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MSc in IT, Software Design
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Portfolio

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Haptic Navigation

I designed and developed an iOS and watchOS navigation app that uses wrist-worn haptics and directional guidance as an alternative to classic turn-by-turn navigation. The prototype combines location and motion tracking, using hand gestures on the Apple Watch to counteract the user's movement and always point in the direction to walk. Using haptic feedback applied to the user's wrist, the user can "feel" in which direction to go.

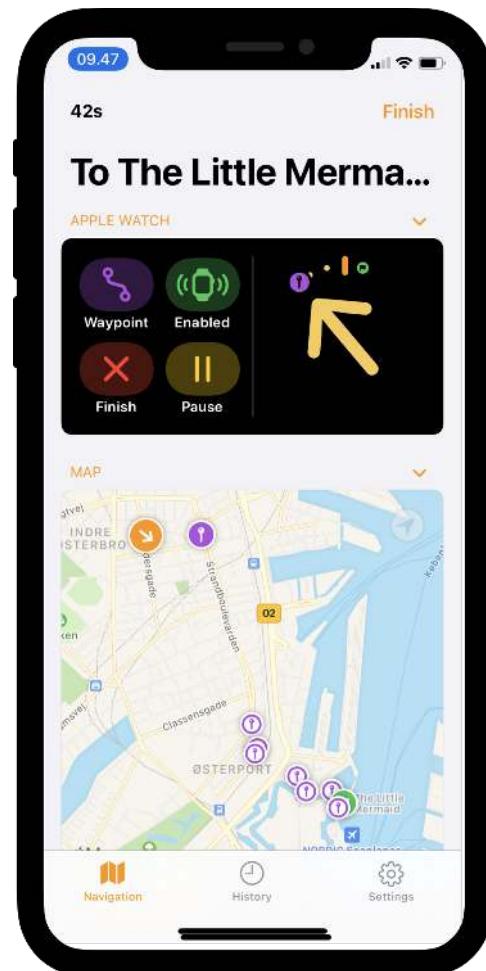
Eight testers were used to test the app on their own devices (using TestFlight). The feedback was used as part of an iterative design, development, and testing cycle.

The purpose of the project was to explore alternative ways of interacting with location data. Using haptics and eyes-free navigation, users can pay more attention to their surroundings, leading to increased safety in traffic.



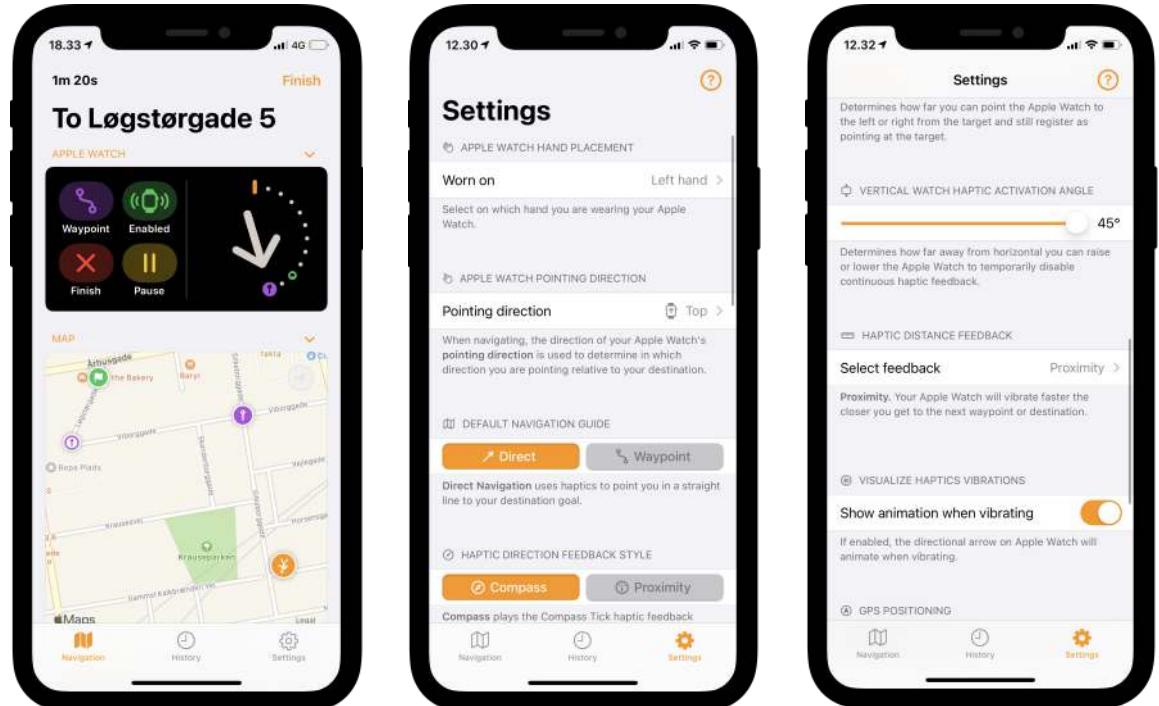
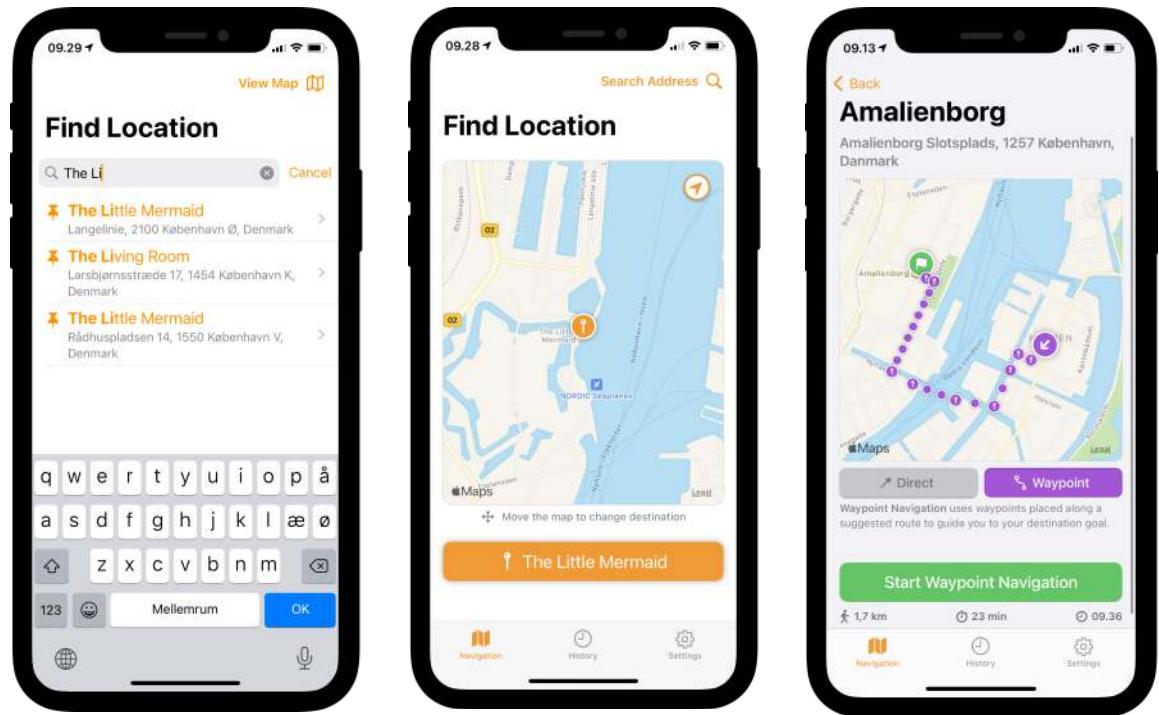
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Haptic Navigation



During development, the iPhone was used as a live monitoring device to view, control, and record the tester's activity on Apple Watch.

Haptic Navigation



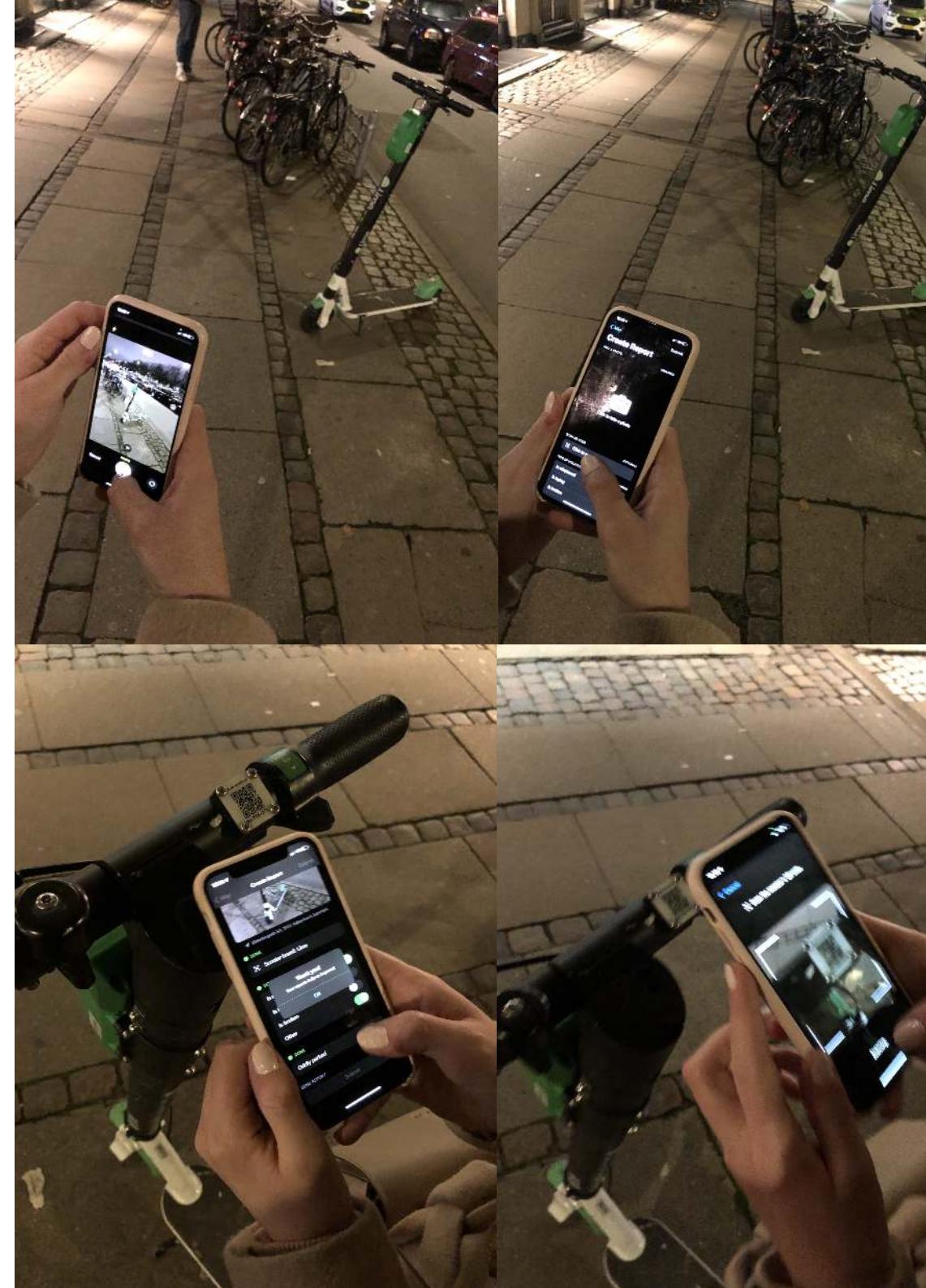
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E-Scooter Reporter

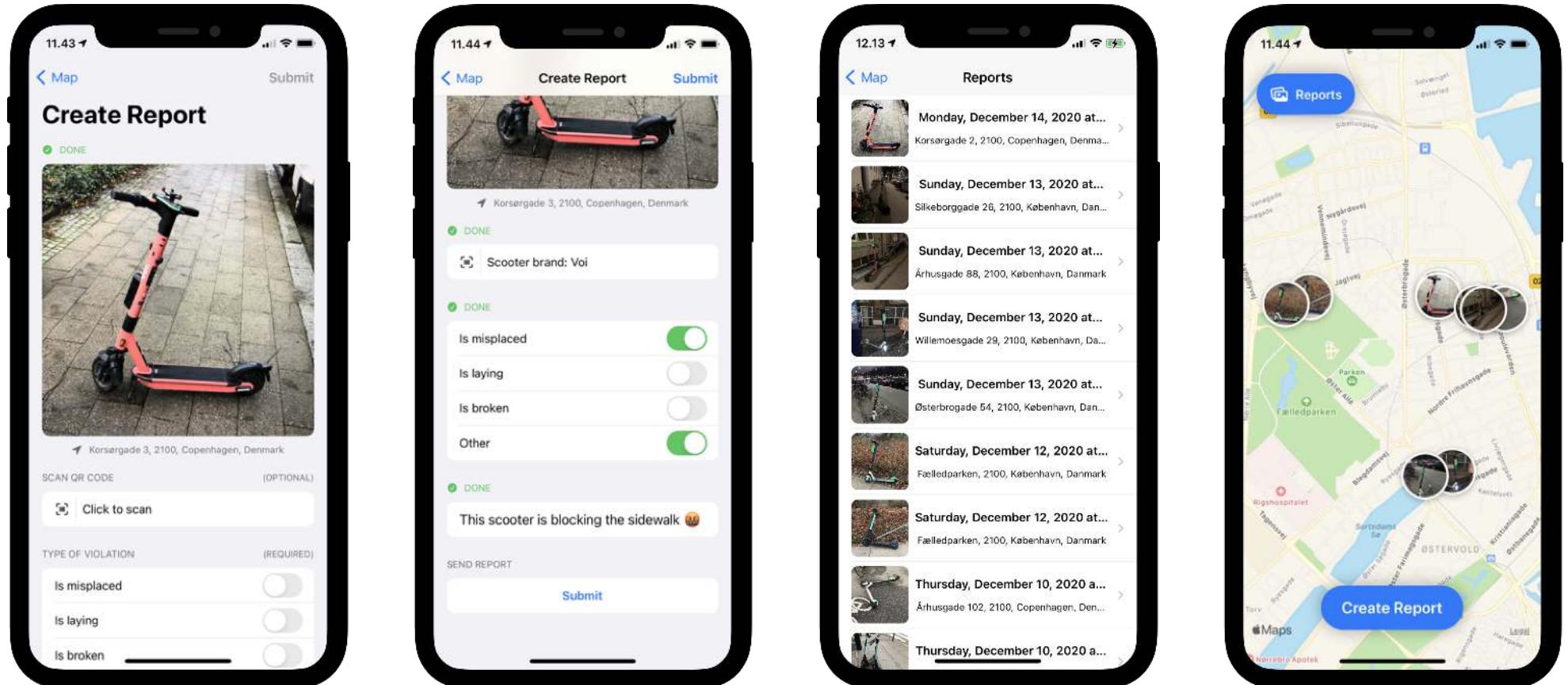
Concept development and prototype of an app for the municipality of Copenhagen. The concept was to allow citizens to report misplaced or vandalized electric scooters to the scooter companies.

To create a report, the user can take a picture and scan the QR code of the scooter, then fill in any required information and optionally add a comment to submit their report. Using the scooter's QR code, the scooter brand is identified, and the corresponding scooter company can be informed about the location of the poorly parked and vandalized scooters.

The initial prototype was developed for iOS and used Firebase as a backend. A React Native version was created for cross-platform compatibility.

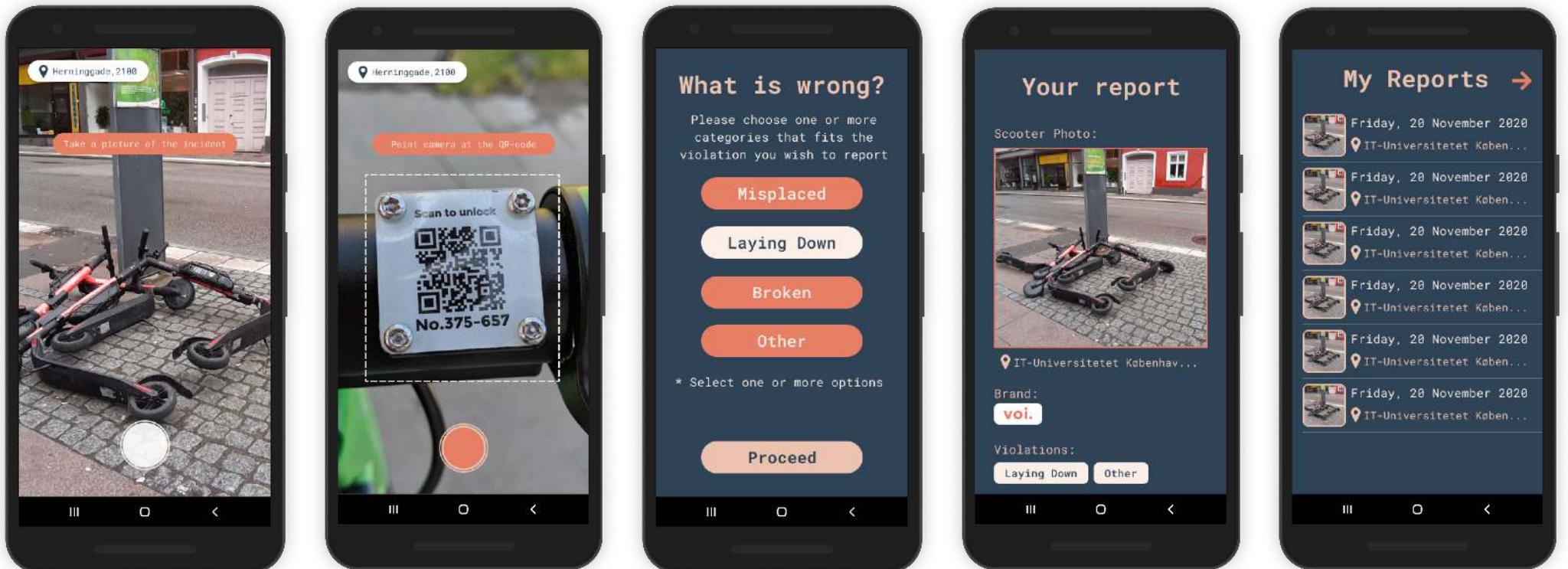


E-Scooter Reporter



iOS Prototype

E-Scooter Reporter



React Native Prototype

RepairWear

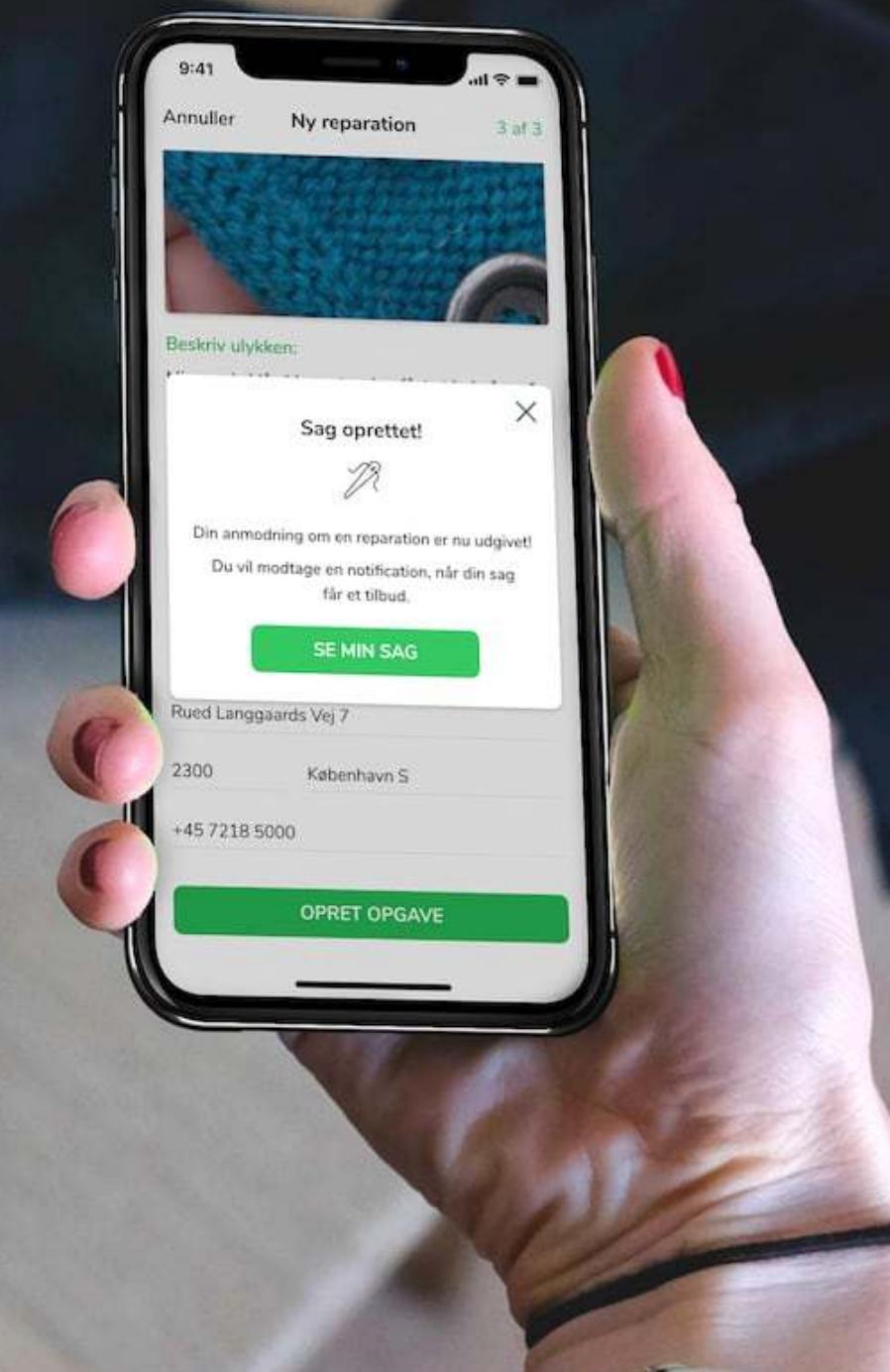
Connects people with sewing tasks with private and small companies that have sewing skills.

RepairWear is a danish business concept that allows people to earn a little extra by offering their sewing skills to nearby people in their community who need minor clothing and fabric repairs.

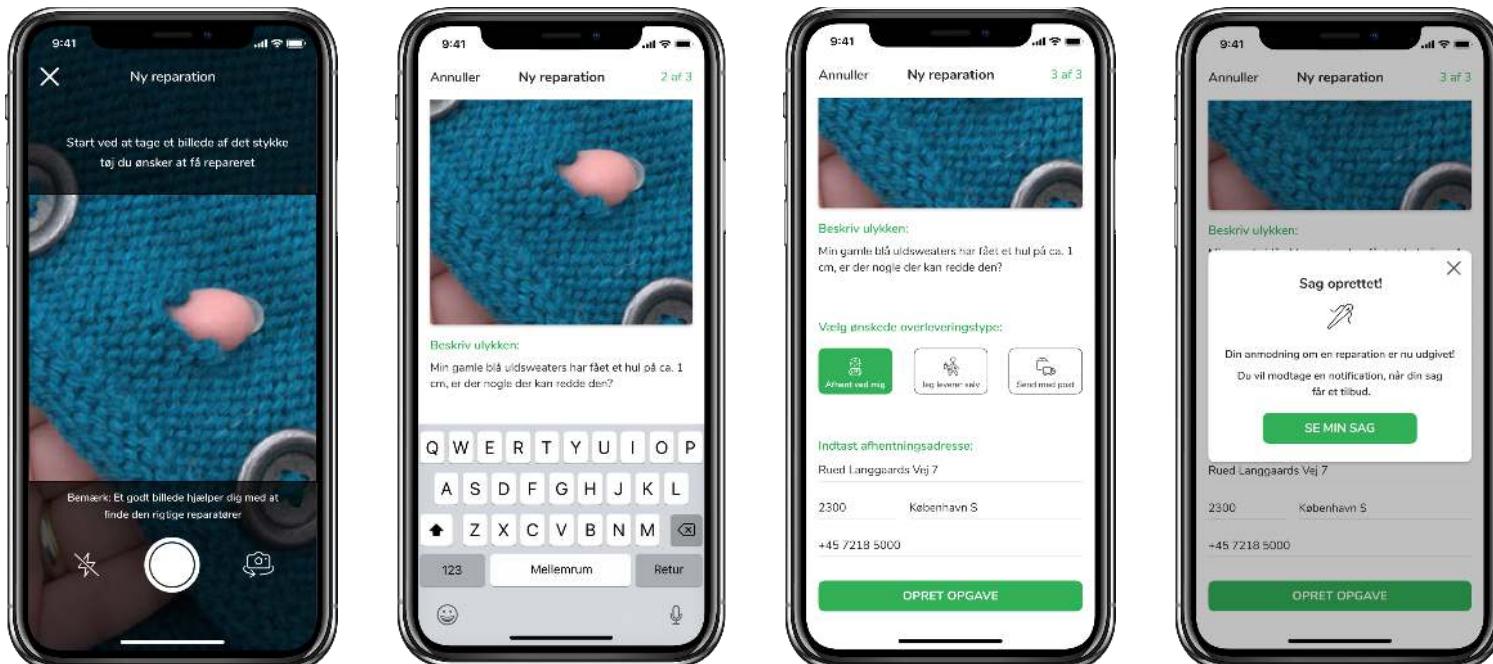
The concept was motivated by research into sustainability issues with the disposal of clothes that suffer minor damage which could otherwise easily be fixed.

A user can sign up as either someone in need of repair or someone with the skills and interest in doing repairs. Users can create and publish sewing tasks, which other users can bid into. As part of the bid, delivery and drop-off can be arranged.

The interactive prototype was developed as a proof of concept for iOS.



RepairWear



A Sense of Direction

In this research project, I explored the use of haptic feedback in interface design and how it can be used to create novel human-computer interactions.

Specifically, the project explores how an intuitive sense of object locating can be conveyed using haptic vibrations applied to the skin on the wrist.

The final prototype consists of an accelerometer and six actuators placed evenly across the circumference of the user's wrist. This wristband is then connected to a microprocessor that evaluates the user's movement and controls the voltage of each of the six individual actuators to generate haptic feedback relative to the user's motion and the object they are trying to find.

The project involves hardware and software sketching using off-the-shelf electronics and hobby materials.

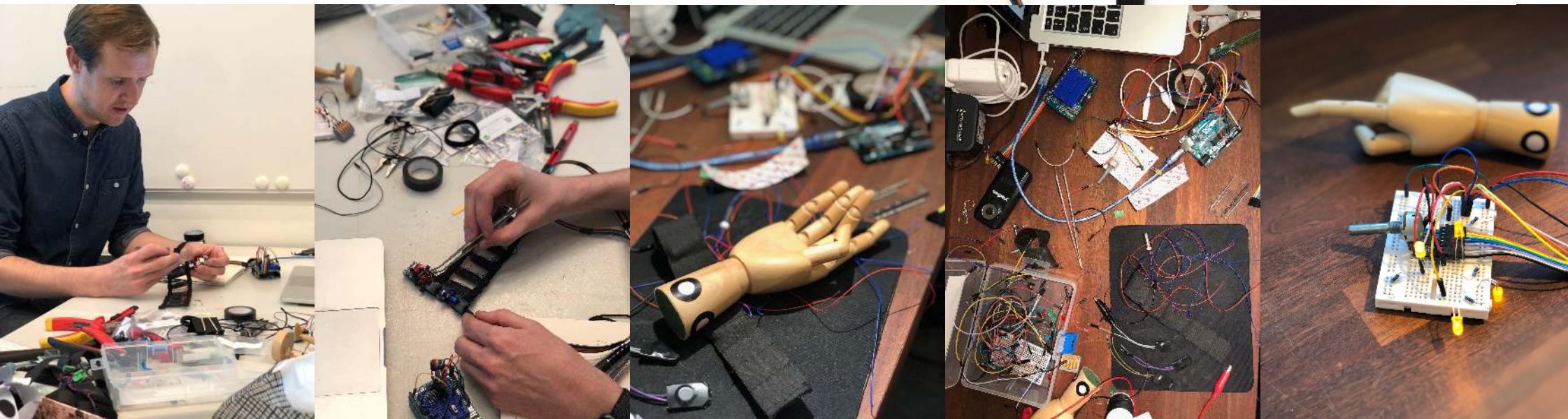
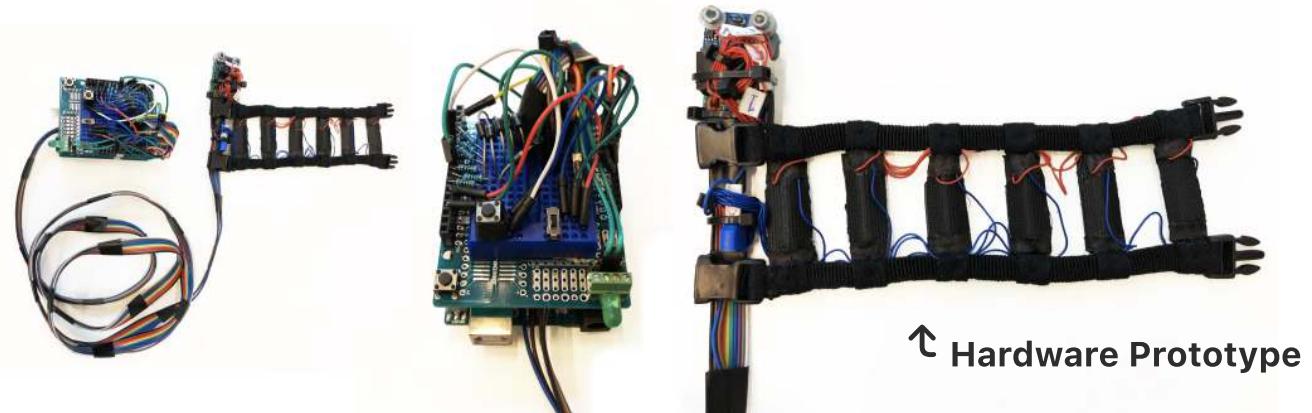
The final prototype is displayed at the AIR LAB department of the IT University of Copenhagen to inspire other interaction design students to experiment outside the constraints of screen-based interactions with IT.

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A Sense of Direction

Process photos of Hardware Sketching and Usability Testing

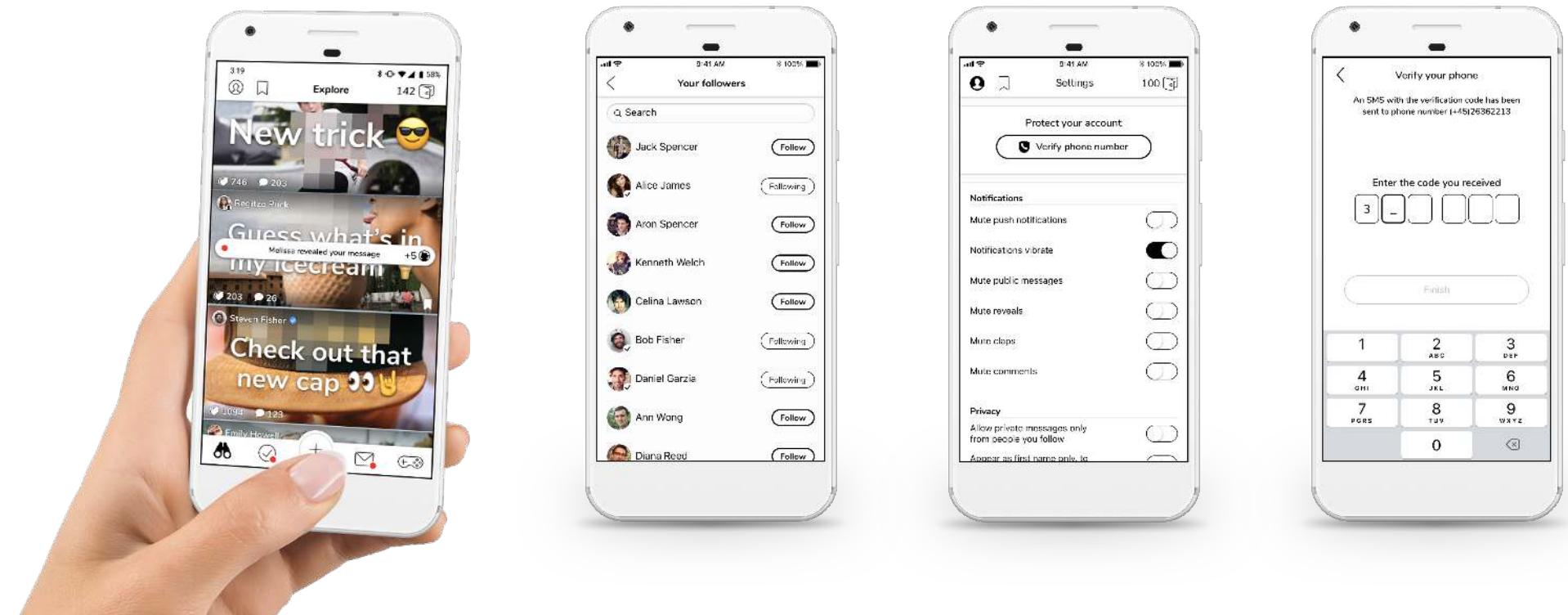
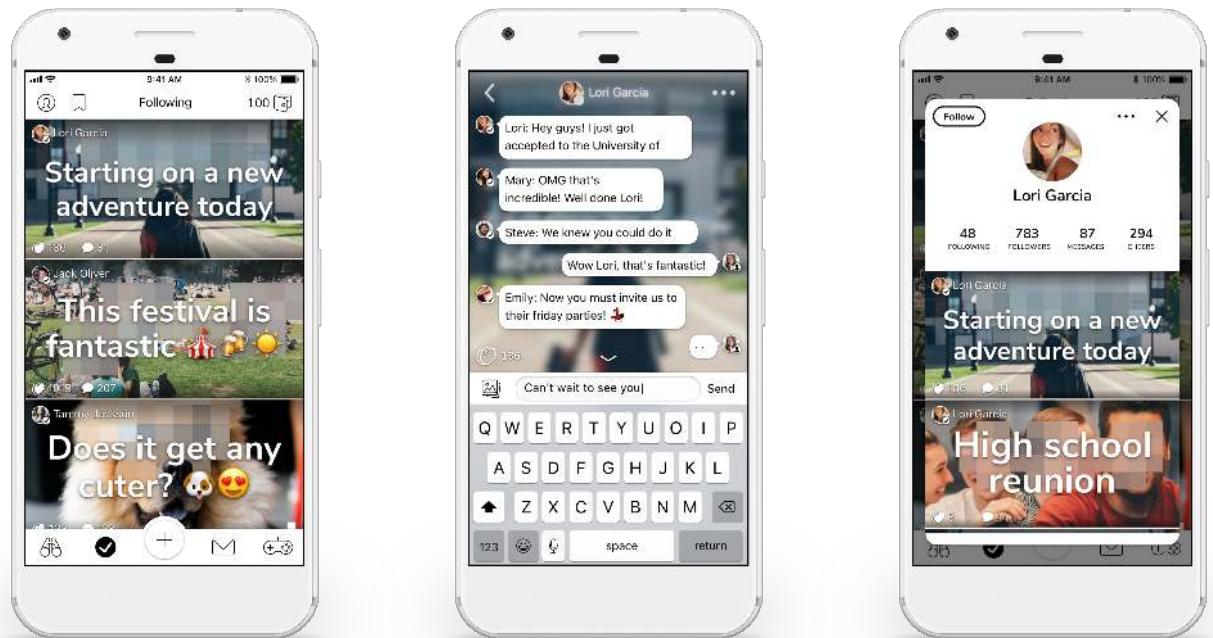


DigDuck

I did freelance UI and UX Design for a social messaging app company, collaborating with an external development team from Poland.

The app was designed and developed for iOS and Android natively and included a website and a CMS backend for advertisers.

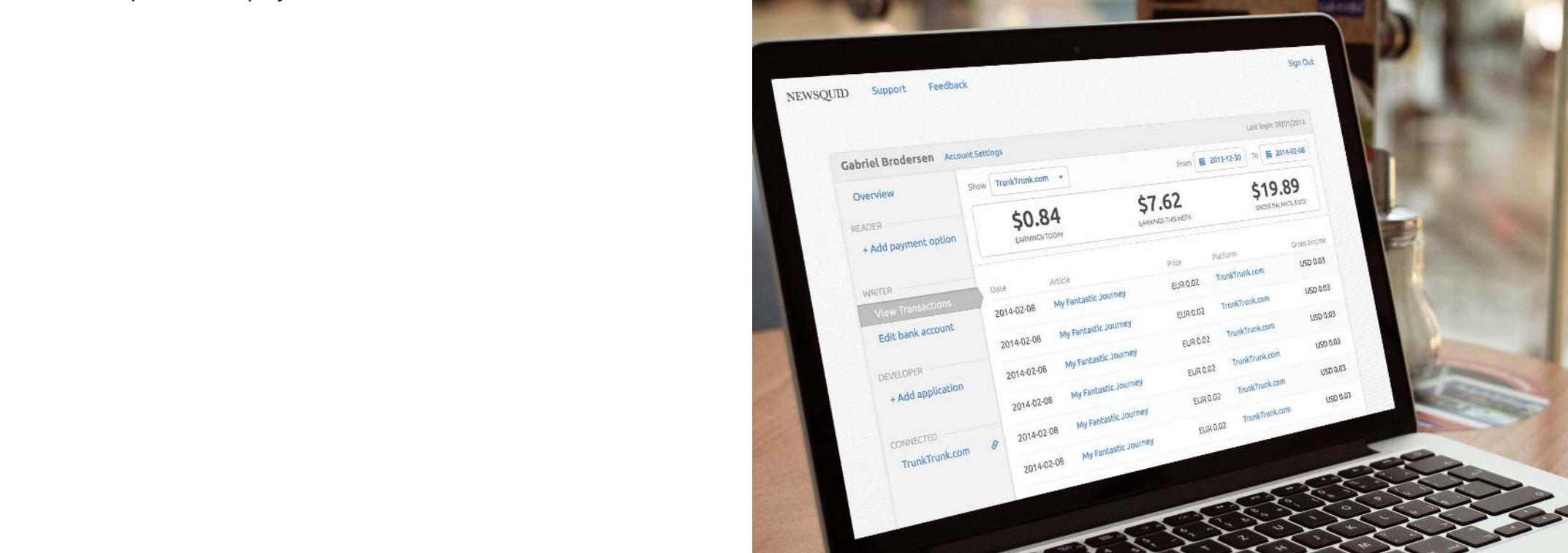
Influencers were used during testing and promotion of the app.



Newsquid

I joined a startup as a freelance UX consultant for a news publishing and microtransaction platform. Here I helped a team of developers and marketing experts define the service's core values and feature set and reader and publisher (customer) goals through testing, user research, and interviews.

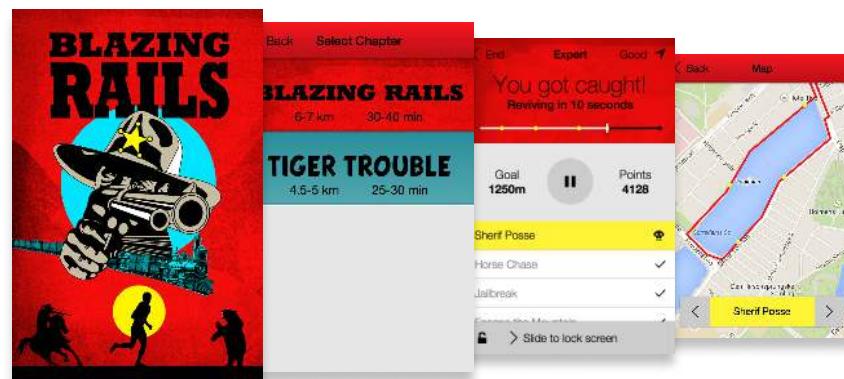
As part of this project, I designed the web UI, application flow, and user journey for both Newsquid and TrunkTrunk – a proof-of-concept news media platform to run on and showcase the Newsquid micropayment service.



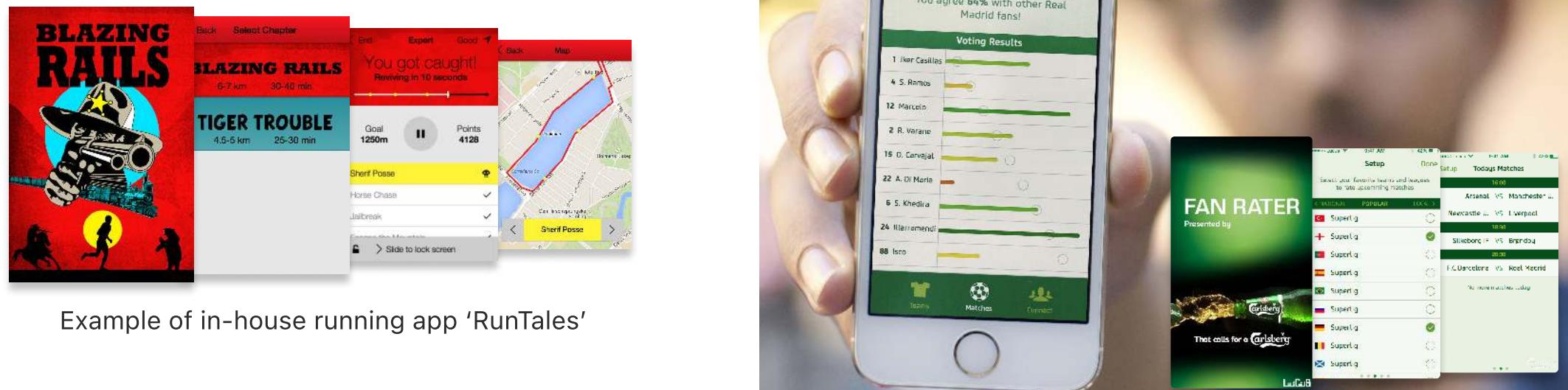
Lucus

I worked for a small agency doing UI design, prototyping and testing for a series of app projects in the category of education, fitness and gaming, with mixed teams of Danish, Romanian and Spanish developers.

The company developed both in-house apps as well as client projects, including clients such as Tivoli and Carlsberg.



Example of in-house running app 'RunTales'



Gedda-Headz

I worked in Berlin for three years on a mobile multiplayer & cross-platform game app that combined mobile gaming and physical toys, which was innovative at that time.

The game was developed for both the iOS and Symbian (Nokia) platforms and was first released in Germany due to the requirement of owning the physical toys. Virtual toys were later released to reach a global audience.

I first took part in the project as an industrial designer creating the figurine toys in 3D for manufacturing and advertisement. As the project advanced, I was hired as a UI and UX designer, working on both platforms, game design, website, and SoMe.

The project involved the player base, including a presence at Gamescom in Cologne, GameStop, Media Markt, and Saturn electronic stores.



**HEAD-TO-HEAD GAMING
ACROSS THE WORLD**



3D & Industrial Design

Before the first iPhone revolutionized the smartphone industry, my first career was as a 3D Artist working with CGI for advertisements and animated movies.

I later transitioned to CAD Modelling and Industrial Design, working at MOEF A/S with a large variety of clients, including Georg Jensen, GN Netcom, Dell, Steelseries, Widex, and Steps to name a few.

These careers combined my interest in working with digital design, using creative tools to visualize ideas.

The release of the iPhone and the App Store in 2008 paved the way for my move to UX Design and interest in how customers interact and engage with digital design.

