



# Kevin Gordon

VISUAL PORTFOLIO - SENIOR CREATIVE TECHNOLOGIST & ARCHITECT

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# Introduction

HELLO MY NAME IS KEVIN GORDON



I design and build playful prototypes that make emerging technologies understandable to non-experts, across automotive, marketing, payments, retail, smart cities, the Internet of Things, business innovation, and incubation. I'm at ease ideating, sketching, designing, building, presenting, leading teams, and collaborating.

I'm looking for a role that stretches my design, architectural, and development skills, grounded in thorough research and clear strategy.

Several of the prototypes I've worked on have gone on to become full blown products, including Ford Pass, and Worldpay Within, which anticipated AI NCP servers and autonomous payment protocols.

The connected car work at Worldpay, helped secure payments processing contracts with major automotive clients, whilst the hackathons I organised and MC'd at, educated developers and supported company recruitment efforts.

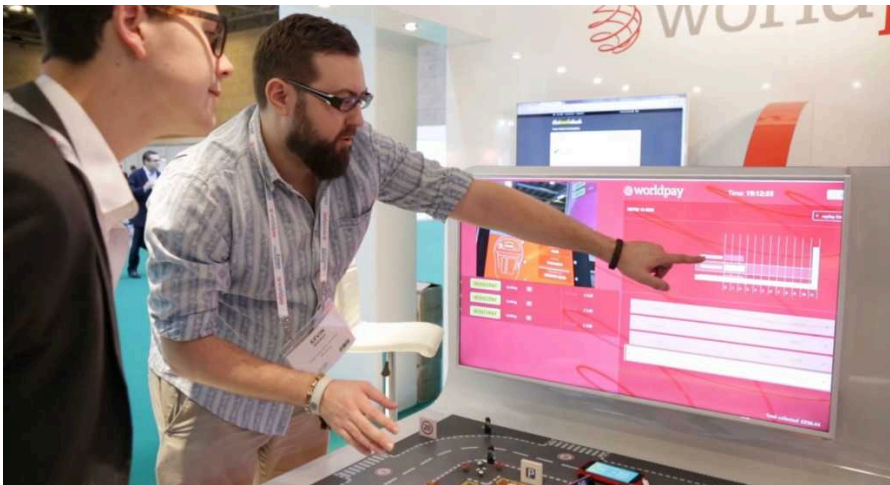
I'm a passionate professional, eager to learn, and share what I discover - and I've been in love with Lego since I was a kid ❤️.

KEVIN GORDON

# 1 - Smart Parking Lego Cityscape

CONNECTED CARS MAKING PAYMENTS, PROOF OF CONCEPT





## THE CHALLENGE

How might you teach smart city concepts such as sensors, data, feedback loops, and digital payments, in a way adults and children can grasp by literally moving pieces with their hands? This prototype explores a future in which connected cars could bid for and pay for parking in a playful, tangible city built in Lego.

## MY ROLE

I facilitated team ideation sessions, leading to the idea of smart bidding between smart cars and connected parking bays. I designed both the Architecture and physical layout, building the interactive demo, including the Lego city, digital dashboard, and connected car behaviours.



## SOLUTION AND IMPACT

The solution proposed the novel approach to connected cars negotiating and paying for parking. With an interactive fusion of digital and physical.

The Lego cityscape is the tangible UI - parking bays, roads, buildings, and street furniture that people can all re-arrange, and try out different scenarios.

NFC tags/stickers, smart phones with NFC readers, a live data dashboard on a large screen connect the cars and parking meters to a visible auction of parking bays.

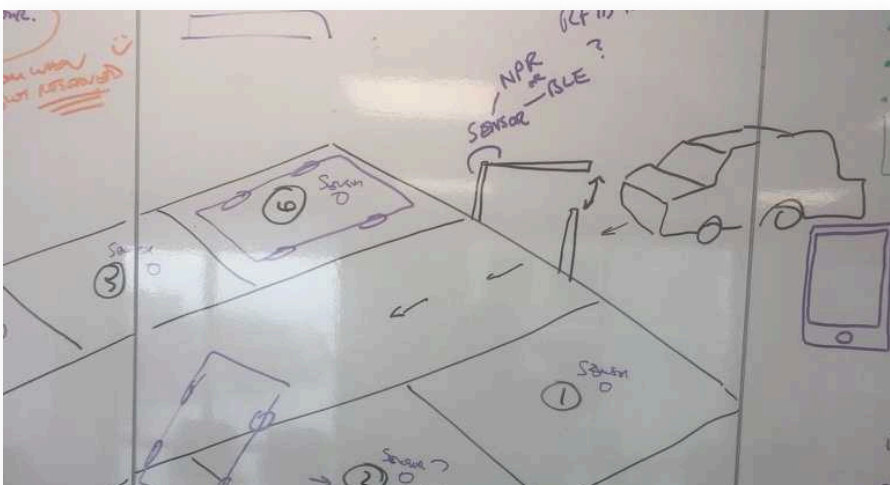
Interactions include changing the maximum bids, moving the cars around the road, watching the live bidding, predicting winners, parking the cars, and triggering the cars to look for new parking.



## DEPTH OF TECHNOLOGY

Each car uses a hybrid Lego and 3D printed chassis, combined with smart phones, a camera, laptop computer, Wifi hub, and NFC/RFID stickers, enabling communication between the cars and parking meters over UDP broadcasts.

The orchestration layer is written in C#, with the Android apps written in Java, handling NFC interactions and car behaviour. The smart logic is based on a set of simple rules that controls the bidding and payments. The state of each vehicle is reset by various NFC tags.



## WHAT I'D DO NEXT AT LEGO EDUCATION

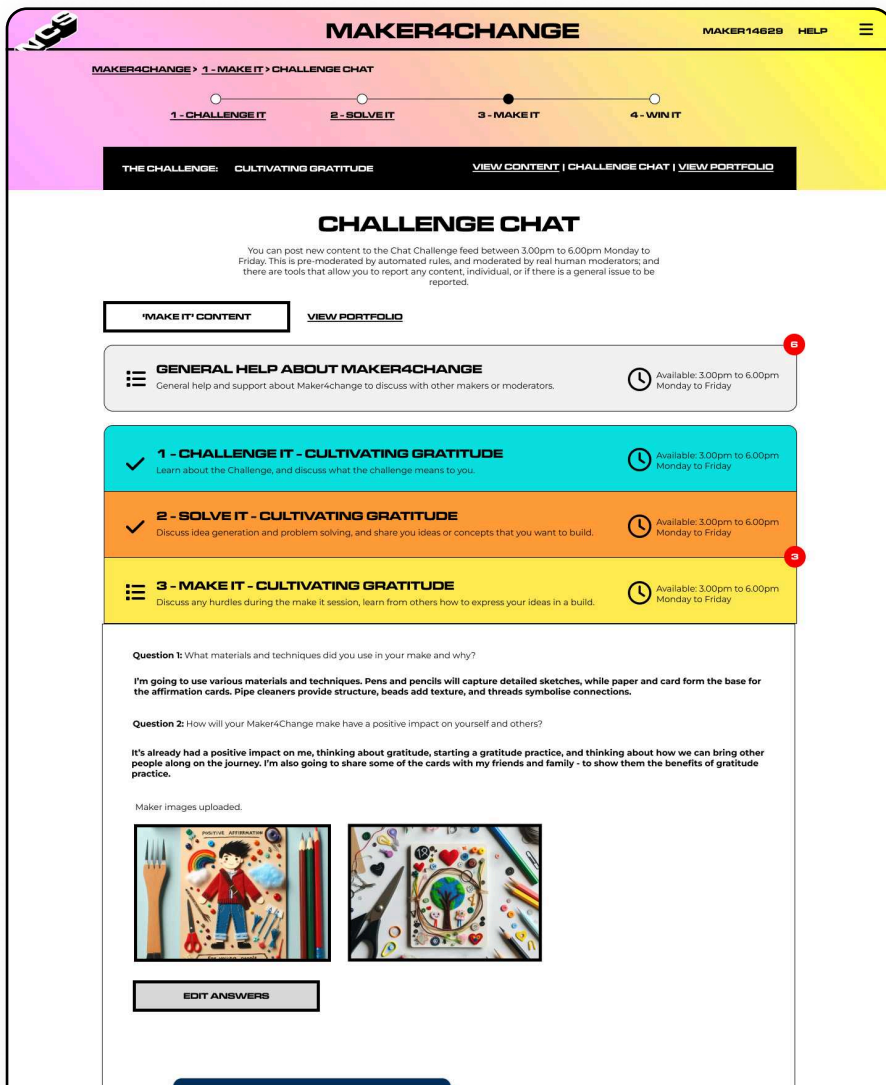
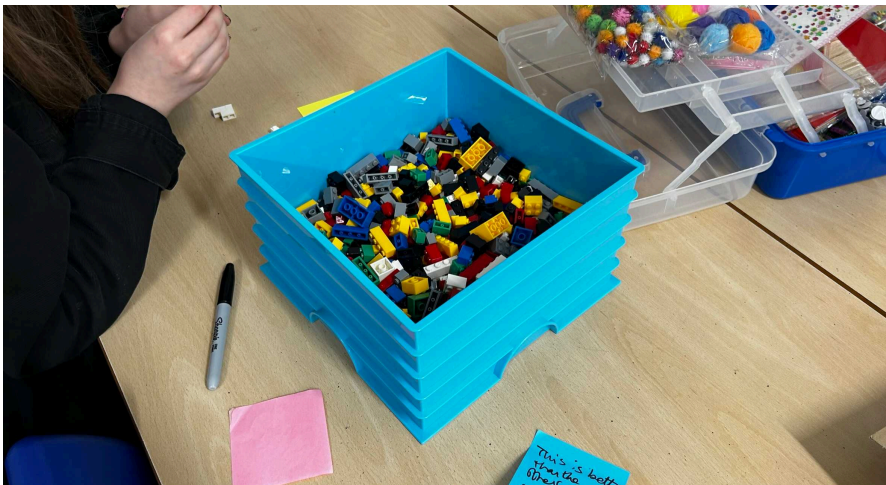
During demos, people played and naturally turned the prototype into a game, the fusion of digital with physical through Lego and 3D printing, brought it to life.

I would love to rebuild with Lego Spike Prime and Lego Smart Bricks, making the cars autonomously move, negotiate and park, using AI and Lego.

# 2 - Multimodal Making

NEW DIGITAL EDUCATIONAL EXPERIENCE FOR 16 AND 17 YEAR OLDS





## THE CHALLENGE

NCS (National Citizen Service) wanted to develop a companion digital experience to extend their in-person residential programmes for 16-17 year olds. The goal was to translate shared NCS themes - collaboration, creativity, and real-world problem solving - into a scalable, multimodal digital format. Research highlighted a growing national increase in maker culture and hands-on learning:

- Between 12-15% of the UK population participated in a maker activity in 2022
- Between 2006 and 2020 the number of people buying craft in England increased from 6.9m to 31.6m people, largely driven by the pandemic
- Maker Kits teach creativity, problem solving and critical thinking skills
- The logic and flow of following instructions are believed to encourage a growth mindset

## MY ROLE

I lead the ideation and concept testing phase - facilitating workshops, generating ideas, and producing high-fidelity mockups of each concept. Survey data indicated that Maker Kits was the most appealing, most educational, and most enjoyable idea among participants.

Building on these findings, I directed a mission to prototype and test Maker Kits and designed a complementary digital platform, later named "Maker 4 Change". This proposition supported collaborative, creative making at scale.

## SOLUTION & IMPACT

Maker 4 Change creates a multi-week digital community where teens use design thinking and maker kits to solve real-world challenges. The experience blends digital tools and physical build, encouraging collaboration, communication, and prototyping.

Participants could ideate, prototype, build, and share their solutions - combining listening, making, collaboration, and presentation through a mix of digital and physical experiences.

Early prototypes tested extremely well, showing strong engagement with blended learning and creative problem-solving.

## DEPTH OF TECHNOLOGY

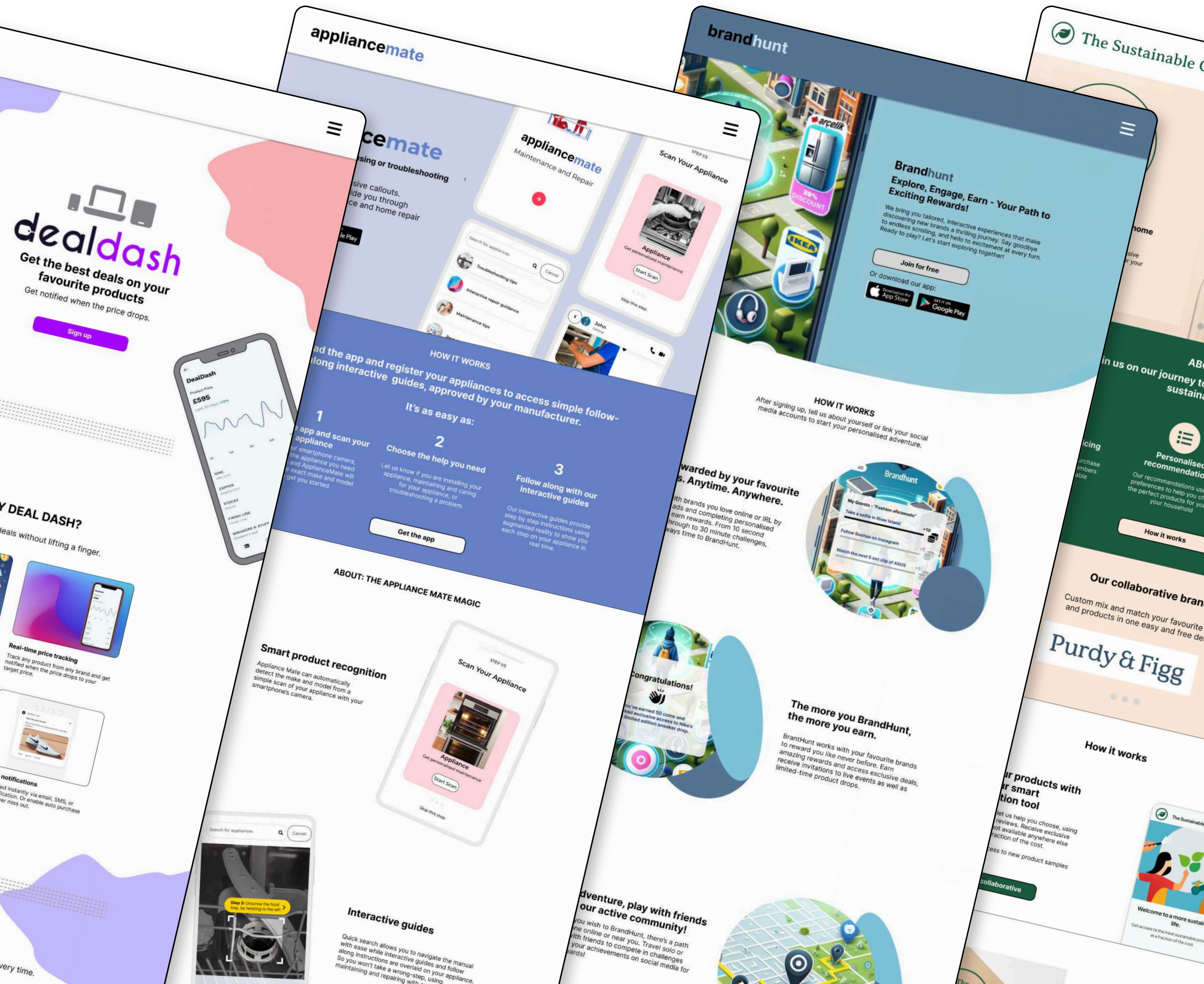
The process moved from sketching to rapid prototyping using: Figma for early concepts and interactive demos. AI-generated imagery to visualise environments and kits. Figma prototyping again for simulating in-platform interactions and community flow.

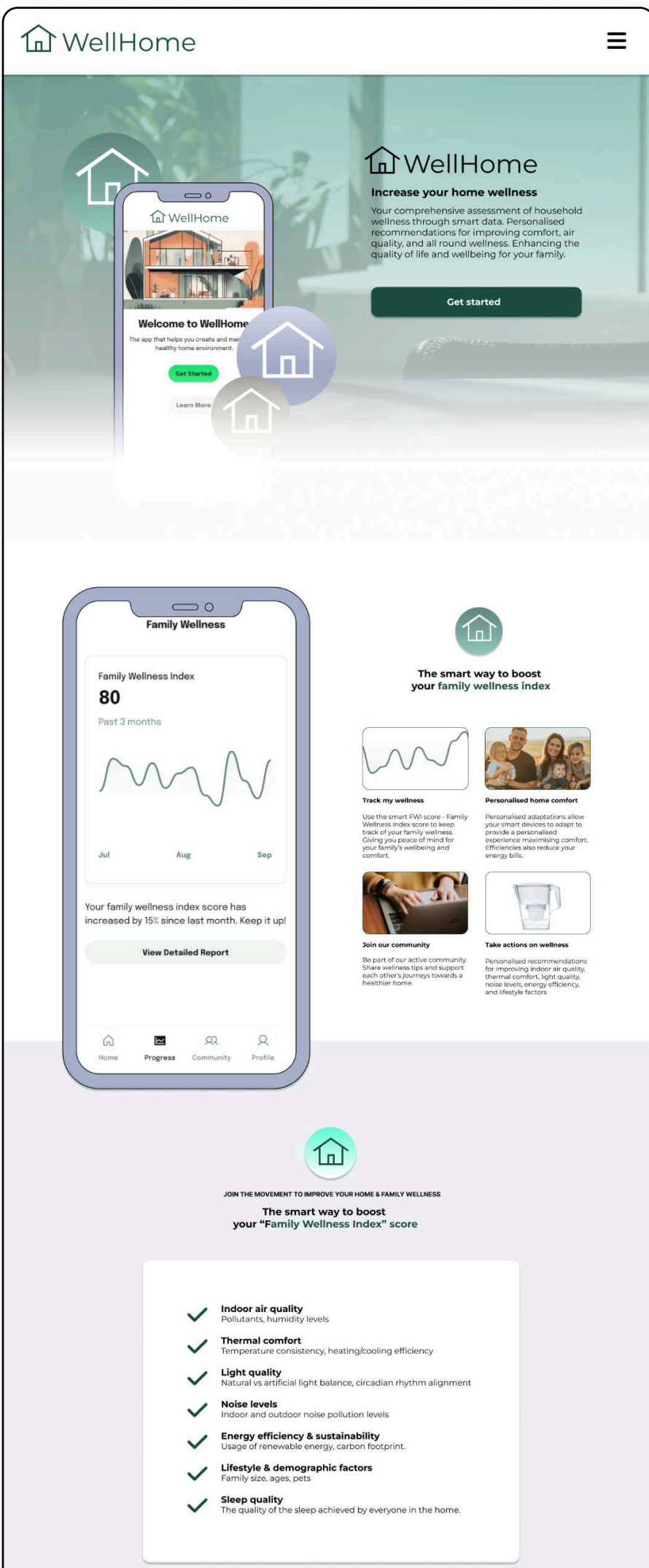
## WHAT I'D DO NEXT AT LEGO EDUCATION

I see strong potential for applying this model to Lego Education - integrating Lego and Lego SPIKE Prime kits into a digital multimodal framework. A hybrid model that empowers children and young adults to build, code, and collaborate online would align powerfully with Lego's mission to combine hands-on creativity with digital learning. It's a space rich for testing, iteration, and play-driven discovery.

# 3 - Arçelik AI Propositions

USING AI TO TRANSFORM CUSTOMER BEHAVIOUR





## THE CHALLENGE

Arçelik, a large multinational white goods company, sought to explore “How can Artificial Intelligence (AI) serve as an enhancing and transformative factor in the key themes of water scarcity, energy prices and shopping behaviour?”

## MY ROLE

I led the horizon scanning and ideation process, drawing on quantitative and qualitative customer insights. Working with a cross functional team I mapped 32 AI-driven opportunity areas, then valued them based on value and feasibility. Through co-creation workshops, I developed concept sketches and storyboards for all propositions, turning 11 into validated, desirable, and scalable venture concepts. My process integrated customer research, rapid prototyping, experimentation with real users, and continuous iteration.

## SOLUTION AND IMPACT

Each product proposition placed AI technology at the core of the customer experience.

- The Brand Hunt app - an AI powered interactive game that rewarded ad engagement with discounts. It achieved a 40.0% landing-page conversion rate, driven by gamified interactive and personalised content.
- The ‘Close The Loop’ concept, enabling frictionless recycling through item recognition and automated pickup, saw strong engagement, and a surge in customer enquiries.

Across concepts, experiments demonstrated how AI could drive behavioural change, enhance brand engagement, and promote sustainable habits.

## DEPTH OF TECHNOLOGY

- Prototypes: Figma (UI/UX), Galileo.ai, Stitch, DALL.e.
- Build tools: Webflow, Bubble.io, custom Javascript.
- Testing: Wizard-of-Oz landing page experiments linked with Google Analytics, Tag Manager, and Hotjar.
- Acquisition: Google, Facebook, and Instagram Ads.

This full-stack experimentation with real users gave Arçelik tangible evidence of customer traction before product investment.

## WHAT I'D DO NEXT AT LEGO EDUCATION

At Lego Education, I'd leverage this same AI ideation and product development expertise to imagine new hybrid play-education experiences - combining generative AI, automation, and hands-on creativity. My background of rapid prototyping (digital and physical), LLM integration, and workflow and RPA automation (UI Path, n8n) would help accelerate how Lego experiments, co-creates, and scales intelligent learning tools that inspire curiosity and creativity.

# 4 - Educational Gaming

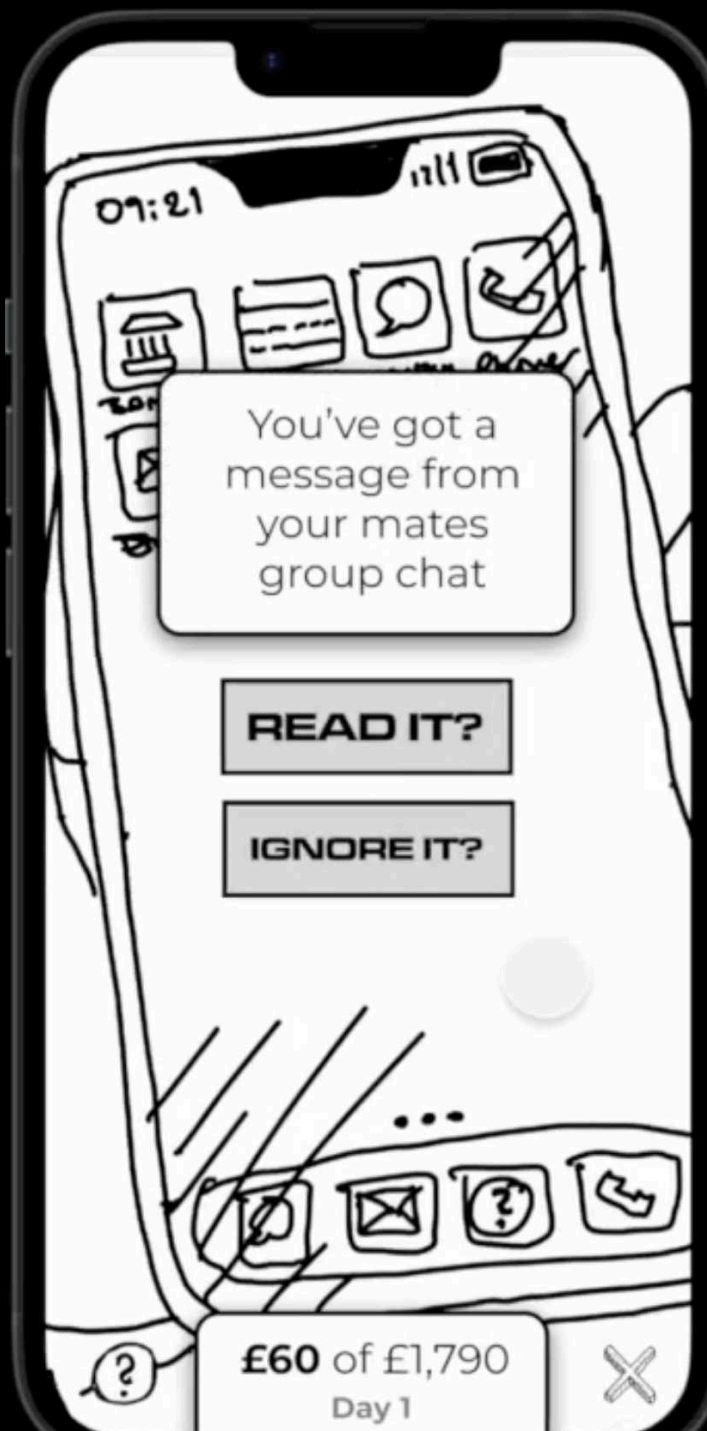
NEW DIGITAL EDUCATIONAL GAMING FOR 16 AND 17 YEAR OLDS

**ESCAPE  
YOUR  
ROOM!**

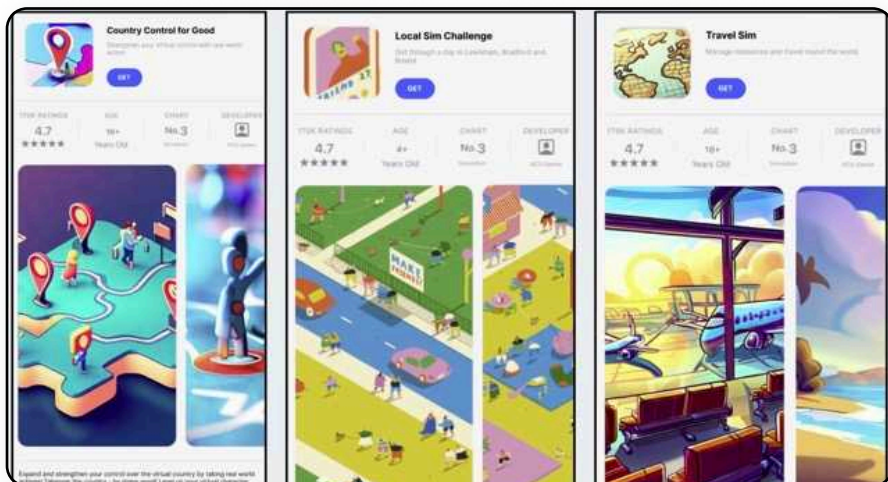
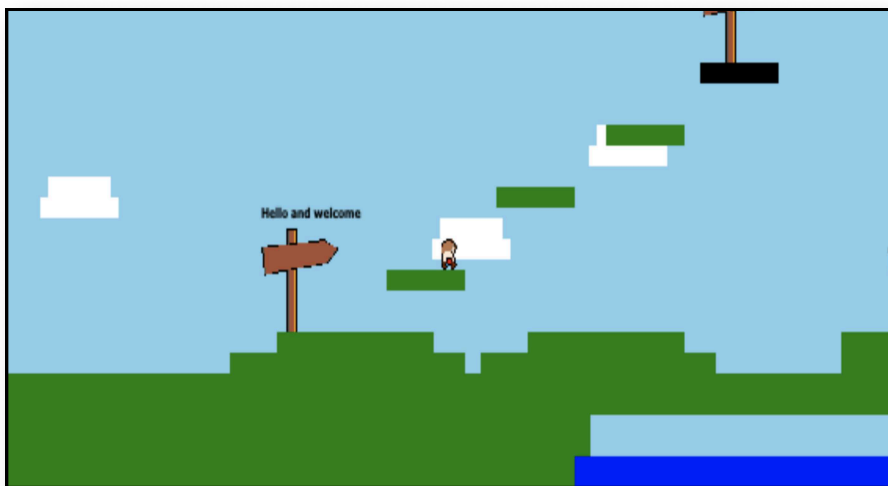
START  
OPTIONS  
LOAD



£60 of £1,790  
Day 1



£60 of £1,790  
Day 1



## THE CHALLENGE

To explore game-style experiences for NCS, we aimed to identify the most engaging ideas for young people, understand their learning goals, and discover their preferred learning styles.

## MY ROLE

I designed and built sample platform and 3D driving games as inspiration pieces for a co-creation workshop. I developed mock app download screens and ran online surveys to quantitatively rank concept appeal and learning potential, then presented high-fidelity mockups to participants.

Over 300 young people aged 16–17 took part. The concept “Escape Your Room” emerged as the most appealing and impactful - both engaging and educational. I translated survey insights into storyboards, visual mockups, and an interactive demo prototype to gather deeper qualitative feedback directly from the target audience.

## SOLUTION & IMPACT

We explored gaming as a tool for learning because it offers immersive storytelling, active problem-solving, and the ability to foster empathy through experience.

Feedback for the final “Jo Escapes / Escape Your Room” concept included comments such as:

***“This is a very unique and interesting approach to learning, not only is it educational but it is also fun.”***

Quantitative results: 61% found the idea appealing, 60% said they were likely or very likely to learn something, 58% said they would find using it enjoyable. The concept was later adopted by NCS as the foundation for a digital gaming experience within their core program.

## DEPTH OF TECHNOLOGY

The prototypes were built using JavaScript, Canvas, and Three.js, with AI-generated assets via DALL·E and UI rendered in Figma. The final interactive demo was created in Figma to simulate core gameplay and user interactions.

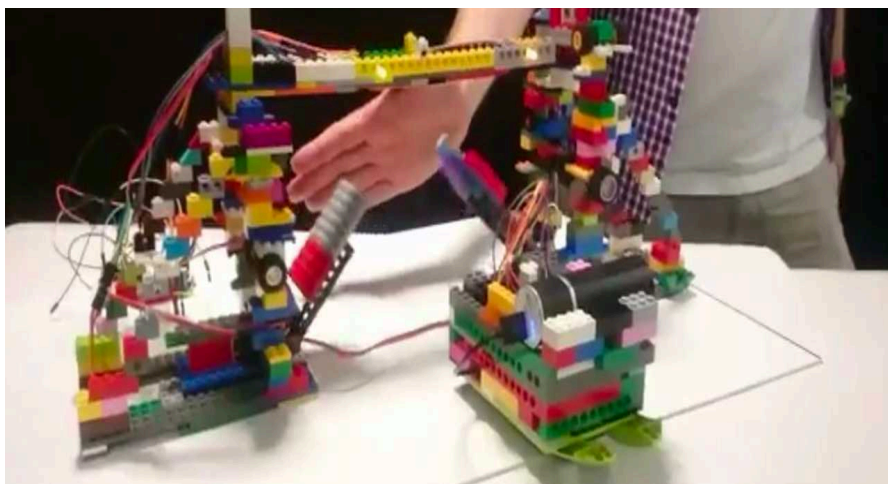
## WHAT I'D DO NEXT AT LEGO EDUCATION

Insights included:

- 75% of 12–17-year-olds play games online.
- 66% of boys (avg. 4 hrs/day) and 51% of girls (avg. 2 hrs/day) regularly play.
- 31% play with people they don't know, and 16% chat with them directly.
- Most gaming happens on consoles and mobile devices.

These insights suggest opportunities to blend physical and digital play, extending LEGO's learning ecosystem into interactive, story-driven experiences. By incorporating AI, user choice, and consequence-based learning, LEGO could deepen engagement while reinforcing creative problem-solving — the essence of LEGO learning through play.





## THE CHALLENGE

How can payments work in the world of the autonomous things and IoT devices? I took an early Smart Parking demo and turned it into a reusable ecosystem that supported Hackathons, innovation events, and developer outreach - all focussed on machine-to-machine payments.

## MY ROLE

I led the design of the Worldpay Within SD, an embeddable payments agent for IoT that lets smart devices talk to each other, negotiate services, and make or receive payments.

I led and collaborated with a team of Innovation Analysts and developers, and then I created a programme of global hackathons which I organised, and presented at and mentored teams to build demo-able solutions utilising Worldpay Within.

## SOLUTION AND IMPACT

Developers learned how to eCommerce style payments into smart devices using various programming languages and hardware, whilst building playful prototypes using Lego, Raspberry Pi, and other components.

These events combined education and competition, participants experimented with connected cars, automated delivery concepts, Alexa integration, smart vending, all powered by device-to-device payments and a Discover-Select-Pay-Release autonomous flow, with a secure Trust Trigger to release services.

## DEPTH OF TECHNOLOGY

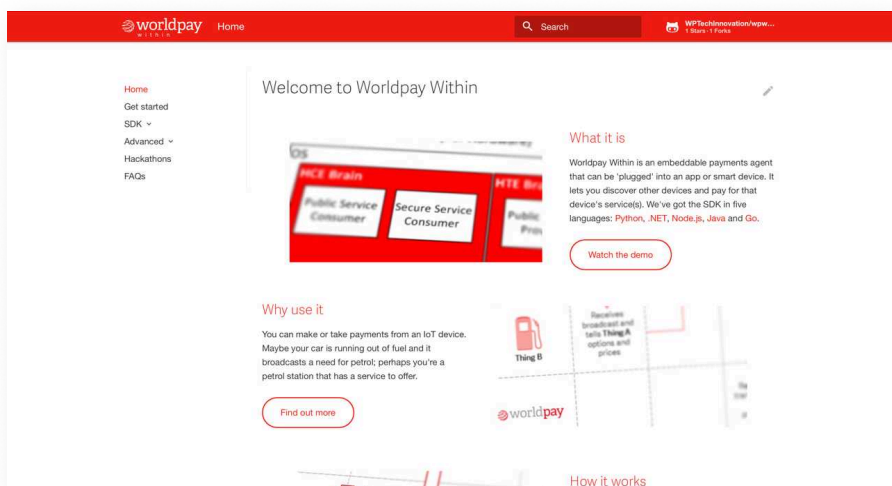
Worldpay Within was implemented in Go with a Thrift based RPC layer that exposed SDKs for C#, Go, Java, Python and Node.js - this enabled a range of integration opportunities.

Deployed to Raspberry Pi, interacting with 3D printers, Lego robotics, breadboards, sensors, actuators, RFID/NFC scanners to showcase an architecture that allows autonomous devices to discover services, agree pricing, pay, and trigger a service or action.

## WHAT I'D DO NEXT AT LEGO EDUCATION

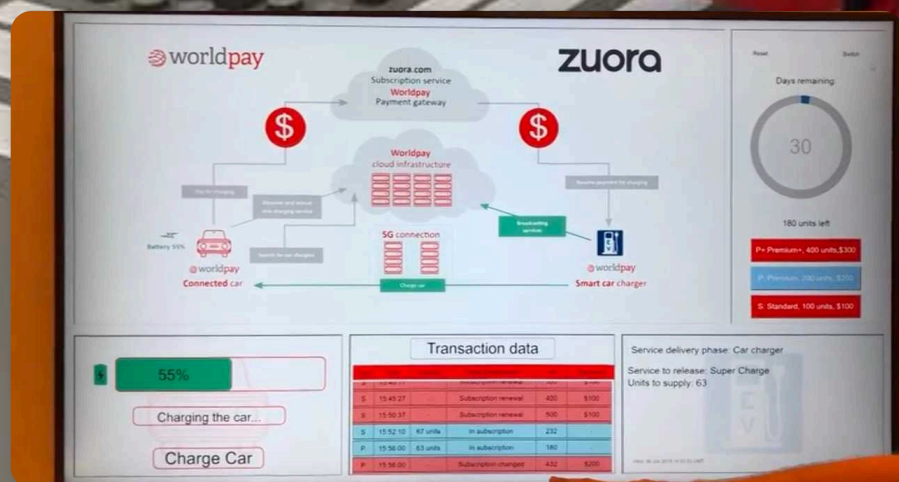
I'd absolutely love to bring my skills in organising and running hackathons to do the same for Lego - internally and externally.

To develop a new product or combine tech such as Lego Spike Prime and Smart Bricks, incorporating new tech such as AI and image processing, to aid the learning process, and give new possibilities and opportunities for building things in the Lego ecosystem.



# 6 - Smart Charging Camper Van

CONNECTED ELECTRIC CARS RECHARGING, SECURED WITH INTEL SGX

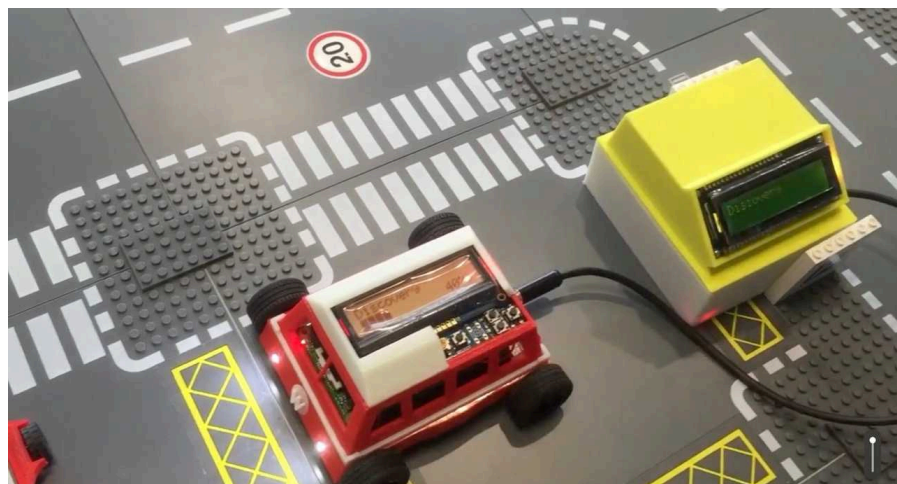
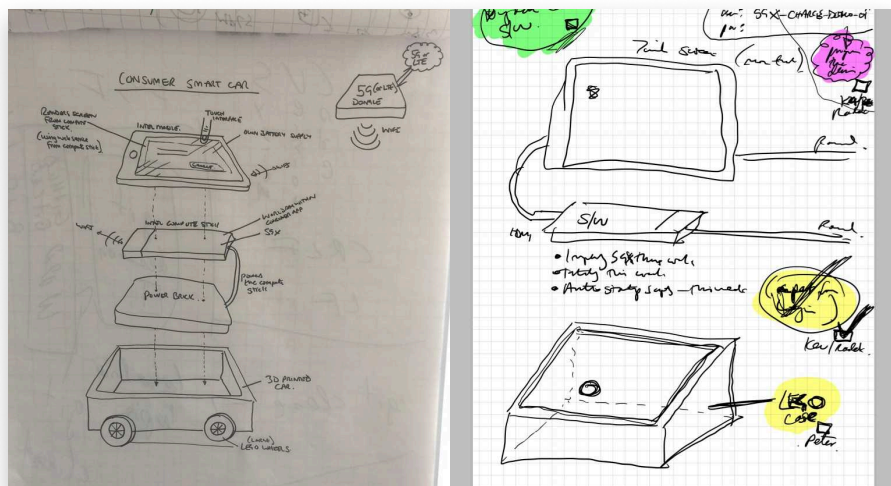


## THE CHALLENGE

Develop a secure, autonomous payment architecture where IoT devices could both make and receive payments, demonstrated by an interactive, playable prototype.

## MY ROLE

I partnered with a payments agency to build the initial Raspberry Pi prototype with stored credentials. I then collaborated with Intel to migrate the credentials into a secure enclave called SGX. I built a Lego cityscape with a large LCD “smart charger” station and a custom Lego camper van housing a compute stick with it’s own colour LCD screen.



## SOLUTION AND IMPACT

Users drive the camper van around the cityscape, when it rolls over a charging sensor, the vehicle autonomously discovers the charging station, negotiates payment (including supercharging for low battery), pays securely, and the charge is released by a trusted trigger.

The large dashboard screen displays real-time negotiation data and orchestration, making the invisible IoT payment flow visible and educational. This hands-on demo engaged audiences at events, sparking conversations about machine-to-machine economies - whilst showcasing secure, practical IoT payments in a playful format.

## DEPTH OF TECHNOLOGY

WiFi comms link the Intel Compute Sticks (vehicle and charger) running C# software, with payment credentials protected in Intel SGX secure enclaves. Custom Lego builds, contain the IoT hardware, the camper-van houses the Compute Stick, NFC sensor and LCD, and the cityscape features RFID/NFC sensors, Compute Stick, and LCD, and a large dashboard screen.

The architecture demonstrates discovery, negotiation, secure payment, and automated service release - all in a tangible, interactive setup.

## WHAT I'D DO NEXT AT LEGO EDUCATION

I'd evolve this further into user-controlled or self-driving vehicles, using Lego Spike Prime, controlled via a demo panel or smartphone app. Imagine multiple Lego vehicles competing for limited charging stations, negotiating payments and prioritising based on battery levels.

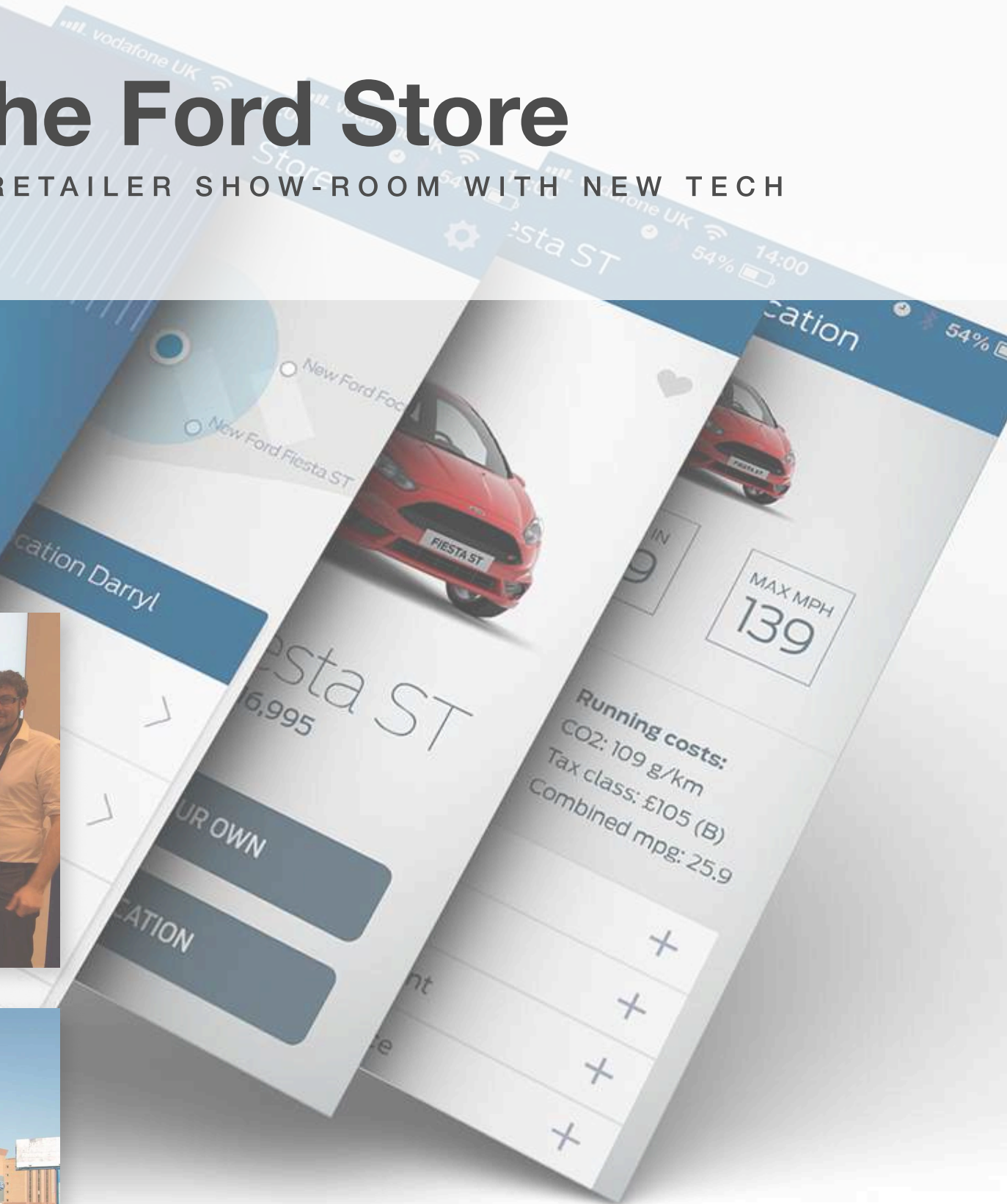
This would be great for a workshop teaching AI decision making, resource management, IoT security, multiplayer architectural thinking through physical play.



# 7 - The Ford Store

RE-IMAGINING THE RETAILER SHOW-ROOM WITH NEW TECH

Hola  
Welcome to the  
Ford Store Barcelona





## THE CHALLENGE

Starting with a loose brief of “do something cool with Augmented Reality”, I secured a wider mandate to modernise the Ford Motor Company retailer showrooms, enhance motor show experiences, and improve the owner journey with integrated digital touch points.

## MY ROLE

I led ideation and rapid prototyping, working hands-on with designers and developers to experiment with new technologies and build testable demos. I oversaw in-situ testing and iteration, implemented the tech in a test Ford Store in Sant Just (Barcelona), managed installs at motor shows and marketing events, and then spent a month in Toronto with Pivotal Labs, building the initial Owners app that informed what is now Ford Pass.



## SOLUTION AND IMPACT

In the showroom, I introduced a social media “Hello Wall” that greeted customers, AR experiences to visualise wheel alloy changes on the vehicles, AR postcards to let users interact with the cars and change their colours, and iBeacon-driven contextual information around the cars.

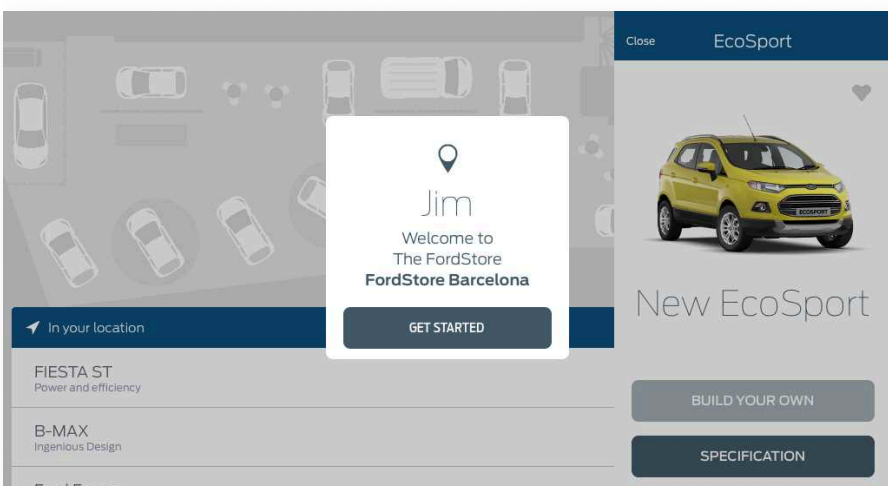
These were connected to a Ford Store companion app, with throw to screen capability, and large configuration power walls, allowing customers to explore and personalise vehicles almost life-size. I adapted the Hello Wall and Ford Store app for international motor shows, adding In door mapping to help visitors to navigate the stand.

And evolved the FordStore experience into an initial Owners app, which ultimately became the customer-facing Ford Pass app



## DEPTH OF TECHNOLOGY

I used Aurasma Augmented Reality tech in combination with native iOS development in Objective C. The social media wall was built in HTML and Javascript, with a Java backend to aggregate, curate, and moderate the social media content. The mobile app was developed in Objective C for iOS, integrating iBeacons for proximity-based content, and VIN image recognition to tie specific vehicles to personalised digital experiences.



## WHAT I'D DO NEXT AT LEGO EDUCATION

I'd apply this experience in blending AR, mobile, in-store installations to enhance the Lego Insiders App and in-store Education experiences. For example AR-enhanced Lego builds, personalised welcome walls (with appropriate controls and consent), “build-to-screen” experiences could connect physical sets with digital challenges, lesson content, and student portfolios - extending the brilliance of Lego play, into a richer, curriculum-aligned digital ecosystem.



# Thank you

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Creating playful demos for complex systems.

