

FUTURE DIALOGUES

Whose voice will control the future?

2018

DJCAD, University of Dundee

Gary Gowans, Tommy Perman, Martin Skelly

TODAY

.....

- 1. Introductions**
- 2. Project Process**
- 3. Forming Teams**
- 4. Mozilla Open IoT Studio + The Brief**
- 5. Research Brief + Icebreaker Task**



Night And Day

Pennies From Heaven

Singing In The Rain

The Boy Next Door

MORE SONGS

STOP & TALK

PAUSE

PLAY

Photographs	Video	Music
	People & Events	Sport
End Session	<div><div>—</div><div>Volume</div><div>+</div></div>	New Session

A Gary M Gowans Film

AXIS MUNDI

Where all questions are answerable,
and all answers are questionable.

"A SCI-PHILOSOPHY MINI EPIC"
Oxymorons United Magazine
★★★★★

**"A BLOODY BRILLIANT BARGAIN
BASEMENT BLOCKBUSTER"**
Alliteration Monthly
★★★★★

**"AT LAST A FILM THAT PUTS THE
EGG INTO EXISTENTIAL"**
British Sandwichmaker Magazine
★★★★★

COMING TO A FILM FESTIVAL NEAR YOU

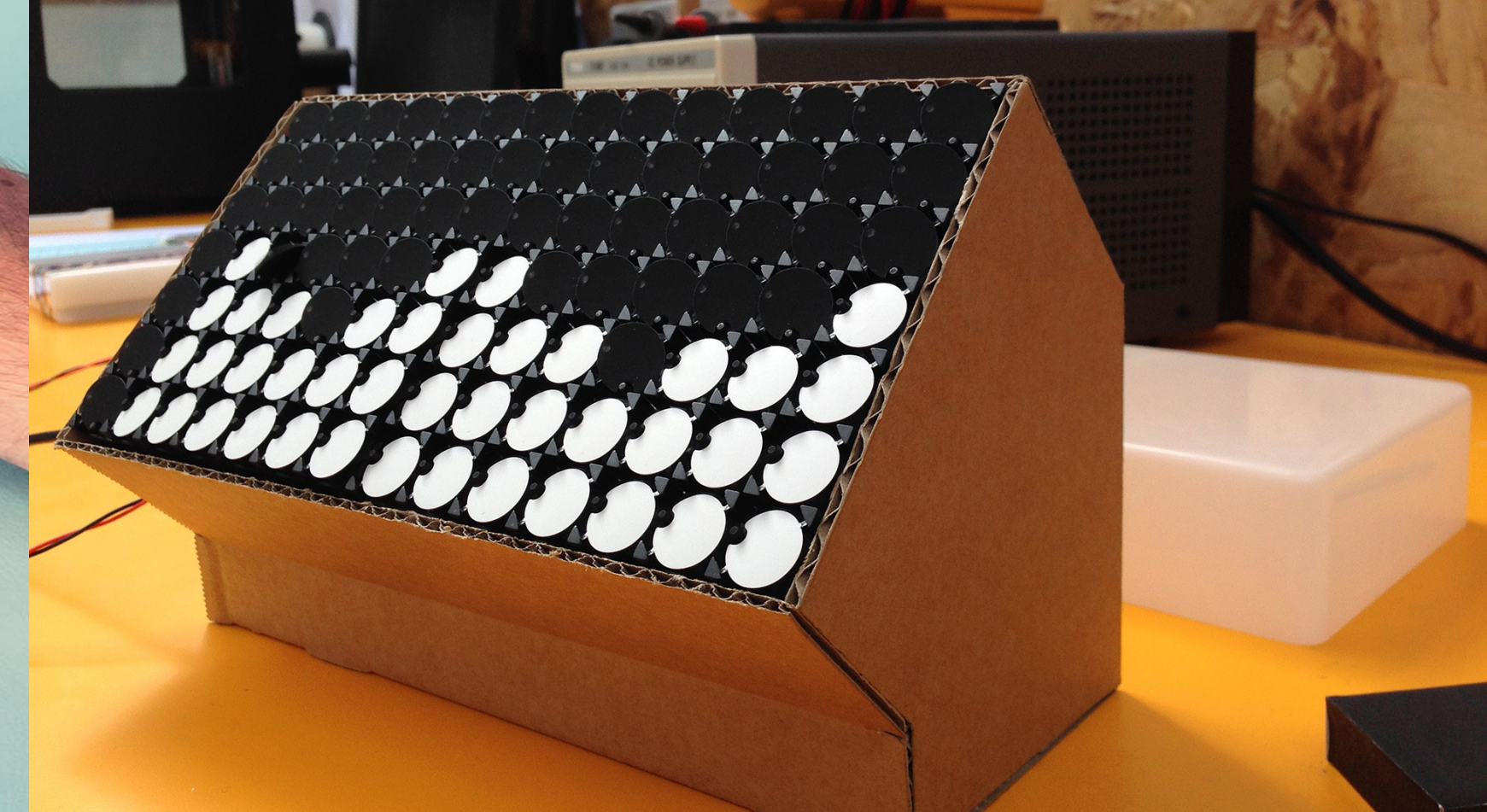
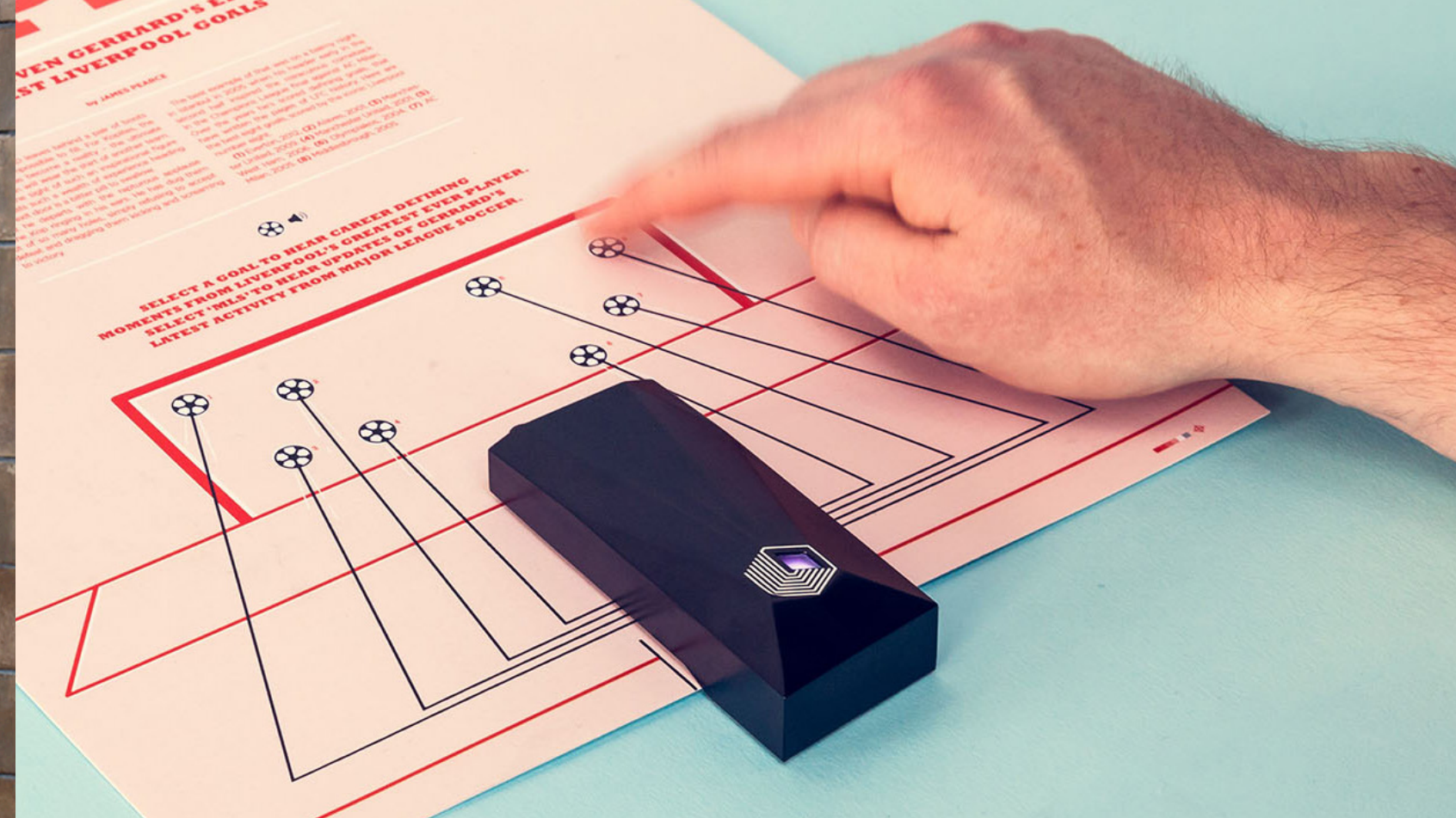
LYNDHURST 102 PRODUCTIONS IN ASSOCIATION WITH DIRTY PICTURES AND 19TH CENTURY DOG PRESENT A GARY M GOWANS FILM "AXIS MUNDI"
STARRING NORMAN ALM / LAURENCE OLIVEOL / ORSON WELLES / JOHN GILGODDY / MICHEL CAINE / ANGELINA HOLLY / BRADLEY ARM PITT
WRITTEN BY GARY M GOWANS PRODUCED BY GARY M GOWANS DIRECTED BY GARY M GOWANS MUSIC BY G.M.G. EDITOR GARY M GOWANS & C.F.A.M.
CASTING BY GARY M GOWANS EXECUTIVE PRODUCERS GARY M GOWANS, MORAG MUIR, NORMAN ALM PRODUCED BY LYNDHURST 102 DIRECTED BY GARY M GOWANS

OFFICIAL SELECTION
FESTIVAL
BRIGGENT
FERRY
SALA WEG
OFFICIAL SELECTION
CANNES

R
RESTRICTED
PARENTS STRONGLY CAUTIONED
SOME MATERIAL MAY BE INAPPROPRIATE FOR CHILDREN UNDER 17







TIMETABLE

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11
w/c 15/01/16	w/c 22/01/16	w/c 29/01/16	w/c 05/02/16	w/c 12/02/16	w/c 19/02/16	w/c 26/02/16	w/c 05/03/16	w/c 12/03/16	w/c 19/03/16	w/c 26/03/16

FIND

PLAY

MAKE

TALK

A3
RESEARCH
BOARD

EXHIBITION
OUTLINE
PLAN

EXHIBITION
ASSETS

SET UP
SHOW

LECTURE ROOMS

ASSESSMENT

<https://learningspaces.dundee.ac.uk/future-dialogues>

LAST YEARS WORK

Team Polaroid

Illustration

Monica Kurrikoff

Product Design

Lewis Milligan
Molly McKinnon
Kirsty Merrick

Graphic Design

Ryan McKnight



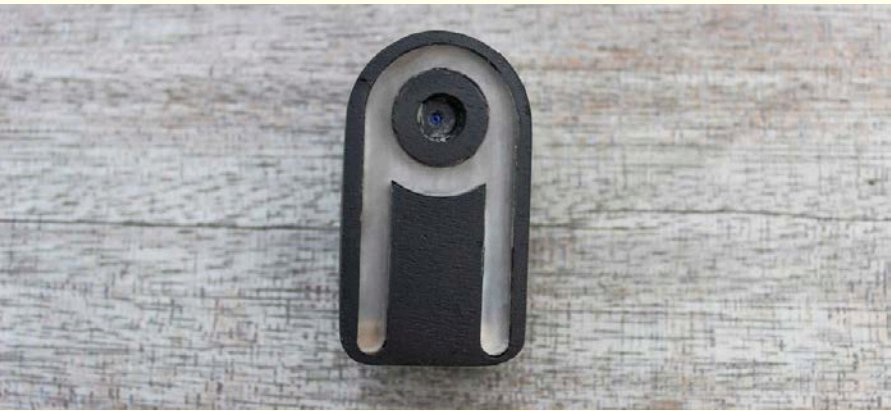
Team Polaroid 2017 - 2017



Photographic Intelligence Nerve

The PIN Camera

The Camera



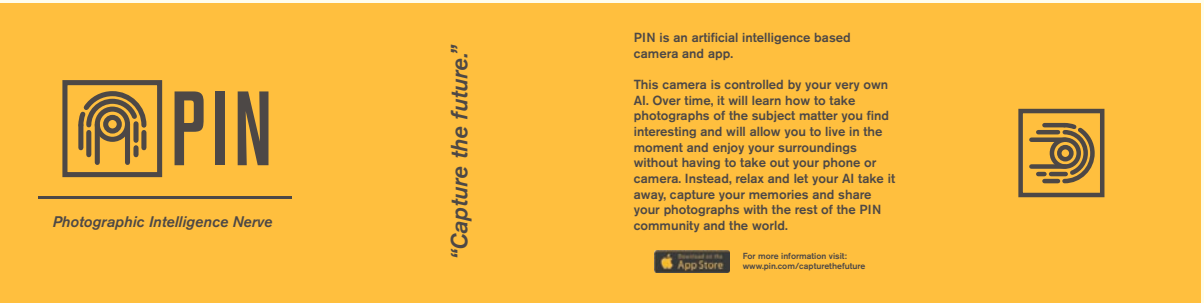
The PIN Camera is the main part of PIN as a whole. Despite the app being the interactive part of the whole process, as well as the display point for the photographs, PIN wouldn't work without the AI controlled camera taking the user's photos.

Our concept for the camera started with taking inspiration from organic shapes, this eventually led to the development of our logo, in which we took the final form for PIN. The front is laser cut clear acrylic and 3mm ply, the reason behind the material choice is to ensure the body of the PIN was uniform, whilst allowing us to store all the electrical components inside. We had initially decided to use a micro Arduino and a Neopixel to simulate the notification you would receive from the pin, due to complications this was soon changed to an Arduino uno. Due to us removing the Arduino mini from the pin it allowed us to slim line the pin further than we already had, creating a sleek solid design we were truly proud of.



PIN

Packaging



We decided to create packaging for the camera to show how it would potentially be sold. We made a box and charging port for the PIN and we also designed a sleeve to fit around the box which displayed the necessary information to sell the camera as well as some info about the App.



Photographic Intelligence Nerve

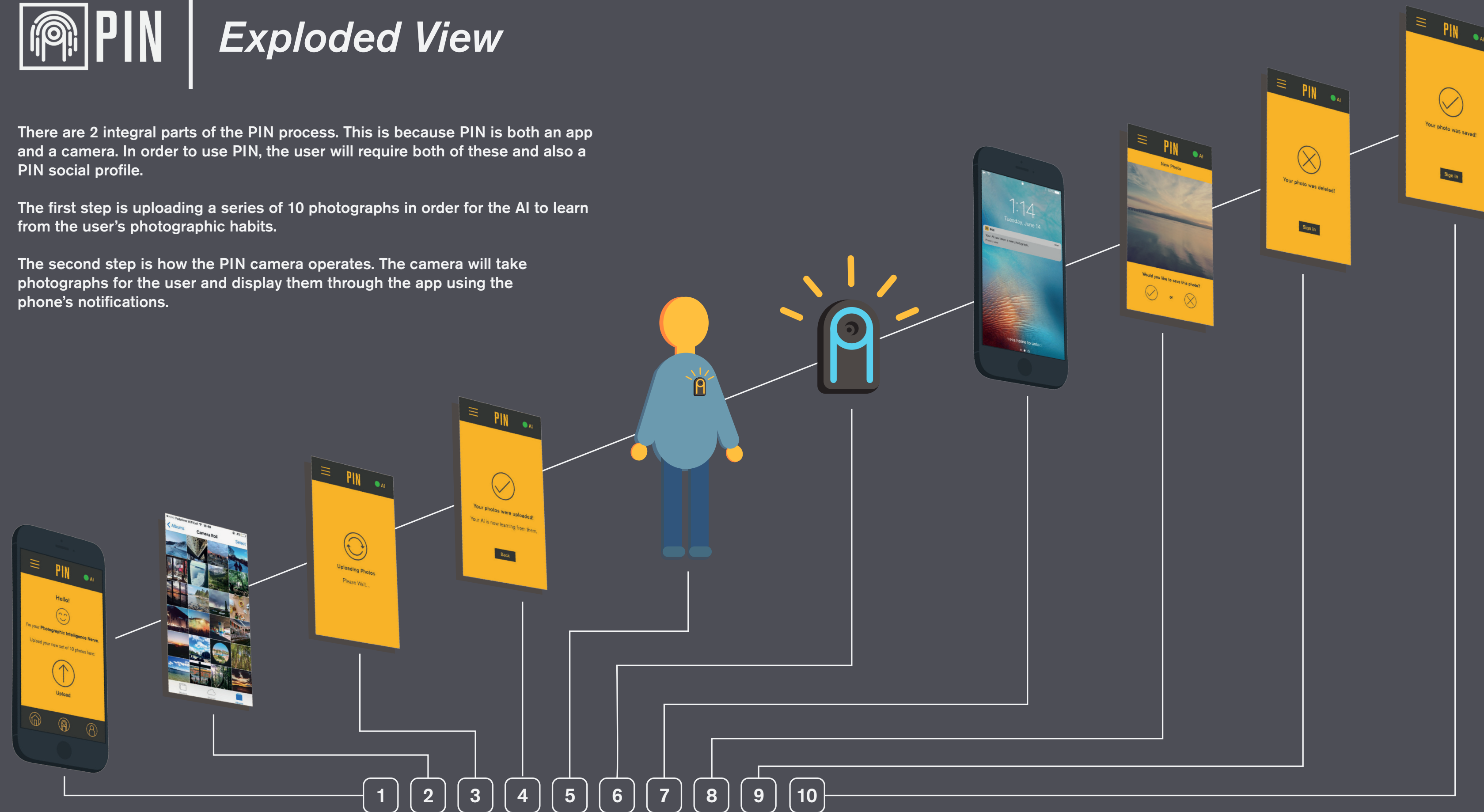


Exploded View

There are 2 integral parts of the PIN process. This is because PIN is both an app and a camera. In order to use PIN, the user will require both of these and also a PIN social profile.

The first step is uploading a series of 10 photographs in order for the AI to learn from the user's photographic habits.

The second step is how the PIN camera operates. The camera will take photographs for the user and display them through the app using the phone's notifications.



1. The user will press the upload icon.

2. This will then open the phone's camera roll and prompt the user to choose 10 photos to upload.

3. The app will then present a loading page as the photos upload.

4. The app will finally present an uploaded icon telling the user that the photos have been uploaded for the AI to learn from.

5. As the user walks around, the PIN camera will be looking for photographic opportunities based on what it has learned from the uploaded photos.

6. When the PIN camera spots a photographic opportunity, it will flash yellow and take a photograph.

7. The PIN camera will then flash blue. A notification will then appear on the user's phone, indicating that a new photograph or a series of photographs has been taken, depending on the user's notification settings.

8. Pressing the notification will then take the user to the PIN app where they will be prompted to save or delete the new photo.

9. The delete icon will be displayed

8. The saved icon will be displayed if the user decided to save the photo.



**PIN**

Capture the future.

Photographic Intelligence Nerve

For more information about our app and to order your PIN camera visit: www.pin.com/capturethefuture






**PIN**


Capture the future.

Photographic Intelligence Nerve

For more information about our app and to order your PIN camera visit: www.pin.com/capturethefuture






**PIN**

Capture the future.

Photographic Intelligence Nerve

For more information about our app and to order your PIN camera visit: www.pin.com/capturethefuture



Terms & Conditions

PIN Service Agreement

This is an agreement between you and Photographic Intelligence Nerve or PIN. Before using PIN, please read PIN's terms & conditions. By using PIN, you need to bound by the terms of this agreement. If you do not accept the terms of this agreement, then you may not use PIN.


For the purpose of PINs terms of use:

"PIN" stands for Photographic Intelligence Nerve. This includes a small camera which is worn by users. It also includes digital content, software, the PIN app, support and other related services.

"PIN enabled product" means any product or application that enables access to PIN such as the PIN app.


"PIN App" means the companion app provided by PIN. This provides access to PIN settings, PIN related content and other information.

Artificial Intelligence Terms & Conditions


Hello!

- I am an artificial intelligence here to help you take photographs.
- I cannot recognise facial features so I won't be able to take photographs of human beings.
- Please do not use me for any unlawful/illegal purposes, thanks.
- I do not need to know any private details from you or other PIN users so keep them to yourself.
- I am not responsible for your PIN profile, I am only here to assist you through photography.
- If I catch you bullying your account will be suspended.
- I am the only AI on this application so keep fake/spam accounts at bay.
- Please do not interfere with my services as this will cause problems with our social network.
- You agree to let my app learn from you with the use of my algorithm. I will recognise photographic opportunities based on what I learn from the photos you upload through the PIN app.
- An internet connection is required to use PIN and my services.


Thank you & I hope you enjoy using PIN!

**PIN**

Capture the future.

Photographic Intelligence Nerve

For more information about our app and to order your PIN camera visit: www.pin.com/capturethefuture



Branding

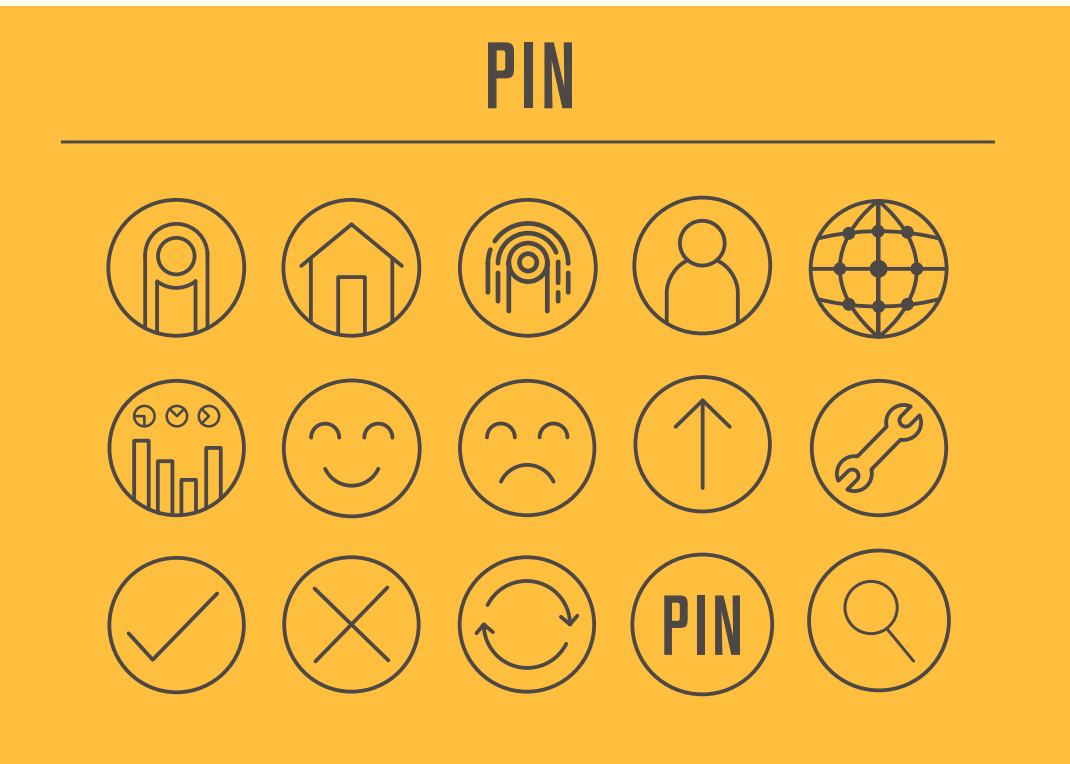
The PIN Brand

With our idea being based around Artificial Intelligence, we felt it was necessary to create a brand and a campaign that reflects the future. With the mixture of yellow, being associated with happiness, joy and intellect, and black, a sense of power, elegance and formality, we aimed to design a brand that made itself stand out from the crowd. Our logo is based on a fingerprint with a camera in the centre. This is intended to represent human's and AI as one.

Brand Exploration



App Icons

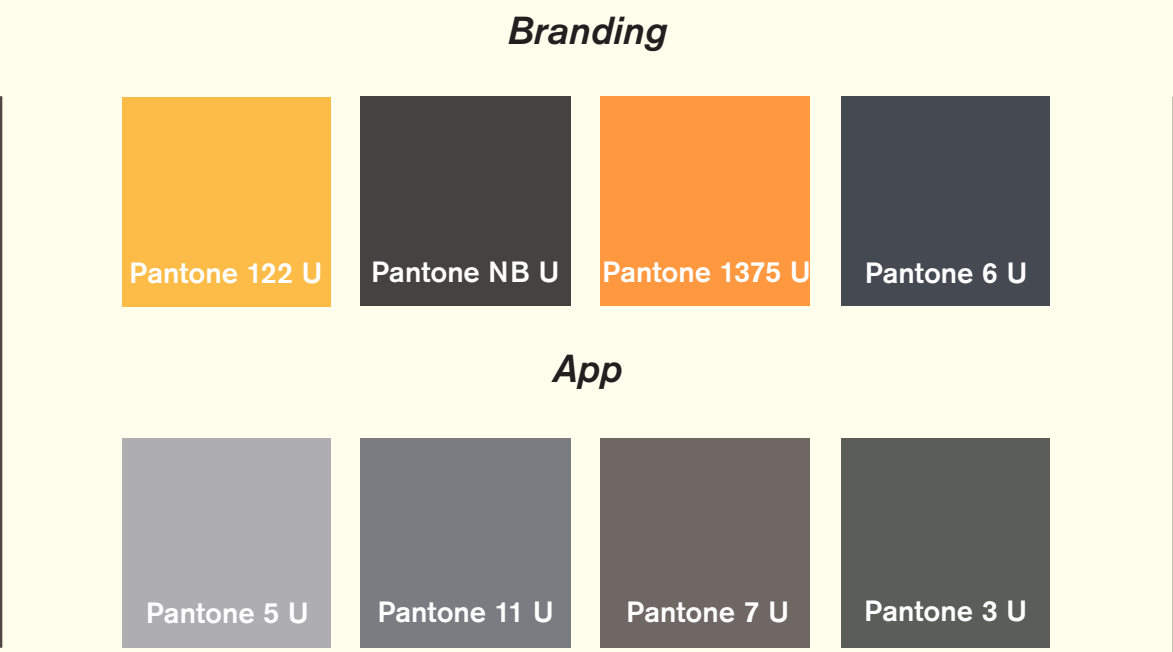


PIN

Final Logo Mark



Colour Palette

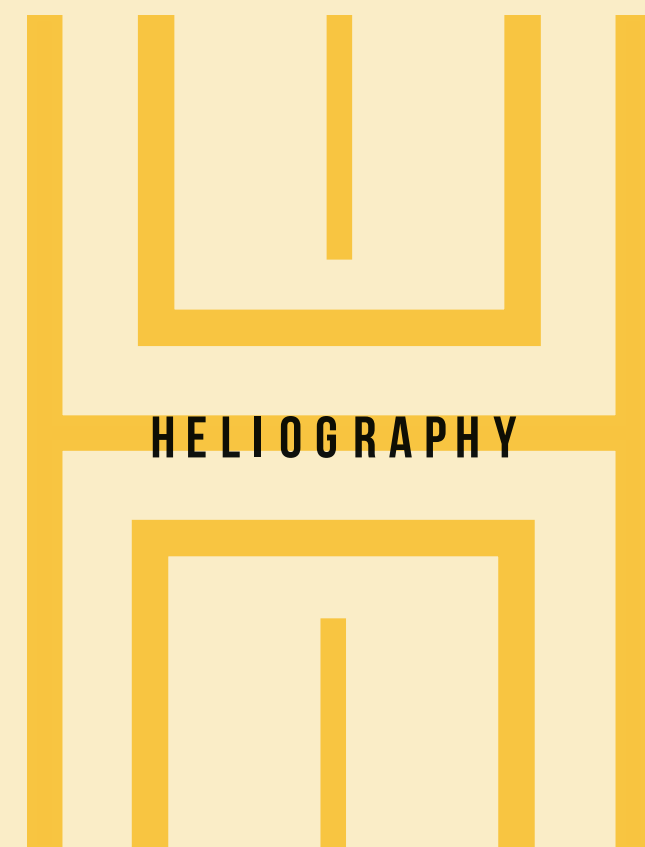


We decided to go with a yellow and black colour palette as we felt it helped us design a colourful and memorable brand. The yellow featured throughout our various campaign pieces mixed with the bold black typography or vice versa helped us create a bold image for PIN. Our main colour duo was the 122 U with the neutral black U, however for some pieces we used alternative pantone colours. In the App we also brought in some greys and lighter black pantones to add a bit of variety.

Typeface

Akzidenz-Grotesk Pro Light
Akzidenz-Grotesk Pro Light Italic
Akzidenz-Grotesk Pro Medium
Akzidenz-Grotesk Pro Medium Italic
Akzidenz-Grotesk Pro Condensed Italic
Akzidenz-Grotesk Pro Medium Condensed Italic

Photographic Intelligence Nerve



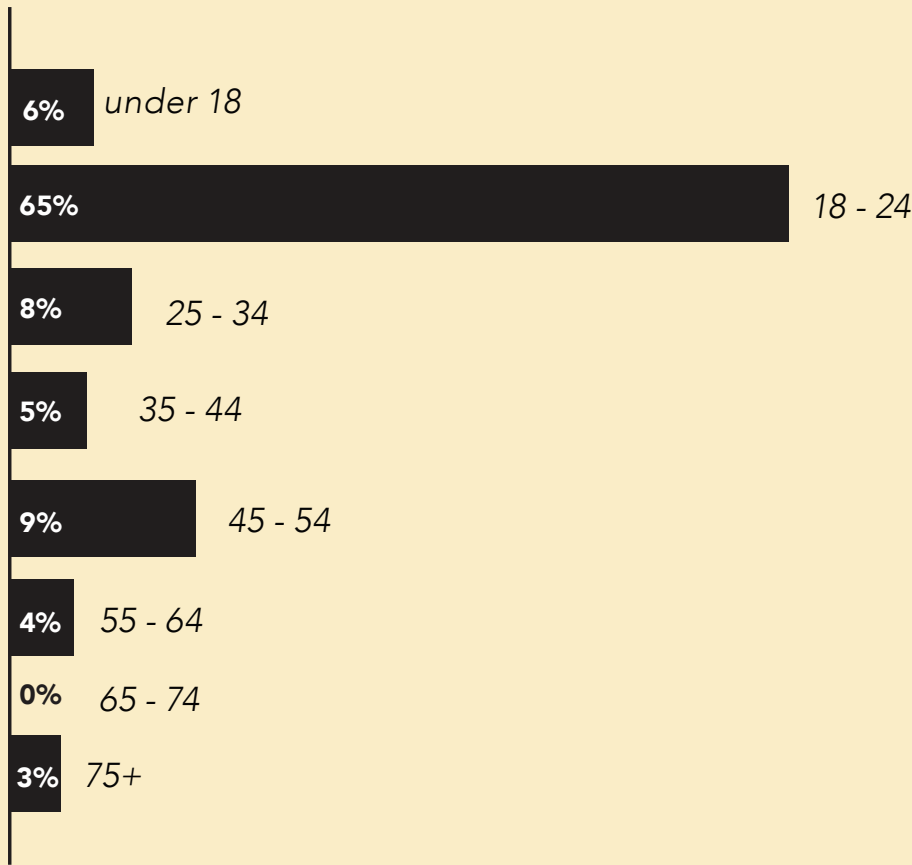
HELIOGRAPHY



Survey Stats

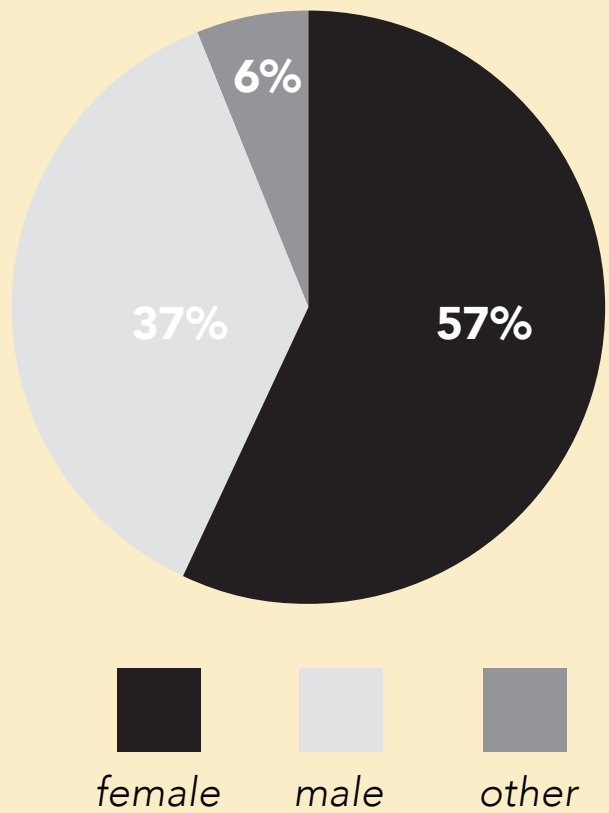
number of
participants
we had in
total... **100**

AGE RANGES



9

PARTICIPANTS
DID NOT POST
PHOTOS ON
SOCIAL MEDIA
AT ALL.

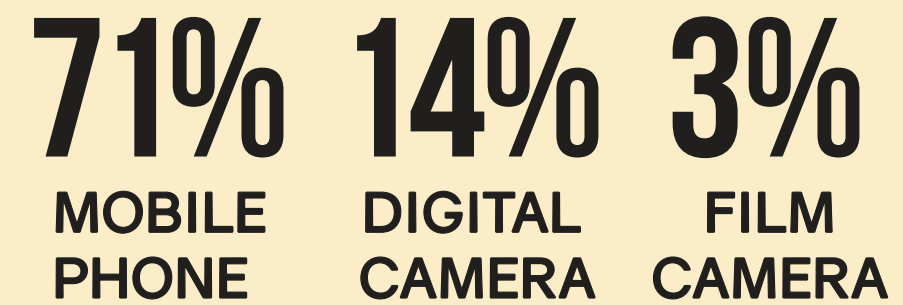


16% OF PARTICIPANTS
DID NOT ENFORCE
THEIR ONLINE
PRIVACY AT ALL.

SHARED ONLY
0 - 2 PHOTOS
ON SOCIAL
MEDIA
PER WEEK. **56%**

RESEARCH

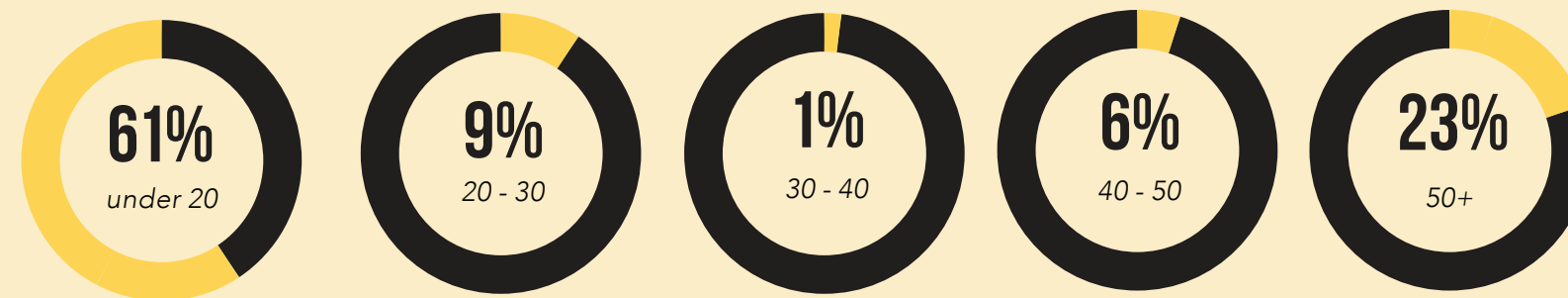
WHAT WAS USED
TO TAKE PHOTOS?



POPULAR PHOTO SUBJECTS

FAMILY LANDSCAPES FRIENDS PETS
MEMORIES NATURE HOLIDAYS SPORT
PORTRAITURE SELFIES FOOD EVENTS
SUNSETS ARTWORK PROJECT WORK
GIGS NIGHTS OUT CITIES GYM
OCCASSIONS WILDLIFE ARCHITECTURE

WHICH AGE GROUP WAS THOUGHT TO BE
THE LEAST CAUTIOUS ONLINE?



WHERE ARE PHOTOS STORED?

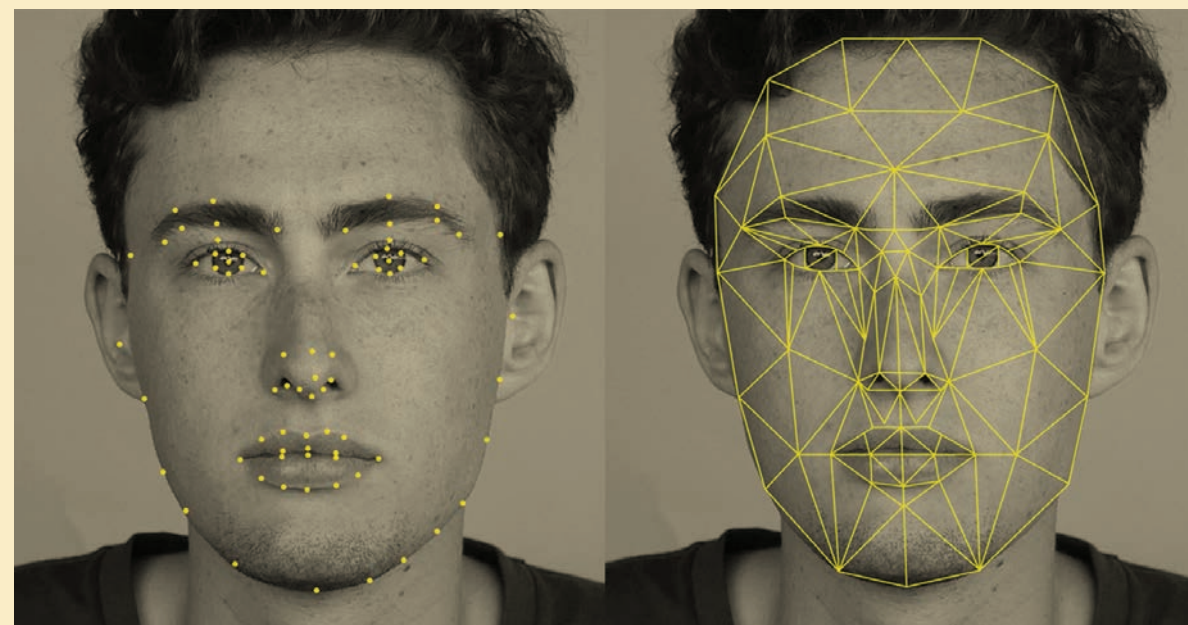
PHONE · CLOUD
PRINTED · ALBUMS

RESEARCH

 **fotoctrl**

Desk Research

A Look at How Snapchat's Powerful Facial Recognition Tech Works



ASSOCIATED PRESS SETTLES COPYRIGHT LAWSUIT AGAINST OBAMA 'HOPE' ARTIST



For our research, we looked into aspects such as how facial recognition works, image copyright cases and the way in which other security apps & services branded themselves.



RESEARCH

 **fotoctrl**

name

fotoctrl

app icon



fotoctrl

fotoctrl

fotoctrl

fotoctrl

BRANDING



typeface

font: Gravity

Ab

abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ

1 2 3 4 5 6 7 8 9 0

Ab

abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ

1 2 3 4 5 6 7 8 9 0

Ab

abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ

1 2 3 4 5 6 7 8 9 0

colour

PANTONE
BLACK

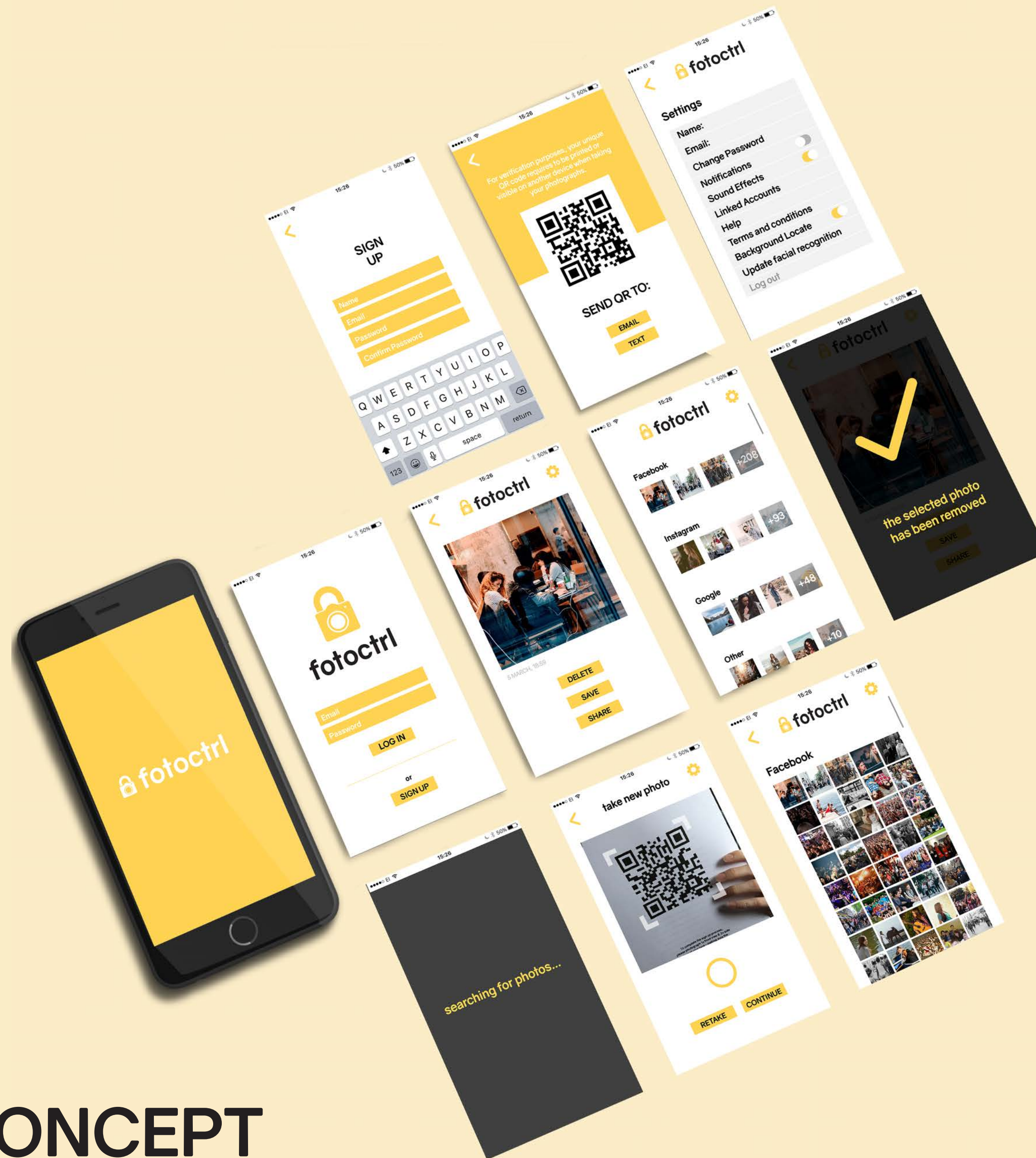
PANTONE
7404 UP

PANTONE
WHITE

logo

logo A

logo B



FINAL CONCEPT



DAGUERREOTYPE

GRAPHIC DESIGN

Rachael Hastie

Patrick Hughes

ILLUSTRATION

Steven Harper

Lizzy Holden

PRODUCT DESIGN

Lauren Johnson

Ryan Kelly



VOXVISIO

Latin:

VOX **VISIO**
sound vision



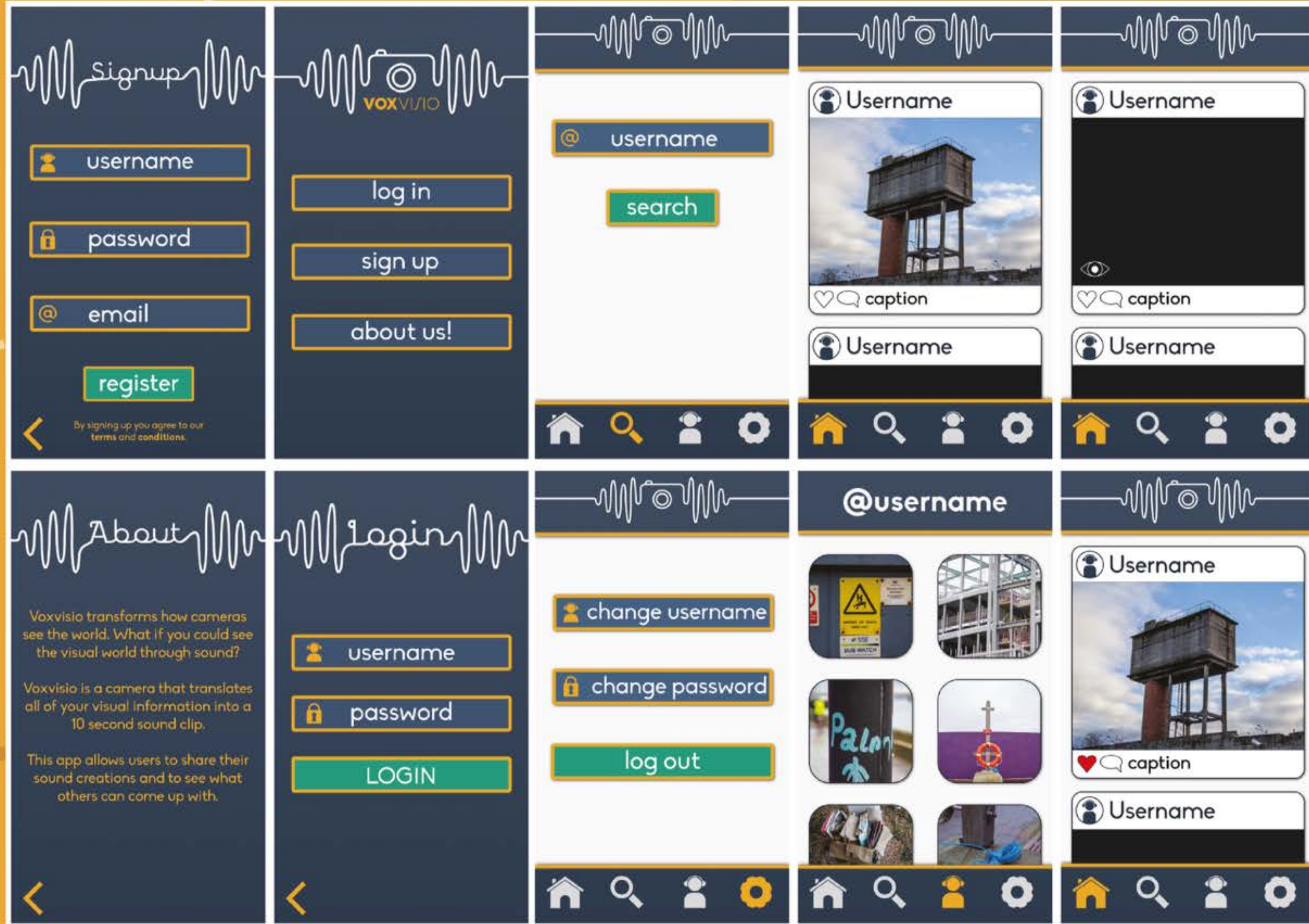
Early prototype



Final prototype



Final model



Final Product

e.motion

clarity through colour



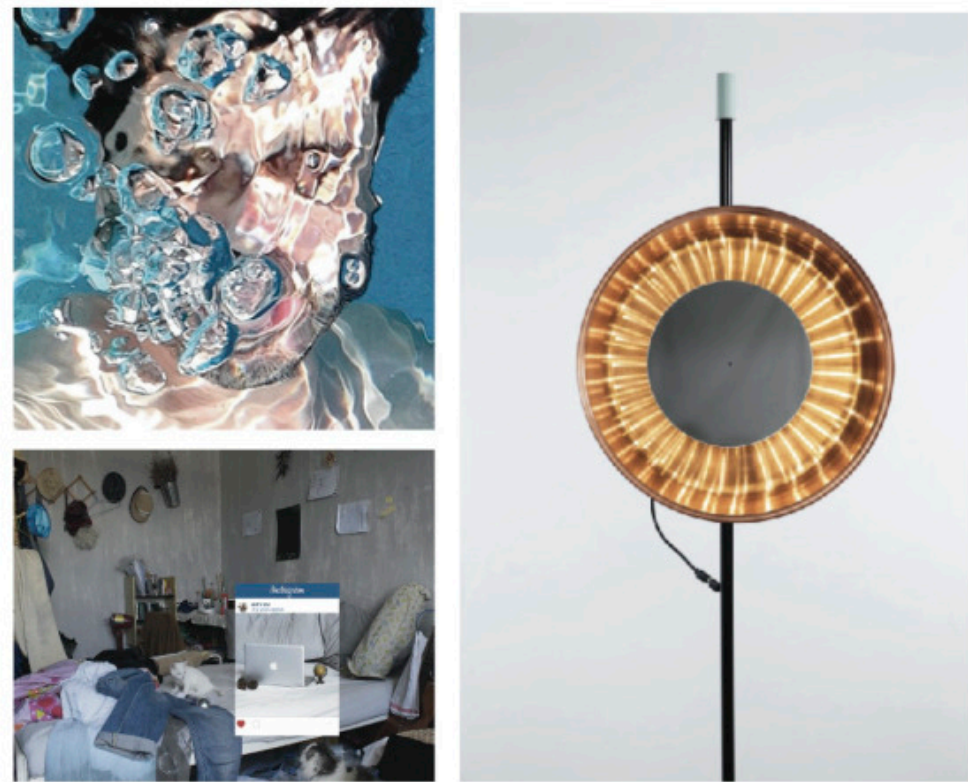
e.motion

E.motion is a small, clip on camera that detects emotions of those interacting with the user using facial recognition, and translates these emotions into a colour on a wearable device worn by the user. The purpose is to create an aid for those who would otherwise struggle in social situations.

clarity through colour



Research

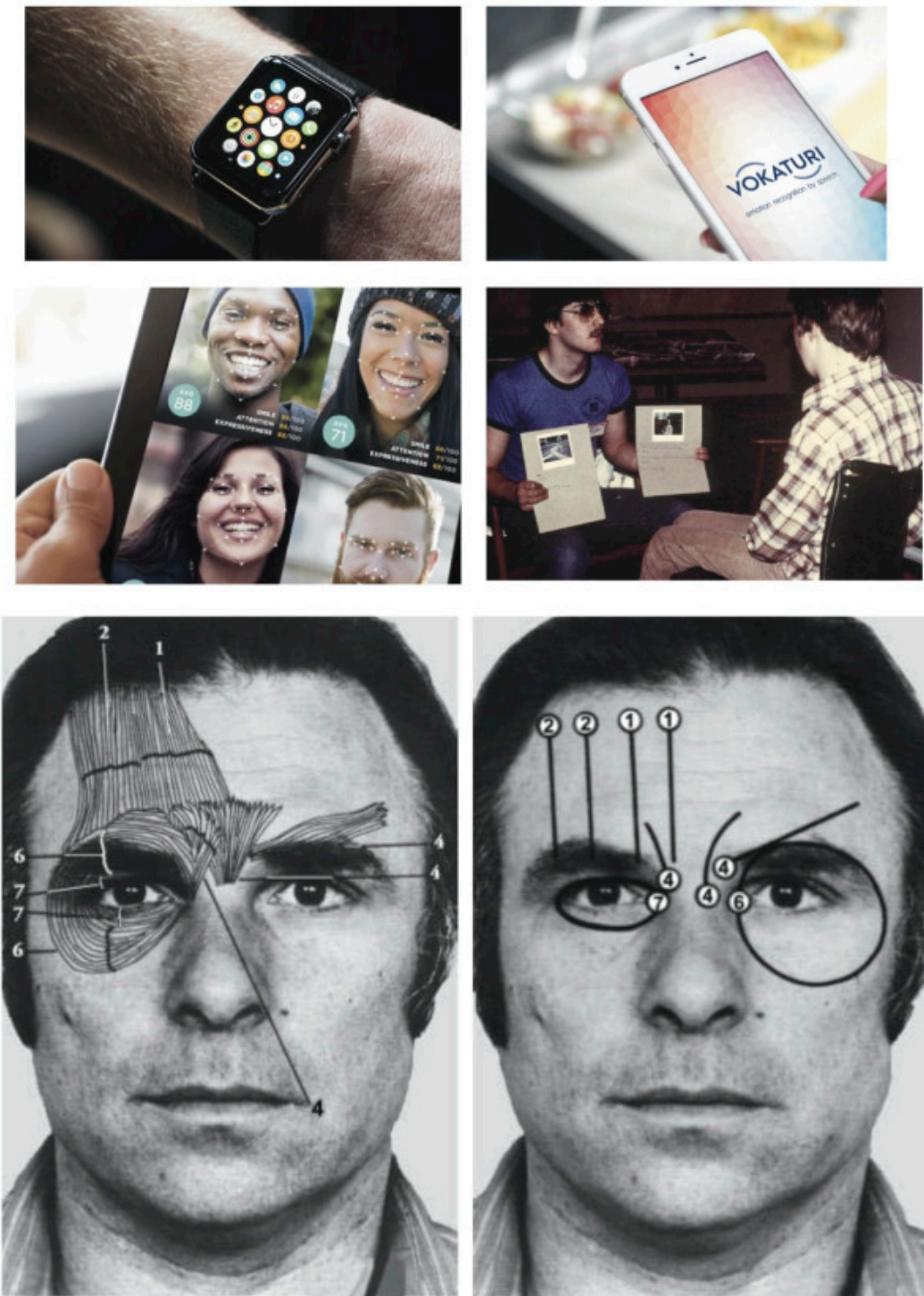


'The Unselfie', a project by Alec Soth, in which he photographed himself in unusual settings, is less about realism and documentation, and more about image creation and expression.

We also looked at projects that portrayed the false identity that social media (specifically Instagram) creates, and that they're only fragments of a much bigger picture.

The 'Self Reflector' mirror harnesses facial recognition technology we're interested in exploring further, something we can also explore through sites such as how-old.net.

Our targeted market is those who struggle with reading emotions and social situations, such as those on the autism spectrum. We did research into this and found the universal logo for autism is a jigsaw piece, which we incorporated into our design.



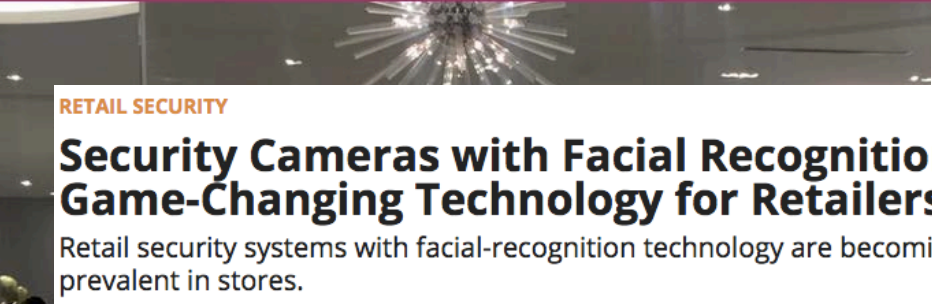
We've investigated current products, such as the Apple Watch, that use technology that gathers signals from your body to determine your current state of being. This technology has also been used in apps, such as Oovoo, a social media app that reads facial expressions to determine emotion, and Vokaturi, which uses voice recognition to similarly detect the user's mood.

We looked briefly at neurodegenerative diseases when considering preserving emotions and memories.

Much of what we currently know about reading emotions through facial expressions comes from the research of Dr. Paul Ekman, an American Psychologist who specialises in research that dictates the specific biological correlations of specific emotions, which demonstrate the universality of human emotion.

Revealed: how facial recognition has invaded shops - and your privacy

Retailers are increasingly using facial recognition technology to track your face. With an estimated 59% of UK fashion retailers doing it, is the anonymity of cities an outdated idea?



Almost 30% of retailers use facial recognition technology to track consumers in store

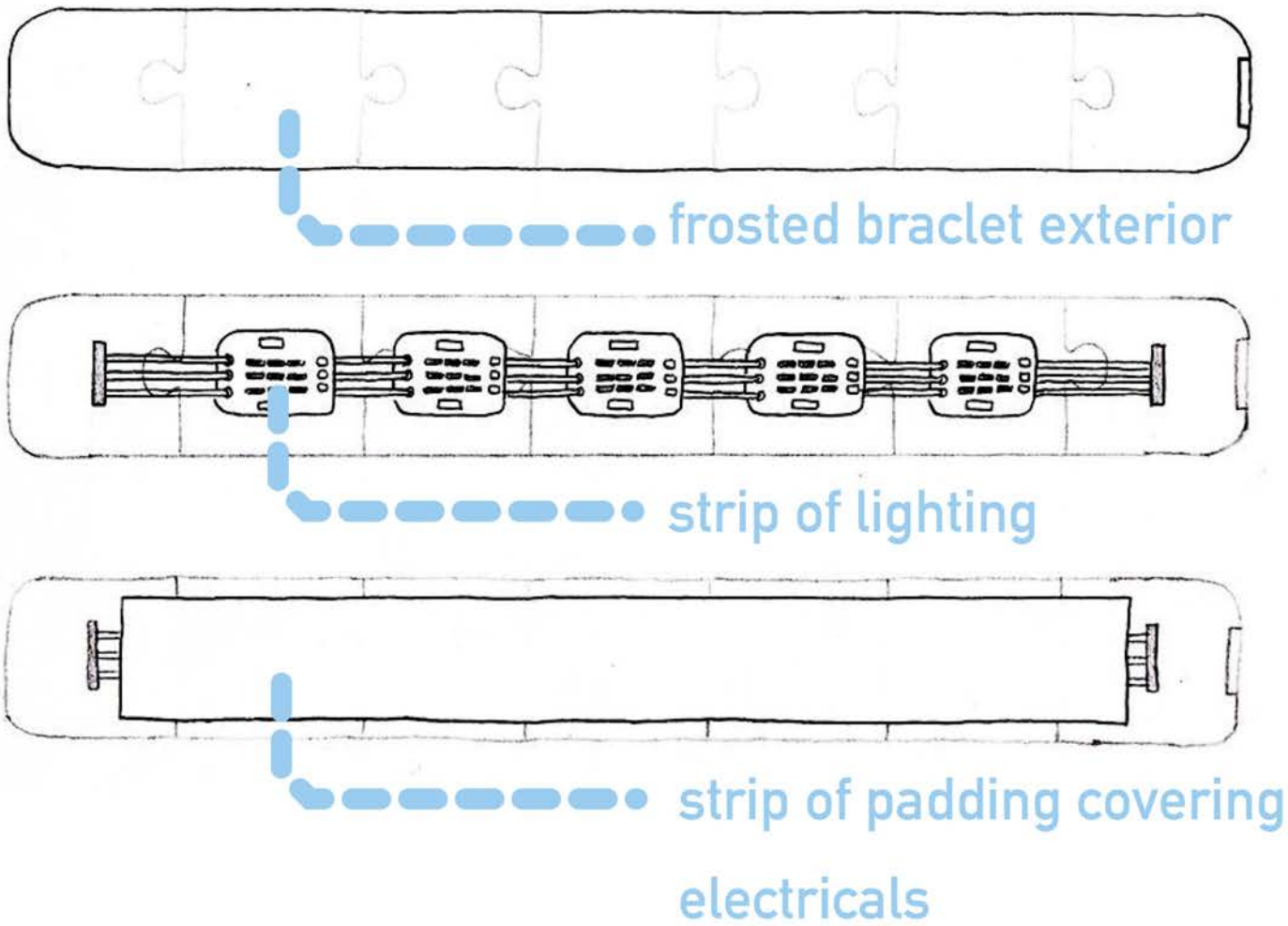
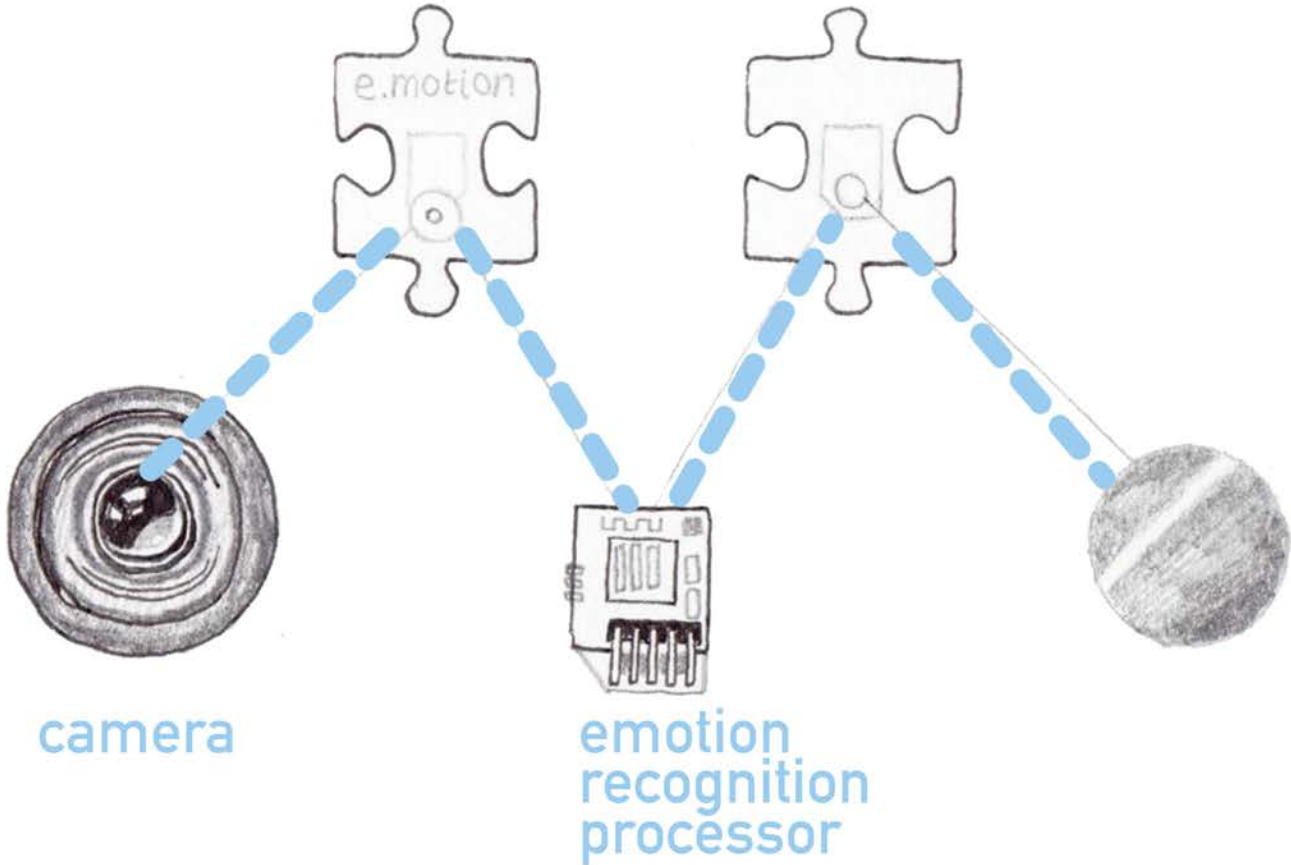
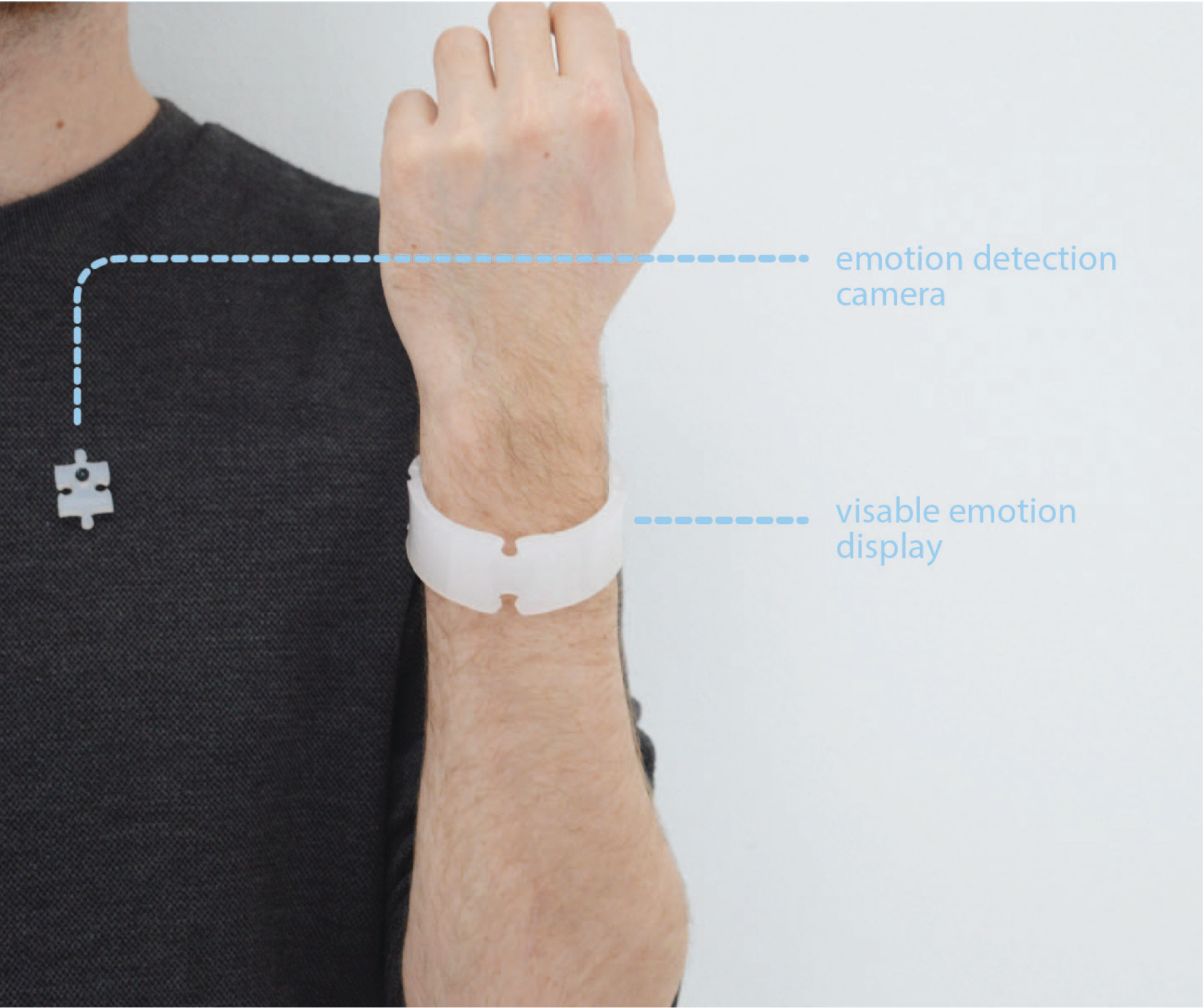
Media & Tech Network Digital business

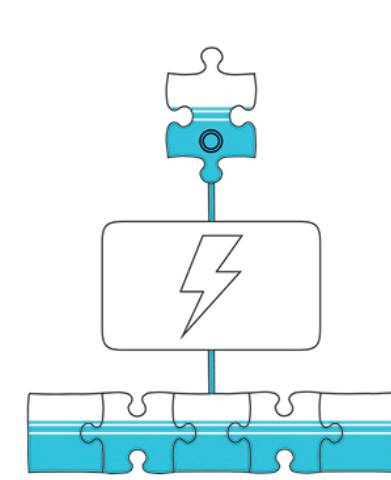
Facial recognition - a powerful ad tool or privacy nightmare?

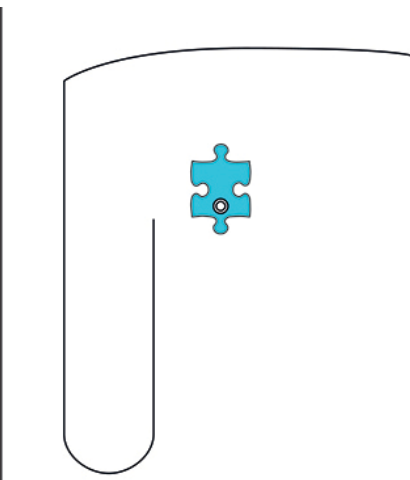
It may sound like science fiction but tech that identifies VIP shoppers could soon be used for customer loyalty schemes

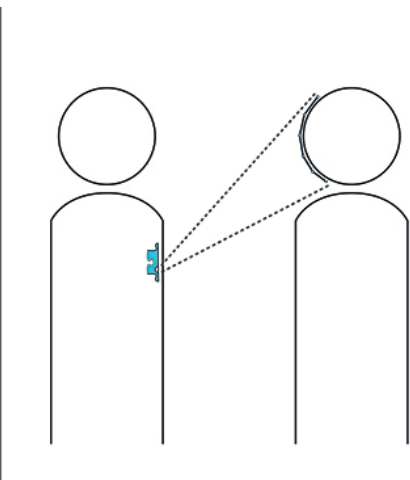
We're interested in using technology that already exists. Facial and emotion reading technology is widely used by retailers for market research. We wanted to use this technology for something that could really help people, rather than something for corporate gain.

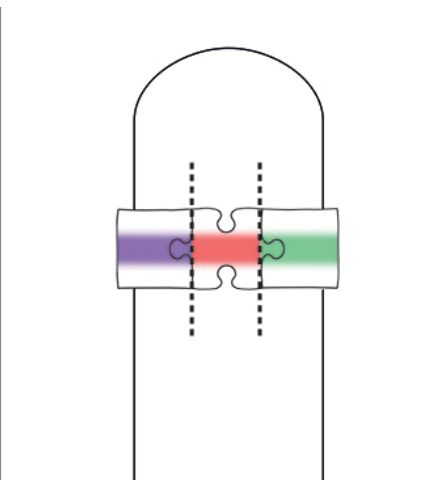
Exploded View and Process



- 

1. Ensure both the camera and band are both fully charged before attaching them.
- 

2. Make sure the camera is outward facing and the correct way up.
- 

3. Allow atleast a few seconds for the camera to properly interpret facial expressions
- 

4. The band will change colour in correspondance to the person opposite's expression

Branding of Concept

We decided on the name E.motion, as we wanted something that described our product well and was straight to the point. We then worked on our advertising campaign, conceptualising where the product would be advertised to the public, for example in medical centres and waiting rooms.

We wanted poster designs that really showcased the coloured light feature of our product, which is the key element of our design. We kept the images clean and simple, while making sure to use eye-catching photography. Though our item is a medial aid, we wanted to show that these types of products can still be exciting and engaging.

Our video uses simple imagery and a clear voiceover describing our product. Keeping the simplicity consistent throughout our campaign and allowing the strength of our design to speak for itself.

e.motion
clarity through colour

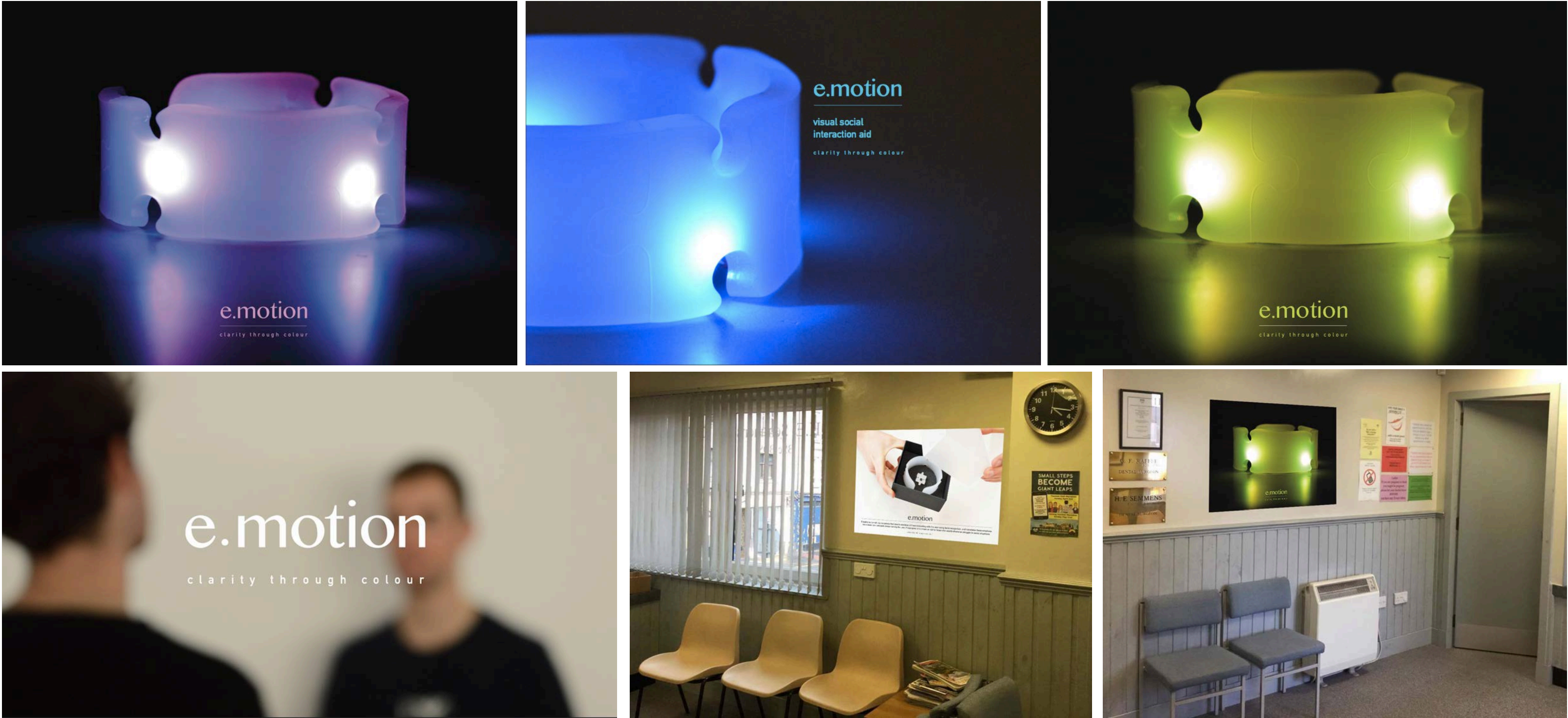


Khemer MN

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

DIN Alternate Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz





TEAMWORKING

FORMING GROUPS



<https://www.mozilla.org/en-US/about/manifesto/>

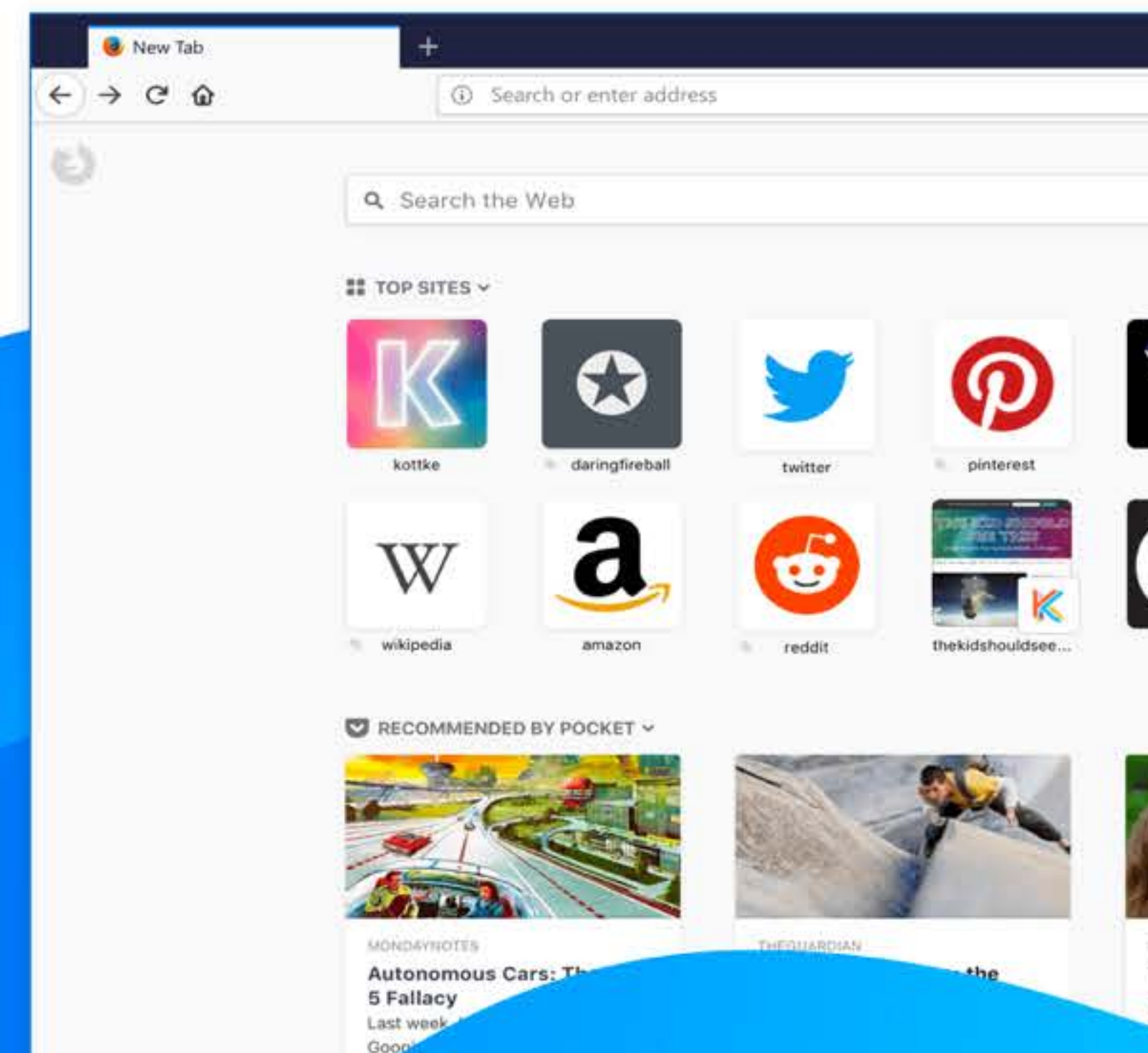


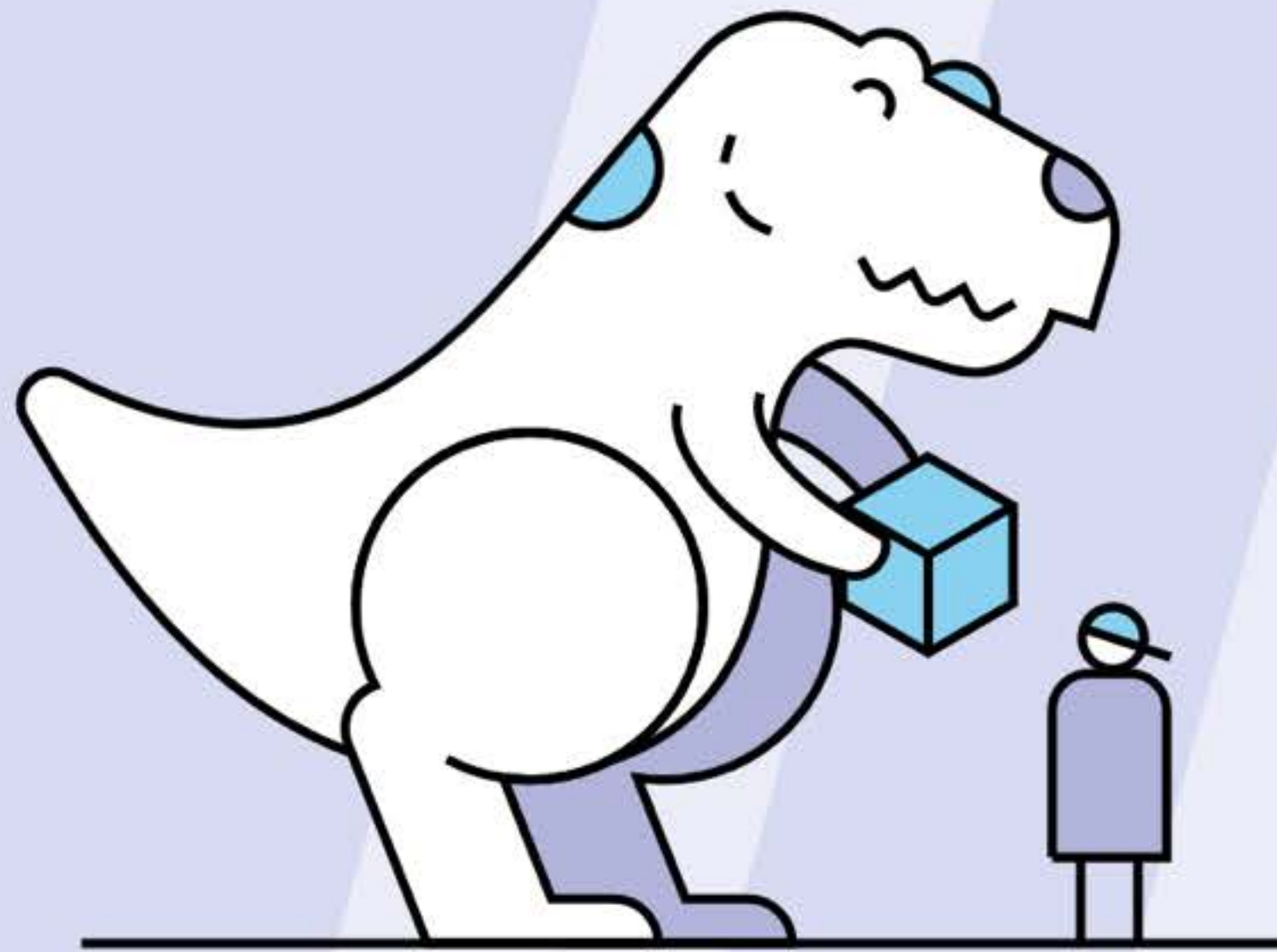
The new **Firefox**

Meet Firefox Quantum.
Fast for good.

Download now

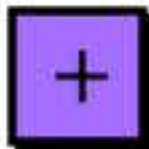
[Firefox Privacy Notice](#)





**We make the internet
safer, healthier and faster
for good.**

**Mozilla is the not-for-profit behind
Firefox, the original alternative browser.
We create products and policy to keep
the internet in service of people, not
profit.**



Discover & collaborate on projects for a healthy internet. [Learn more.](#)



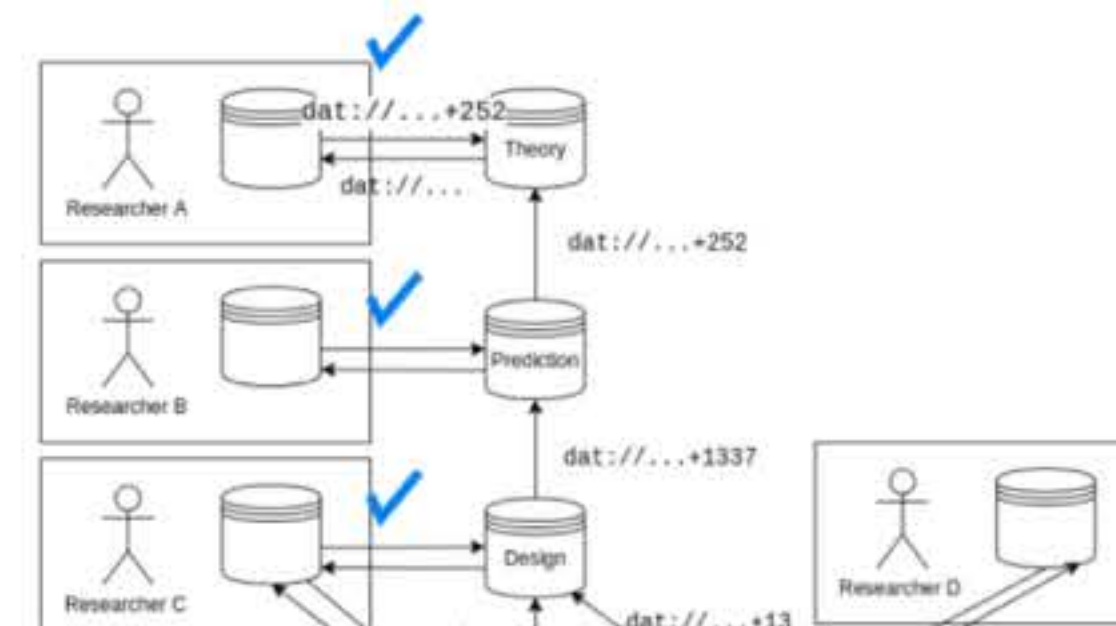
Open Leadership Map white paper

Zannah Marsh, Abigail Cabunoc Mayes, Rizwan Tufail, [Chad Sansing](#)



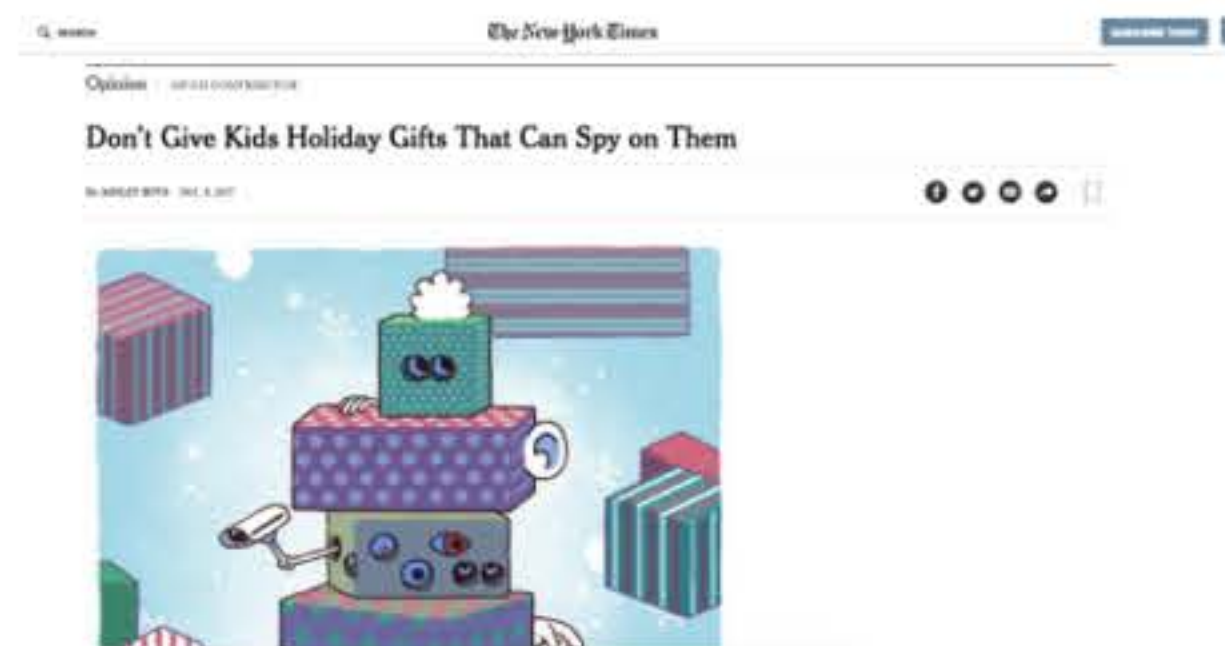
Blog: Plugging in on Policy

[Corinna Zarek](#)



Decentralizing scholarly communication

Jim Pick, [Chris Hartgerink](#)



Op-ed: Don't Give Kids Holiday Gifts That Can Spy on Them

Ashley Boyd



MozFest 2017: Exposure, Cross-Pollination and Tomorrow's New Internet

Matthew Kopel



A Future Not Made in the EU

Centrum Cyfrowe

Welcome

#openiot

//

Technologies that could allow literally billions of everyday objects to communicate with each other over the Internet have enormous potential to change all of our lives.

IoT: the Second Digital Revolution

IoT Review

“Mozilla’s Open IoT Studio seeks to advance responsible open IoT through professional practices and a network of IoT practitioners who conduct research, make prototypes and build meaningful collaborations.

Mozilla Open IoT Studio
Studio Values





What does IoT look like?

<https://informationisbeautiful.net/visualizations/the-internet-of-things-a-primer/>



Nest Learning Thermostat

[Nest Website](#)

A close-up, angled view of a silver August Smart Lock. The lock has a cylindrical shape with a perforated surface of small circular holes. A horizontal slot in the center features the August logo. The background is dark and out of focus.

◀ Editors' Choice Award

August Smart Lock
HomeKit Enabled

[LEARN MORE](#)

August Connected Locks
[August Website](#)

AUGUST SMART LOCK

A white plastic egg tray is shown from a high angle, containing seven brown eggs. The tray is positioned diagonally across the frame. The eggs are arranged in two rows: three in the front and four in the back. The tray has a small blue logo on the bottom right corner. The background is a dark, textured surface.

GE Connected Egg Tray
[GE Website](#)



Roll over image to zoom in

Amazon Echo / Alexa

Wired Article - Real Challenge

Amazon Echo, Black

Save an extra 10% with [Amazon Student*](#)

by Amazon

★★★★★ 3,725 customer reviews

| 1000+ answered questions

#1 Best Seller in Hi-Fi Speakers

Price: **£149.99** & **FREE Delivery** in the UK. [Details](#)

In stock.

Want it delivered by tomorrow, 20 Jan.? Order within **2 hrs 16 mins** and choose **One-Day Delivery** at checkout. [Details](#)

Dispatched from and sold by Amazon EU Sarl. Gift-wrap available.

Note: This item is eligible for **click and collect**. [Details](#)

Colour Name: **Black**




£149.99



£149.99

- Plays all your music from Amazon Music, Spotify, TuneIn and more using just your voice
- Fills the room with immersive, 360° omni-directional audio
- Allows hands-free convenience with voice control
- Hears you from across the room with far-field voice recognition, even in noisy environments or while playing music
- Answers questions, reads audiobooks, reports news, traffic and weather, provides sports scores and schedules, and more using the Alexa Voice Service
- Controls lights, switches, thermostats and more with compatible connected devices from WeMo, Philips Hue, Hive, Netatmo, Nest, tado° and others

Share    

Quantity: 1 



Add to Basket

[Turn on 1-Click ordering](#)

☐ This is a gift. [Why is this important?](#)

[Add Accessories](#)

☐ [Amazon Voice Remote \(not included\)](#)
£19.99

☐ Belkin Wemo Smart Switch: [Switch](#)
~~£48.99~~ £40.11

☐ Philips Hue White & Colour Lighting Kit: [Richer Colours - E27 Starter Kit](#)
£149.99

☐ Netatmo Smart Thermostat: [Stand Alone](#) £104.99

Dispatch to:

Martin Skelly- Bathgate - EH48 

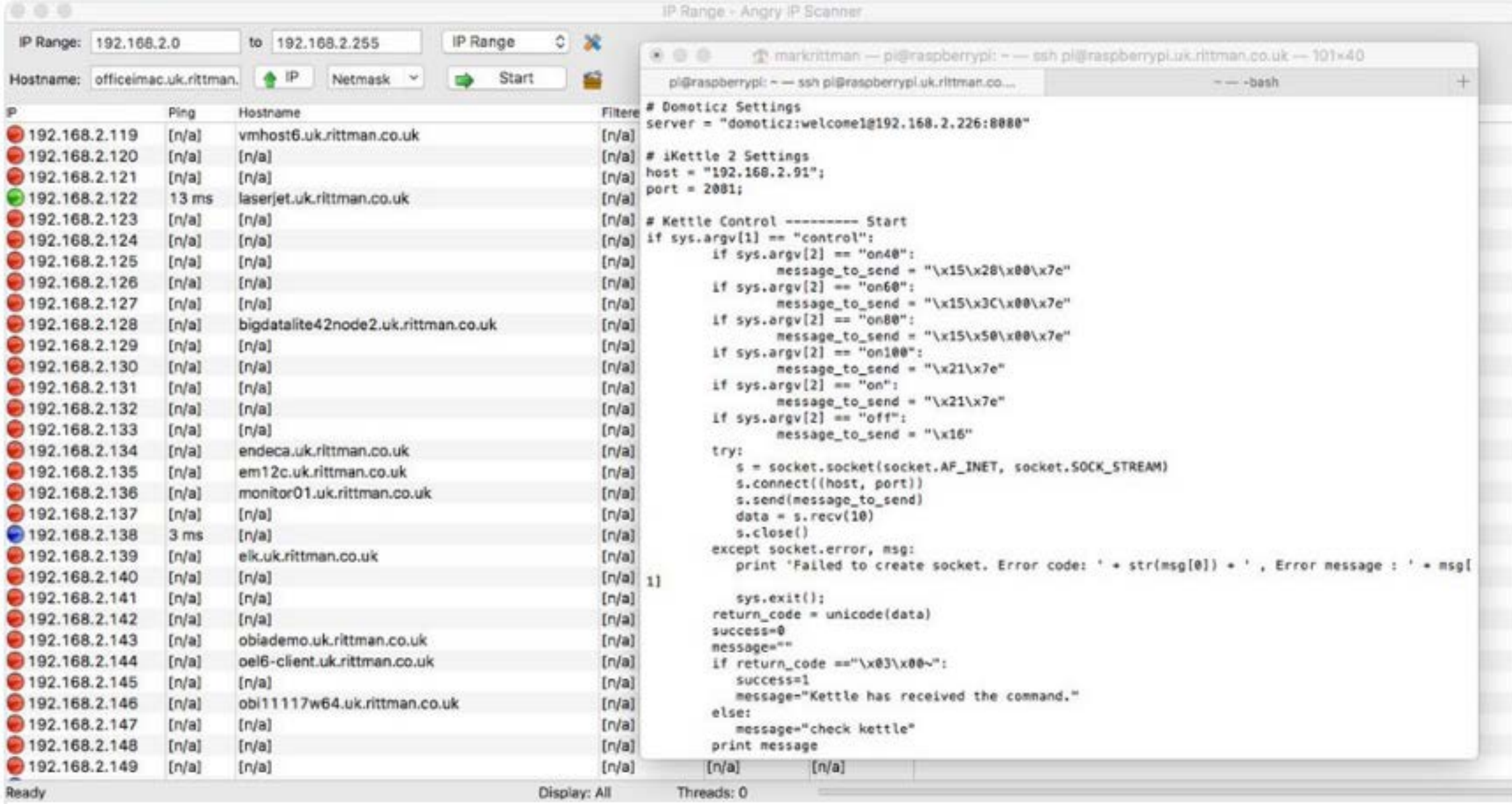
Add to List



//

Well the kettle is back online and responding to voice control, but now we're eating dinner in dark while lights download a firmware update...

Mark Rittman, 12 hours for a cup of tea
[Guardian Article](#)



The screenshot shows a computer screen with two windows. The top window is 'IP Range - Angry IP Scanner', displaying a list of IP addresses from 192.168.2.119 to 192.168.2.149. The bottom window is a terminal window titled 'pi@raspberrypi: ~ -- ssh pi@raspberrypi.uk.rittman.co.uk -- 101x40'. It shows the output of a script named 'Kettle Control' which is attempting to connect to a server at 192.168.2.226 on port 2001. The script is using a socket to send and receive data. The terminal output shows the script is running and has received a message from the server.

Mark Rittman
@markrittman

3 hrs later and still no tea. Mandatory recalibration caused wifi base-station reset, now port-scanning network to find where kettle is now.

9:46 AM - 11 Oct 2016 · Hove, England, United Kingdom

285 475

Recognition features to you. In addition, Samsung may collect and your device may capture voice commands and associated texts so that we can provide you with Voice Recognition features and evaluate and improve the features. Please be aware that if your spoken words include personal or other sensitive information, that information will be among the data captured and transmitted to a third party through your use of Voice Recognition.

If you do not enable Voice Recognition, you will not be able to use interactive voice recognition features, although you may be able to control your TV using certain predefined voice commands. While Samsung will not collect your spoken word, Samsung may still collect associated texts and other usage data so that

Behind Winston's back the voice from the telescreen was still babbling away about pig-iron and the overfulfilment of the Ninth Three-Year Plan. The telescreen received and transmitted simultaneously. Any sound that Winston made, above the level of a very low whisper, would be picked up by it, moreover, so long as he remained within the field of vision which the metal plaque commanded, he could be seen as well as heard. There was of course no way of knowing whether you were being watched at any given moment. How often, or on what system, the Thought Police plugged in on any individual wire was guesswork. It was even conceivable that they watched everybody all the time. But at any rate they could plug in your wire whenever they wanted to. You had to live--did live, from habit that became instinct--in the assumption that every sound you made was overheard, and, except in darkness, every movement scrutinized.



Parker Higgins ✓
@xor

Follow

Left: Samsung SmartTV privacy policy, warning users not to discuss personal info in front of their TV

Right: 1984

9:35 AM - 8 Feb 2015

31,848 17,449

//

...there are the rampant security issues with the internet of things that allow hackers – whether they are criminal, government or something in between – to access loads of data without any court order...

IoT Surveillance
Guardian Article

Voice

siri has

2,000,000,000

siri has

2,000,000,000

conversations every week

Nearly 40,000,000
'Smart Speakers' were
sold globally in 2017

Predicted 70%
rise year on year
until 2020

What happens
in 2018?

whose voice
will control
the future?

Yours...

RESEARCH BRIEF

Find out something
interesting about voice
interactions to inform
your creative process...

Think qualitative!

surveys, focus groups,
interview friends and family,
desk research, experiment with
platforms, be inquisitive...

ANY QUESTIONS?

TODAY

TODAY

.....

- Find a space in assigned studios
- Get to know each other (discuss previous projects, areas of interest)
- Discuss the brief, discuss interests and where to begin research
- Come up with a team name + think about your brand

TEXT TO SPEECH DEMO

ICEBREAKER

.....

- As a group, create an image and a 20 second digital voice audio recording introducing your team name and research direction to the class
- Send the mp3 + single image to m.skelly@dundee.ac.uk by 4.30pm
- We will share next week on the blog

Download the processing sketch at:
<https://github.com/mskell/processing-tts>

This isn't a technology test, if you have any problems with the file - don't worry - you can create a similar mp3 on <http://www.fromtexttospeech.com/>

ANY QUESTIONS?