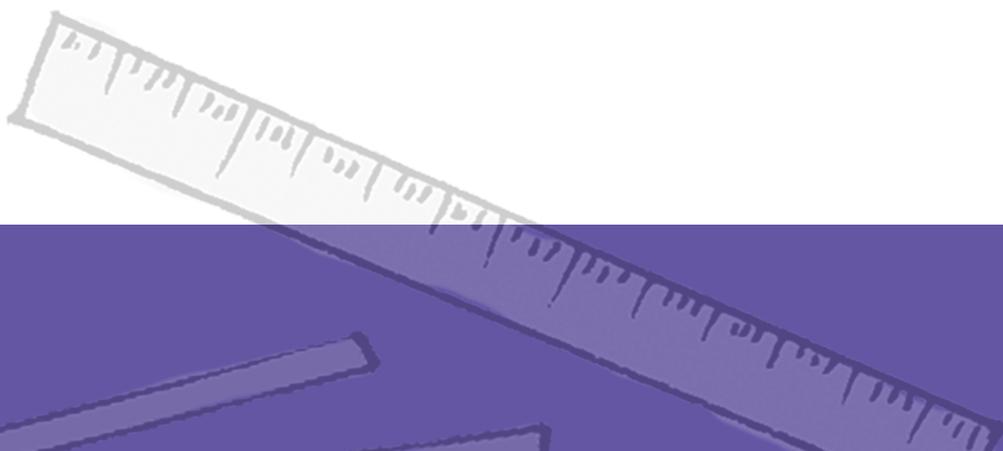
You are looking at my work I designed at the very start of the module for TMA D1 Design and me.

What started as a simple exploration of my hands, looking at all the creases, lines, and wrinkles, like I never looked before, continued with multiple options of pictures and attempts to create abstractions, putting in practice newly acquired skills, I produced a t-shirt design.

The very first project was to create a design for myself. I used a photo I took of my hand playing with colours and as if capturing untouched paint in the centre of the photograph.

I come from a distant village in Latvia, where we had snowy, frosty winters when I was little. I liked to spend days outside and would only return home at the dawn. My home, where it was warm and I was safe.

Like many others, I leave with anxiety, which I had since childhood. The t-shirt is my reminder of my comfort zone, which exists now only in my memories and I got to move on. Only those who are close/ come close enough can see the "tiny house" I treasure...





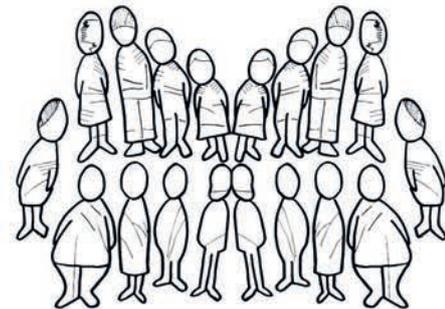
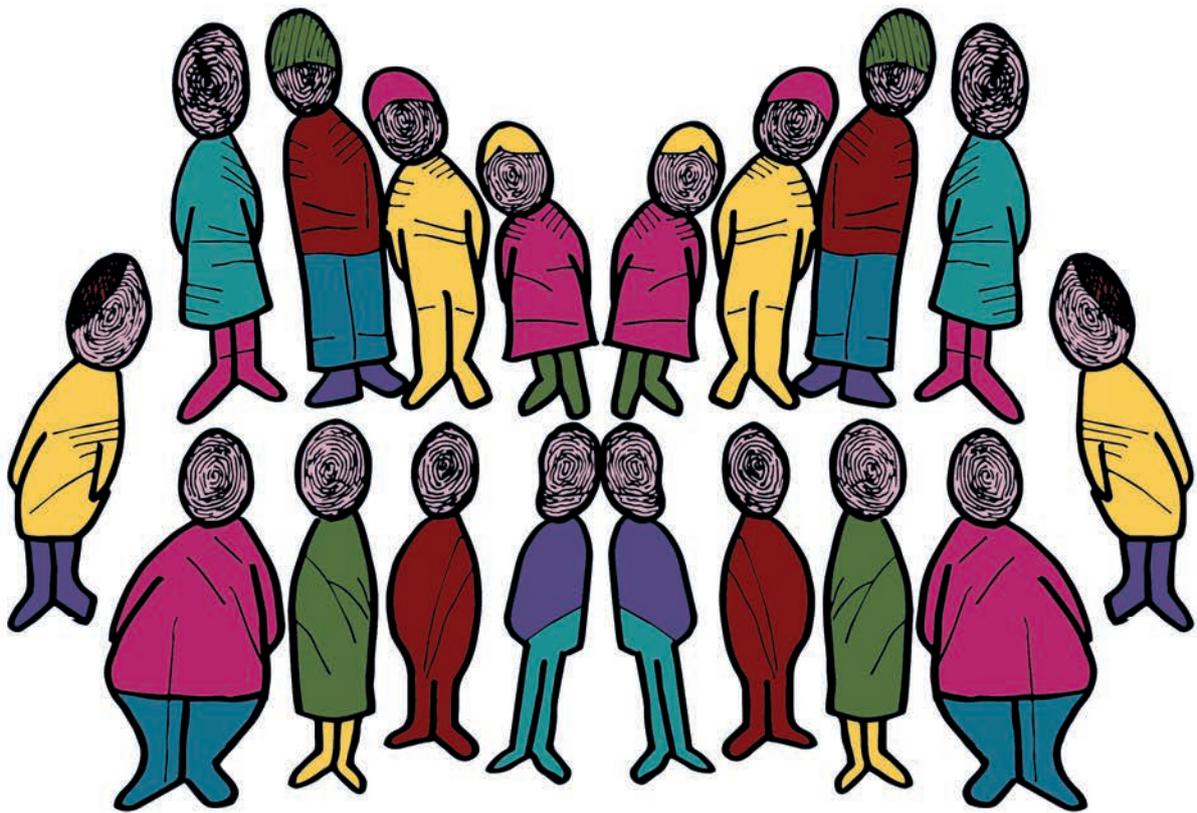
EMILY STUDHOLME

U101

Design Thinking

This t-shirt design explores the idea of identity and individuality through the abstracted forms of fingerprints portrayed as people.





TMA01 asked me to explore concept development stages to design a produce a T-shirt through experimentation and evaluation of my design processes. My ideology was the representation of individuality, the idea that every hand has unique fingerprints, just as every person is different. The development of design through stages led to abstracting shapes into people, then exploring design placement, further developing ideology. The use of symmetry links to reflection, and interpretation.

U101 TMA01

Emily Studholme

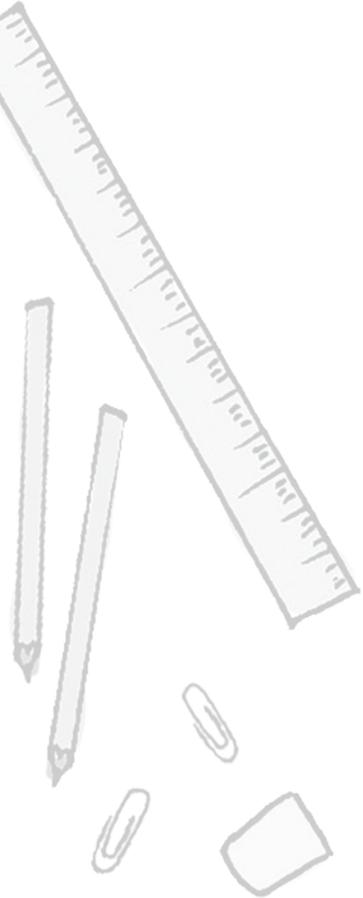


ROSIE CONLON-MCKAY

U101

Design Thinking

This design uses the imagery of holding hands to convey love, support, unity and care across communities.



U101

ROSIE CONLON-MCKAY



THE BRIEF

Explore features, stories and gestures of your hands and create an image to be printed on a t-shirt.



EXPLORATION PHASE

Use principles of proportion to create an abstract composition from the trace that unifies the gesture and text together to convey a message.

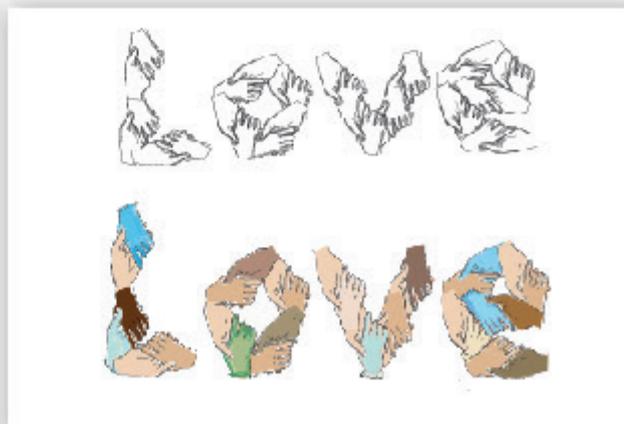
CONCEPTS PHASE

Apply the concepts of symmetry and repetition to create an abstract design



FINAL DESIGN

Somewhat influenced with current events, I decided to include some of the hands wearing rubber gloves. I felt this was a wee nod to the health care workers currently doing some amazing jobs. It also was a bit of a subversive message as current guidelines suggest against hand shaking



U101, TMA 01 ROSIE CONLON-MCKAY

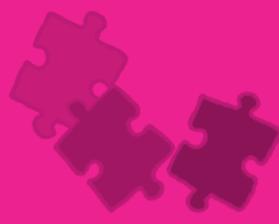
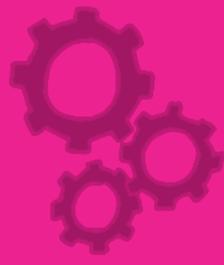
FINDING & SOLVING PROBLEM

Finding and framing problems to identify possible solutions is a skill developed throughout the degree programme allowing students the autonomy to work on issues that bother them.





S



ALICE BEEBEE

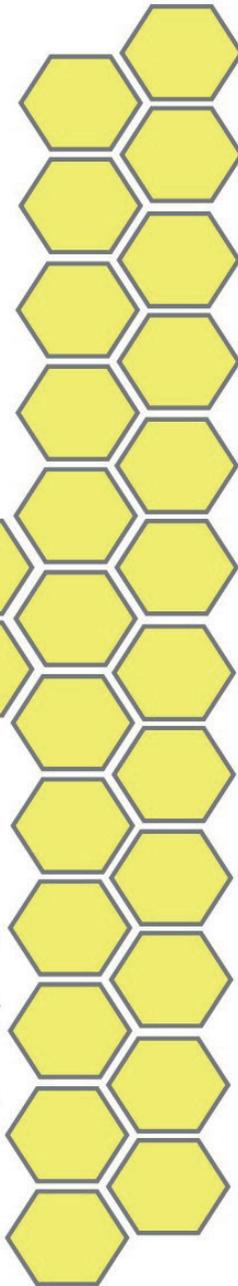
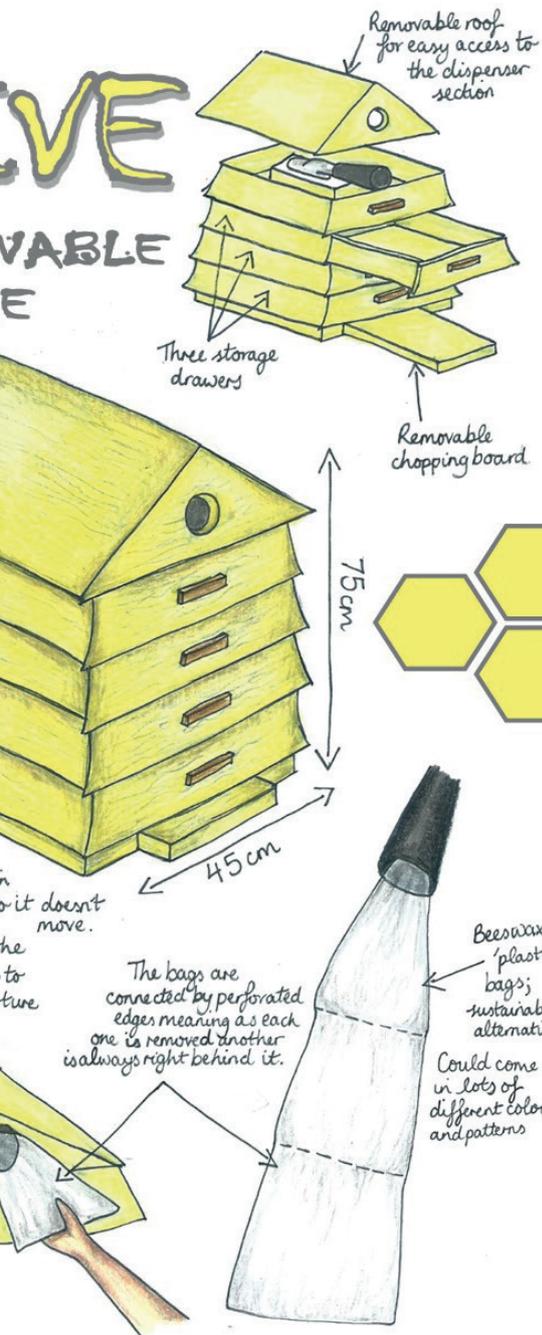
U101

Design Thinking

This sustainable kitchen storage unit addresses the problem of plastic food wrap waste. The unit dispenses biodegradable beeswax food bags and incorporates a chopping board and storage drawers.



VE
VABLE
E



ALICE BEEBEE U101 TMA02

Problem statement: Design an easier solution to wrapping and storing food that is convenient, sustainable and safe to use.

This is my design concept titled 'The Hive', in correlation to the product's shape and the main purpose of the design - to dispense biodegradable beeswax food storage bags. I aimed to come up with a concept that was innovative and interesting yet didn't tip into the realm of ridiculous and infeasible. Simplicity was also key in my concept, for over-complication can really kill the appeal of a design. Therefore, I designed a dispensing system that borrows mainly from the design of tissue boxes; a box of beeswax bags sits within the roof area of The Hive and through a funnel that leads to the front aperture, the bags are fed through. The perforated edges of the bags make removing one easy and also ensures that there is always a new one behind it. Furthermore, the dispensing system is safe for all to operate, involving no sharp or serrated edges, instead only the smooth yet effective funnel. The additional storage drawers and removable chopping board make useful extras while the robust wooden structure adds a pleasant rustic feel to any kitchen.



PROTOTYPE DISPENSER

Beeswax 'plastic' bags; sustainable alternative
Could come in lots of different colours and patterns

it doesn't move.
he to ture

DAWN GOODWILL

T317

Innovation: Designing for Change

The difficulties of parking in designated bays are addressed in this project. The proposal is to use an electronic device fitted to the car to deactivate bollards and enable only bona fide visitors to park in special spaces.

**CRADLE TO
CRADLE
ELECTRONIC
SENSORS &
BOLLARDS
TO KEEP
NON-GENUINE
PARENT/CHILD
DRIVERS
OUT OF
PARENT/CHILD
SUPERMARKET
PARKING BAYS**



Designated Parent/Child parking at supermarkets is wider:

WHY?

- to fully open doors
- to enable child in/out of car
- to assemble pram
- Law insists on car seats unless 135cm tall or 12 years old

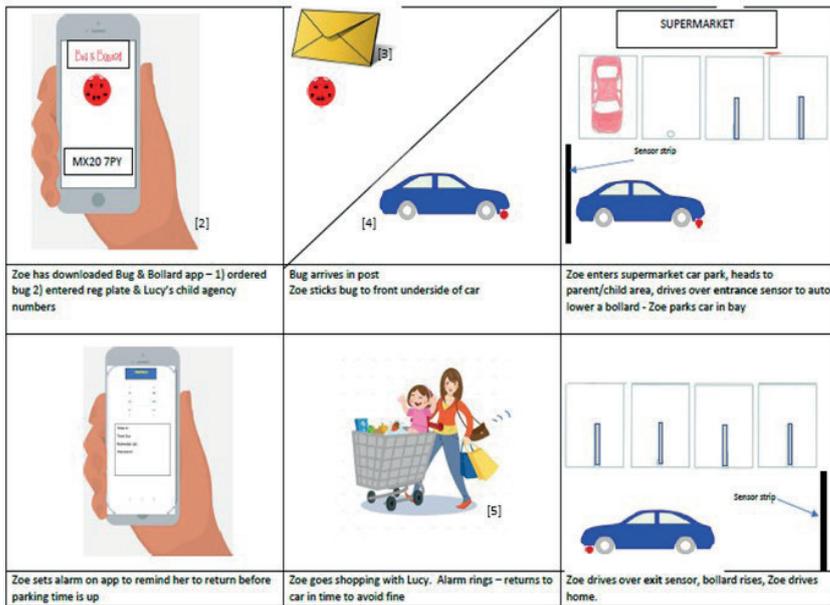
Bug & Bollard

A store with 21 parent/child bays costs £57,245.80 (full cost of bollards, ground sensors and installation)

£74,053.20 revenue gained from 23.5% p&c customers who previously drove away, when parking spaces taken, often by non-p&c shoppers. Investment paid back within 1 year

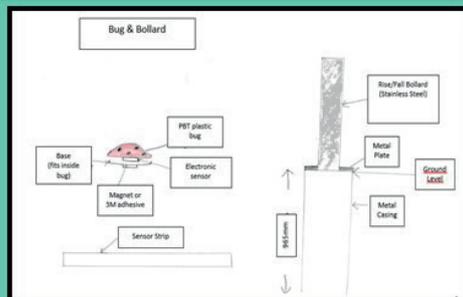
Supermarket could invest, also fund Bug & Bollard's App & Bug, enabling users to have a free service

- Designated users in bays
- less damage to cars
- less risk of accidents



User Friendly App enables:

- Booking facility
- 1 in 5 p&c parking bays for reservation
- Time Management
- Avoid fines – set alarm reminder to return to car
- Reassurance
- Calmness



Magnetic sensors would trigger auto-electric bollards to rise and fall, with permanent magnet within ground strip sensor, overcoming problem of mud splashed on bug sensor positioned underneath front of car



Designated Parent/Child parking is situated closer to supermarket:

WHY?

For safety – no need for child to cross car park

[1] <https://i.pinimg.com/736x/ea/6e/4f/ea6e4f157de1a0b4d4971682daf733c.jpg>
 [2] www.needpix.com/photo/download/852244/smartphone-drawing-mobile-phone-transparent-display-technology-communication-phone-cell-phone
 [3] https://cdn.pixabay.com/photo/2017/01/31/00/48/envelope-202710_360_720.png
 [4] https://1001freedownloads3.amazonaws.com/vector/thumb/66561/simple_car_side.png
 [5] <https://i03.enrvo.com/files/199980597/Mom%20and%20Child%20Shopping.jpg>

IRINA VODICH U101 Design Thinking

This food expiry app design is a response to the growing problem of food waste. The app helps users track and use food close to its expiry date.

Design concept of the pro

The proposed method is to ma

After shopping, the scanner reads the information about the product contained in the barcode and stores it in the mobile app. The expiration date can be updated directly onto the app.



The mobile app can even show suggested recipes to use the food close to its expiry date and reconstitute leftovers into fresh dishes.

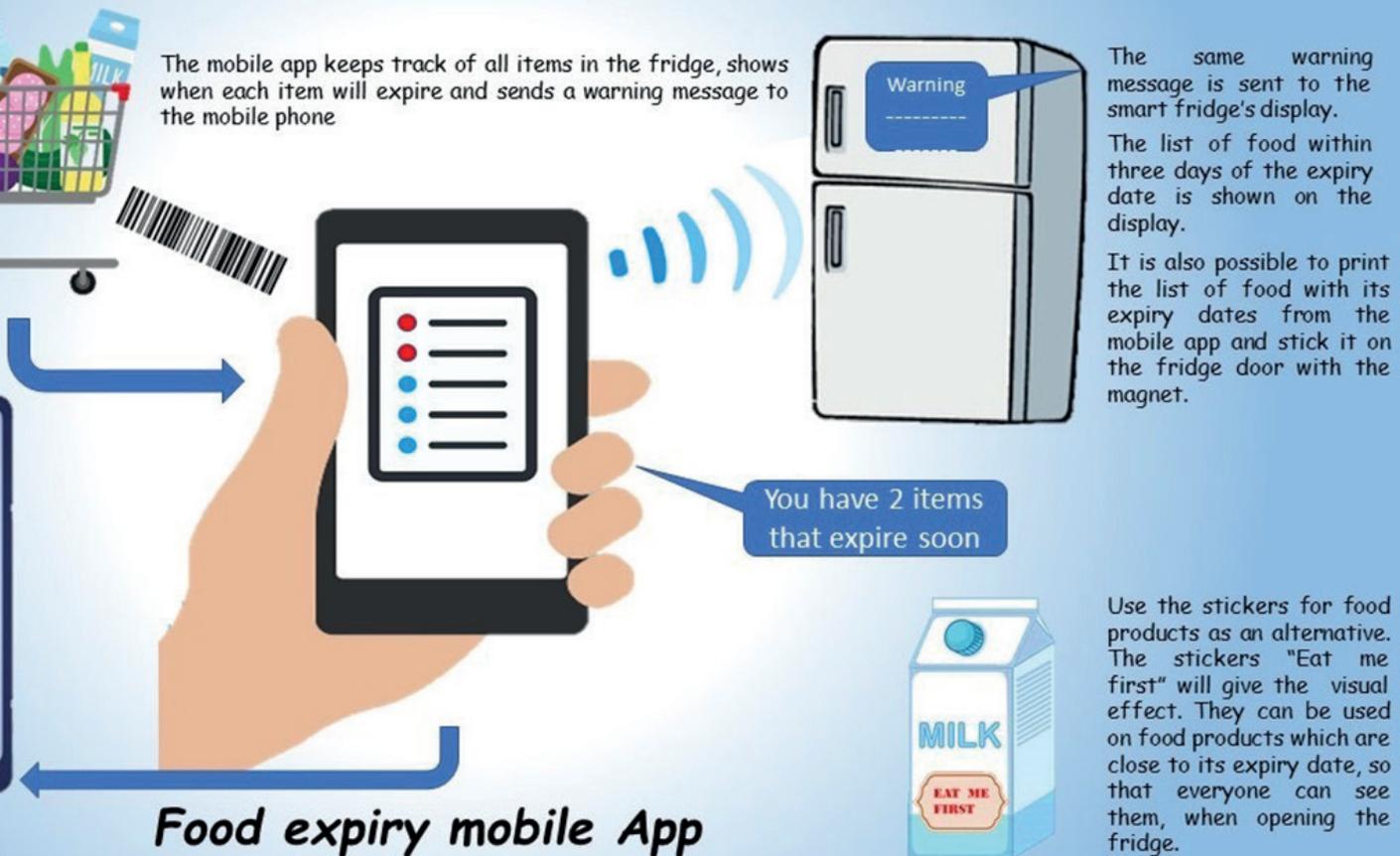
The mobile app can prepare an order for food products that are used up and need to be purchased again.



Irina Vodich L3340996, Module U101 – TMA02

Process for efficient management of refrigerated food products to minimise waste:

Manage the information about the expiration dates of the food purchased via mobile app.



Design thinking: creativity for the 21st century

MEGAN AUCOTT

U101

Design Thinking

The Smart Oven design helps people with dementia to retain their independence by creating a safer home environment whilst giving some peace of mind to carers and family members.

The Smart Oven is designed to improve the lives of people with dementia by providing a customised cooking experience that helps reduce the risk of accidents.

The main features of the Smart Oven

- Customised cooking time limit, alarm sound and temperature limit
- Gas disabling option
- Personalisation options for background colours, including a colourblind option, text size and colour
- The screen is password-protected, for the carers use only

The Smart Oven

The Smart Oven is designed to help people with dementia become more independent, improve the lives of both themselves and their carers. The Smart Oven allows the carer to set the settings on the oven for the person that they're caring for. People suffering with dementia can quickly become a fire hazard as their memory weakens. The Smart Oven reduces the risk of fire by allowing the carer to set a cooking time and temperature limit.



Benefits of the Smart Oven

- Boosts confidence, independence and happiness of the user
- Delays the need for a carehome, saving the family or the government money.

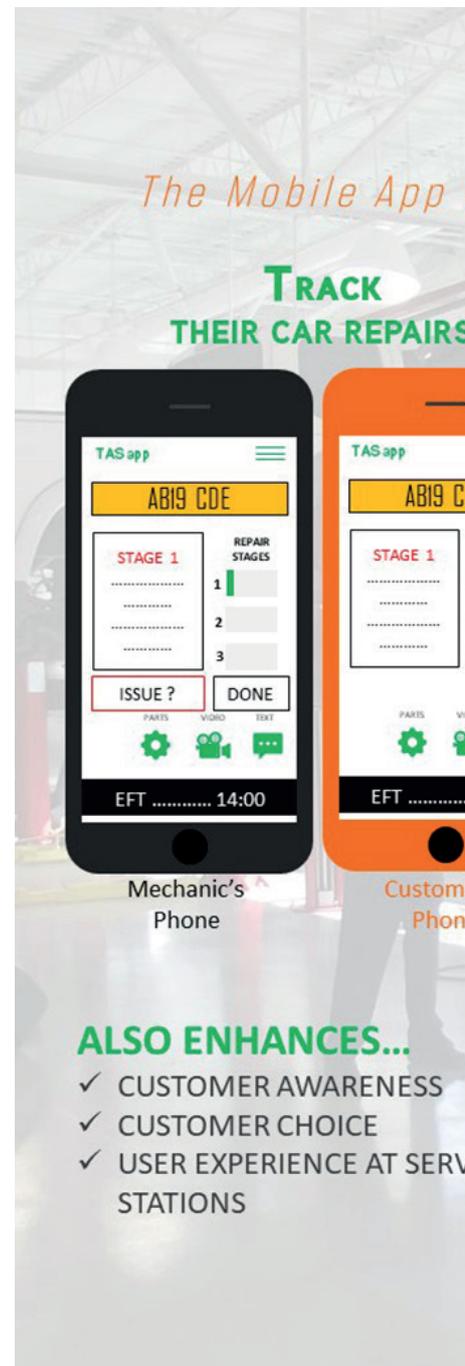
Megan Aucott K8555107 U101-19J Design Thinking

MAYOWA BALOGUN

T317

Innovation: Designing for Change

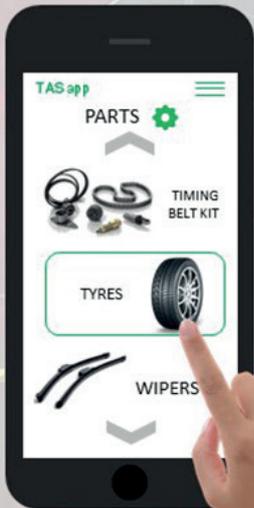
This app is envisaged as an interface between car mechanics and customers to enable information about work and decisions about replacement parts to be made quickly and easily.



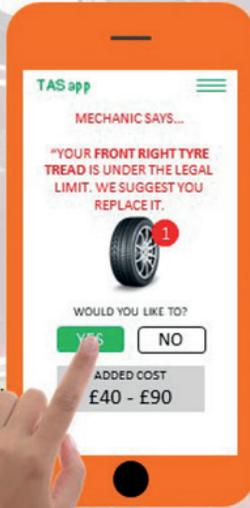
The TAS app

That Allows Service Station (Mechanic Shop) Customers To ...

AUTHORISE EXTRA REPAIRS

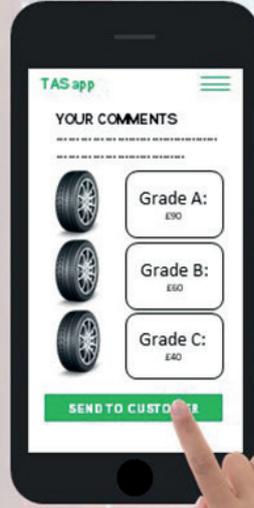


Mechanic's
Phone



Customer's
Phone

SELECT REPLACEMENT CAR PARTS



Mechanic's
Phone



Customer's
Phone

**NO OTHER CAR-CARE APP
DOES ALL THREE!**

**COMPATIBLE WITH
TOUCHSCREEN SMARTPHONES**

**NEVER BE SURPRISED
BY EXTRA CAR REPAIRS AND EXPENSIVE BILLS AGAIN!**

2 USER INTERFACES
- Mechanics
- Customers

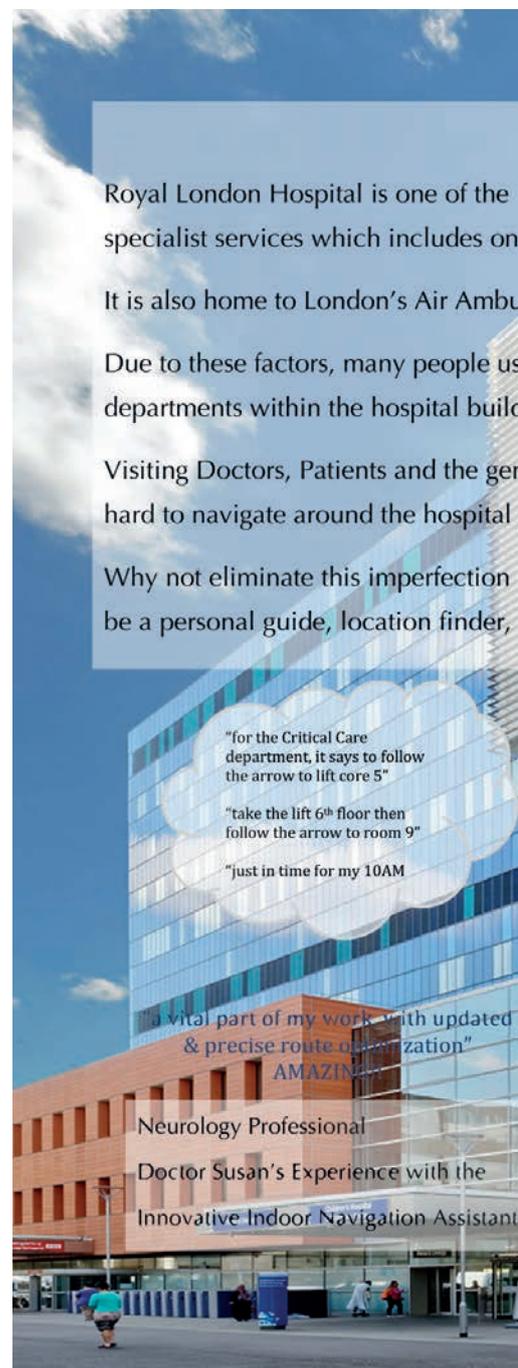
**Name: Mayowa Balogun
Module: T317**

DENIS AGYEMAN

T317

Innovation: Designing for Change

The problem of finding the way around an unfamiliar hospital are addressed in this proposed app. The app would ensure that visitors arrive at their destination by the best route and the proposal also integrates information from the hospital about upcoming appointments.



Royal London Hospital Indoor Navigation Assistant

UK's largest teaching hospitals based in East London and run by the NHS Trust. It offers a full range of local and one of London's busiest paediatric Accident & Emergency departments and one of the UK's largest children's hospitals.

and is one of London's leading trauma & emergency care centres and hyper-acute stroke centres.

make this hospital as their first choice, but there are a few shortcomings in regards to finding the clinics, wards and other facilities.

General public always find themselves lost on its many floors. The elderly, less-abled & disabled people especially, find it difficult to navigate the hospital even for basic accessible amenities.

By introducing the Indoor Navigation Assistant, which would not only add assurance and convenience, but would also serve as a central notification hub and appointment scheduler.

- optimized & precise directions
- all users with correct level of credentials
- 'ping' indicating each successful instruction followed



- accessibility settings
- high contrast visual settings
- hearing aid connectivity
- preferred language settings



- remote updates & notifications
- appointment times
- locations



- visual image of destination
- audio notifications

'You have arrived at 'Pharmacy Lab'
'Would you like further assistance?'





ALEXANDER FOSTER

U101

Design Thinking

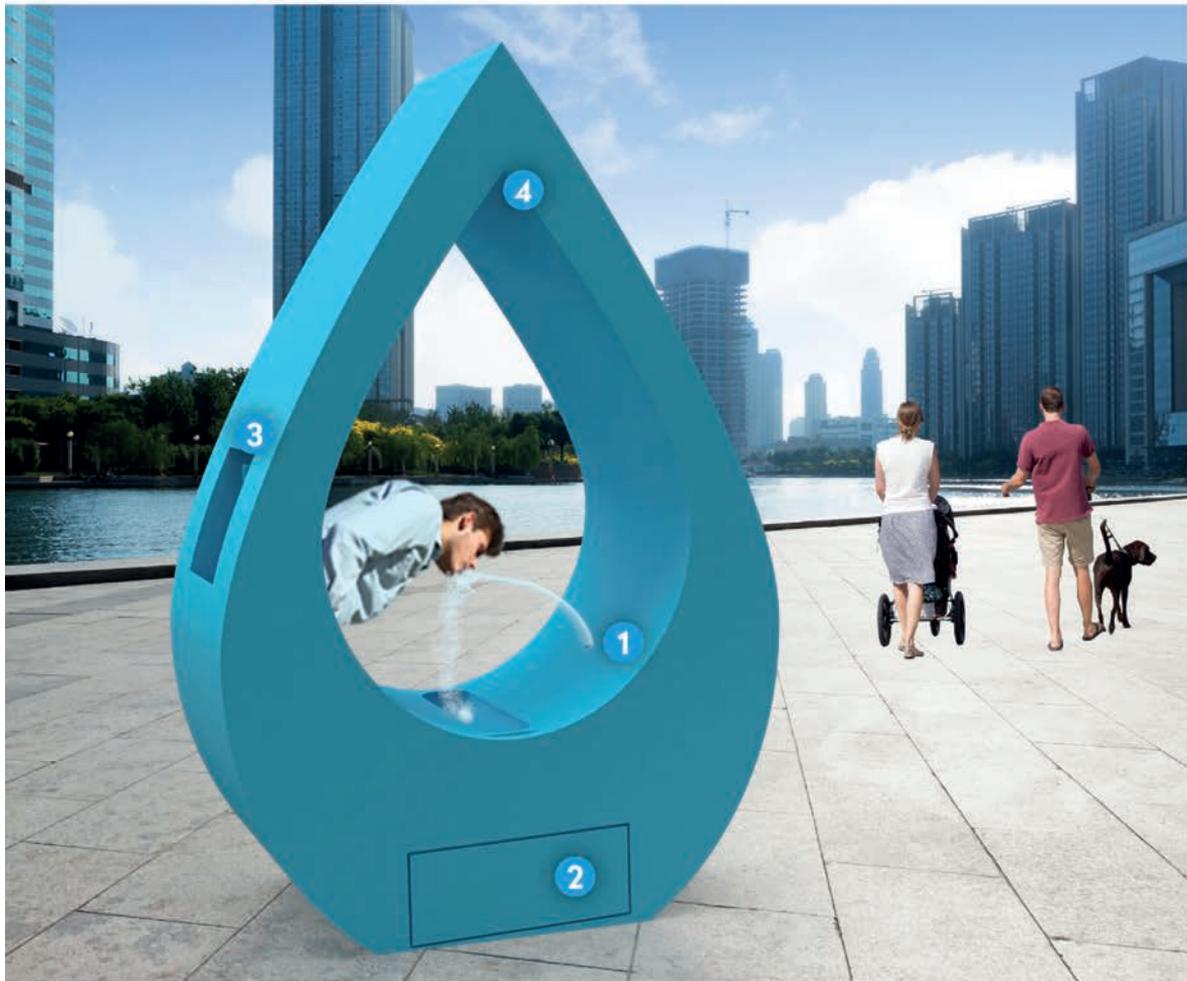


This public drinking fountain and water bottle filling station was designed in response to the proliferation of single use plastic bottles in society, encouraging the use of refillable water containers.



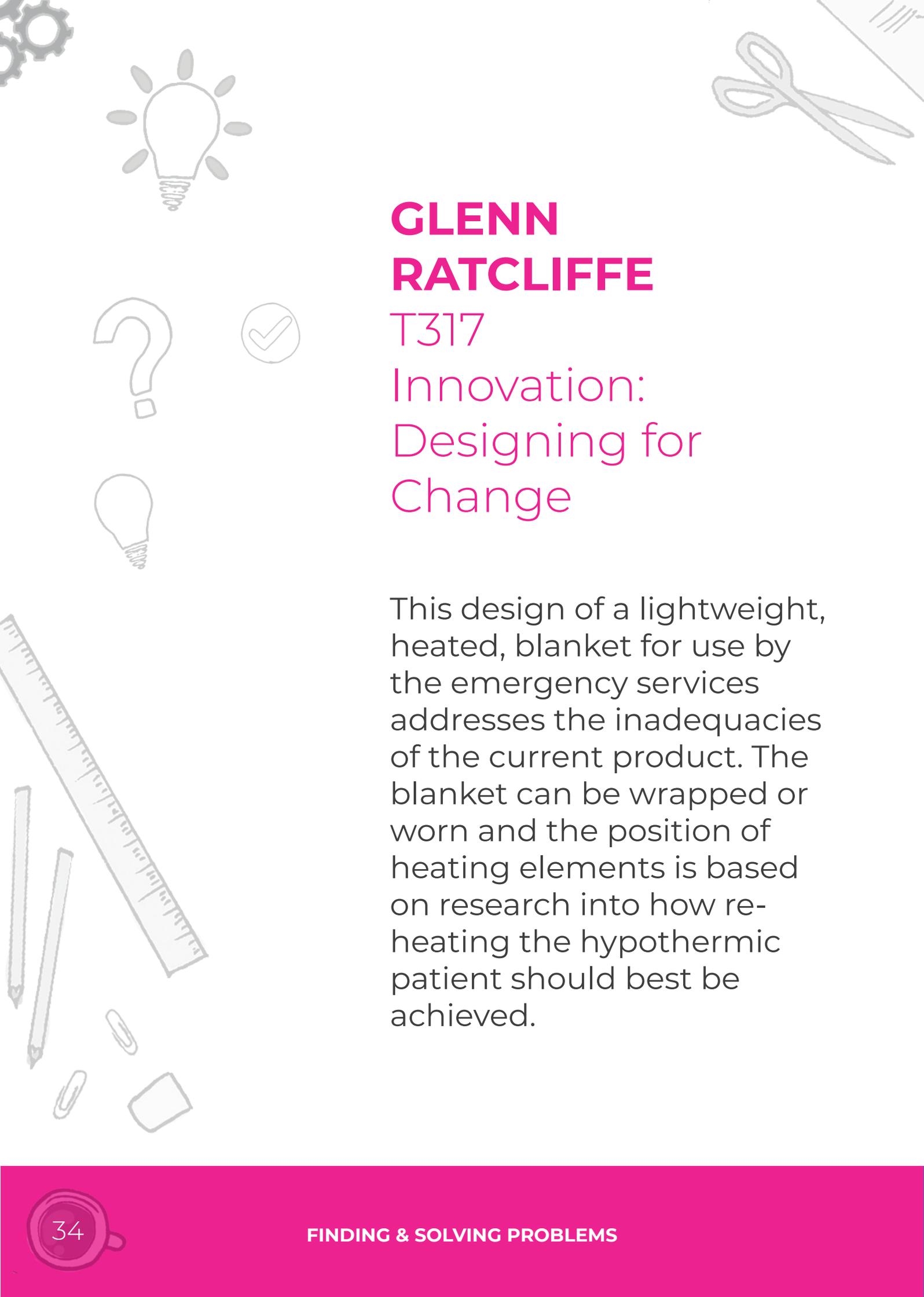
Drop PUBLIC DRINKING FOUNTAIN

CREATED BY ALEXANDER FOSTER FOR U101



- 1 A flush spout, triggered by sensors eliminate the chance of the user placing their mouth over the spout increasing the hygiene.
- 2 Research showed the taste of water was important to end users. Located inside the fountain are water filters, improving the taste.
- 3 A bottle refill station with sensor tap allows people to fill up reusable bottles, a convenient solution for people whilst they out and further reducing the need for single use bottles.
- 4 Infrared sensors built into the shell detect when a user wants to use the fountain, at which point it is turned on automatically. Similarly the fountain is tuned off automatically when a user is finished and moves away.

Single use plastic bottles have become an intrinsic part of modern life. Becoming almost essential but having considerable environmental impacts at the same time. This design solution is meant to reduce the use of single use plastic bottles by making drinking water accessible to people outside. The fountain is to be placed in plazas, high-streets, squares and parks etc. It is the same height (2.4m) as a red MK6 telephone box, making it visible from a distance and providing presence. The drop shape not only conveys its purpose but is meant to also act as a kind of street sculpture. Integrated LED lighting gently illuminate the fountain at night.



GLENN RATCLIFFE

T317

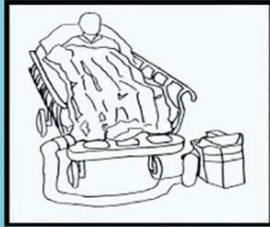
Innovation: Designing for Change

This design of a lightweight, heated, blanket for use by the emergency services addresses the inadequacies of the current product. The blanket can be wrapped or worn and the position of heating elements is based on research into how re-heating the hypothermic patient should best be achieved.

The 'Core comfort' blanket

There are about 20,000 hypothermia related deaths a year in Britain. This equates to 54.8 hyperthermia deaths on average everyday in the UK

What tools do we have to help treat this issue?



Hospitals use 'warm air blankets' to treat patients temperatures within the hospital environment.

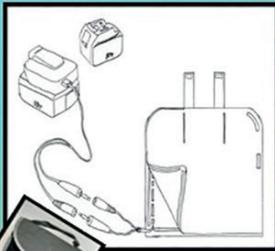
Paramedics use 'space blankets'.

The thin shiny plastic sheets known as emergency space blankets have no insulating qualities, they immediately become as cold as the prevailing elements and conduct that cold through wet clothing to the human body. (Speik, 2012)



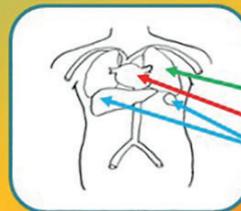
An 'active' warming solution could help. The 'Core Comfort Blanket' takes the hospital thermal blanket concept in to the community, helping to maintain or recover the patients core body temperature directly at the emergency scene.

How does it work?



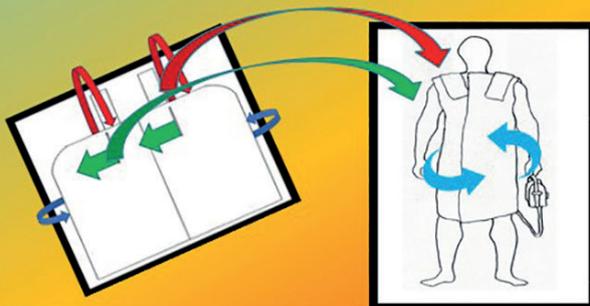
The energy to heat the blanket is provided by 'heat pads' contained within the blanket, powered by a 18V dc 5Ah rechargeable battery. The battery and adaptor are carried in a light weight canvas bag attached to the blanket by a plug and socket.

The blanket heater elements are positioned inside the blanket to transfer heat to areas surrounding the patients vital organs.



Lungs:
Heart:
Liver & kidneys:

The blanket can be used as an all weather over coat. To warm patients in extreme weather conditions.



The blanket deployed at an RTA.

What are the patient benefits?

Controlling the patients body temperature can assist in regulating their heartrate, assisting with rational thought and providing all round better body function. (Mayo Clinic staff, 2020)

What are the environmental benefits?

The blanket is made from a 100% recyclable material. The heat source is powered by a rechargeable battery. The blanket can be reused and laundered to NHS standards.



MAR REYES

U101

Design Thinking



The design for the pull down shelf was prompted by the need for more accessible features in standard homes for people with disabilities and limited movement.

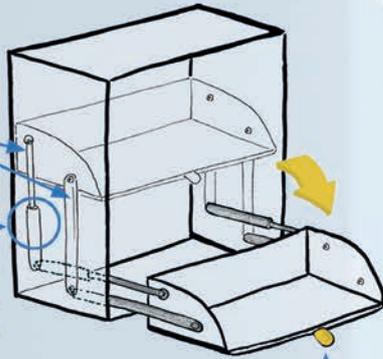


PULL DOWN SHELF

Double strut for stability.
Parallel support to avoid
swinging.

Hydraulic system for
effortless and smooth
movement.

Grabber, easy to pull down
and push back up.
A simple touch of your fingertips
would activate the struts to
complete the movement.

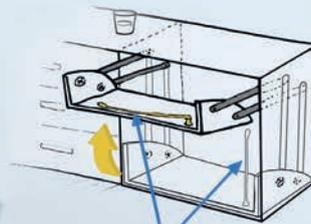


Many people struggle with everyday tasks, simply trying to reach high places can be a risky situation, having to climb onto unsteady ladders or other objects could end up in an accident.

This shelf is designed to bring closer those high objects, effortlessly. It provides easy access to unreachable places, it is designed specially for anyone with difficulty to reach, e.g. elderly people or with reduced mobility.

It is adaptable to existing cupboards. This system can be applied in different directions, so simply modifying the anchor point of the struts, it can be used to access lower cupboards.

PULL UP option
for low cabinets, to avoid
bending and painful postures.



Long grabber, it can be
folded when it reaches
top position for easier access.





RACHAEL BAKER

U101

Design Thinking

Traditional airplane seating is cramped, restrictive and does not encourage movement in the legs. This rotating seat design aims to improve on the comfort and accessibility of existing seating options.

ROTATE TO RECLINE: ACCESSIBLE ECONOMY AIRLINE SEATING

For TMA 02, the task was to identify and solve a design problem. The problem that I identified is economy class seating on long haul flights. Economy seating on longhaul flights is designed to maximise revenue at the expense of comfort and functionality. This creates issues across the following areas :

Movement is important to reduce the likelihood of Deep Vain Thrombosis. However, there is very little space.

Leg room is sacrificed further by lack of functional storage space for the multitude of essential items possessions needed on a long flight and rubbish that is accumulated.

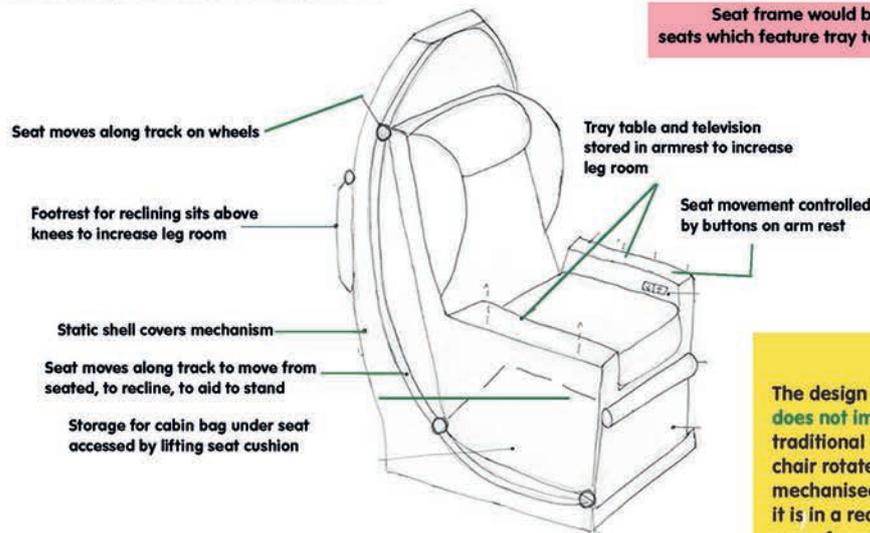
Space is further impacted on by reclining seats.

There are difficulties with accessibility if you are seated in the middle or at the window.

All significant storage is overhead.

When framing my problem I considered this experience from the view points of different groups of people. Having someone in my family with **mobility issues**, I was able to identify that this is a problem which has a particularly significant impact on the customer experience of this group of people. Therefore I looked to consider the following:

How might we improve the customer experience of an individual with mobility issues in an economy cabin?



Seat frame would be recycled from existing bulkhead seats which feature tray table and tv integrated in arm rests

The design is for a chair that reclines, but **does not impede on personal space** like a traditional airline chair. This is because the chair rotates by moving along a mechanised track inside a static shell until it is in a reclining position, and can also move forward to aid the person to standing.

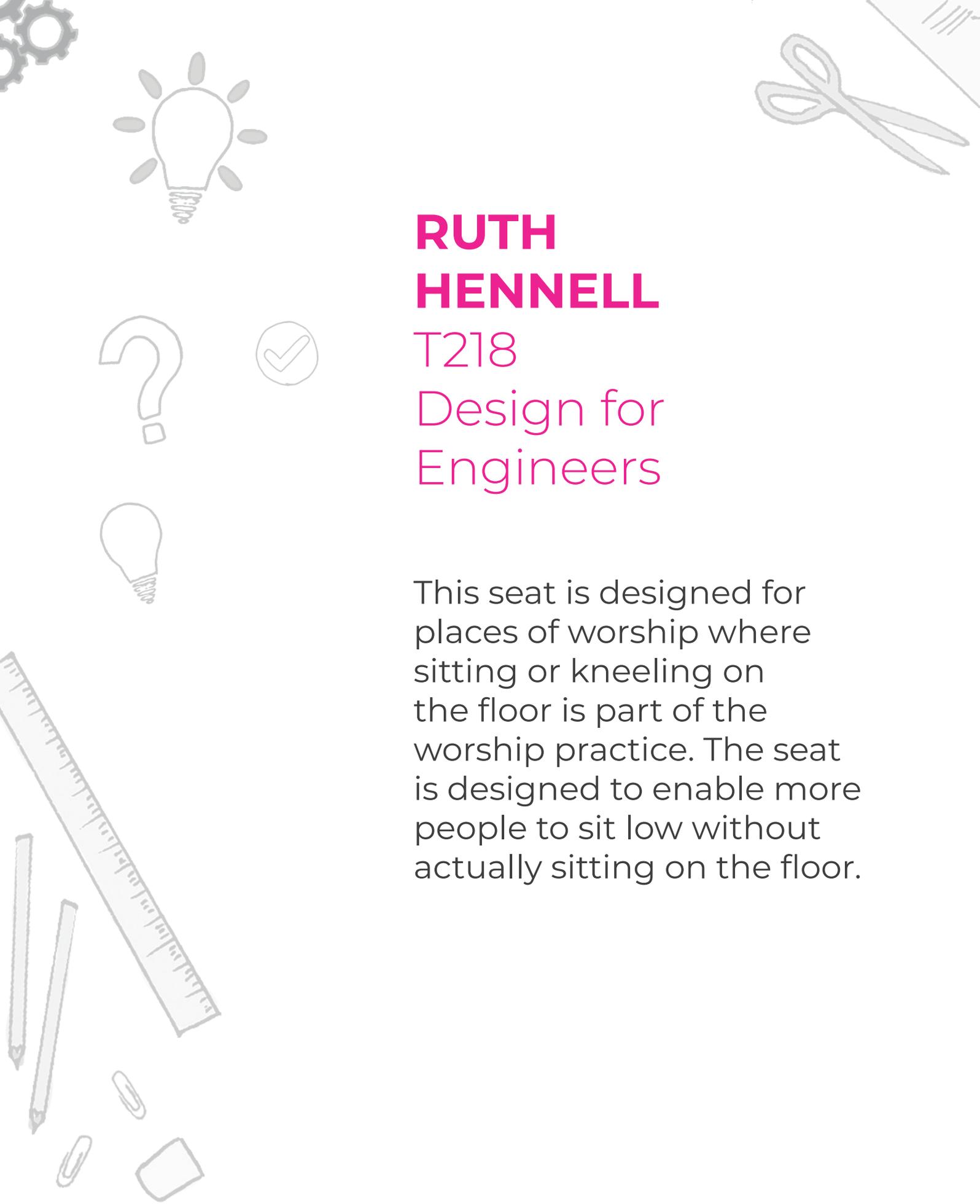
A footrest would exist on the back of the seat in front to enable the individual to **stretch their legs** whilst reclining.

To free up **more leg room and space**, the tray table and entertainment system would fold into the arm rests.

To reduce difficulties accessing overhead storage. The seat would have **inbuilt storage** which would fit a cabin bag.



RACHAEL BAKER U101



RUTH HENNELL

T218

Design for Engineers

This seat is designed for places of worship where sitting or kneeling on the floor is part of the worship practice. The seat is designed to enable more people to sit low without actually sitting on the floor.

A seat for Places of Worship, where it is common to sit on the floor

Ruth Hennell
T218 TMA 01
Chair Design

Photo taken at Easton Jamia Mosque, Bristol



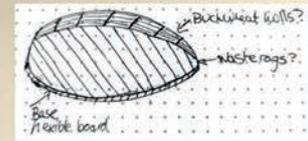
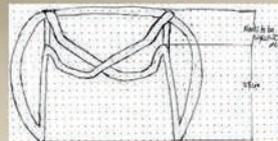
In various places of worship or for meditation, it is traditional or expected to sit on the floor.

Yet the following groups of people find it difficult to sit on the floor:

- Visitors or worshippers not used to sitting on the floor
- Those who are physically unable to sit on the floor
- People wearing clothes that make it difficult to sit appropriately and respectfully on the floor e.g. shorts and skirts

Sitting on a full height chair can feel conspicuous and separated and the person made feel excluded or different. In some cultures, people not sitting on the floor are not considered to have entered the room socially (Garner & Zamenopoulos, 2013).

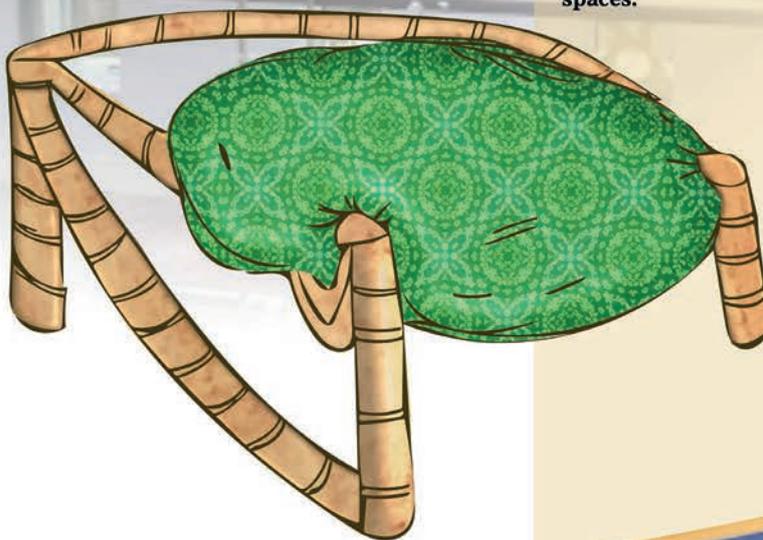
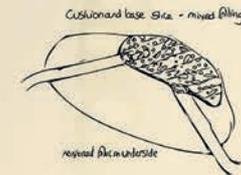
These visitors and (depending on faith practices) worshippers can benefit from this low level seat.



The chair is two separate assemblies that are designed to be used together, although the cushion can also be used separately. The back legs are longer than the front to allow the sitter to sit forward and be included with, not cut off from those sitting on the floor.

The tilted and angle X shaped seat frame is encircled by a tilted U shaped which adds stability and aesthetics.

The cushion shape was inspired by pebbles and the chair is made with natural materials, creating a nature feel ideal for reflective, spiritual spaces.



The materials are cognisant with the values of faith communities, regarding the impact on people and the planet. They were also chosen to allow for easy movement within the space and has been kept natural and simple to be appropriate in a wide variety of religious and meditation spaces and keep a connection with nature.

The frame is made from bamboo, which is light and strong and grows quickly so is sustainable. The cushion is filled with a mixture of buckwheat hulls and scrap fabric. This is both environmentally-friendly and adjustable for comfort. The scrap-fabric can be collected by faith communities as a way of reducing waste.

The cushion is covered in plain canvas and a decorative cover can then be put on top. This allows each community to match the chair to their space. A pattern will be available if the community wishes to knit or sew their own covers, in a similar way to how some Church communities make kneelers with interesting designs.



Kneelers photographed in St Michael's Church, Southampton



STEPHEN MCNALLY

T317

Innovation: Designing for Change

This proposal is for quick-fix tape for spectacle repairs that can easily be carried around in a glasses case for use when needed.

DAD!
I've broken
my glasses...

and the bus
will be here in
1 MINUTE !!!

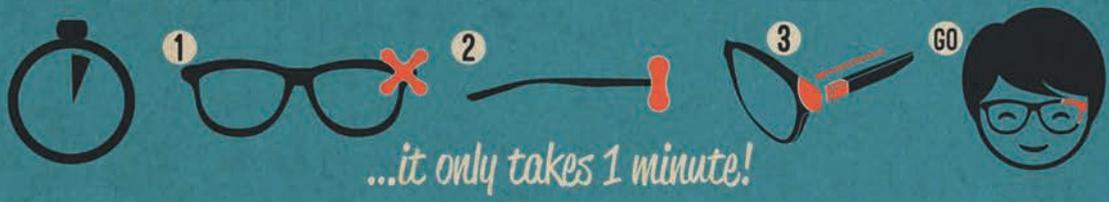


Super
Strong



SPECTAPE^X

1ST AID FOR YOUR GLASSES



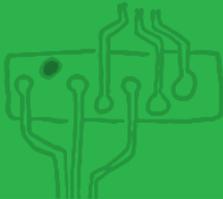
...it only takes 1 minute!

SUSTAINA

Sustainability is core to thinking about design at the OU, some students choose aspects of sustainability for their project work at each level of study.



ABILITY

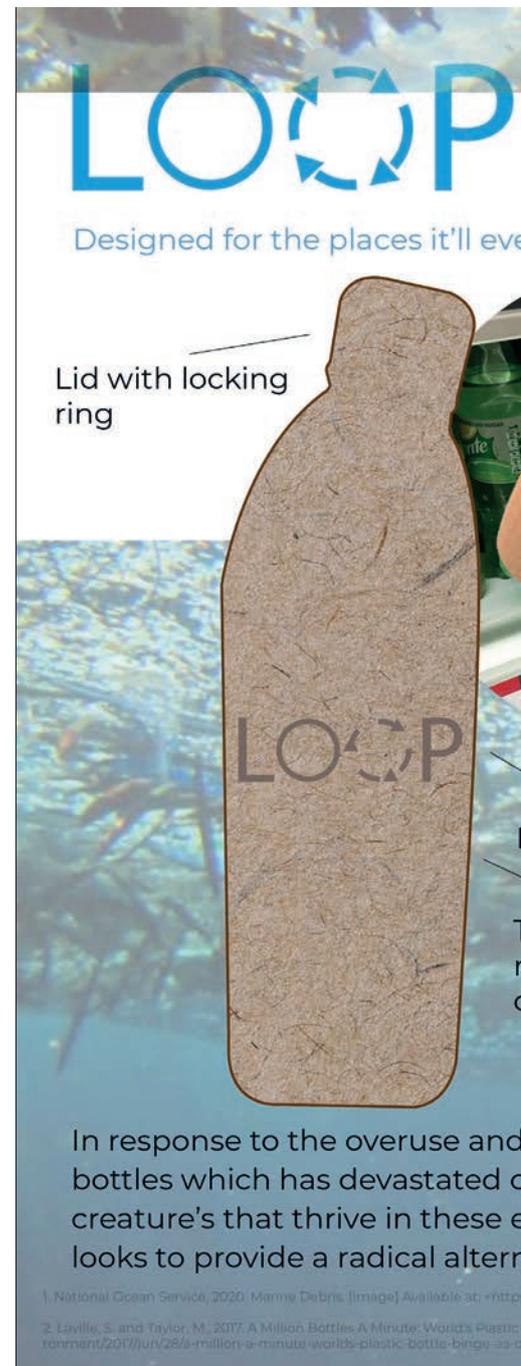


DANNY JONES

T317

Innovation: Designing for Change

This project addresses the problem of plastic waste by taking a closed loop recycling approach; considering how byproducts of the brewing industry might be made into a refillable drinking bottle. Danny considers the whole lifecycle, creating an edible and compostable version of this ubiquitous product.





'A million single use bottles plastic bottles are bought around the world every minute'².

eventually end up.



The loop product is produced using a mash of malted barley a by-product of the beer brewing process



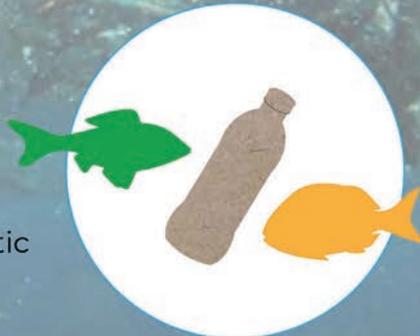
Embossed logo

The manufacture process moulds the material into a durable liquid vessel

Encourages users to think of their environmental impact



Can be composted or is safe to be eaten by animals in our oceans

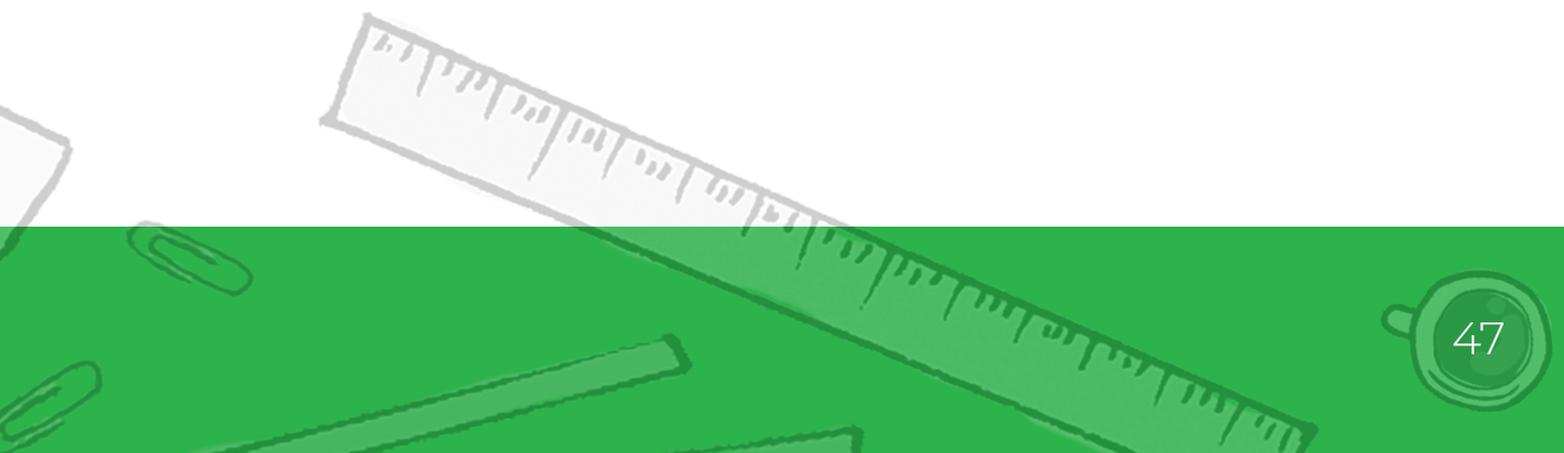


or



The manufacture of single use plastic bottles is harmful to our natural habitats and the environment, the Loop Bottle is a sustainable alternative to single use plastic bottles.

¹<https://www.nationalgeographic.org/encyclopedia/great-pacific-garbage-patch/#marine-debris> [Accessed 9 June 2020].
²Frings, 'As Dangerous As Climate Change' [online] the Guardian. Available at: <<https://www.theguardian.com/environment/2019/feb/23/as-dangerous-as-climate-change>> [Accessed 23 February 2019].

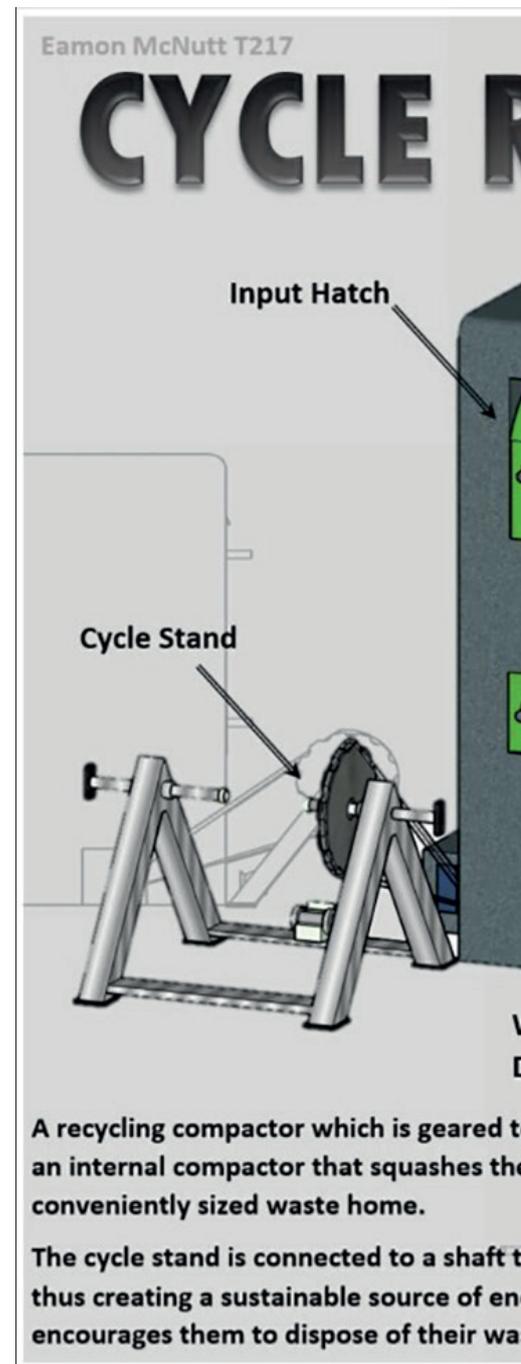


EAMON MCNUTT

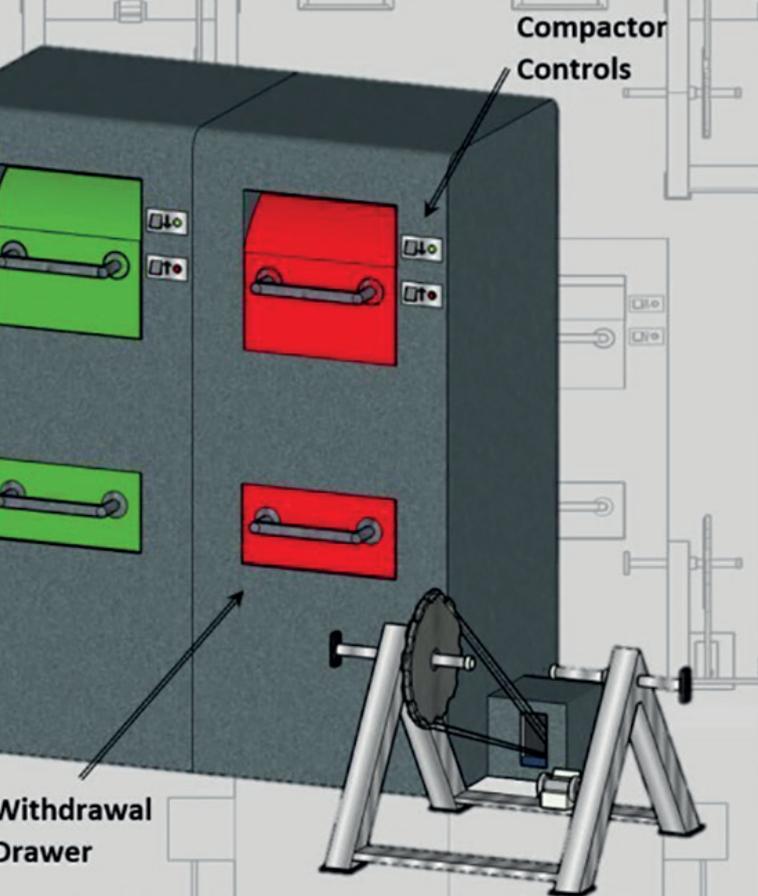
T217

Design Essentials

Awareness of the popularity of a national park as a place for cyclists has been the generator for this recycling idea which uses the cyclist's own bike to power a compactor to reduce waste to a size that is convenient to take home.



RECYCLE

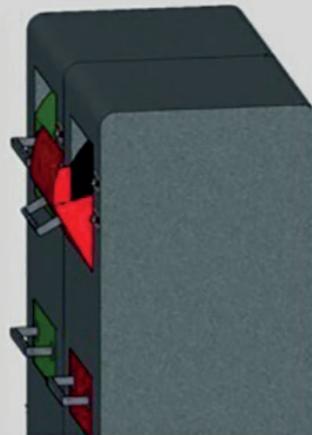
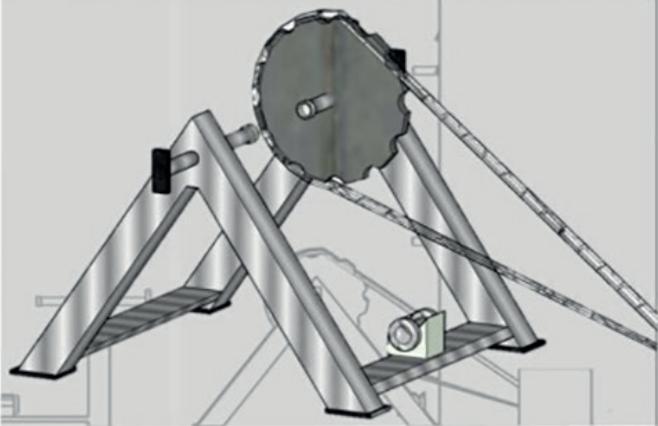
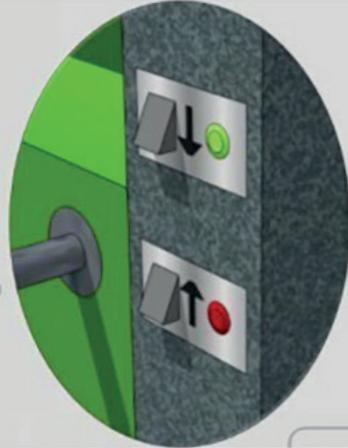


Compactor Controls

Withdrawal Drawer

...owards cyclists visiting parks for weekend rides. It features
...e users plastic or metal and a withdrawal drawer to take their

...hat spins a dynamo that charges the compactors battery,
...ergy and provides an engaging feature for the user which
...ste.



ELENOR MARSH

T217

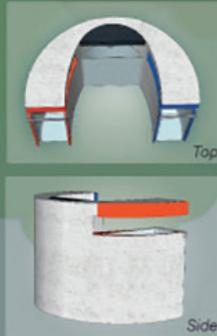
Design Essentials

This design takes an inclusive approach to the separation of waste and is designed to encourage sustainability by the careful placement of the different receptacles.



promotes sustainable living and protection of the landscape. of littering, requiring a solution to encourage people to their visits. This design encourages and promotes recycling ent of the unit.

posal Unit



National recycling logos & local colour scheme used for familiarity and recognition.

Curved structure in stone finish to fit with natural surroundings.

Braille version of text provided for visually impaired.

Steel locking bars secure and hold inner bins in place.

Prominent recycling areas are presented to the user first encouraging them to dispose of waste there rather than the central litter unit.

The general waste is accessible from the centre only, with a wide clearance provided for wheelchair users.



UGNE ASTRACAITE

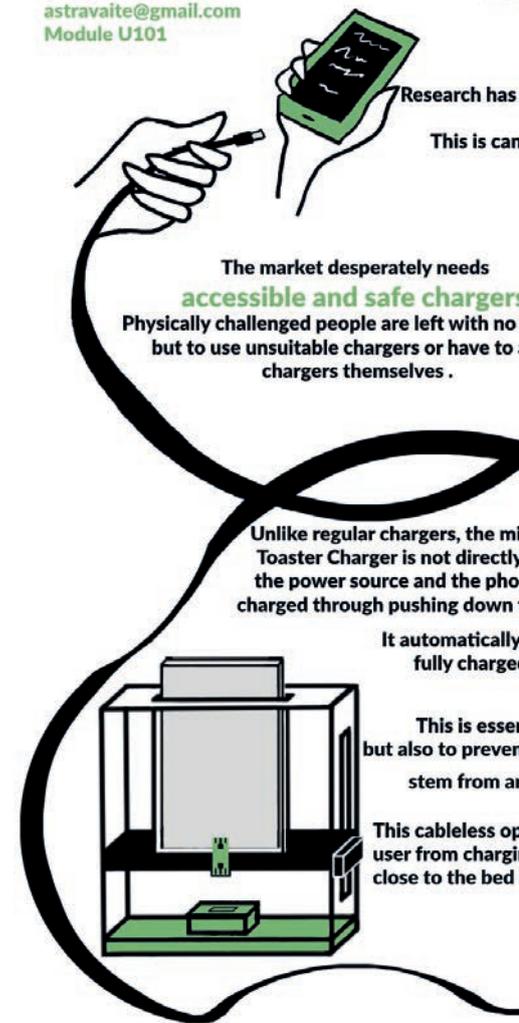
U101 Design Thinking

The 'Toaster Charger' addresses the problems of unsafe chargers and overcharging devices by automatically cutting off the charge to a device once it is full.



Designed by Ugne Astravaite
astravaite@gmail.com
Module U101

1.8



million phone chargers are bought online in the UK each year.

Unsafe devices are often made in China for as little as 3p, which is very dangerous as improper use can lead to injuries and fatalities.

revealed that 53 percent of children/teens charge their phone or tablet either on their bed or under their pillow. be extremely dangerous as overnight charging will overcharge the battery and can result in pillow/bed fire.

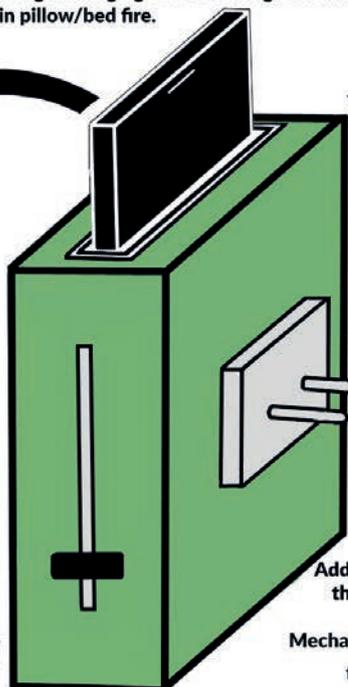
options alter

micro USB of the connected to the push handle.

releases the phone when it's d, preventing the phone from overheating.

potential for a long-lasting battery at injuries and fatalities which an overcharged battery.

tion prevents the phone or even in bed.



The Toaster Charger is designed for people with physical restrictions and for anyone who is struggling with hand coordination.



The product is of great use in an environment of children and pets.

The charger is easy to use for elderly and physical impaired users. You require a lot of precision and patience while inserting a micro USB whereas with the Toaster Charger charging is much easier and quicker for the user.



Through this cableless approach, children won't trip over the charger, put the micro USB in their mouths and play with the wire.

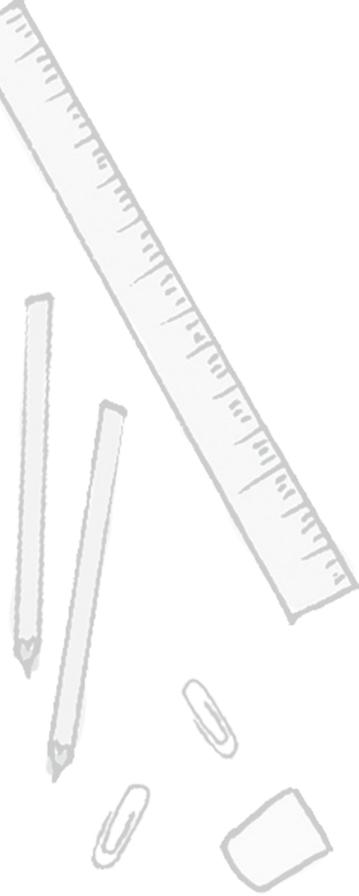
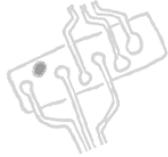
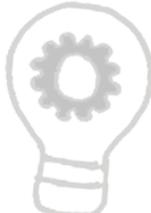
Additionally, through eliminating cheap, fragile cable, the life expectancy of this charger is much longer.

Mechanical parts can be easily switched out or customised, thus making the charger more sustainable.



THE TOASTER CHARGER





JONAS BEER

U101

Design Thinking

The 'Co-Life' app uses information on food expiry dates, recipe ideas and supermarket discounts for near expired food to address the problem of food waste.

U101 TMA2 DESIGN PROBLEM AND DESIGN PROTOTYPE

We all want to do good for our planet, but the question is, how? Colife app is a smart approach to food waste which will serve as your guide towards aiding the world through minimizing the damage of food waste. The Co-life app envisions a no waste and healthy individual that will ensure nothing expires before without your notice.

I created this prototype app with the effort to make its features as user-friendly and convenient as possible for its users not merely to adjust but to adapt its features. The app users can utilize it in buying products without worrying about its expiration dates. The app addresses two issues of food waste problems—the consumer food waste problem at home and the food waste problem of supermarkets or other food businesses. In order to achieve its goal, the app comes with three different features: notification, smart dishes and the marketplace. All three elements can work alone, but when using altogether they make practical use in combating food waste.

3. Smart Dishes

The smart dish functions in creating individual meal recipes found on your stored products. The products will be shown together with their expiration dates and suggested meal plan for your saved products. For example, there are different categories, such as meal types, etc. that will be shown in your smart dishes. Also, you can change the setting if you want to add an expiring product on your meal plan, making it as useful and creative as possible.

2. Notification

In the app, you can set a date on when you want to get notified about the expiration of each product. For example, two to three days before the expiration, for you to plan what you can do next. With the help of Co-life app and its notification, you will no longer have to keep an eye and be worried about your products because the app does the job for you. Moreover, the app will notify the user of some great ideas for their meal plans.



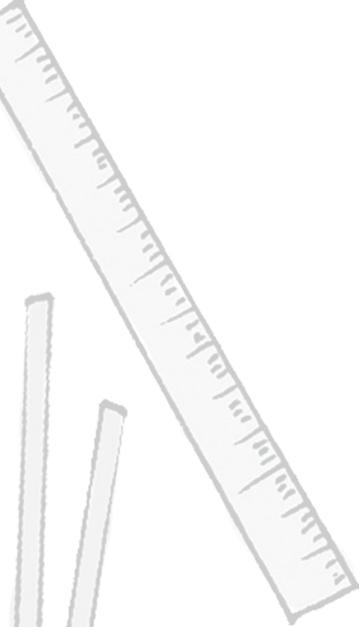
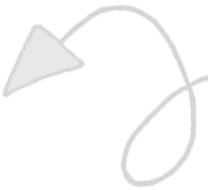
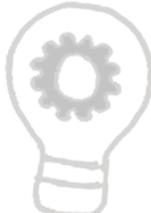
4. Marketplace

In the app, you have what I call the marketplace where there are available vouchers from supermarkets on the products that are about to reach their expiration date. This will be possible with the help of a smart dish that functions on analyzing the products expiration dates and what you can still buy in order to combine with the ones you already have stored.

1. Configuration

The app gets connected with a digital ID that is connected to all the major supermarkets within your country. All Food items you buy and their information (expiration dates, weight, production dates, nutrition facts, etc.) will be sent to you upon your check out at the counter. And by this, you can be worry free in storing your product at home.

Jonas Beer(G3519933) jonasbeer00@gmail.com



JONNY MUIR

T317

Innovation: Designing for Change

This proposal for a flour vending machine addresses the issues of sustainability and supply by proposing use of locally milled flour dispensed to the customer.

Fresh Flour Vending

How to create a service that allows access to a sustainable and nutritional ingredient whilst valuing the time of suppliers and consumers



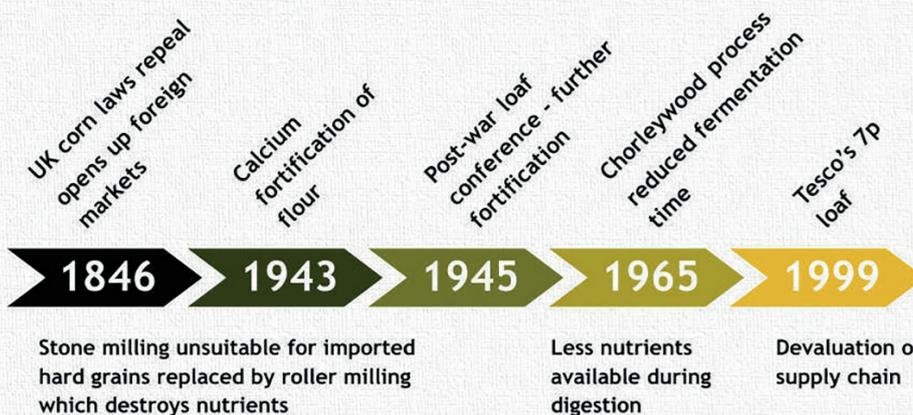
Field



Vend



Use



T317 Innovation: designing for change

Jonny Muir

SERIOUS PLAY

Using the design of a game to think about systems and services is the first step in engaging with service and systems design at later stages of the degree.



HEATHER KNIGHT

U101

Design Thinking

'Emergency' is a board game themed around the ambulance service, including forfeits and rewards based on patient transportation, real life emergency situations and hazards.





Emergency!

Be prepared as you navigate a manic ambulance shift in this fast pace game of life and death



The problem

The task was to research and design a game based on a service that was familiar. I chose to design a game based on the ambulance service.

The objective of the game is for each player to use their ambulance to pick up sick patients and deliver them safely to hospital before returning back to the centre of the board at the end of their shift.

First player to drop off at least one patient at each of the four hospitals and arrive back at the ambulance station at the centre of the board wins.

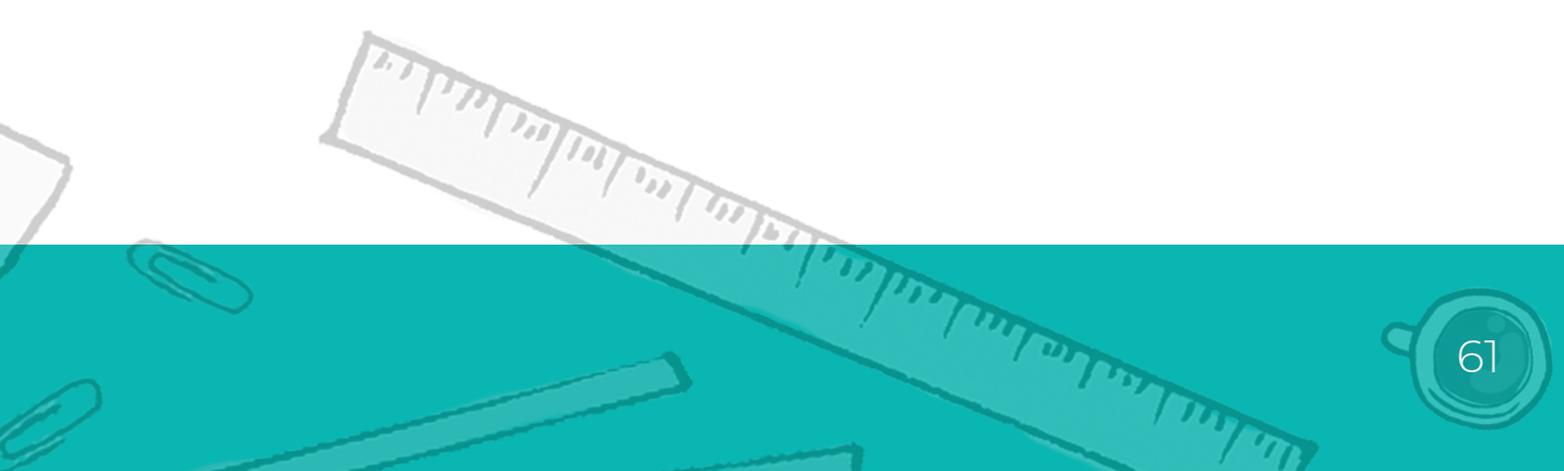
Players start at the ambulance station at the ambulance station in any direction until level is dictated by arrowed tiles

pick up a patient and head to a hospital which they drop off a patient at a time and must find at least one hospital. After dropping off a patient at each hospital, they are transported directly to a hospital of their choice and arrive back at the ambulance station.



Mechanics

As the player moves around the board they encounter "Difficult delay" and "Rapid response" tiles. These good and bad deed tiles prompt the player to pick up cards from the corresponding pile and follow the instructions, moving either forward or backwards a variable number of tiles. To randomise the gameplay, the number of tiles moved is determined by a roll of the die. The player can also encounter a "Major incident" which is represented by an explosion icon. Landing on this tile will cause the player to miss a turn.



JUSTINE MILES

U101

Design Thinking

The 'Zoo Survival' game uses questions and facts about the zoo service to educate players about endangered animals and habitats.



ZOO SURVIVAL

MA 03 – Design a Board Game based on a Service that contributes to Society.

The game is based on the service the zoo provides to protect animals from extinction, the board is laid out like a map based on Edinburgh Zoo. My aim was to make the game fun and educational. I used the Edinburgh Zoo information and the photos www.edinburghzoo.org.uk For max 4 players aged 8 or over.

Play the board clockwise by throwing a dice, also clockwise travel around the internal paths.



1 x dice



4 x sets of Collection Cards

Playing Pieces

Each playing piece is a Safari Jeep which can carry the animal cards (Animals) back to their Safe Enclosures

Collection Cards

As a player moves and lands on coloured spaces, each colour has a consequence; light red, orange, yellow and grey relate to Collection Cards which are categorised: Habitat, Diet, Size and Status. The animals are listed under the category that they relate to. for example Habitat: Grasslands, Desert Oceans etc, Diet: Carnivore, Omnivore, Herbivore etc



Transporting animals

Pick-Up Cards

There are also Pick-Up cards (dark red) which add a random element. These can either be a straight forward 'Pick up a (particular) Collection Card', 'Go straight to Drop-Off' or a catastrophe 'Your adopted animals have escaped' which means you have to return any animals you may have been carrying in your jeep.

Game Play

To collect an animal, a player must have collected 4 of the different Collection Cards relating to the animal. They can then collect the animal card (eg Lion) by landing on the Lion space or by landing on a black or white space on the board (they have to move to the Lion space if they do this). Transport the animal card (Animal) back to the Safe Enclosure to ensure its safety. This is done by travelling to the Drop-Off point and either passing or landing on it. A player can collect as many animal cards as they want on route around the board but these cards (Animals) are not safe until they are deposited in the Safe Enclosure. If another player has the Collection Cards relating to any animal (not in the Secure Enclosure) and if they land on the animal space, they are able to take this animal card off their opponent. All animal cards (Animals) in the Safe Enclosures are safe.



4 x Playing pieces

To Win

The game is finished when all animal cards (Animals) have been collected and are in the Safe Enclosures. Each animal card (Animal) is worth points based on their Status, the most Endangered animals having the highest points.

Each player counts up these points.

The Player with the highest points is the Winner.



1 x set of Animal cards

JUSTINE MILES (U4136240)



ABIGAIL JACKSON

U101

Design Thinking

This board game prototype is themed around the tattoo industry and explores some of the skills, knowledge and pitfalls involved.

NEEDLE WORK



For this assignment I had to choose a service to create a board game. After researching on the OU library and interviewing local tattoo artists, I chose the tattoo industry as my service. Although its an unconventional service which only serves a small population of the general public, it's been around for centuries and benefits the clients greatly. Not only do tattoo artists provide body art, but they help to give grievors closure, confidence to those struggling with body confidence and creative freedom to everybody.

'Needle Work' is a game for three or more players. It is targeted towards 18-40 year olds. The players roll a dice to move forward from the 'start' space to the 'finish', with each space denoting an action or card the player has to engage with in order to earn reward roses. When the first player crosses the finish line, the game is ended, and whoever has the most points (reward roses) is the winner. I created over 250 cards for this game.

The spaces could win you a 'positive card' or a 'negative card'- these detail good or bad scenarios that could confront tattoo artists in their daily life, with rewards roses or sanctions. I.e 'you accidentally misspelled a lovers name on a neck tattoo- go back a space' or 'your tattoo was named best in show at a convention- take two roses!' There are also drawing spaces. When the player lands on these, they must take three drawing cards. These will spell out a tattoo that the player has to draw. For example; 'card one- cat', 'card two- wig' and 'card three- dancing'. The player would have to draw a cat, wearing a wig and dancing, in no longer than two minutes. Another player must then guess the three elements of the picture. If three are guessed then the player wins 3 roses and the guesser wins 1. If two, then they get one each. If one, or none, then no rewards are given. there are also question cards, containing tattoo trivia with easy and hard levels. The hard questions give the player two roses when answered correctly, and the easy questions receive one rose. Lastly there are three sabotage cards, which allow you to steal the reward of another player as they win one.



U101 - Abigail Jackson



HAYLEY BOUGHTFLOWER

U101

Design Thinking

This board game prototype explores the dynamics of the wholesale flower and floristry industries. Players aim to trade and negotiate deals in order to make the most profit.

The Flower Trade

BOARD GAME DESIGN



The task for TMA03 on the U101 module, was to design, make, play and evaluate a board game, where the game content is based on a service that contributes to society.

My game focuses on the flower industry, where players of the game act out the role of a retail florist. The name 'The Flower Trade' was born from its double-meaning – flower trading is one of the game mechanics, and it is also a term for the industry as a whole.

The aim of the game is to become the wealthiest florist through making purchases from the wholesaler and selling bouquets to customers for a profit.

It's a game for 2-4 players, and fun for all the family! Not only is it entertaining, but involves a level of strategy and simulation, which helps to educate about business decisions.

GAME PLAY, COMPONENTS AND MECHANICS: KEY FEATURES

Players are given a £50 business loan before the game commences. Each player takes turns to move their coloured flower playing piece around the board using the number of spaces determined by a roll of the dice. They take an action according to the space they land on.

Actions include:

- buying flowers (represented by flower tokens)
- selling flowers to customers either as singles or in bouquets (making a profit)
- visiting the wholesaler (a mini-game which gives a further chance to buy reduced price flowers)
- negotiating trades with another player
- drawing random good or bad deed cards from a pile.

Game play ends after 45 minutes, with the winner being the player with the most money!



BY HAYLEY BOUGHTFLOWER FOR U101 TMA03 'DESIGN & SOCIETY'



Juan TORRES

U101

Design Thinking

‘Hotel Rooms’ is a board game inspired by the day to day workings of the hotel industry, featuring forfeits for potential issues and mistakes as well as rewards for good service.



HOTEL ROOMS!

-THE BOARD GAME-

AN INSIDE LOOK INTO
HOTELS AS A SERVICE.

About:

The challenge proposed for this assignment was to create a board game based on a service. I took inspiration from the hospitality industry, which I have worked in the past and acquired great knowledge of.

The aim of the boardgame was to educate players, in a fun way, around the different components of a hotel and the experiences that someone might have while working there.

Gameplay:

Starting in reception, the player rolls a dice to decide how many squares they can move throughout the hotel.

The players must go through every floor opening the hotel doors looking for stars to earn, which are hidden in some of the rooms.

Players can go backwards and forwards through the board, but are only allowed to move through each floor by using the stairs, which are placed at opposite sides.



Some rooms contain an "Event" sign, in which they must pick an event card from the "Pool" of cards. The cards contain events like:

- "Your booking system is down! Lose a turn."
- "The housekeeper needs your help! Go to room 102."
- "Your hotel is fully booked! Well done, earn a star."
- "A colleague has called in sick and you have to stay working. Roll dice again!"
- "Salmonella outbreak in the restaurant! Lose a star and a turn to deep clean your hotel!"
- "Blackout! Your hotel is completely dark! Lose all your stars."
- "A travel journalist came to your hotel, and gave a stellar review. Earn a star."



The aim of the event cards was to add reality to the game and describe events that might happen in a hotel in real life, that, although amusing during the game, might not be so much fun in real life!

Lifts are also hidden behind some doors, that take a player to a different square on the board. Other type of squares contain different rooms you might find a hotel, like "double room", "suite", "spa" or "housekeeper cupboard". In these squares, the turn ends after the player opens the door.

The first player to collect 5 stars is the winner.

To provide replay value to the game, the rooms are placed in "game cards" which the players choose at random (without looking!) at the beginning of the game, and place it in the slot behind the board.

Some of the ideas considered were also to allow players to download and print cards with new content, create their own ones or the option of a travel version that fits as a cover for a tablet making the game more interactive.

JUAN TORRES Q61, U101 2020

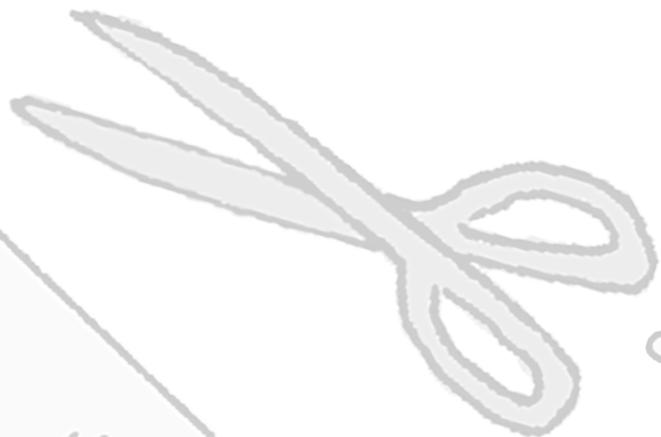


SITE

SPECIFIC

The final project at in the second level module Design Essentials, briefs students about a national park and asks for a response around refreshment, recycling, playful engagement or inclusive design.





DEAN PARSONS

T217

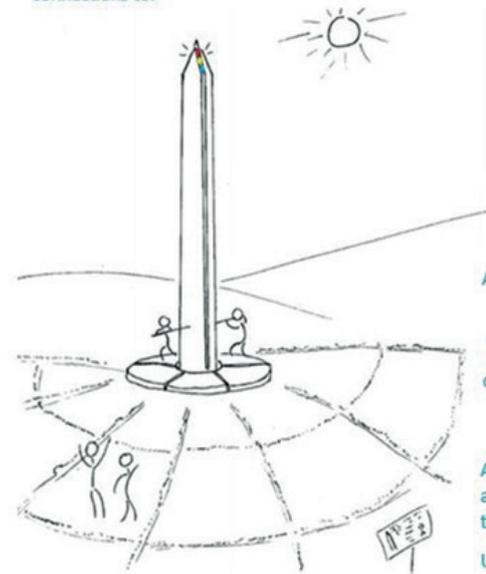
Design Essentials

This response to the ancient site of Ditchling Beacon proposes a structure which celebrates the history of the site in a playful way to stimulate engagement with that history and the surrounding landscape.



Appreciation for Ditchling Playful Engage

The Ancient Alignments project focuses on the loss of culture between the Bronze and Iron age as tribes move away from aligning earth, stone, and wooden structures with astronomical bodies to become more defensive, as was done at Ditchling Beacon. The design promotes the importance of remembering such traditions and offers the public the opportunity to discover the excitement and difficulty of manipulating large objects, refracting sunrays through the bevelled glass to capture the beautiful colours found when splitting natural white light. The 'neo-bronze age' structure combines the large bronze/iron age style shaven tree trunk with an iron leverage bar and modern glass production to create a large functional design and unique user experience. By applying effort to create beauty as our ancestors did, users will connect with ancient history by physically turning the large stake structure to complete their own celestial alignments. It is hoped that these experiences will create strong bonds between the various users and the park - particularly with children empowered by their ability to manipulate the colossal structure- helping to develop appreciation and help conserve an area they have new emotional connections to.



WES HOWES

T217

Design Essentials

This proposal is for a café which is designed for the setting of a national park. The design uses sustainable building to create an ecological sympathetic space for visitors to the park.

Very Green

'There's plenty of space h

However, what if y



The Eco Cafe

Toilets

Accessible to All

& NO PLASTIC STRAWS!

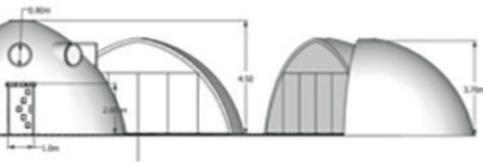
The Units

Wes Howes - F2676078 - T217

Cuisine

Here to explore, go on an adventure or simply enjoy a good walk!
(THE NATIONAL TRUST, 2020)

You're thirsty?



Greenhouse

Retail Units

Outdoor Seating

Community Groups

Schools/Education

Create something that provides a place for visitors to Ditchling Beacon to buy refreshments and therefore generate money for its conservation:

With hundreds of earth filled bags to build the walls, reclaimed wood to support the structure & create the windows & the doors this not only makes it incredibly eco-friendly & sustainable but also very cheap to build compared to conventional methods.

The grass roof helps it blend with the natural beauty that surrounds it, also keeping the inside cool in the summer and warm in the winter. All 9 windows are fitted with Solar glass, which can be tinted to control the light coming into the café and more importantly generate energy for the café.

I wanted to create something that would stand the test of time, something that both blended in with nature & respected the environment and history surrounding it

Built by volunteers, used by everyone!

I believe that this is a fantastic opportunity for the Trust, for them to invest in something that will, in a short space of time, begin to generate money for them to use to help conserve and further protect the site. It will also benefit visitors and the local community, giving them an opportunity to bring them together, accessing the area to meet friends, family, join local groups and enjoy this new and exciting concept.

**Let's relight
the beacon!**

LUKE OLDFIELD

T217

Design Essentials

The design of this café for a national park location considers the history of the site in its choice of materials and form. Materials have been chosen for their sustainable qualities and inclusivity has also been considered in the overall design.

The Ditch



Sustainability is key to the design with sustainably-sourced pine for the seats, solar panels for renewable energy generation and a thatched roof which uses renewable locally-sourced materials.

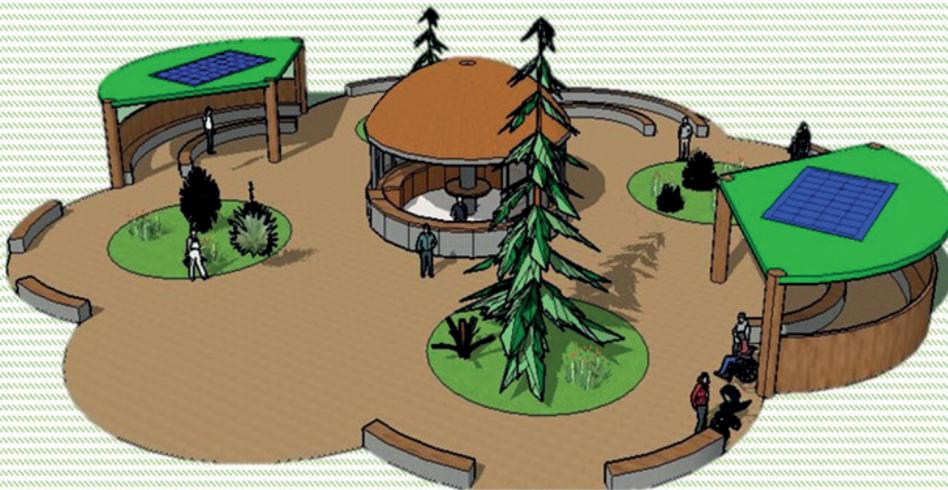


Ditchling Beacon Outdoor Café

Luke Oldfield

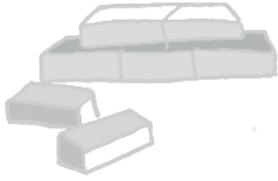
T217

Ditchling Beacon is a cultural landmark, with its surrounding natural beauty and its iron age history. It is also a growing tourist attraction, with people from nearby and afar enjoying the picturesque landscape and learning about the iron age settlement remains. There is a problem though, how can stakeholders afford to maintain the pristine landscape despite the ever-growing visitor numbers? The Ditchling Beacon Outdoor Café could be the answer, with refreshments on sale to visitors all year round in an inclusive and sustainable setting.



The refreshment hut's thatched roof creates strong associations to the iron age history of Ditchling Beacon. The curved seating is also inspired by tree rings, not only to link the café to the surrounding environment, but also because tree rings are used to understand how the location was centuries ago, consequently creating another link to Ditchling Beacon's historical significance.

The café is also inclusive, with flat paths, close proximity to the car park and seating at wheelchair height.



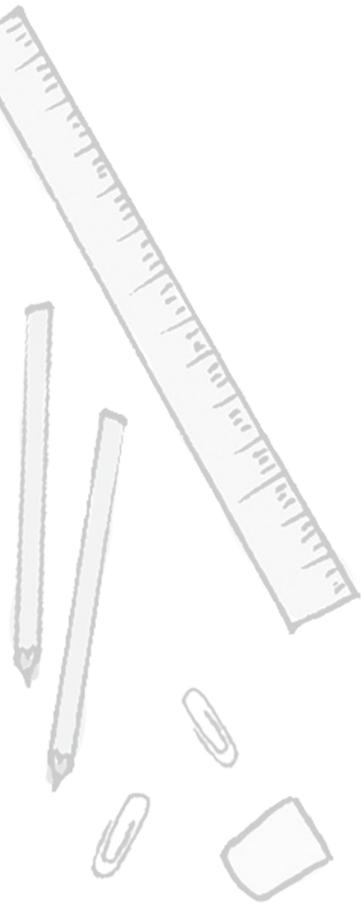
AGNES NEMEDI

T217

Design Essentials



This design for a playground incorporating natural features and educational activity areas is a response to the brief to design playful engagement for a National Park. The use of sustainable materials has been considered to fit with the ethos of conservation of the park.



Nature-given Playhouse

This is designed for the Ditchling Beacon National Park where the protection of the landscape is essential.

I have chosen the woodland area for my project it would not disturb the archaeological remains and keep the feature of the area.



A playground with natural elements aids children to develop empathy and appreciation of the environment. I used a natural tree by building a wooden house around it. It would be immersed in the woodland and the children engage apparently with nature. It can be inspiring for the younger generation as they can see and learn how to protect and look after our Mother nature.

My project is focused on specific areas of learning, such as, being active by using challenging play equipment, (ropes, nets, swings) and giving educational benefits for the youngsters who can learn in a fun way by bird-watching (4 telescopes) or learning about this park history (1 tangible education tablet) provided in the dome room).

I extended the building concept for a total playground landscape by adding another 4 identical buildings, sandpits, climbing walls, balance saw, and a hopscotch frame.



It is aesthetically pleasing and fulfilling the cradle to grave sustainability of the design.

The building and the roof frame are constructed of bamboo, the floor is Pine wood and the glass on the roof is Plexiglass. The bamboo and the Pine are 100% sustainable the plexiglass recyclable. All materials are no harm to the surrounding soil. The pins are made from bamboo, the hinges and screws are steels they can be reused or recycled.

I hope I designed a place for the youth to change their attitude toward visiting natural places and enjoying themselves with outdoor activities.



Agnes Nemedi (T217) F2658521 – agnesnemedi@yahoo.com

Nadia Salih

T217

Design Essentials

These sustainably produced ladybug-themed binoculars and a booklet about the national park playfully engage children when visiting Ditchling Beacon. The booklet can be taken home to keep.



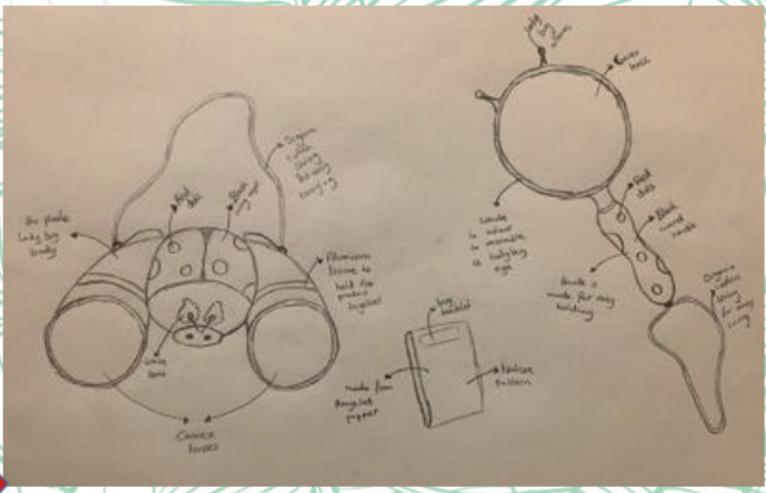


Fun and interactive products for all ages

NADIAH SALIH,
T217

...e, was to design a
...ges children of all
...m for
...and the landscape
...ional park.

...themed binoculars,
...ooklet. All
...friendly materials
...nment when



This design is all about children and are the result of my own kids helping me out, to dig deeper into a child's way of playing whilst learning. This product can be leased out from the store for a small fee, this fee will help the Ditchling Beacon park to stay clean and healthy. The little booklet, contains fun facts about the park and its habitants. The children can then take it home and read through it to remember the adventures they had.





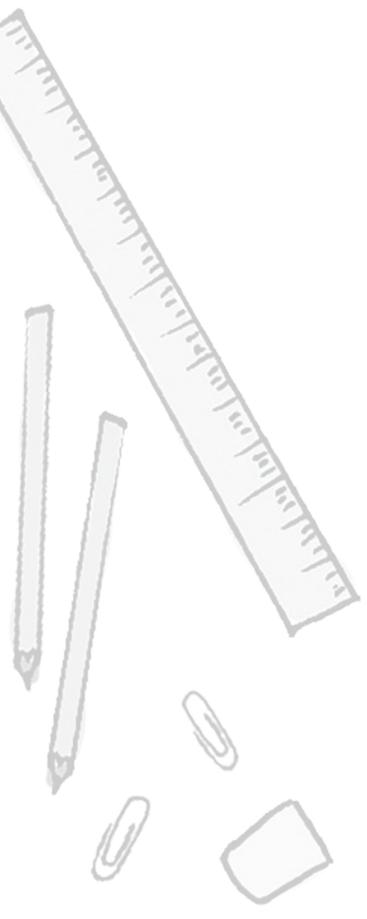
ANNA WARD- STANCHEVA

T217

Design Essentials



The proposal for this design addresses the problem of litter and the need to encourage recycling. The design enables users to save empty containers and waste in purpose-built pockets for recycling whenever possible.



A BAG BIN?

A FASHIONABLE BAG WHICH IS ALSO A REUSABLE RECYCLING BIN

A standard waterproof drawstring bag where you can keep your essentials safe



4 velcro-detachable mini drawstring pouches for recycling and general waste complete with recycling guidelines



Easy to fill up and empty without getting your hands dirty!



Eco-friendly
Secure
Waterproof
Instant recycling

Anna Ward-Stancheva (19861985) T217 annawp@hotmail.co.uk



KEITH CALLABY

T217

Design Essentials

In response to the brief to provide education and interpretation of the environment of a national park, this design proposes a tower that uses digital technology to introduce visitors to the unique features of the site and its history.

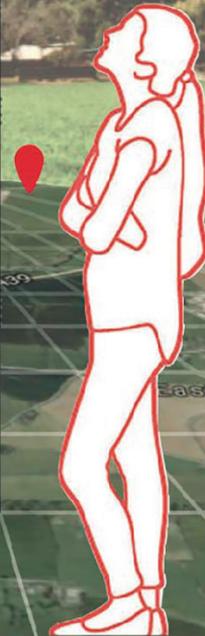
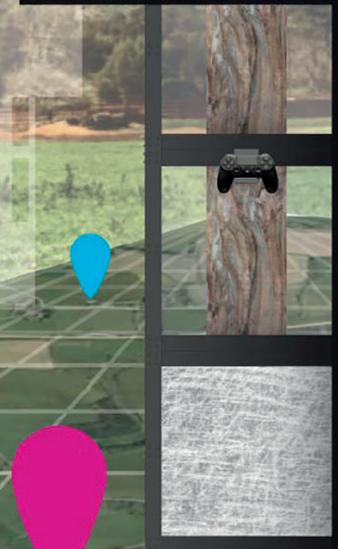
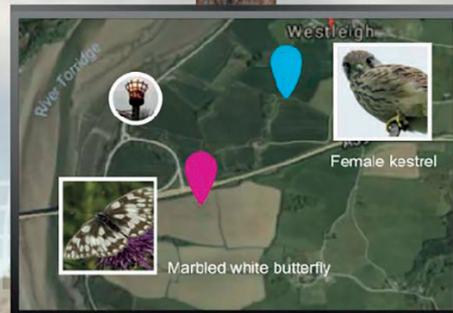
DITCHLING BEACON

Visitor Centre

Exhibit tower inspired by natural features with a digital floor and sub-system to preview and review elements of Ditchling Beacon National Park.

Plan visits and download to mobile devices specific details such as routes, locations of nesting birds, flowering plants, animals, and other areas of interest.

Year-round accessibility to park attractions whatever the weather.



Design Essentials | T217 TMA04 | Design for Ditchling Beacon National Park | Keith Callaby | © 2020
This work is licensed under a CC BY-NC

HUMANITY

The theme of humanity and society runs throughout design studies at the OU, beginning with responses to social issues in the Design Thinking module.



Y



ANNETTE BECKETT

U101

Design Thinking

This system design addresses the problem of dementia carer stress by using a series of sensors around the home to monitor the activity and wellbeing of dementia sufferers and inform their carers of potential problems.

Global Design

TMA04 required me to research a global problem and present a design concept in response to it. This was communicated in three posters, one communicating the problem, one my ideas and one the final design concept.

*Global Problem to Respond to:
How might we better support family caregivers as they care for a loved one with dementia?*

Design Problem - Poster 1

To frame my problem I reviewed many different personal stories from the OpenEDO challenge. This allowed me to consider different views. By reviewing the statistics and data on Alzheimer's Research UK I developed an understanding of the size of the overall issue.

I decided to focus my problem on benefits that could be created if people with dementia could live independent lives for longer, allowing caregivers to continue with their own lives - improving health and welfare for both parties

My final problem statement:

- "Imagine how care in the home can be changed, to allow society to benefit, from those living with dementia having their independence for longer"

Design Ideas - Poster 2

After running a creative idea generation session with friends over WebEx I identified three ideas focusing on different aspects of the caregiver experience.

Prepare Carers: Create a service and system of

training for carers through the different stages of a loved one's dementia to help them cope.

Support Carers: Help create their own local networks of support through creating a website of activities they can take in

Assist Carers: To allow carers to retain a level of 'oversight' of their loved ones without always being there. Through new intelligent technology placed about the home carers can be notified of issues and problems automatically rather than worrying or not finding

Design Concept - Poster 3

Using 2D prototyping and stories I explored "Assist Carers - Smart Technology in the Home" to develop the idea further.

I considered what products those living with dementia experienced and what a caregiver's concerns were. I propose types of sensors, how they would notify caregivers and overall support that the design would need to enable

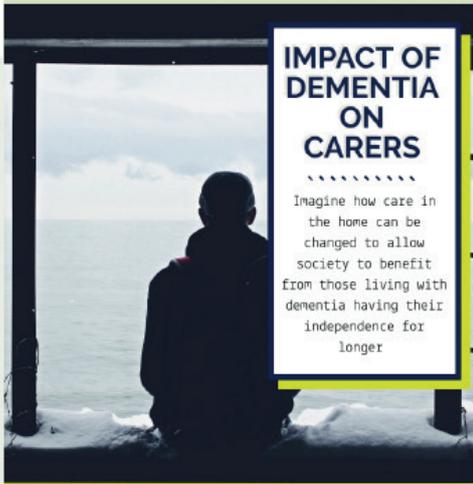


Poster Design Approach: My poster design focused on a single image at each stage to trigger an emotive response and draw viewers in. The use of dark blue shades and tones as the main colour in each poster, consistent fonts and structure, along with the campaign title 'Impact of Dementia on Carers' further linked them together. Finally I used a different, almost fluorescent single colour on each poster to allow them to stand out at a distance. Poster - 1 - Yellow to be optimistic a solution was possible. Poster 2 - Orange which represents the creativity and determination to find a solution. Poster - 3 - Pink to represent compassion and love between the carer and those with dementia working together to live better lives.

Piktochart.com, including their stock imagery was used to create each poster. Storyboardthat.com was used to create the storyboards and PowerPoint to create the final concept image

Poster 3: For my final poster I continued using a single main image to create an emotive response, before reading the content of the poster. The picture I used was of an elderly person relaxing outside his home. The use of yellow in the image was as an 'optimistic and positive' colour in contrast to the darkness of the image in poster 1. My focus in communicating my concept was on the benefit of the solution not the technology. I used simple imagery to show where sensors could be placed, and how they could benefit carer givers and those living with dementia.

As most caregiver stress is worrying about the day to day, rather than a crisis, I chose to depict a story that showed the 'easing' of stress in a caregiver as they know what is going on and don't have to rely on their loved one to tell them of problems.



6 million healthy years lost by those living with dementia in Europe, due to disability and early death in 2015



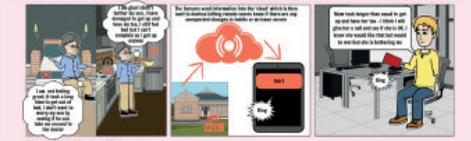
Poster 1: Dementia isolates people from each other, those with it, forget their families, and caregivers struggle needing to be vigilant 24 hours a day due to the unpredictable nature of the disease. I chose a large image of a single person, staring out to an infinite ocean. Alone and with no sign of help.

The statistics I presented were to show the stark reality of the size of informal care and the impact on caregivers.

Poster 2: To present my ideas I chose to retain the single image as I had used in poster 1. This time I chose an uplifting image of an elderly person and 'family' embracing, to demonstrate overcoming the feeling of loneliness that both parties can feel.

I used simple headings of repetitive structure to allow the ideas to be contextualised first, and differentiation in colour to allow the design ideas to be emphasised. Finally I created story boards of scenarios to communicate the 'experience' of the ideas to better engage and communicate to viewers.

Once set up and activated, if anything happens that puts your loved one at risk, the sensors will pick it up and notify you. Enabling you to check on your loved one quickly.



TMA04 - U101 - Annette Beckett - K338751

JONATHAN NODEN

U101

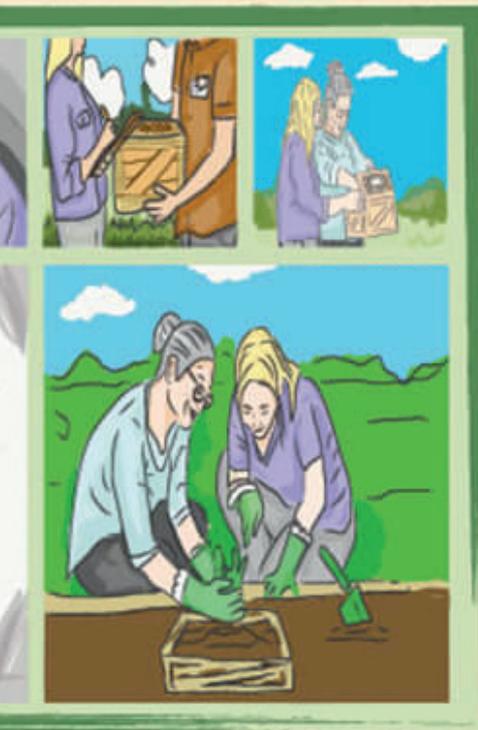
Design Thinking

The Let it Grow pack is a complete kit that encourages dementia sufferers and carers to take up and benefit from the therapeutic effects of gardening.



GARDENING PACKS FOR CAREGIVERS

is a great therapeutic activity for combating
disorders which severely affect caregivers.



JULIE WALDEN U101 Design Thinking

In order to help dementia carers cope with stress the 'Carer's Companion' file provides relaxation and mental wellbeing information and helps organise the personal and medical information of the dementia sufferer.

CARER'

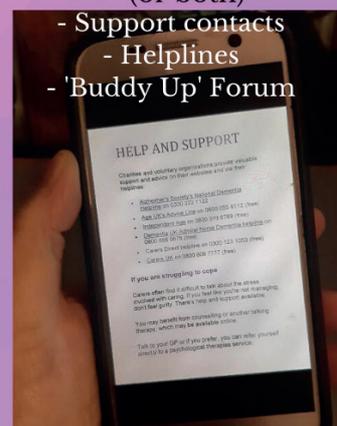
There is a section specifically for carers with suggestions and information on how to help reduce stress, support mental health and well-being, as well as seeking help via phone or online



Well-being and mental health support

A carer can choose between a physical copy or an app (or both)

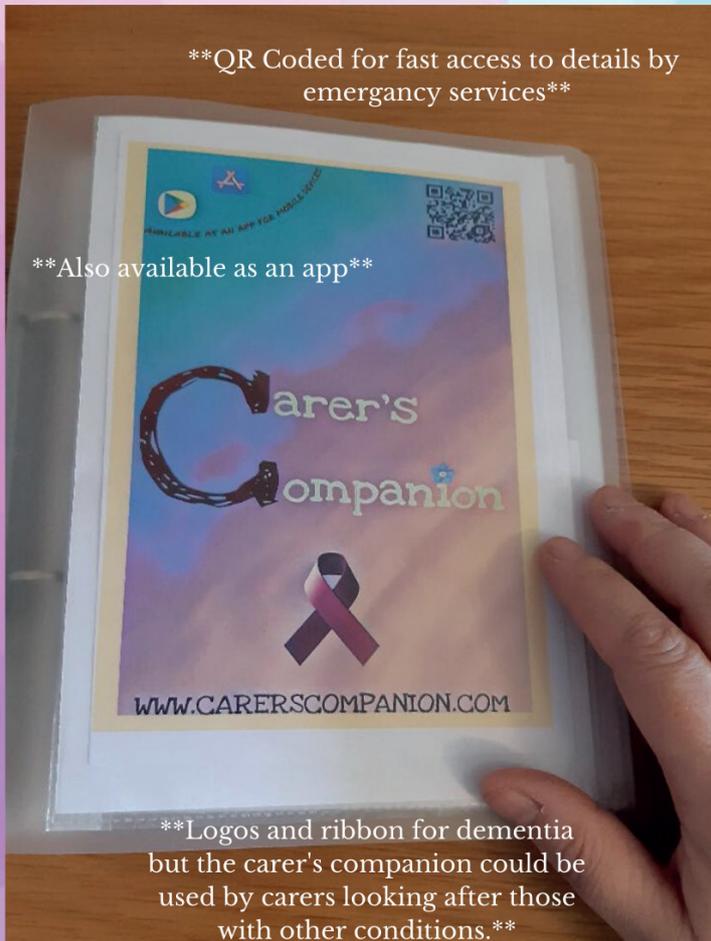
- Support contacts
- Helplines
- 'Buddy Up' Forum



S COMPANION

QR Coded for fast access to details by emergency services

Also available as an app



Logos and ribbon for dementia but the carer's companion could be used by carers looking after those with other conditions.



Almost three quarters (72%) of carers in the UK said they had suffered mental ill health as a result of caring. (Carers UK, June 2020)

With 40% of dementia carers dying from stress related conditions before those they care for die, it was evident that carers need help to combat stress but also to help with organisation and communication which are often major stress contributors.

The life of a carer can be fast paced and exhausting, with so many things to do including attending appointments, giving and ordering medications and assisting with all hygiene and daily living needs.

A person with dementia can change in memory, care needs and behavior quickly, so having somewhere to document important details was a key idea behind this design and there is a section dedicated to personal details and documentation for the person they care for.

However I wanted to focus on stress and the high number of carers that feel isolated and overwhelmed, so the design needed to include something specifically to help support the carer which I've not found in any other document or app so far.

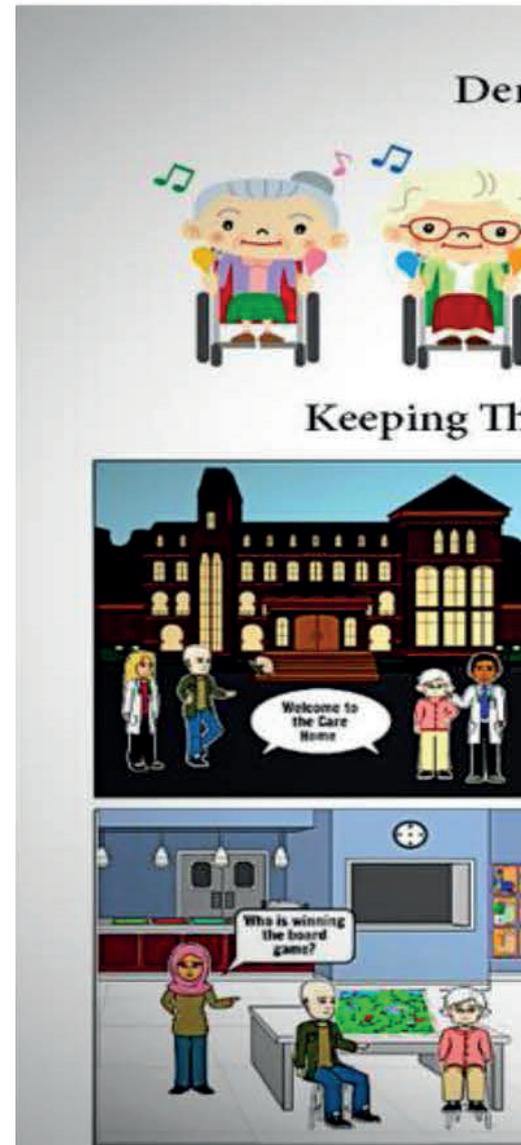
Julie Walden (B6444286)
U101 Design thinking
julieannwalden@yahoo.com

OWEN HARRISON

U101

Design Thinking

This plan for dementia care focuses on activity and engagement for people with dementia in order to stimulate them and encourage social interactions.



ementia



the Mind Active

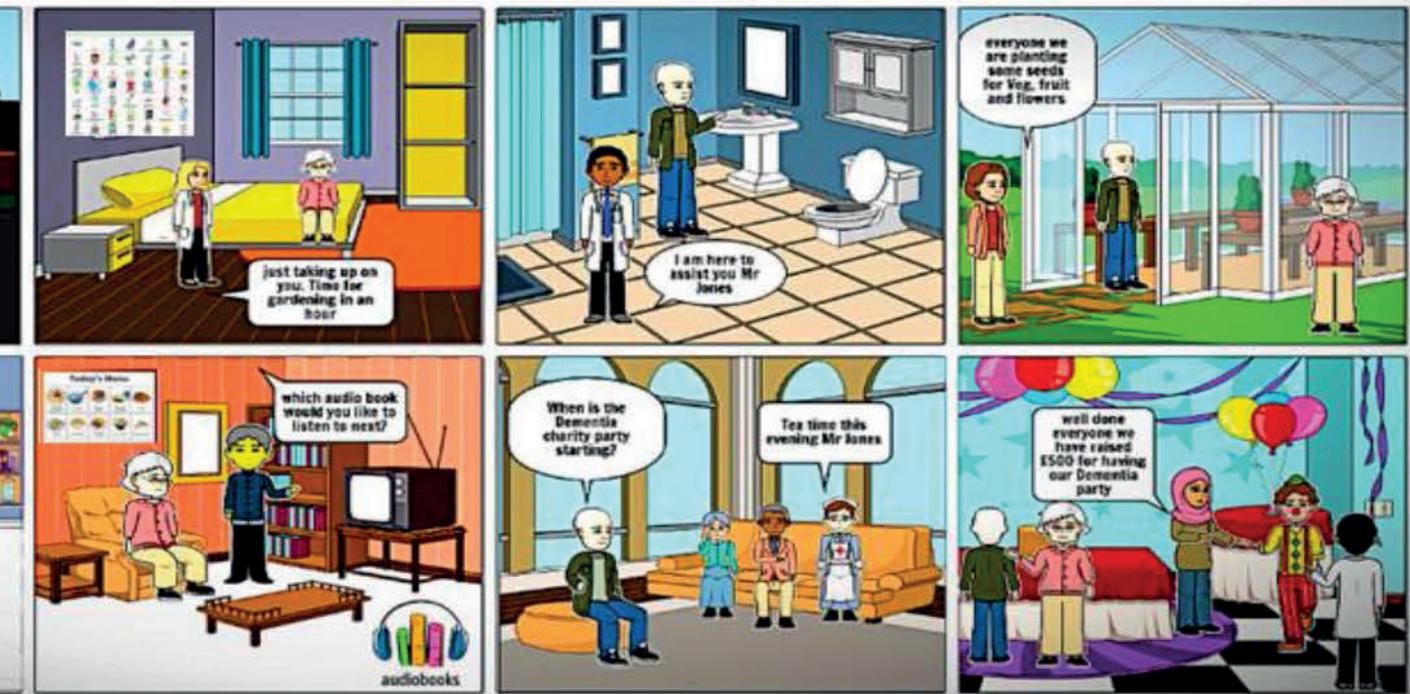
The three solutions to the problem of Dementia I have come up with are:

Gardening—to keep people physically active and fit, as well as engaged in a project in the fresh air outdoors

Audio Books—to keep their minds engaged and active. This stimulates memory and the creative part of the brain, and also allows those with poor eyesight to be able to continue enjoying books and reading

Board Game—to encourage socialising within the care home. This also engages with the competitive side of the mind, as well as strategy.

With all of these solutions, variety can be introduced throughout. For example, there are lots of audiobooks, plants, flowers, fruit & vegetables, not to mention board games, to keep things fresh and interesting.





BARBARA INGLEY

U101

Design Thinking

This design for a new type of leisure centre responds to rising dementia rates by combining social, respite, medical and information services within one community space.

Mind and Body Well-being and Exercise Leisure Center

Dementia Center

Café/Lounge
Music/Dance Room
Exercise Room
Library/Lounge/TV
Craft/Art Room
Games Room
Doctor/Pharmacy
Sensory Gardens

Open
seven days
a week

★
For
bookings
and info.
Tel. 01234
555555

Leisure Center

Café/Lounge
Carers' Meeting Room
Fitness Classes
Full Gym
Tennis/Table Tennis
Sauna
Education/Training
Center for Carers



SHARNA LOUISE WILDGOOSE

U101

Design Thinking

These tracking labels are designed to allow people with dementia to roam freely and safely and members of the public and emergency services to offer immediate assistance; this enables carers and loved ones to feel reassured.

GPS Chip

The **GPS chip** within the labels allow the person with dementia to be **located quickly** and easily without any worry or stress.



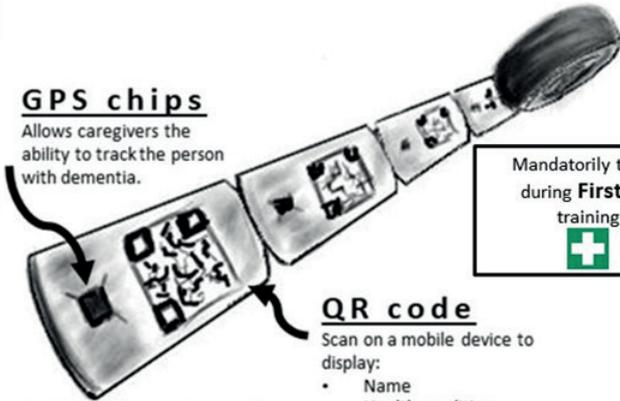
GPS CHIPPED QR LABELS

How might we better support family caregivers as they care for a loved one with dementia?

A roll of labels that can stick to most items. All with **GPS** chips and **QR** codes.

GPS chips

Allows caregivers the ability to track the person with dementia.



Mandatorily taught during **First Aid** training.



QR code

Scan on a mobile device to display:

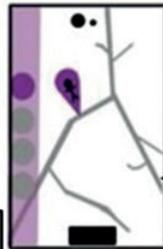
- Name
- Health condition
- Variety of contacts

The label sticks to many items that would typically leave the house with the user on a daily basis, including coats/jackets.

The person with dementia can be in more control over their daily lives.



- These labels enable a caregiver to find their loved one with dementia easily without involving the authorities.
- The QR code gives members of the community the tools to help keep a person with dementia safe.
- Local business would have knowledge of these labels through FIRST AID training.



GPS tracking screen. Tracks the chips that moved most recently.



QR scanned screen.

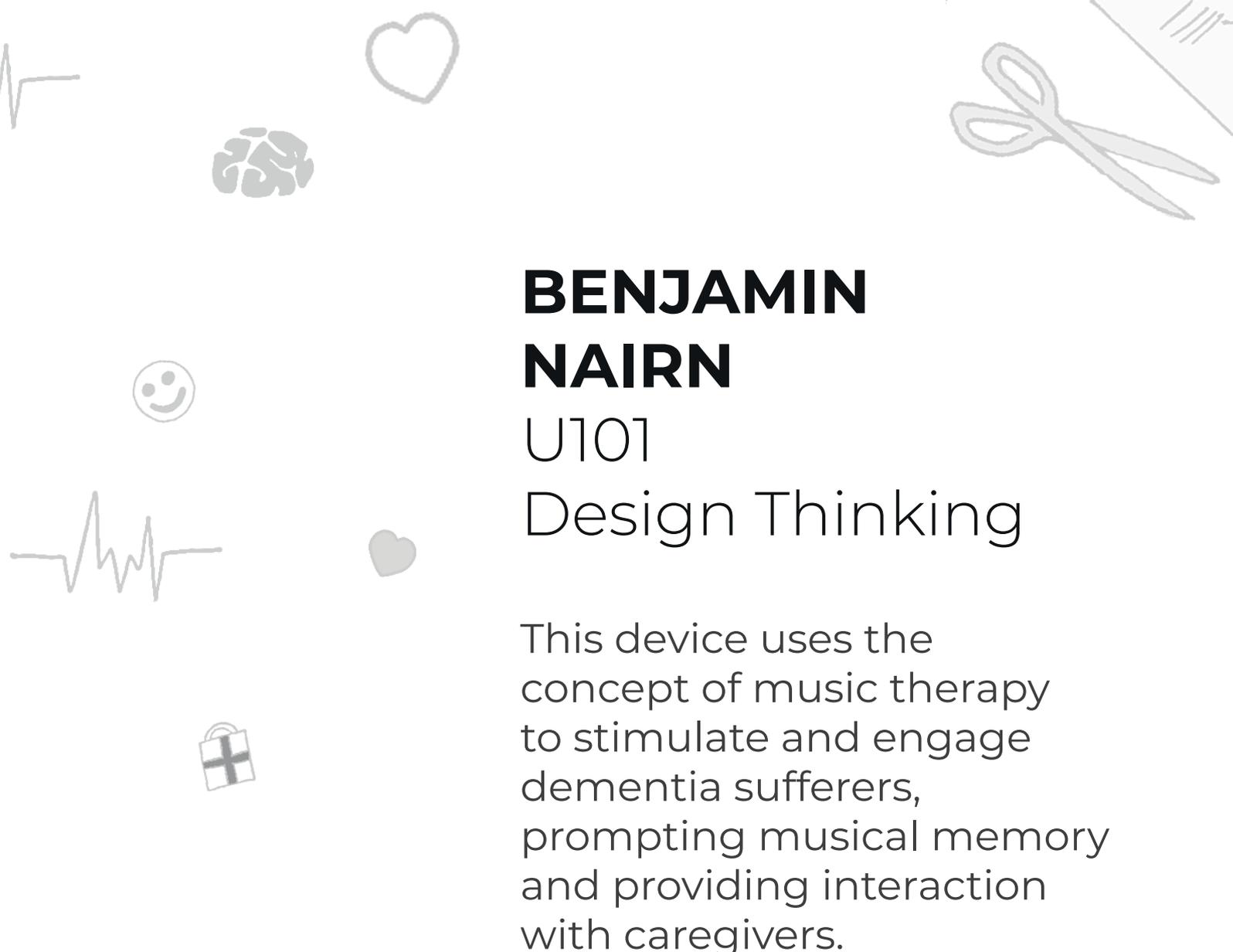
QR Code

The **QR code** on the labels can be **scanned** by a member of the community **to reveal** the person's **medical condition** and different **contact** details for varying situations.



U101- Design thinking: creativity for the 21st century

By Sharna Wildgoose
H7173406



BENJAMIN NAIRN

U101

Design Thinking

This device uses the concept of music therapy to stimulate and engage dementia sufferers, prompting musical memory and providing interaction with caregivers.



MUSIC IGNITES MEMORY

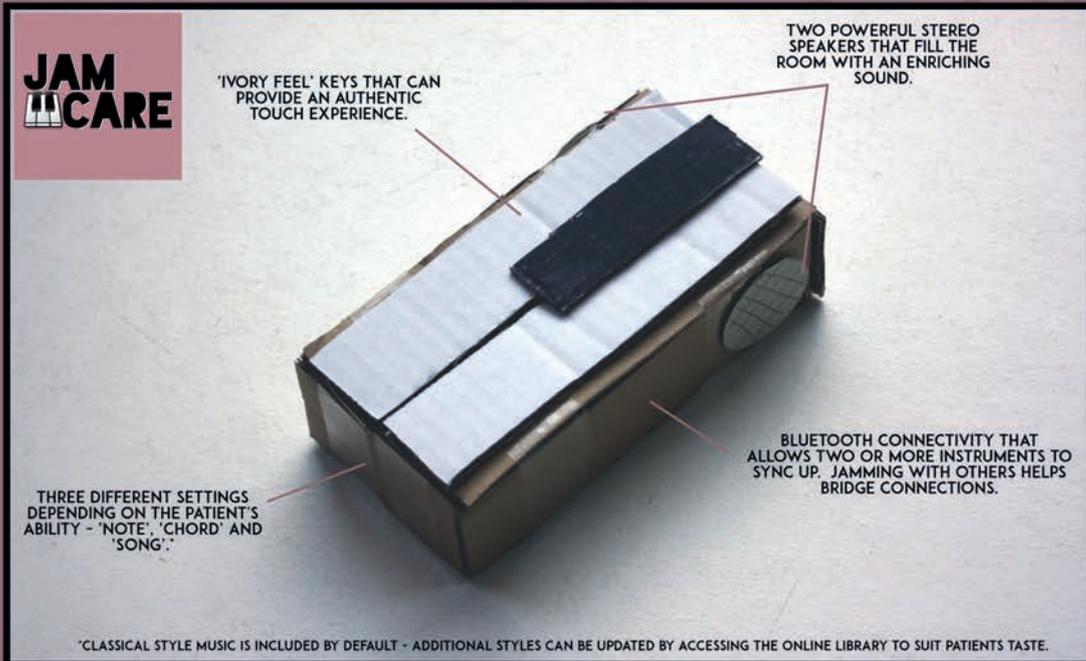
Context:
In TMA04 we were to research a global design problem and present a design concept in response to this problem. The global design problem was 'How might we better support family caregivers as they care for a loved one with dementia?'. I then generated a problem statement from this which was 'How might carers use music in UK care homes to help with those affected by dementia?'

My final design concept was named 'JamCare' and the idea behind it was Music Ignites Memory. I wanted to introduce a fun but simplified way that dementia patients along with their caregivers could interact using musical instruments. The interactive element of my concept would invigorate the users senses and promote creativity. I wanted the concept to have familiar music so this can be changed in order to suit their background. Ultimately the playful element would strengthen bonds between patient and caregiver.

HOW IT WORKS:



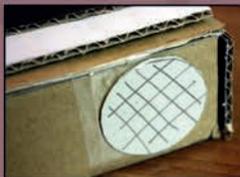
KEY FEATURES:



BENJAMIN NAIRN (H4554628)

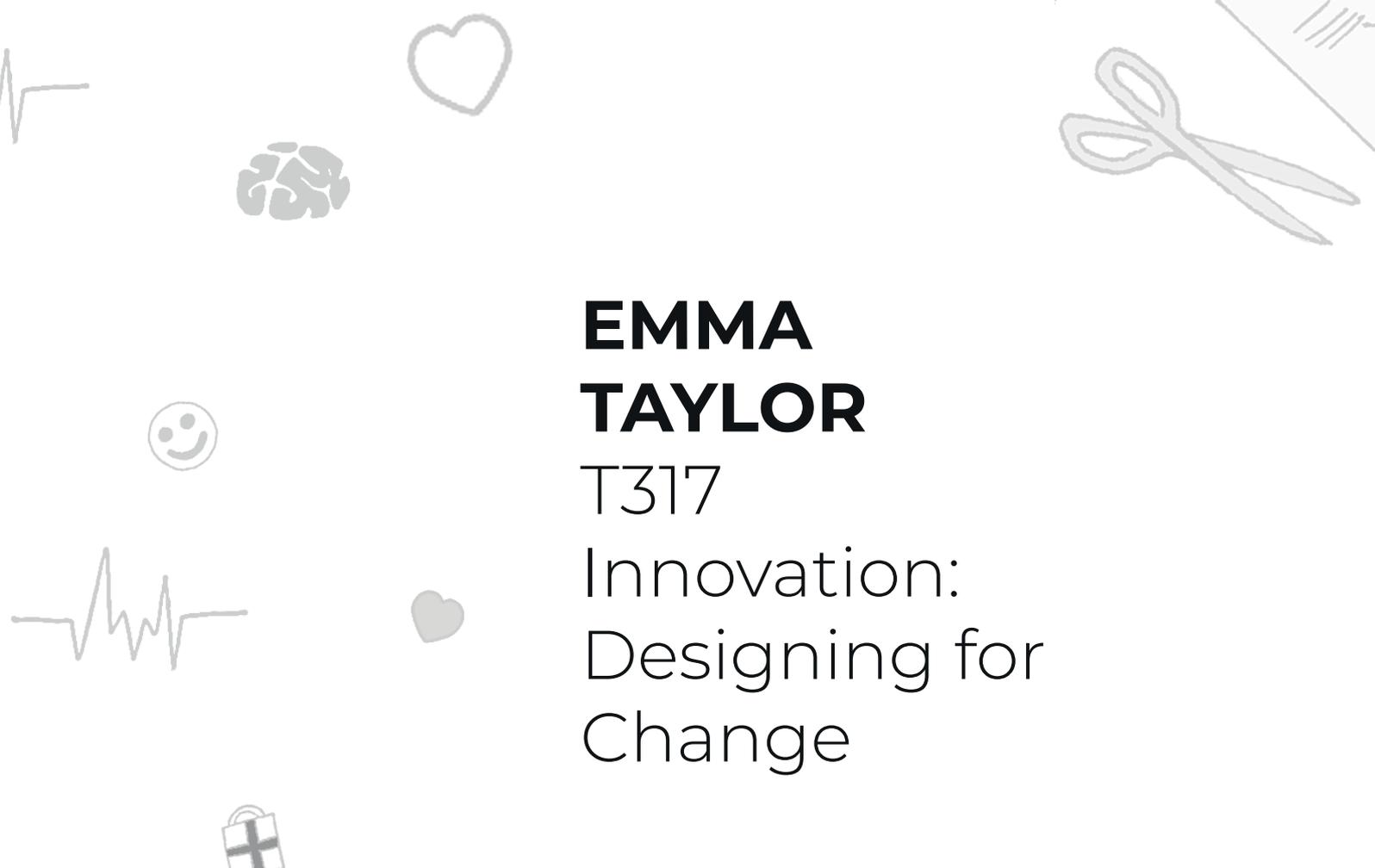


U101



BENJAMINNAIRN@GMAIL.COM





EMMA TAYLOR

T317

Innovation:
Designing for
Change

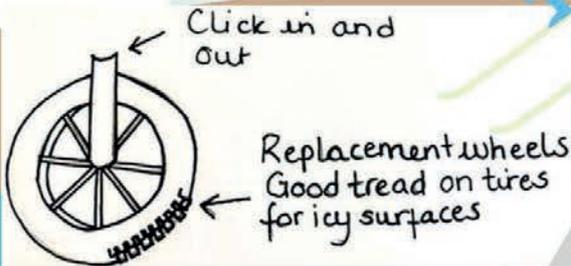
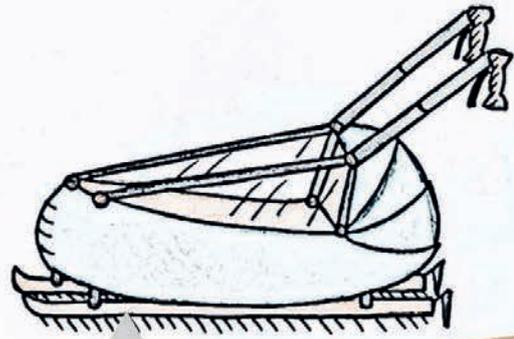
This proposal addresses the needs of new parents who enjoy snow sports. Emma has considered the need for the design to be compact for travelling and proposes interchangeable wheels and skis for different situations.



Open University 2020

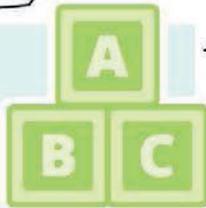
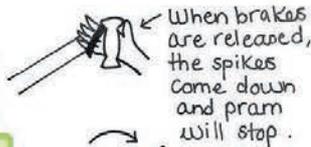
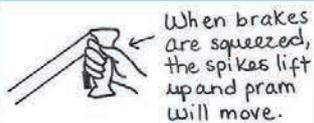
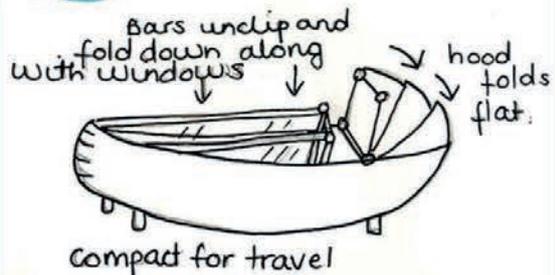
Skibaby-go

T317 Emma Taylor
F8315201



The Skibaby-go is a state-of-the-art, all-terrain pushchair for mountain enthusiasts to take their baby skiing in a safe and stress-free manner. It is designed with the ease and comfort of the parent in mind, and the safety of the baby at the forefront.

Unlike existing solutions, it features adjustable, ski-pole handles with a reverse braking system which activates in the event of a fall, roll-bars along the window and shatterproof goggle lens material for the window panels. It has the advantage of being foldable for travel purposes using biomimicry of a woodlouse shell for the hood. The handlebars and skis can be used at either end, meaning the baby can be front or rear facing and it adapts to different terrain with its interchangeable skis or wheels.



This product is user-centered and context-driven and its sustainable design uses recycled plastic bottles for the inner, waterproof liner and recyclable or repurposed materials throughout. This design offers benefits such as safe, outdoor family fun, promoting mental and physical wellbeing.



HAILEY SEAL

T317

Innovation:
Designing for
Change

Aimed at sufferers of anxiety, this design uses vibration to calm the user. The proposal is for a cushion that transmits vibration from an existing wearable device so that the benefits can be felt when the user is in bed as well as on the go.

Doppel at Home

an add-on product to Doppel

Off the wrist to sleep assist



Doppel

Doppel helps to calm anxiety on the go

- Wearable device scientifically proven to successfully use vibrations to calm and focus users via physiological arousal.
- A study identified the main issue with similar devices is comfort of wearability in bed.



Doppel at Home

Doppel at Home is a cushion

- Aims to soothe anxiety in a home context

According to Harvard Health Publishing, sleep problems affect more than **50%** of adults with generalized anxiety disorder



Attach

Doppel at Home wears the Doppel instead of the user

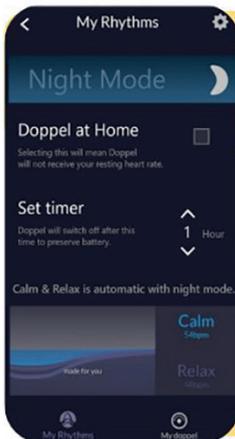
It transfers Doppel's vibrations around an aluminium circuit within the cushion. Utilising the natural properties of metal, means no energy is required.

- Eco friendly
- Low maintenance
- Easy to use



Helping to comfortably combat anxiety symptoms at home

- Doppel at Home offers night comfort with the benefits of Doppel
- Its shape allows the user to hold in various sleeping positions without dominating space

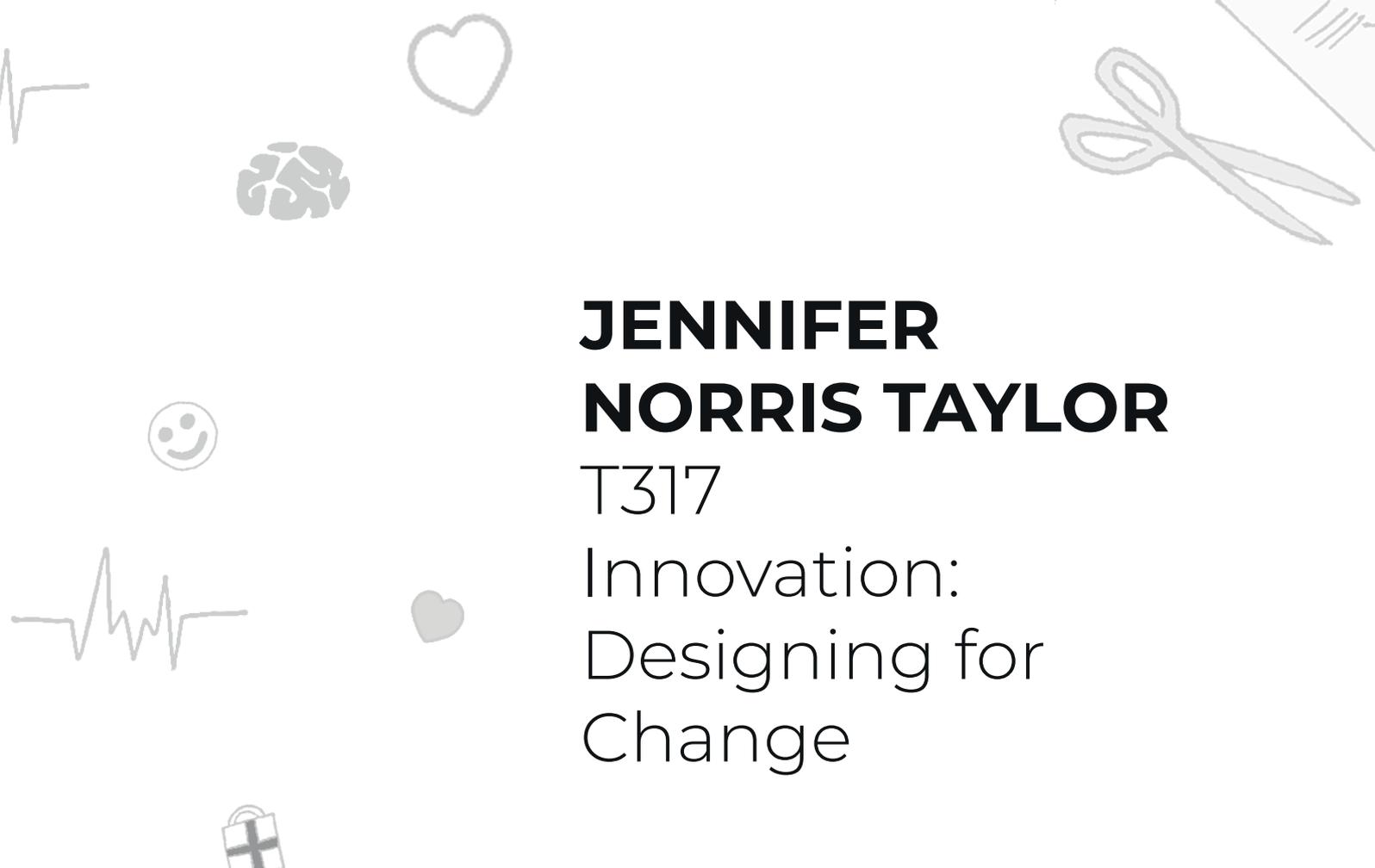


Modifications to Doppel's existing app aims to preserve Doppel battery life.

"Night Mode" Saves energy to avoid frequent recharging of Doppel.

The user estimates how long they will need to get to sleep and the device will switch off after this time.

T317 Hailey Seal



JENNIFER NORRIS TAYLOR

T317

Innovation:
Designing for
Change

This design addresses new mother's concerns about breastfeeding discreetly in public. The proposal is for a set of tops that are designed with integral flaps so that babies can latch on whenever they need.



Discr•eat

Breastfeeding tops

Discreet, comfortable & safe breastfeeding - wherever, whenever

Problem

Breastfeeding in public can be frustrating, embarrassing and worrisome.

Many mothers across the globe feel observed and uncomfortable while nursing in public and don't have a product which comfortably, discreetly and safely allows them to do so.

Products currently available aren't effective at covering the breast while providing a comfortable experience for the mother and child.

The solution is Discr•eat



V-neck



Tank top



T-shirt



Long sleeve



Discr•eat tops are an innovative line of breastfeeding tops. They have an unnoticeable clasp that allows part of the top to fold down. Once folded down it exposes an inbuilt supportive bralette which covers everything but the areola, so that, whilst the baby is nursing the entire breast is fully covered. A piece of absorbent fabric gently rests over the nipple ensuring that the nipple stays covered if the baby abruptly moves away. Discr•eat tops enable mothers and babies to achieve the discreet, comfortable and private nursing experience they've always wanted!

- Very discrete - unable to tell that the mother is breastfeeding
- Timeless, stylish and desirable - suitable for different women
- Encourages bonding - Mother and child can see each other
- No extra nursing equipment is needed
- Baby isn't at risk of overheating
- Breast isn't exposed
- Comfortable and stretchy
- Fits a variety of sizes
- Easy to use
- Eco friendly
- Vegan

Materials:

certified organic cotton, bio elastane (T162R), bamboo and (POM).





JORIN VAN BLIJSWIJK

U101

Design Thinking

The 'Brian' AI system proposes using voice interaction technology to entertain, stimulate and lessen feelings of isolation in dementia patients.

These are some examples of the kind of interaction a user may have with Brian



Fep: "Brian, play us some music"

Brian: "Sure Fep, playing your favourites now"

Fep: "Brian, what is the news today?"

Brian: "Playing the headlines for today"

Fep - Fun elderly person



Brian notices Fep opening the front door.

Brian: "Hi Fep, where are you going?"

Fep: "I am going to the local shop"

Brian keeps track and will alert the carer if Fep is away longer than expected

Brian notices Fep has been inactive for a while.

Brian: "Hey Fep, do you want to play a game?"

Fep: "Sure, lets play a game!"

Brian tracks responses for cognitive function.

Brian notices the fire alarm has gone off and calls 999. Brian also calls the carer.

Brian: "Fep, there is a fire, you must leave the house now. Fep, please confirm."

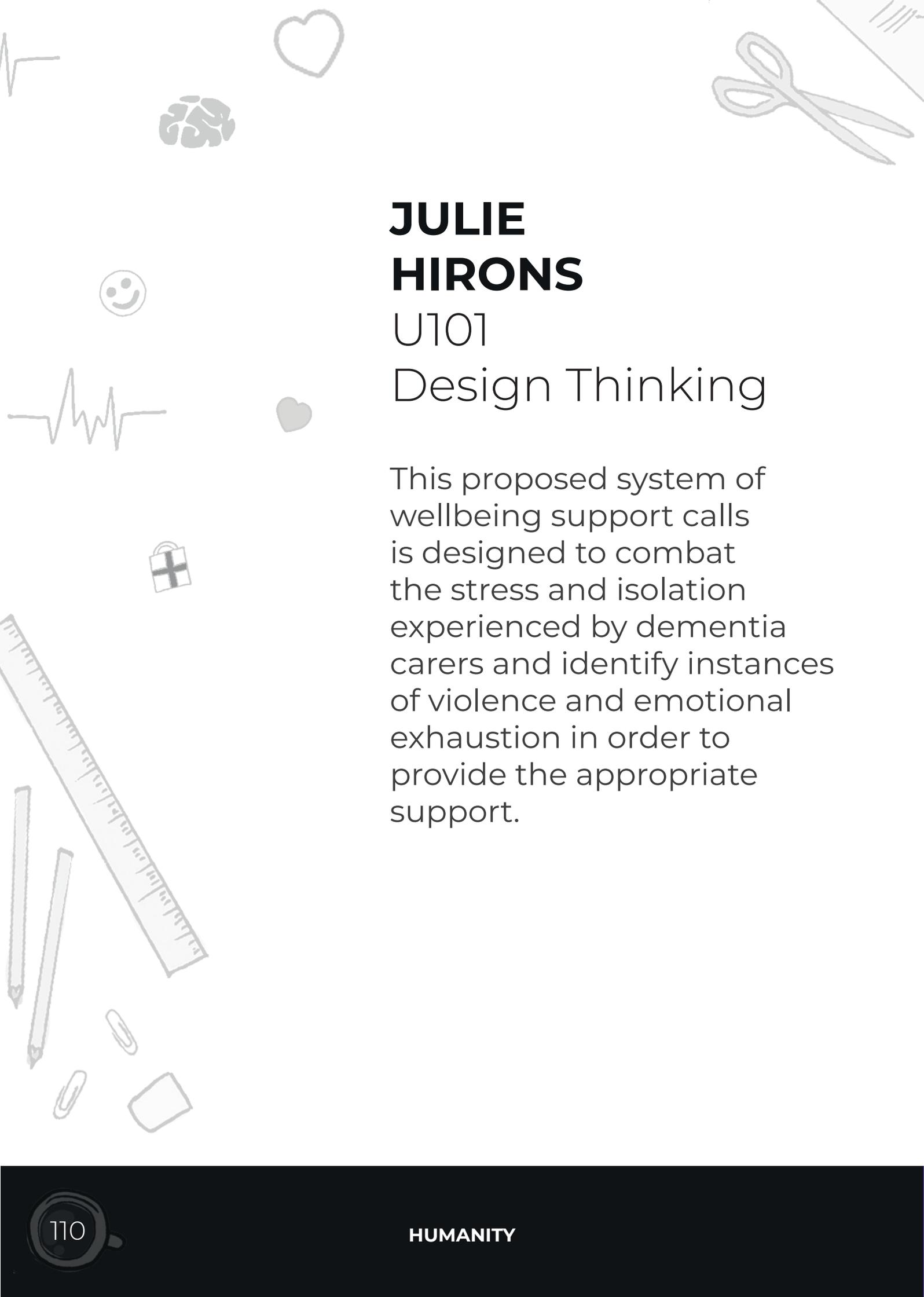
Fep: "Oh dear, Okay Brian I will wait outside"

Brian - Dementia AI



Brian is a smart system that checks, protects and alerts, but also entertains. It has built in speakers and microphones. It can play music, tell stories and read books. The system has bluetooth and wifi connectivity, creating a smart home with controls for appliances, lights, doors and sensors. and can make and receive calls.





JULIE HIRONS

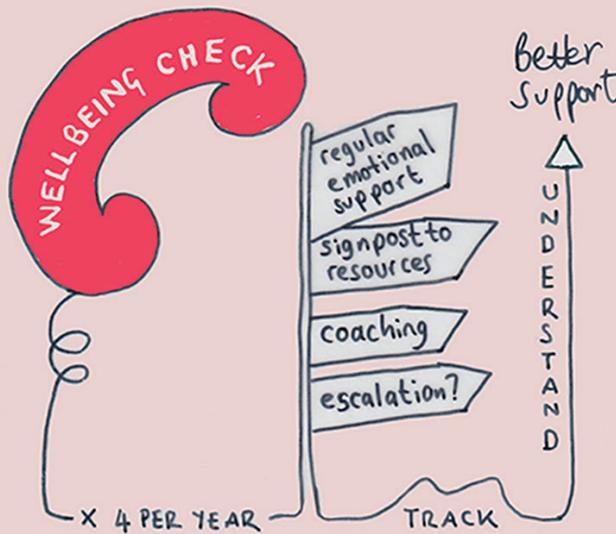
U101

Design Thinking

This proposed system of wellbeing support calls is designed to combat the stress and isolation experienced by dementia carers and identify instances of violence and emotional exhaustion in order to provide the appropriate support.

Wellbeing calls for Dementia Carers

Supporting and resourcing all carers PLUS
tracking & better aiding the estimated 20% who face violence



Approach **designed in consultation with carers** and professionals

Dementia Trained counsellors provide regular sessions for all carers

Includes a (recorded) check on frustration frequency & severity

Aids earlier identification of extreme issues and **accelerates assistance**

Summary report **contributes to Annual Dementia Review**

Data insights highlight trends leading to improvements for all

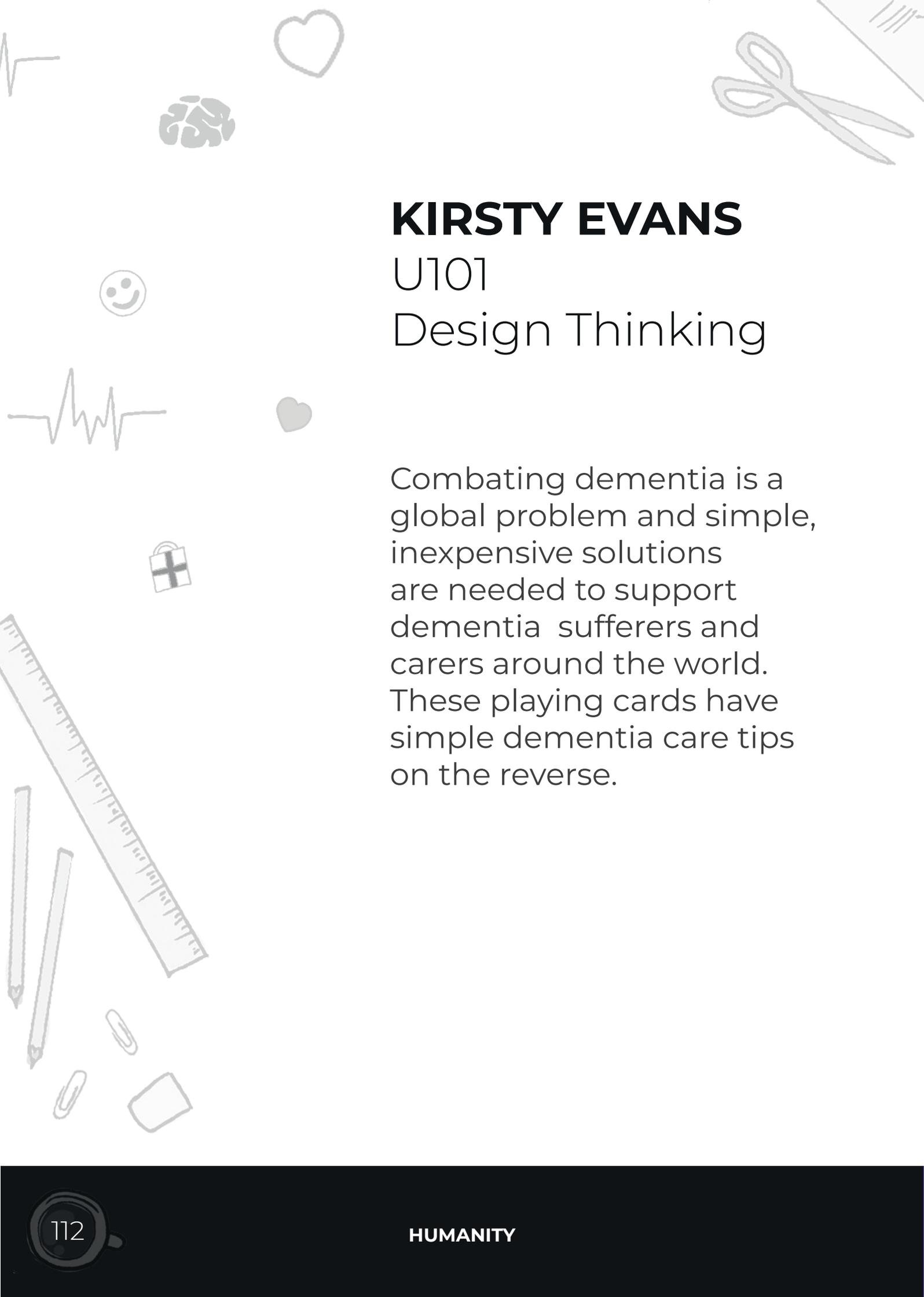
U101 • Design a solution for a global problem • Julie Hirons

Context: I experienced how Dementia can lead to violence against carers during carer interviews. Academic research confirmed this issue as “growing, neglected...estimated to affect at least 20% of Dementia carers”. Relevant professionals joined creative sessions to explore this problem which highlighted the delays by carers in seeking help for this taboo area. Influential testimony from a GP participant:

“Carers avoid mentioning violence until they can’t leave it any more. Maybe a particular incident is the trigger, or they’ve become emotionally shattered. They may have hinted. Maybe the direct question hasn’t been asked yet?”

Development: The solution addresses the problem of private struggles and delayed disclosure through a quarterly call for all carers. This is delivered by trained counsellors and always checks on the frequency and severity of frustrations, which are a recorded metric. The final solution merged ideas to form an integrated design, working on several levels; regularly supporting carers, contributing inputs to the Annual Dementia Review (which doesn’t include private discussion with carers) and generating data insights to guide improvements for this global issue.

Designing for extremes, providing benefit to all: I was initially concerned the idea took the majority of carers through a solution designed to meet the needs of a minority. I reflected on the principles of universal design and realised a regular wellbeing call would help all Dementia carers, as a recognised vulnerable group, as well as those with extreme needs.



KIRSTY EVANS

U101

Design Thinking

Combating dementia is a global problem and simple, inexpensive solutions are needed to support dementia sufferers and carers around the world. These playing cards have simple dementia care tips on the reverse.

How something so simple, has the power to help so many

The playing cards, that have two sides of help.



Play their favourite game and use as a distraction for your family member who has Dementia.

Turn the card over for key information, tips and important phone numbers.

All this all help in the palm of your hand, and it doesn't require 21st Century digital technology.

TMA 04 was about designing a poster on a Global challenge that could best help the family member, caring for another family member with Dementia.

About my thinking process, I kept it simple, I was looking at not just first world Countries but also third world (remember this is a Global challenge), where help can be given from living in a bricks and mortar property to the far reach slums, where even electricity is not a given. I also looked at the costing of my idea, Religions, Cultures (as not all are excepting of technology), Cards in some Religions are not allowed, however if the playing side was replaced, this would then be acceptable.

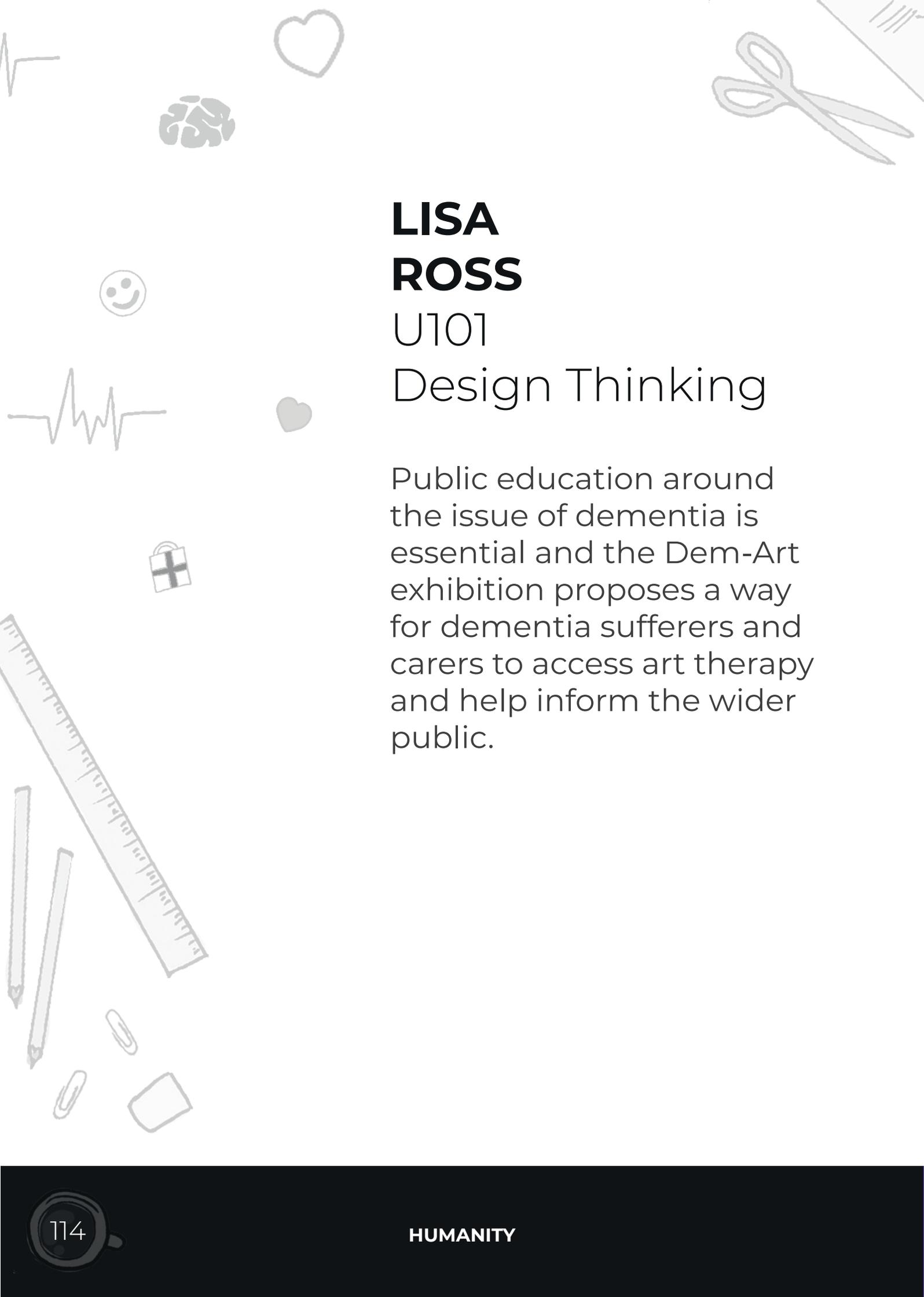
The cards are small, this is important for homes of literally minimal space. I also do not know many people who do not methodically pick up all the cards and put them back in the pack, where as books, leaflets, etc.. on help usually get thrown around.

The artwork represents brain firing, with the pink at its strongest and turning grey with minimal pink to represent loss of activity.

Help shouldn't be just for the people who can afford it, it should be for all.

Kirsty Evans U101

*Deep inside, your family member is
Thanking you.*



LISA ROSS

U101

Design Thinking

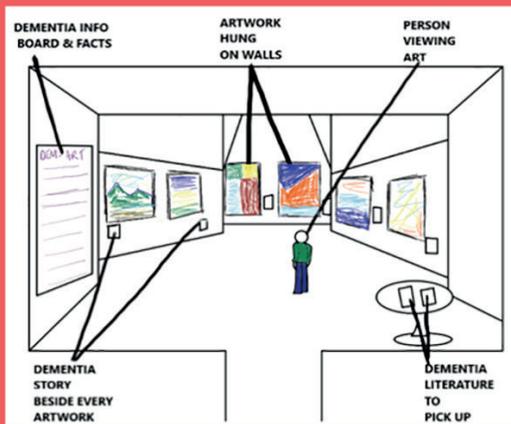
Public education around the issue of dementia is essential and the Dem-Art exhibition proposes a way for dementia sufferers and carers to access art therapy and help inform the wider public.

Dem-Art

Dementia Art Exhibition

Dementia education is very poor, so i decided to address the problem by creating a fun solution, that is therapeutic for patients and carers, while also educating people about the condition and all of its symptoms.

MAIN FEATURES:



HOW IT WORKS:



1. Artwork created by Dementia patients, family & caregivers. They can paint about how Dementia makes them or their loved ones feel, or do a self portrait before or after being diagnosed



2. Artwork is displayed at the exhibition, alongside artists' 'Dementia story' to accompany their artwork. All profits for a Dementia Education Charity



3. The exhibition runs for 1 month, with a catalogue featuring the Dementia artists, and Dementia literature scattered about. There will also be a Dementia information & facts board at the entrance



4. Buyer admiring artwork, and with far more knowledge about Dementia, and tells the artists' 'Dementia story' to every person who comes into their home and admires the artwork

U101: Design Thinking
Lisa Ross F7609160

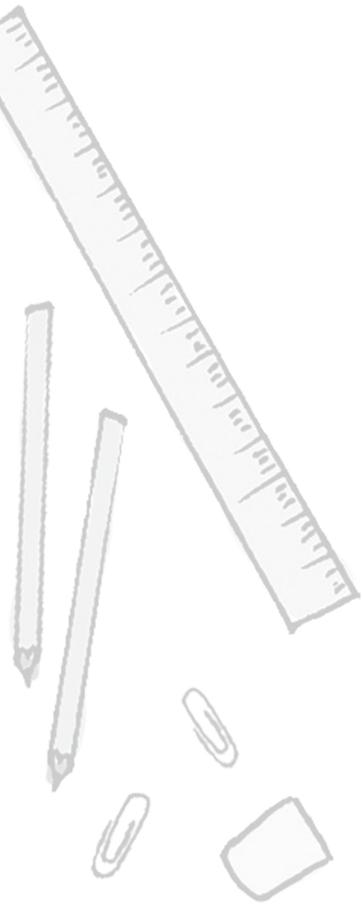


OANA PIRIIAC

U101

Design Thinking

The CRTD certificate recognises the training of retailers to become more skilled in serving customers with dementia. This proposal aims to avoid the financial exploitation of dementia sufferers in retail.



Gov.co.uk/mybusiness/dementia

CRTD is coming December 2020 Is your business ready?

CRTD – Certificate for Retail Training for Dementia



If you own a retail/sales business, you have until December 2020 to achieve your CRTD. Visit gov.co.uk/mybusiness/dementia for a list of accredited training centres.



Your staff will be fully trained in recognising and dealing with dementia sufferers.



To avoid paying hefty penalties and, most importantly, to be part of a national effort in fighting the financial exploitation for dementia sufferers, your business needs to have the CRTD.

Oana Piriac – U101 – How can we ensure that dementia sufferers are not being financially exploited in a world that is all about the sell?

HACKING A PROBLEM

Hacking existing products and components to create new and unique designs is part of the learning in the second level Design Essentials module.



EM



FRAN NICOLETTI T217 Design Essentials

This project is the result of a hack of IKEA furniture to create something new from existing components, the design creates a step or seat that can fold flat for easy storage.

#STEP SAFE



DESIGN

Step Safe helps people of all access high up storage safely easily. Its sturdy frame, steps foldout handrail provide support during use, and it quickly folds away.



GOAL

How might we improve the available storage space in small kitchens that the lives of people that use are enhanced?



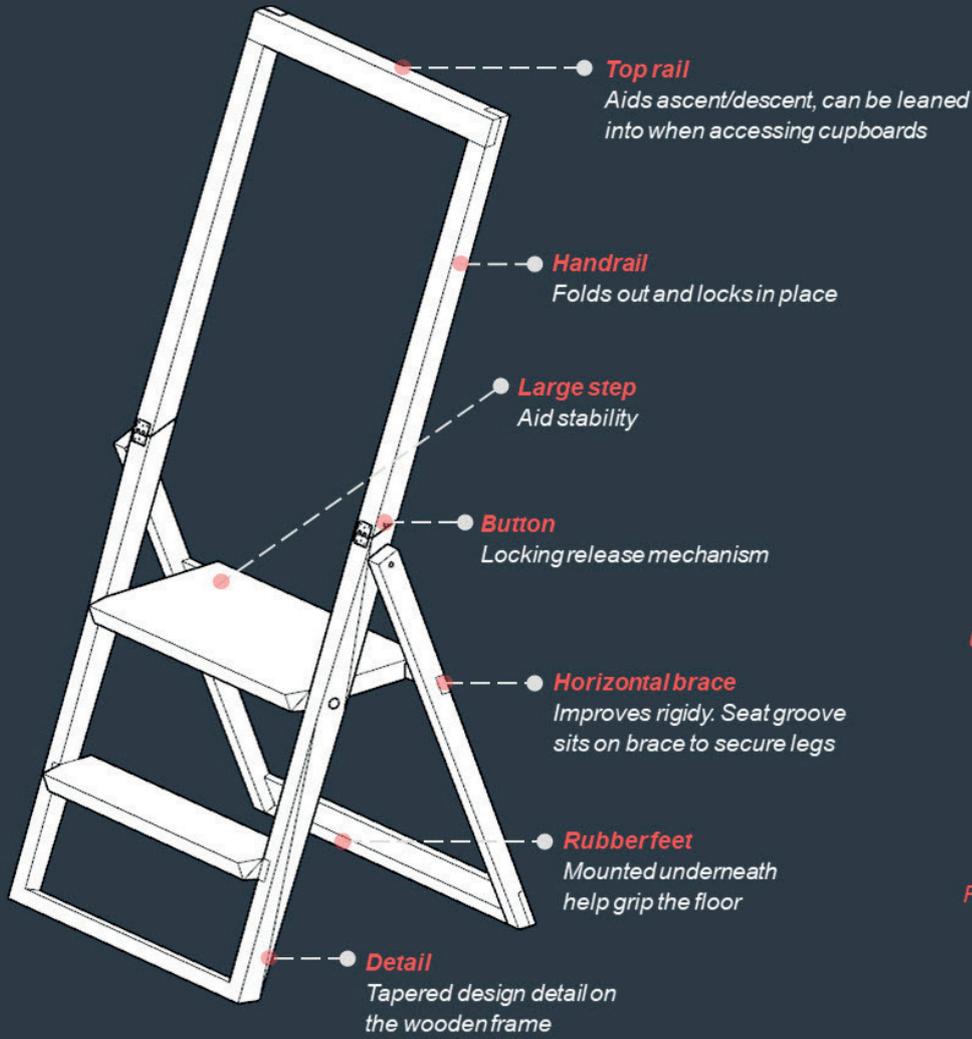
CONTEXT

Storage is an important part of kitchen design, and never more so than in a small kitchen where space is scarce. Cupboards situated above work surfaces can be underutilised due to difficulties with accessibility and visibility. This can also lead to unsafe practices such as standing on chairs to access cupboards. For people with mobility issues and other physical limitations (e.g. the young, old or disabled) this inconvenience is amplified.

ages
and
and
support
way.

lable
s, so
it are

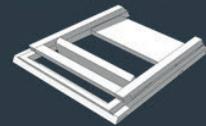
rt of
re so
pace
high
be
s in
can
like
ccess
bility
tions
d the



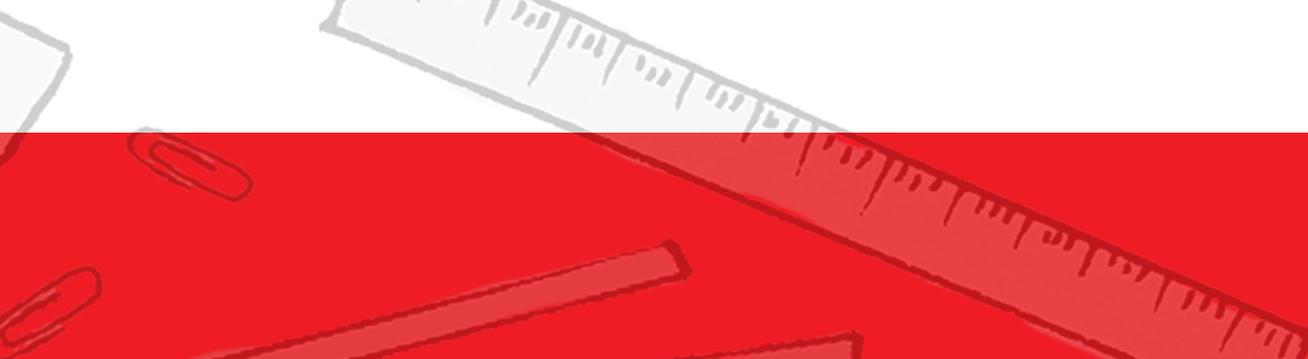
Use without handrail or as a seat



Folds away to store



Franc Nicoletti, T217



RICHARD HENRY SMITH

T217

Design Essentials

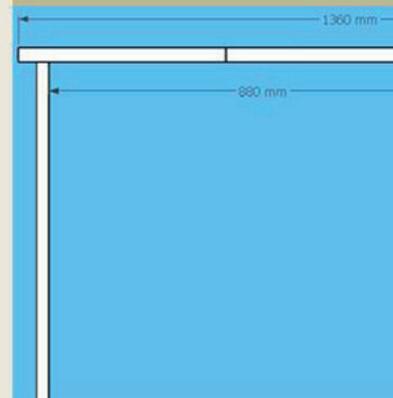
This desk is a hack of IKEA products to create something new. This fold-away desk enables the flexible use of space for work or study.



The *Fold-Away*

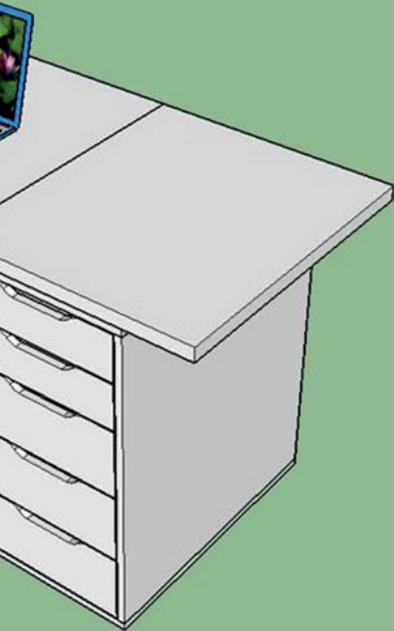


Note: Chair, base-unit and lap-t
3D Sketch-Up Warehouse



ay Desk ... NEW from IGEA!

Richard Henry Smith T217



Introducing the new compact '*Fold-Away*' desk.

This simple to use folding desk-top can be attached to any standard base drawer unit. It is all held securely with quick locking when being used ... then folded away to a convenient flat profile.

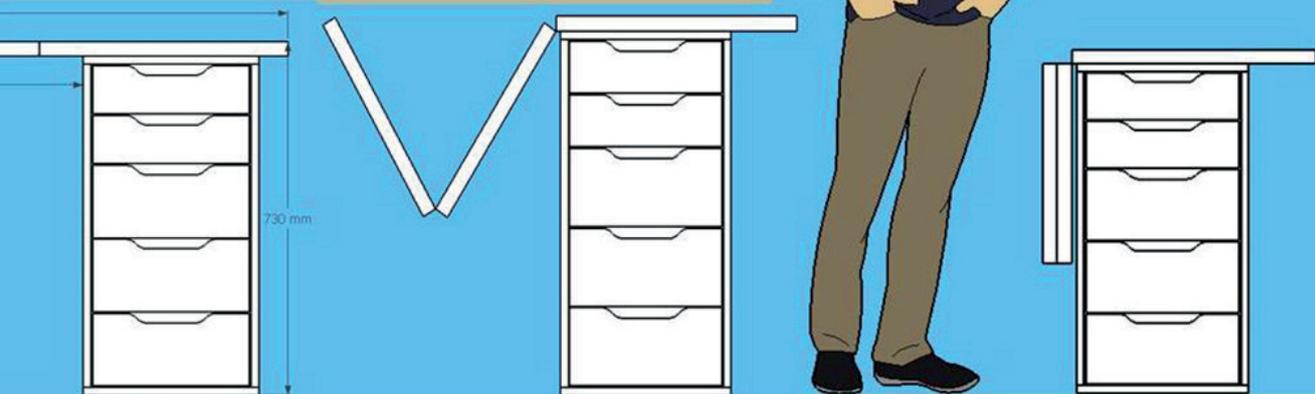
The *Fold-Away* provides an ample desk-top measuring an impressive 1360 mm by 600 mm

It is easy to install and requires only minimum DIY skills

So ... improve your office space **TODAY!**



top imported from



TRACY CROSS

U101

Design Thinking

This design addresses the problem of an unstable but desirable chair by adapting it to incorporate useful, non-tipping, features.

Armchair Tipping Problem

An IKEA armchair easily tips with amount of pressure. This has hap



a 5-year-old, thrill s
with additional need
backwards on it;
when a larger adult
too quickly after a
work shift. Also, a
person grabbed the

steady themselves has also cause
ping. The family want to find a sol
hazards.

Other Considerations

The chair is comfortable, to read
TV, because of the shape and th
back, plus the wings provide h
when needed.

Replacing the armchair is not
comfortable seating is sparse, ro
tight, and funds are not available.

Problem Statement

As the family tend to read in the a
design it to accommodate shelves
into a stable reading chair that wil

The Concept

The redesign will change the tippin
provide an anchor to stabilise
whilst providing storage.

The Reading Chair

Design Proposal

quite a low
pened when
eeking child
ds, bounced
and again
sitting back
long, tiring
n unsteady
backrest to
ed some tip-
lution to the

and watch
ne height of
ead support

ossible as
om space is

rmchair, re-
and turn it
l not tip.

ng point and
the chair,



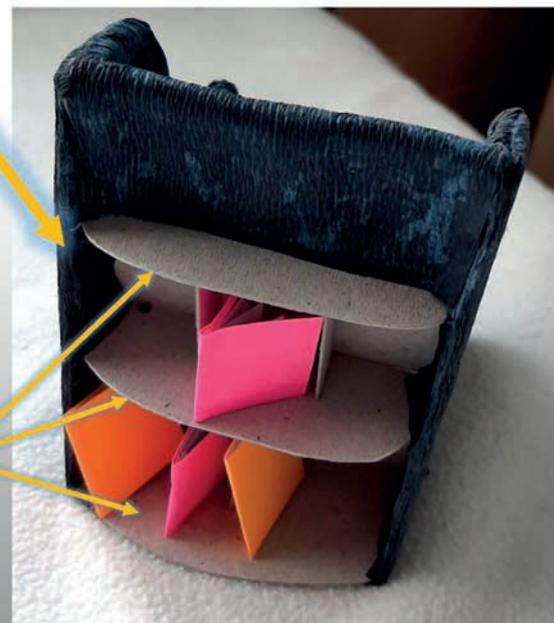
The Front

A comfortable seating area with a high back and wings.

A drawer to store handy items such as reading glasses, pens and bookmarks when not in use.

The Back

Shelves of various depths for all book sizes



Tracy Cross tracy.cross@outlook.com
H4713940—U101—Design thinking:
Creativity for the 21st century—TMA02

SOCIAL

TECHNOLOGY

The conception of technological responses and apps addressing social issues is particularly chosen by students taking design in conjunction with computing modules.



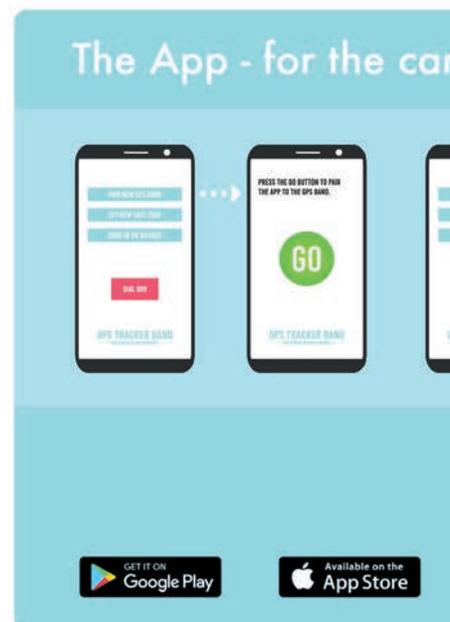
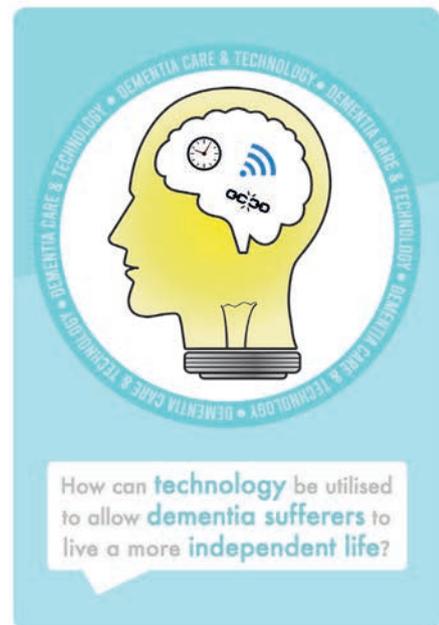
OGY



PETER RICHARDSON

U101 Design Thinking

People in the early stages of dementia often lose confidence when going out alone. This GPS tracker helps reduce the worry around becoming lost and reassures carers and family members.






GPS TRACKER BAND

• • • FOR DEMENTIA INDEPENDENCE • • •

Features - for Wearers

- A-GPS • Lightweight • 5ATM Water Resistance
- Qi Wireless and Kinetic Charging • Audible Alerts
- Green Safe Zone LED • Red Danger Zone LED
- Secure Clasp • Hypoallergenic Strap • Adjustable

Setup - for Carers



Charge band on wireless charger



Download & install the tracker app



Use app to set GPS safe zone for wearer

Carer











"I feel happier that I can go outside and take walks. If I get a bit lost then I get an alert on my band and the light turns red. My carer then chats to me and helps me get home."

A Smith, Wearer

"The tracker band uses a hypoallergenic rubber strap and is extremely lightweight meaning it can be worn all day, everyday without causing discomfort. The 5ATM water resistance means that the band can even be worn in the bath or shower."

P Richardson, Designer

"The app is so easy to use, especially if you are not too technically minded. In a couple of button presses I can drop in and have a chat with the wearer if out of their safe zone."

B Jones, Carer

Name: Peter Richardson | Module: U101 (TMA04) | Title: GPS Tracker Band (For Dementia Independence)
 Desc.: A GPS Tracker and associated app designed specifically to notify the carer and track the dementia sufferer (the wearer) if they move outside of a preset safe zone.

U101



SAM CULYER

U101

Design Thinking

These suggested systems of support are designed to alleviate the stress and depression that are common amongst dementia carers.



givers



Information

How to look after the person with dementia, what to prepare for and how to manage their behaviours

Networking

A messenger for connecting with and supporting other caregivers. A message board for sharing information and talking about things outside dementia.

Ideas for supporting primary caregivers of dementia



Share the load

Here family, friends and associates have a meeting. Where they discuss, how they can share the responsibilities of caregiving. Lightening the load on the primary caregiver.



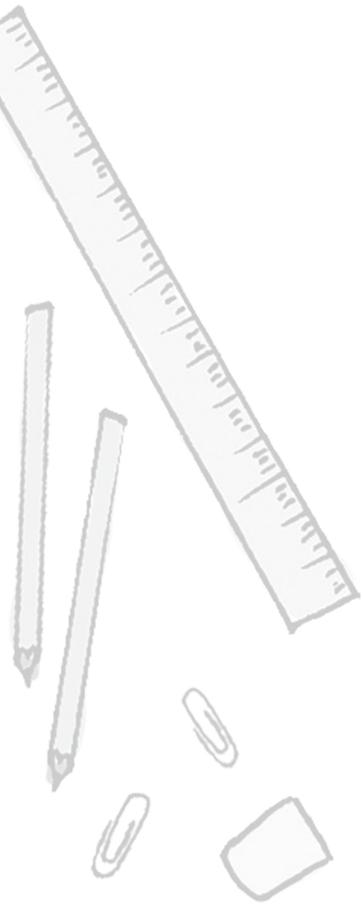


ALBINA DAVIES

U101

Design Thinking

This mobile app is designed to reduce stress and social isolation amongst dementia carers by encouraging them to try new skills and interact with others.



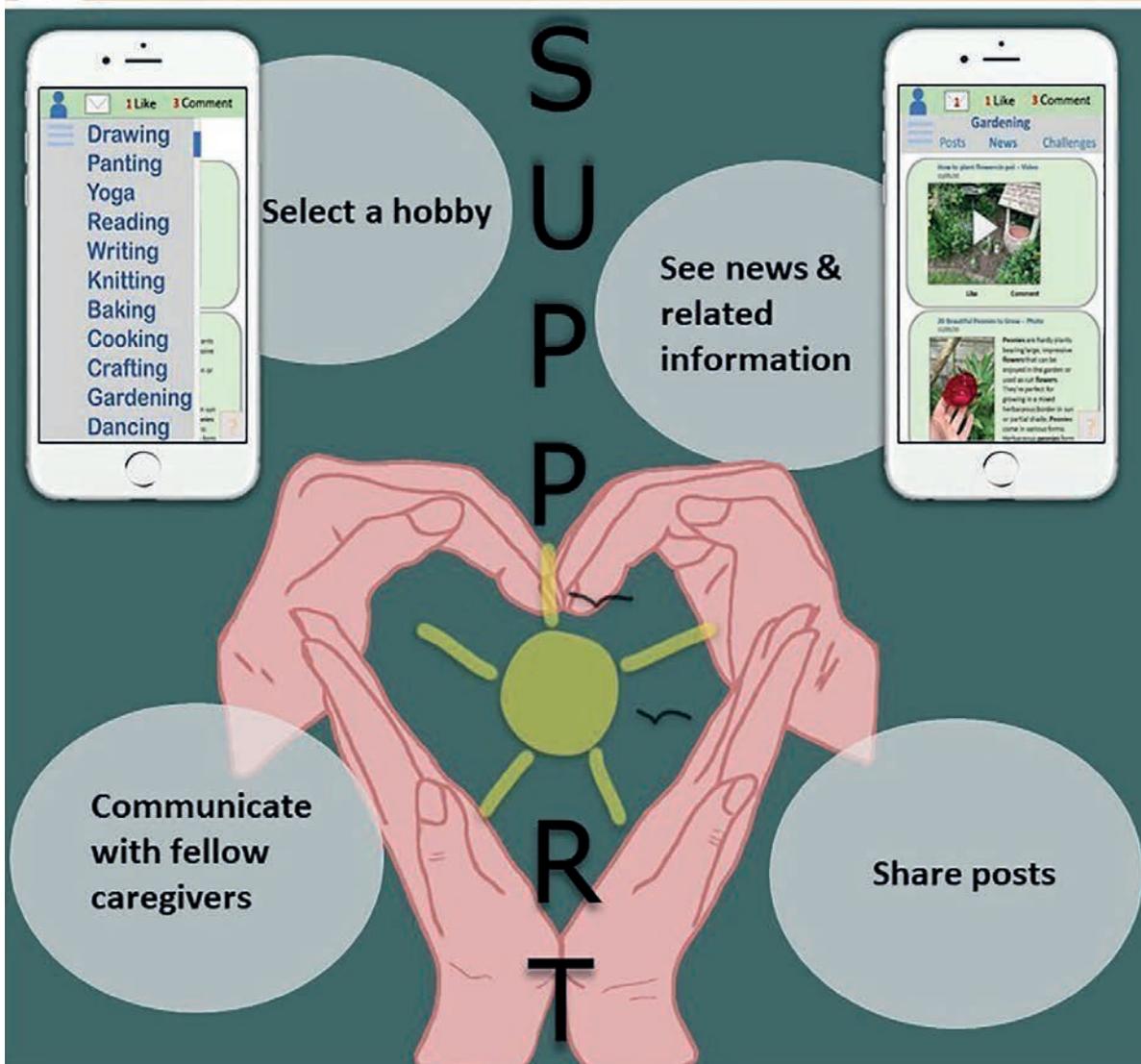
40% of Alzheimer's caregivers die from stress-related disorders before the person with dementia they are caring for dies



How might we provide support to caregivers who feel depressed when caring for those with dementia?



With a mobile app for Dementia caregivers, they can :



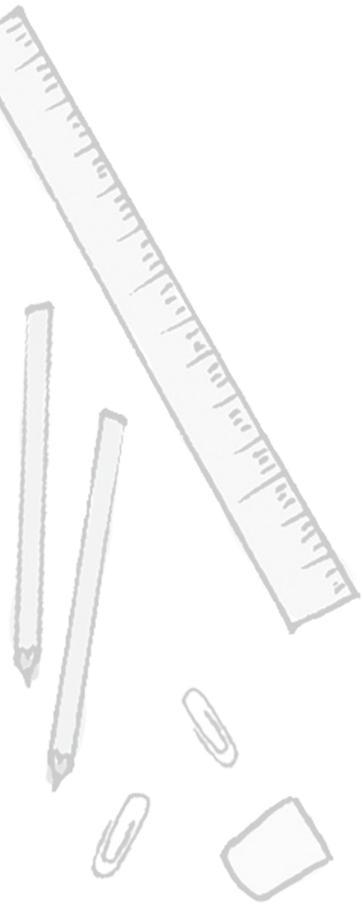


FRANCESCO FERORELLI

U101

Design Thinking

The 'Dememory' app is designed to assist patients in the early stages of dementia with simple access to memory games, carer contact and location tracking.





Home screen



Flashcards



Swipe up for answer



Mark questions



Call carer



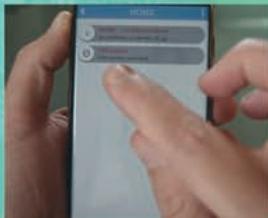
Watch videos



Boost memory



Directions home



GPS tracker

- Flashcards - sustaining memory
- Educational and entertaining videos
- One touch to call carers
- GPS tracking enabled
- Include Podcast, cards and reminders
- Simplify your phone



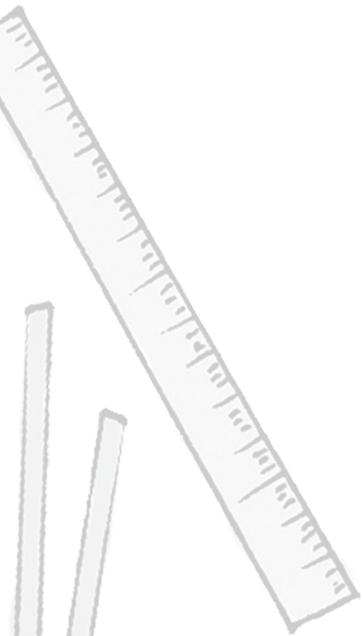


LUIZ DIAS CARVALHO SIMOE

U101

Design Thinking

The 'Photo Puzzle' app uses personal photographs and music choices to prompt memories and aid memory retention for people with dementia.



Problem statement:

How can we use past memories as a way of treatment of reminiscence therapy to reduce depression and anxiety on patients with dementia.

Design Concept Prototype

Photo Puzzle is a game app that promises to reduce anxiety and depression, we use reminiscence therapy as our main inspiration users are asked to upload images and link to a spotify account, we suggest to use memorable images and songs for best results.

How it Works ?



00 - Create your account

Setting your account is really easy and it only take some few steps.



01 - Upload your images

Your favourite images will be saved to your album.



02 - Link to your Spotify account

If you decide not to link your account you can also upload mp3 files.



03 - Select the Dementia level the person is

You can choose in between 05 stages, from 06 - 24 puzzle pieces.



04 - Select your image from your album

You can choose in between 05 stages, from 06 - 24 puzzle pieces.



05 - You are all done

Sit and relax enjoying your favourite songs while assembling a fun puzzle.



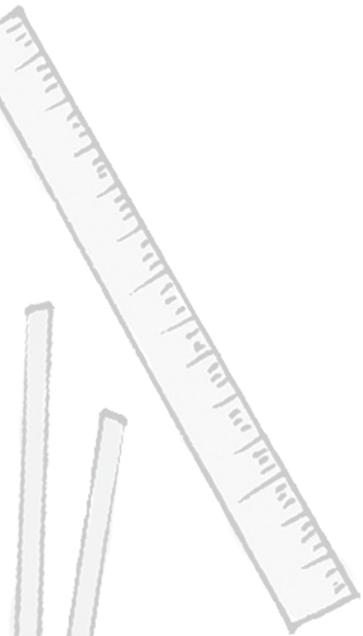


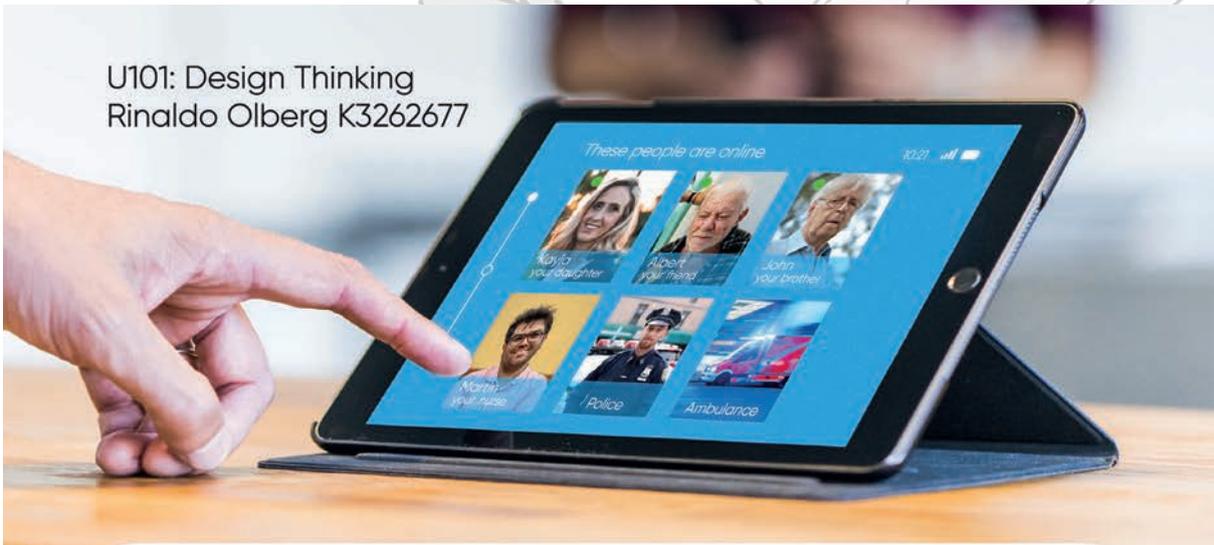
RINALDO OLBERG

U101

Design Thinking

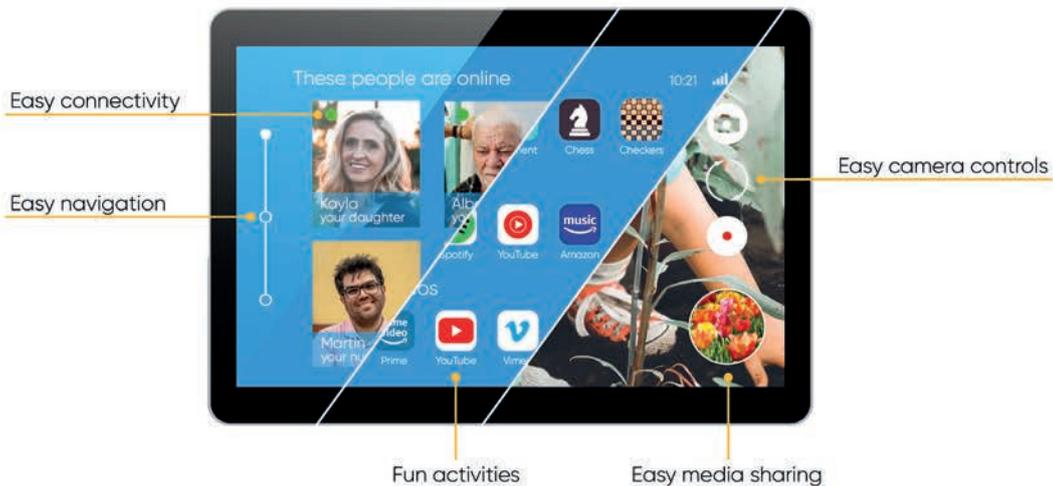
This app design provides dementia sufferers with a simple way to connect with their family and support network, access games and create photographic memories.





Dementia App

Stay connected – stay active!



There are nearly 10 million new global cases of dementia every year. It is a syndrome associated with an ongoing decline of brain functioning. The feeling of being lonely can elevate the risk of dementia by 40%.

To help solve this problem, an idea of dementia app was developed. It targets the problem by helping its users stay more easily connected, providing ways to capture and share moments of the day, and by providing fun activities and entertainment.

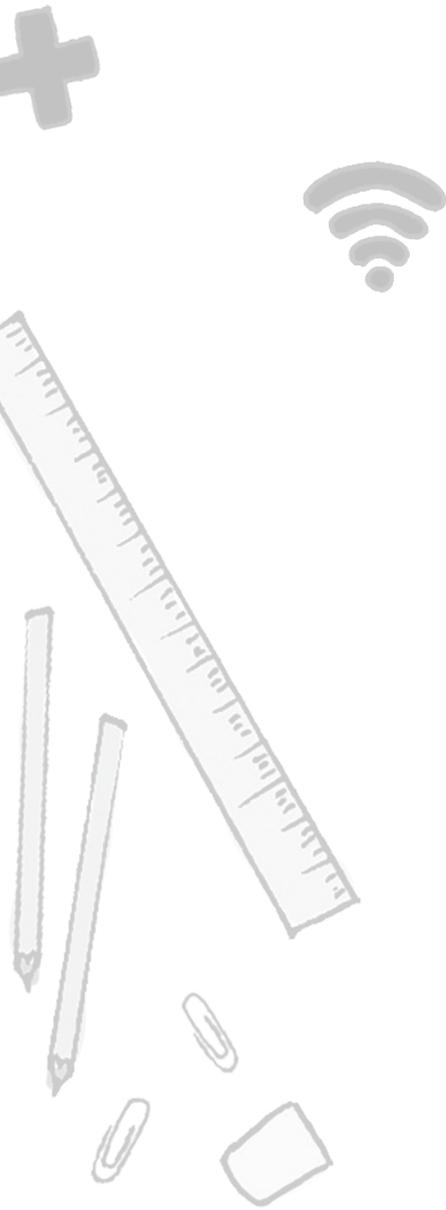


TOM BARTRAM

U101

Design Thinking

The stress experienced by dementia caregivers is often exacerbated by the frustration of not knowing what support services and products are available to help. This app is designed to reduce stress by providing a single source of useful information.



Caregiver Support Portal App



A smartphone app to empower caregivers of persons living with Dementia to build bespoke subscription packages of support services to improve the wellbeing of themselves and the loved ones they care for

The Context

Over 50 million people currently live with Dementia, including several in my family. Caring for someone living with Dementia is a demanding and complex task which is most likely to be carried out by a family member. While they will do anything to support their loved one, Caregivers are not trained, and have not asked for this extra responsibility which can bring great difficulties and complexities into their own lives.

Many caregivers feel they are 'on their own', and do not know where to turn for the support they need. This is causing a crisis in caregivers' health and wellbeing:

- 65% experience a lack of support
- 61% rate their emotional stress level as 'high' or 'very high'
- 59% feel they are overworked and 'on duty' 24/7
- 40% die from stress-related disorders before the person they are caring for



The Problem

In many cases, these sorely needed support functions already exist, for example Government attendance allowances, NHS services, charities, and private providers. The problem is that these services may not be known to the caregiver, and if they are, can be stressful and time-consuming for Caregivers to access, adding to their worries.

The Caregiver Support Portal App

The Caregiver Support Portal App brings all these services into one place, government approved, pre-vetted, in one easy monthly subscription package. It aims to reduce stress and increase the wellbeing of Caregivers and those being cared for.

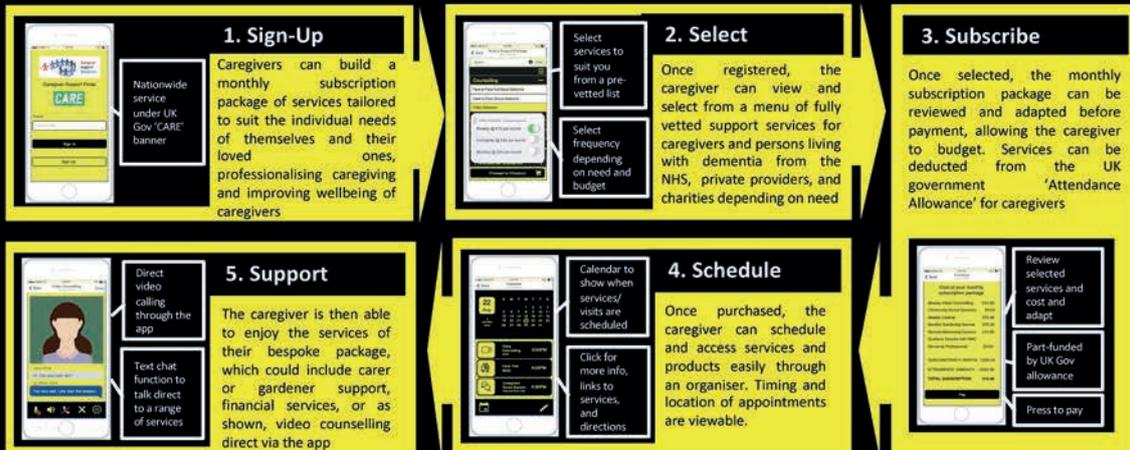


The app offers 4 key features:

- 'One-click' selection of services required from 8 key categories
- user-friendly drop-down menus showing information on each care product, user reviews, and prices
- 'no-hassle' payment: costs deducted directly from the Government attendance allowance, and one monthly payment for any extra
- 'at a glance' scheduling system for viewing/booking appointments

How it works

The app guides Caregivers through a simple 5-step process from Sign-Up, to accessing the Support they need



Tom Bartram, G2995352, U101-19J

OUR WINNERS

Overall winner

Ben Nairn

U101 Communication winner

Mar Reyes

U101 Idea winner

Alexander Foster

U101 Commendation for game design

Juan Torres

U101 Commendation for T-shirt design

Emily Studholme

WINNERS

**U101 Commendation
for creative thinking**

Ugne Astravaite

T217 Winner

Dean Parsons

**T217 Commendation
for viability**

Richard Smith

T317 Joint winner

Emma Taylor

T317 Joint winner

Jennifer Norris Taylor

EXHIBITION TEAM



**Anna Ward-
Stancheva**
Design Student



Abigail Jackson
Design Student



Annette Beckett
Design Student



Leo Rees-Evans
Design Student



Mar Reyes
Design Student



Rebekah Manston
Design Student



Rachel Baker
Design Student

Karmjeet Kaur
Design Student

Iestyn Jowers
Senior Lecturer



Dawn Correa
Associate Lecturer



Nicole Lotz
Senior Lecturer



Georgy Holden
Senior Lecturer

SOCIAL M

The exhibition was kindly supported by the Open University's School of Engineering and Innovation.

For more information on the Design and Innovation course visit:

<http://www.open.ac.uk/courses/qualifications/q61>



open.ac.uk/blogs/design/



facebook.com/groups/1599710346973999/



twitter.com/@DesignOpenUni



EDIA



