

# P O R T F O L I O

R A C H E L      Z H A N G

E X P E R I E N C E / S E R V I C E   D E S I G N





# Hi, I'm Rachel Zhang.

## An Experience / Service designer

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[zxwdesign.eu](http://zxwdesign.eu)

I help organizations understand their users better  
and align their business goals with users' goals.  
And I create delightful experiences and services  
for users through design and technology.



A photograph of a car service center. In the foreground, a silver car is partially visible with its hood open. Behind it, a red car is also on a lift with its hood open. In the background, a blue car is on a lift. The scene is set in a well-lit garage with various tools and equipment visible.

# 1

## CAR SERVICE

Service & Interaction Design  
Aug. 2017 - Oct. 2017 | Team work

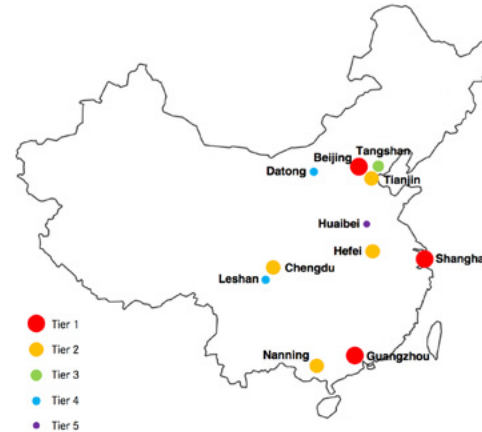
In this project, I worked together with our design researcher to help a premium German car company improve the quality and efficiency of their car maintenance and repair service in 4s stores. We mapped out the current service blueprint including front and back stage after field studies, marked out all the gaps, and redesigned the service and their internal software accordingly. We then tested the solution with the internal teams and customers in twelve 4s stores and iterated after each testing. The final deliverable was a more transparent and efficient car service which meets the major needs of both customers and the service team.



## DESIGN GOAL

To help a premium German car company improve the quality and efficiency of their car maintenance and repair service in 4s stores; At the same time, to make the software in 4s stores easier to use for the service team.

## FIELD STUDY



We conducted field studies in twelve 4S stores in eleven cities in China, interviewed and observed the whole service team as well as the customers to find out problems in the current service and their potential needs.

## STAKEHOLDERS

There were 8 roles involved in the service which made the project more challenging for us. However, we were able to dive deep into the needs and frustrations of each role and gather insights.



Car owner  
CUSTOMER

SERVICE TEAM



SR



CDO



SA



Controller



Inspector



Technician



Car wash



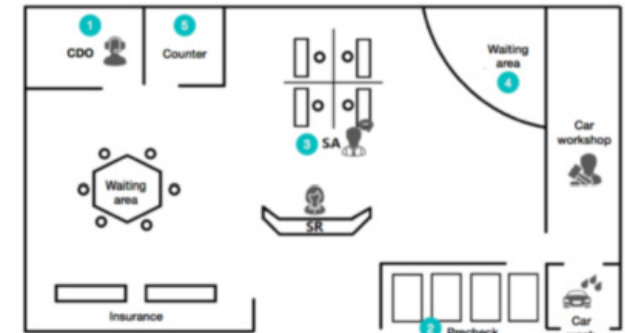
Manager



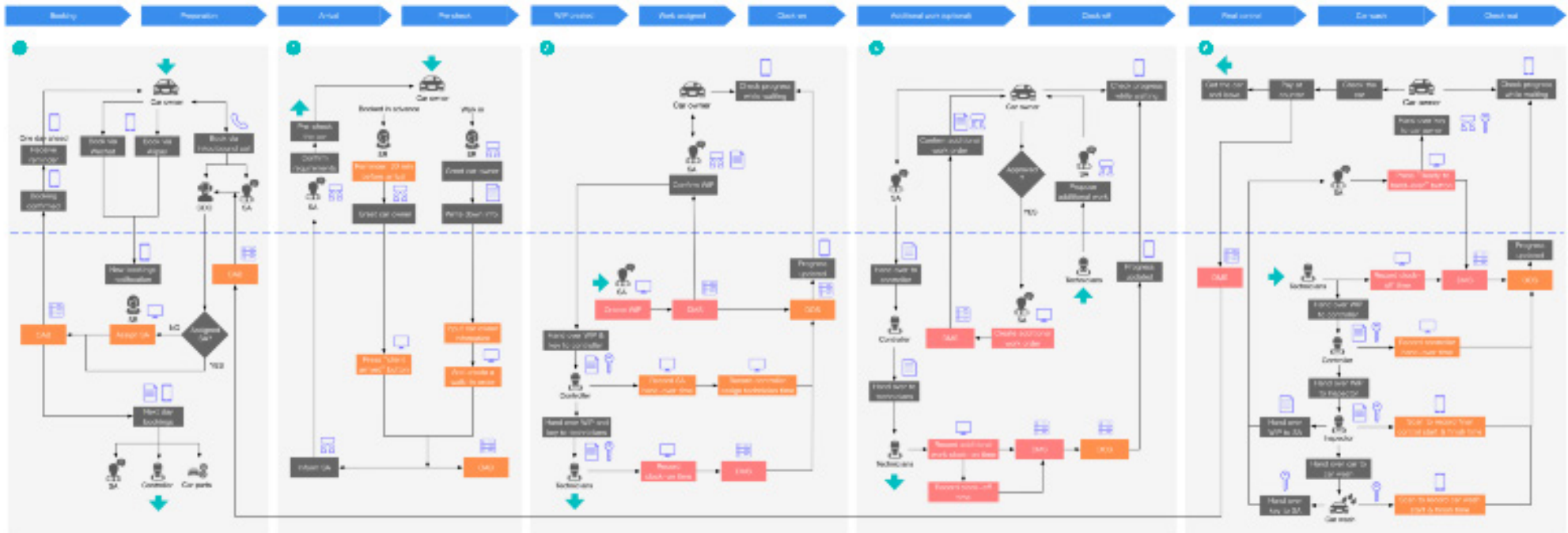


After field studies, we mapped out the current service blueprint including actions of customers and front & back stage staff, touch points and systems, marked out all the gaps, and redesigned the whole service blueprint to achieve a more transparent and efficient service.

## 4S store layout



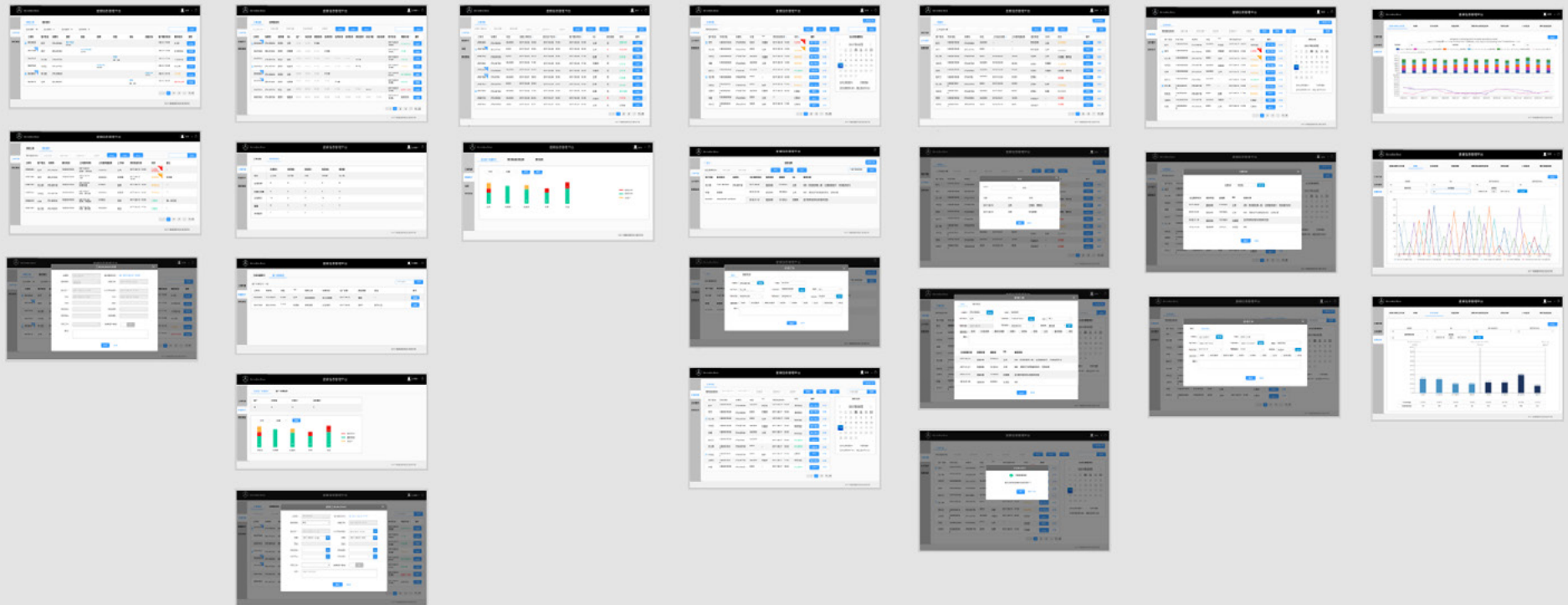
## New Service blueprint





# INTERNAL SOFTWARE REDESIGN AND INTERACTION

I redesigned their internal software based on the insights from field studies and our new customer journey. I created prototypes in Axure for testing in another twelve 4s stores and iterated the design after each testing.







# 2

## PHOENIX

Responsive Web Design  
Mar. 2018 - now | Team work

Project Phoenix aims to increase the conversion rate of a limousine service booking platform by redesigning the whole responsive website to make it easier for users to book rides. In the project I worked closely with product managers to define MVP features and user stories, and provide UX & UI specification to developers for implementation. I drafted wireframes and prototypes for usability testing and iterated the design based on the feedback from users. The redesigned website has a higher conversion rate and user satisfaction.



## DESIGN GOALS

This project aims to increase the conversion rate of a limousine service booking platform by making it easier and faster for customer to book rides through a responsive website.

## COMPETITOR ANALYSIS

We analysed the main competitors in the travel/mobility/limousine service industry and set some benchmarks and best practises.

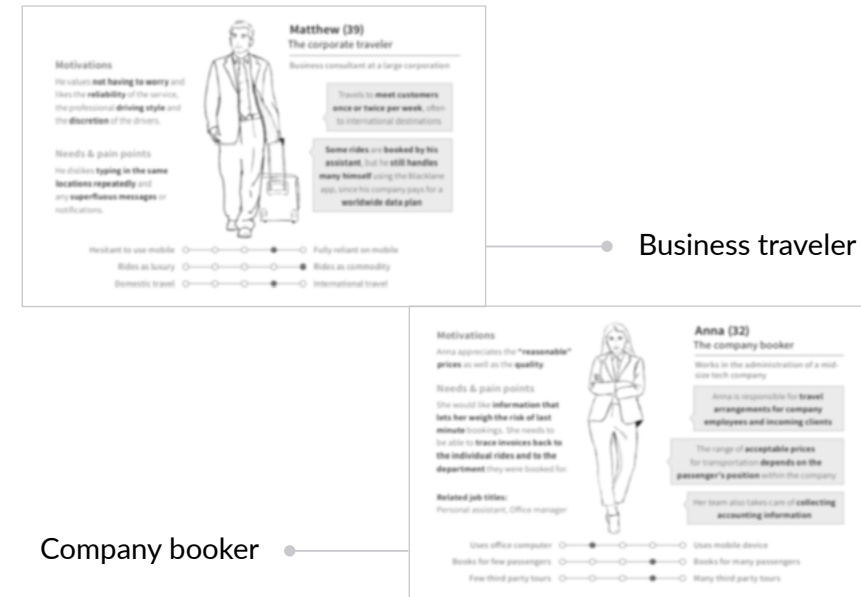
## HEURISTIC REVIEW

I also conducted heuristic review on the current customer booking website from aspects such as Flexibility/efficiency of use, User control, Visibility of system status and Error prevention/recovery ect.

## PERSONA

The service has 3 main types of users: business traveler, company booker and limousine service provider.

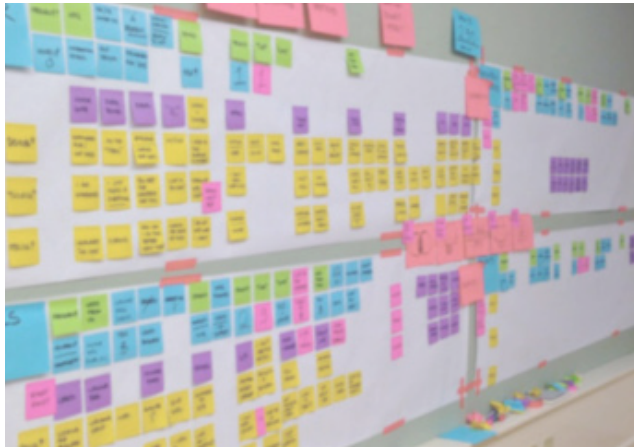
This project focuses on business traveler and company booker, their motivation, needs and frustrations when booking rides for themselves or for others.





## USER JOURNEY MAP

We mapped out the existing journey of the passenger and limousine service provider and identified the key pain points.



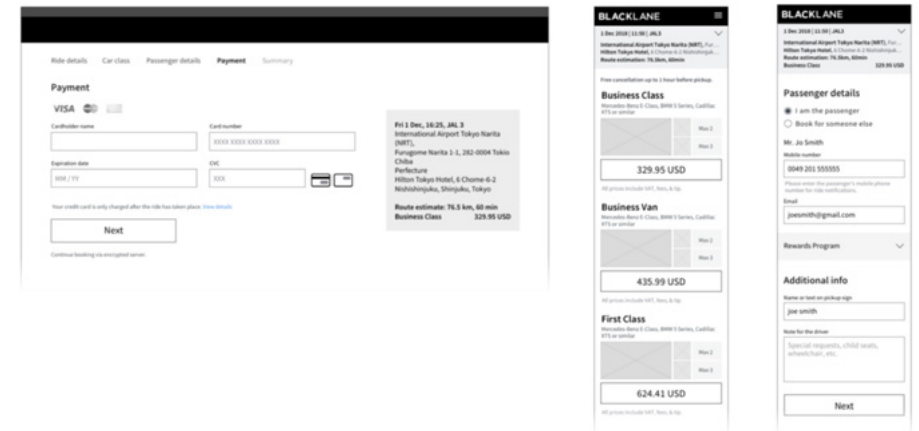
## MVP FEATURES & ROAD MAP

To solve the key pain points with design thinking and agile methodology, we defined the MVP features and roadmap for the new customer booking funnel.

Note: Some deliverables in this project cannot be zoomed to view details.

## WIREFRAMES

Then I started to draft wireframes and redesign the whole funnel to make it easier and faster for users to book rides for themselves or for others on both mobile and desktop.



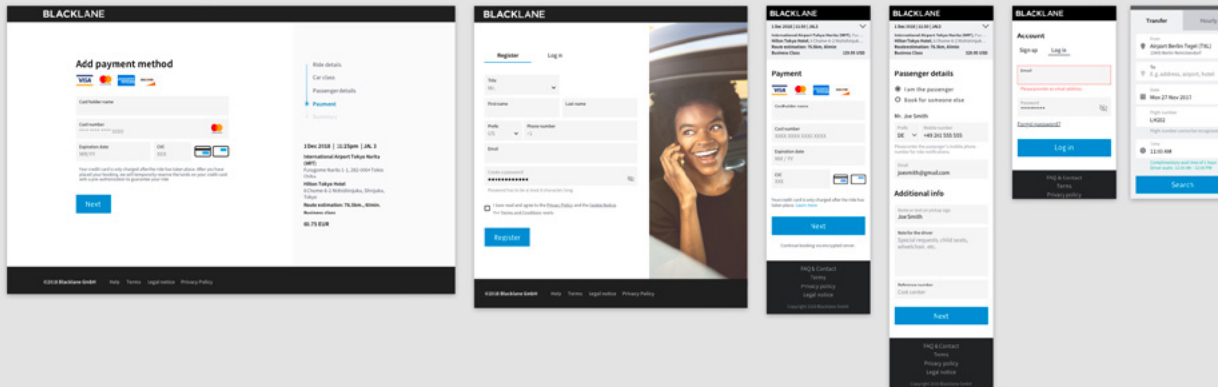
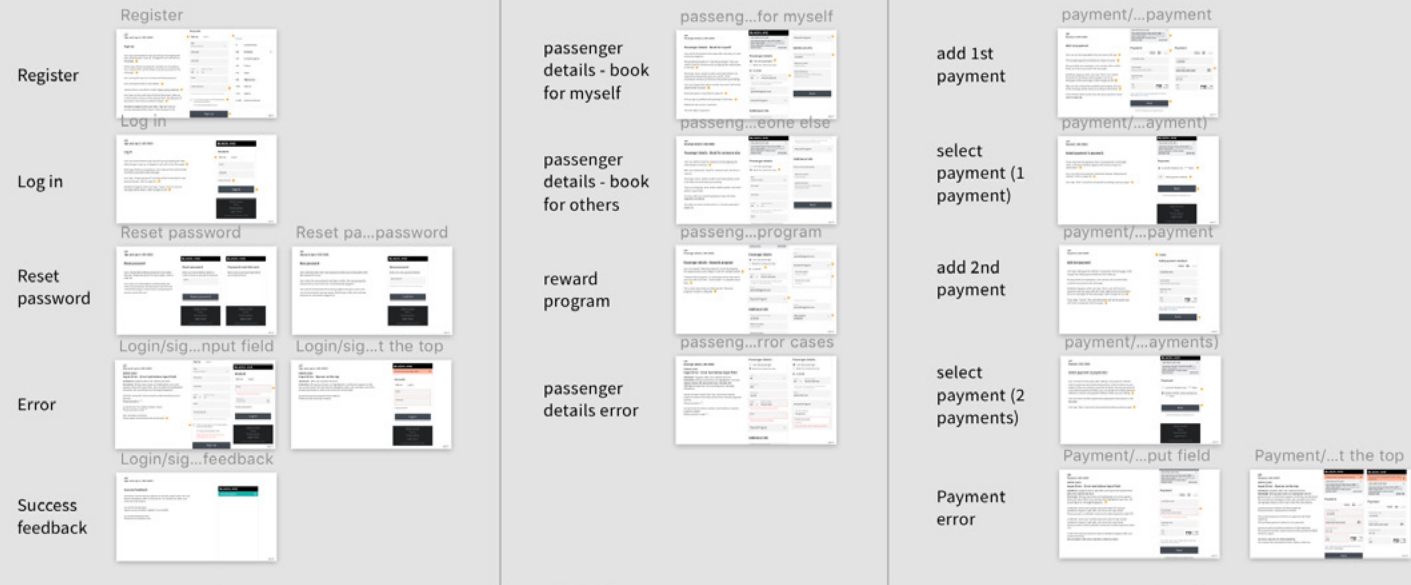
## USABILITY TEST AND INTERACTION

I created a clickable prototype in InVision. Using that, we carried out 2 rounds of moderated usability testings with potential users and gathered qualitative feedback, based on which I could iterate and improve the design.



## UX SPECS

After design is finalized, I created UX specs to cover different user cases, then worked closely with the developers and QA to implement the design.



## IMPLEMENTATION

After the new design was implemented, we saw an increase in conversion rate and user satisfaction. Later on, we implemented more features and constantly improved the design with AB testing and hotjar recordings.



A close-up, shallow depth-of-field photograph of hands typing on a laptop keyboard. The focus is on the fingers and keys, with the background blurred. The lighting is soft and warm, creating a professional yet approachable atmosphere.

# 3

## PROJECT DX

Service & Interaction Design  
Feb. - May. 2017 | Team work

In this project, we helped our client to achieve digital transformation and increase competitiveness in the market. We carried out field studies and stakeholder workshops, based on which I generated 5 personas and mapped out their eco-system, as well as service blueprint. We then redesigned their business model and customer journey in co-creation workshops with the client. The iterative design process included user flows, sitemaps, wireframes and usability testing . It's worth mentioning that service design thinking served as a holistic approach in problem solving.



## DESIGN GOALS

To help an education institute transform from offline business model to hybrid model and increase their competitiveness in the current market.

## COMPETITIVE ANALYSIS

We analysed the value proposition, target audience, website content and user experience and of their five main competitors.

## HEURISTIC REVIEW

I also conducted a heuristic review on client's main eco-system: three websites, one mobile App and one tablet App to provide an overview of the existing problems and potential solutions.

## ETHNOGRAPHIC STUDY

Our researcher followed through a day of 15 potential customers and carried out in-depth interviews to gather qualitative insights.

## PERSONA

I generated 5 personas from our ethnographic study insights with a focus on users' purpose of English learning, purchasing decision making factors and online behavior.





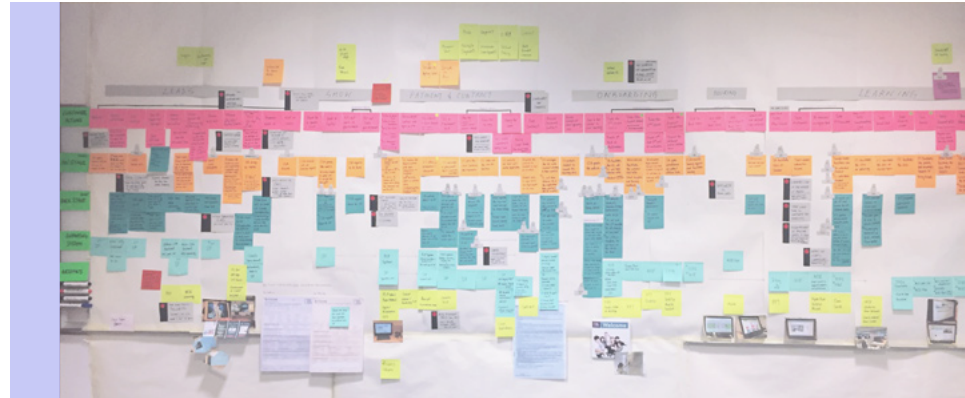
## ECO-SYSTEM MAP

Mapping out the eco-system gave us a holistic view and helped us to minimize the complexity.

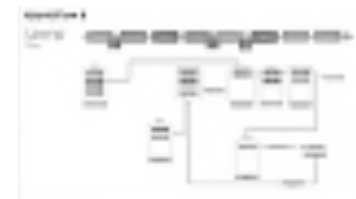
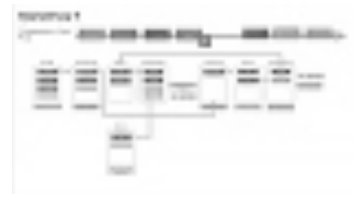
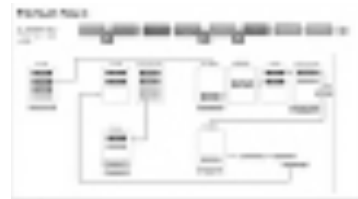
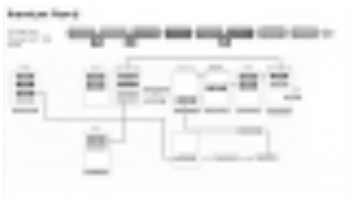


## SERVICE BLUEPRINT

We mapped out the current service blueprint including customer actions, internal team onstage and backstage actions, touchpoints, artifacts and pain points to identify problems and opportunity areas.



## CONVERSION AND PURCHASE FLOWS

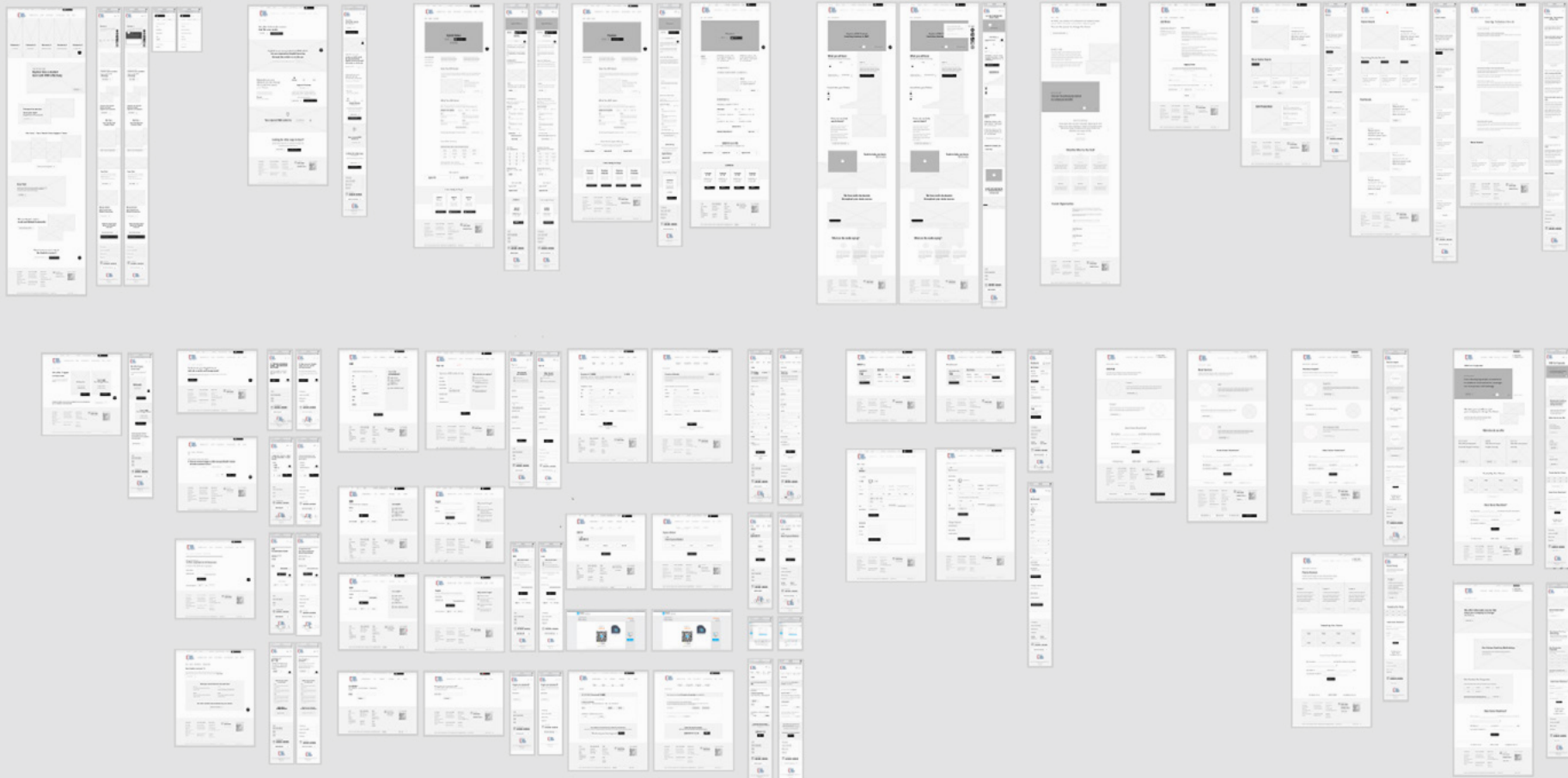
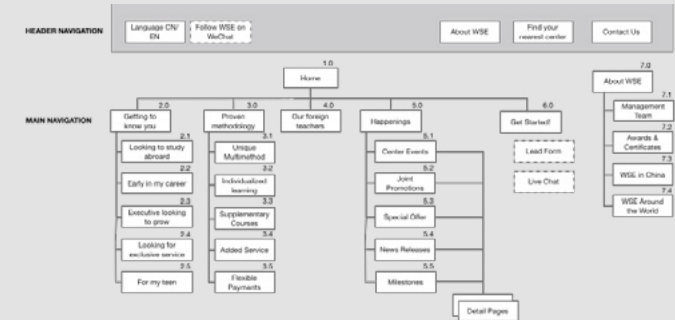


Note: The deliverables in this project cannot be zoomed to view details.



# SITEMAPS AND WIREFRAMES

We restructured their main website based on the findings from ethnographic study, added e-commerce feature and redesigned the whole user experience and iterated after user testing.





The background image shows a modern, minimalist interior. In the foreground, there are two white silhouettes of people sitting on curved, tiered seating. One person is sitting on a lower tier, and the other is sitting on a higher tier, gesturing with their hand. In the background, there is a large, spherical object that looks like a globe or a large light fixture. It has a reflection of a city skyline on its surface, with the word "MORNING" visible. The overall aesthetic is clean and contemporary.

4

## VOLVOS

Mobility & Service Design  
Oct. 2014 - Feb. 2015 | Team Work

VolvoS, a project for "INVOLVO China", creates a better commuting experience for users so that more people will take shuttle buses instead of private cars or taxis which can relieve the overloaded traffic during peak hours in Shanghai. VolvoS serves as a team-building and networking platform for big companies and offers shuttle bus sharing service to close-by small companies.



## DESIGN GOAL

To create a more comfortable and meaningful commuting experience for users.

## COMMUTING IN SHANGHAI

By public transportation

90  
MIN

1  
Change

Overload

By shuttle bus

Faster

Direct

Relaxing

## USER INTERVIEWS

1

"I drive my car to work everyday since I cannot stand the *awful* experience of public transportation during peak hours, but the *traffic jam* is also terrible. We *waste* so much time on commuting and we cannot do much about it."

2

"Our company has a shuttle bus because it is in the outskirts, but it's always *tedious* in the bus. Most of the time colleagues are sleeping, on their phone or chatting with whom they already knew. And it's hard to build new connections."

3

"Our company is *too small* for a shuttle bus and my friend who goes to work by shuttle bus saves nearly one hour everyday. I always feel worn out after struggling in metro at peak time."

## PERSONA



JIM

28 years old; Single  
Front-end Developer  
at a big IT company

INTERESTS: Football; Technology

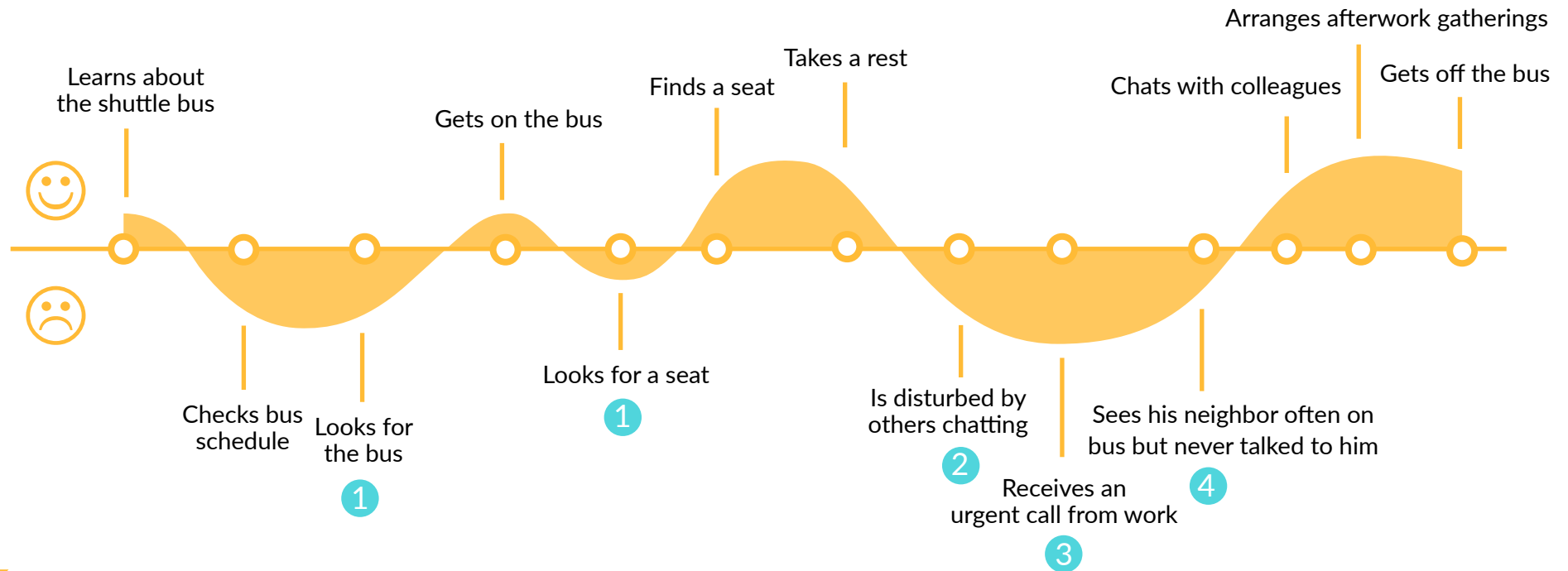
PERSONALITY: Nerdy & shy

CURRENT GOAL: Wants to spend more time with family and friends and expand *social circle*

WORKING DAY ROUTINE: Takes company shuttle bus to work; Takes a *nap* and checks *news* on the phone or listen to music; Sees many familiar faces but doesn't know their name and is *too shy to talk* to them; Gets a *coffee* at a Cafe after getting off the bus.



## JIM'S EMOTION JOURNEY



## PAIN POINTS / OPPORTUNITY AREAS

1

Jim has difficulty locating the bus and getting the seats he likes.

2

Jim sometimes finds his surroundings too noisy to get some rest.

3

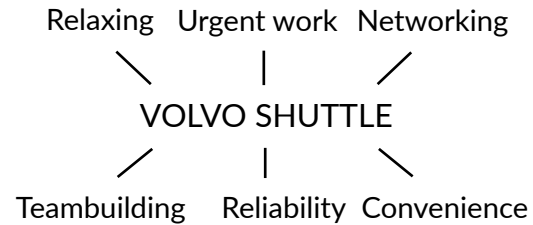
It is almost impossible for Jim to work on the bus when there is an urgent need.

4

Jim tends to talk to people he already knew, but building new connections is not easy.



## USER NEEDS



## OPPORTUNITY AREAS

1

The shuttle bus should be easier to locate and track.

2

There is often a need for urgent work during commuting.

3

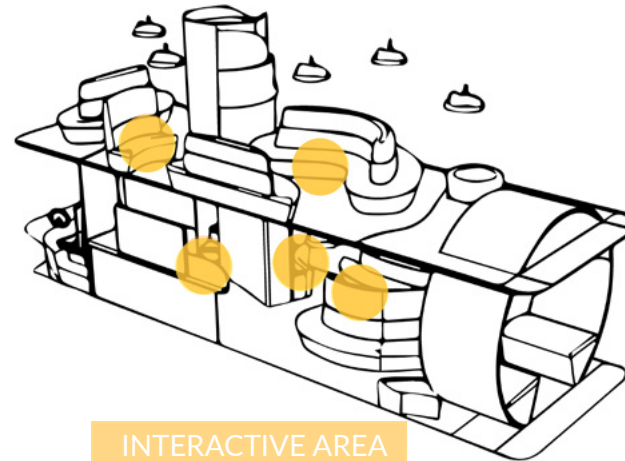
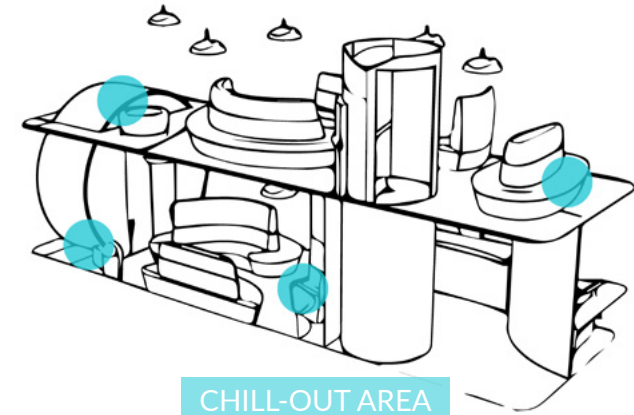
Users have different needs for relaxing and chatting.

4

The shuttle bus can serve as a platform for team-building and networking.

## CONCEPT

The shuttle bus is divided into two areas. In the chill-out area, users can take a nap.



In the interactive area, users are encouraged to communicate with others through our design.



## SCENARIOS



Check floor plan and see what is displayed on each screen



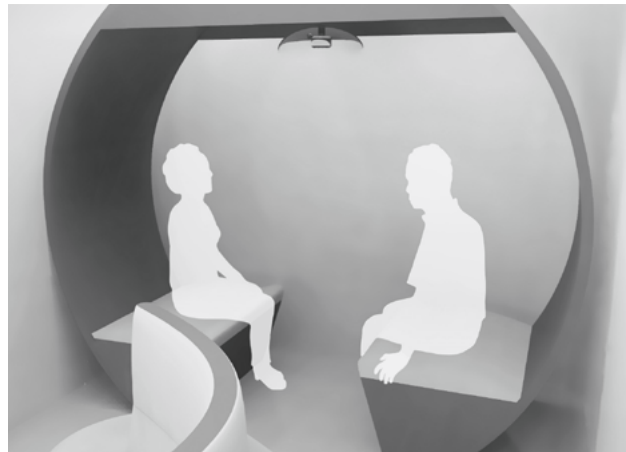
Share photos of company events and parties



Get a coffee and chat with others

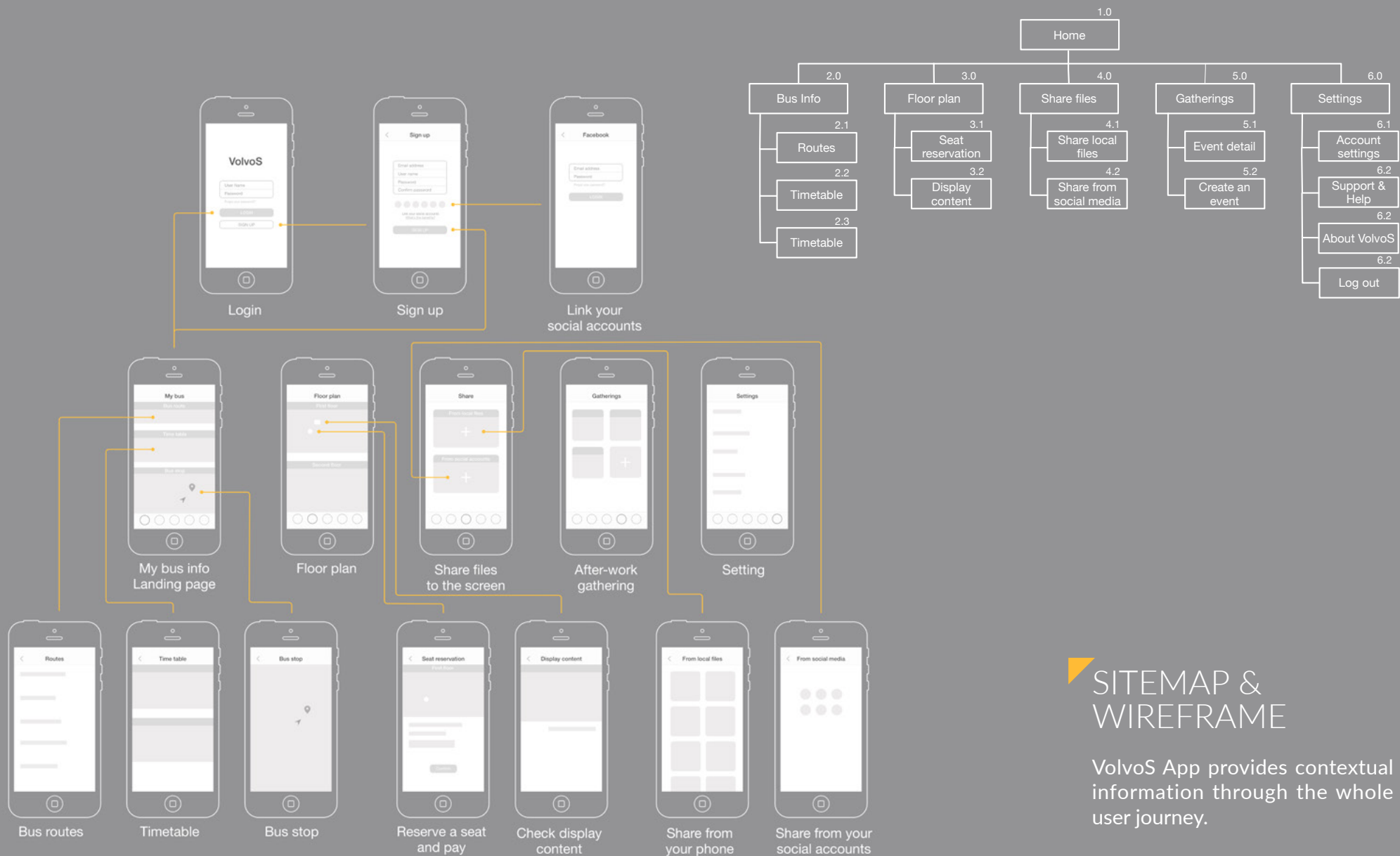


In each area, videos/photos/articles based on users' mutual interests will be displayed on the screen so they can start conversations much easier.



Carry out urgent work or conduct meetings without being disturbed





## SITEMAP & WIREFRAME

VolvoS App provides contextual information through the whole user journey.





# 5

## NIKE+SHM

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Mobile Interaction Design  
Jul. 2017 | Freelance work

This project helped marathon runners prepare for Shanghai Marathon Day with our mobile site and NRC App. We got the idea of a digital “journey journal” where users can track progress and get rewards if they accomplish certain milestones. I iteratively designed the user flows of different scenarios, the wireframes of the mobile site and the interactions. During the project, I worked closely with the developer, our client and a marathon runner to ensure the best user experience within a relatively short time frame.



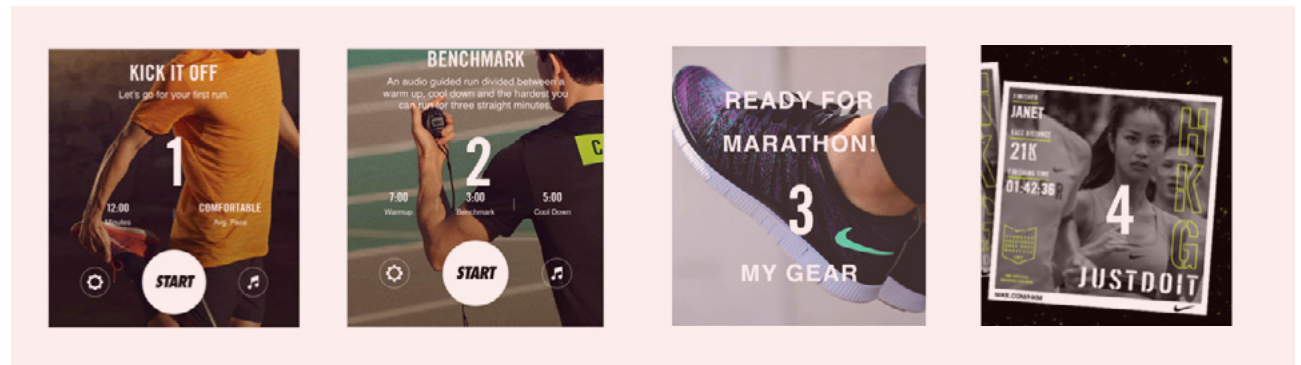
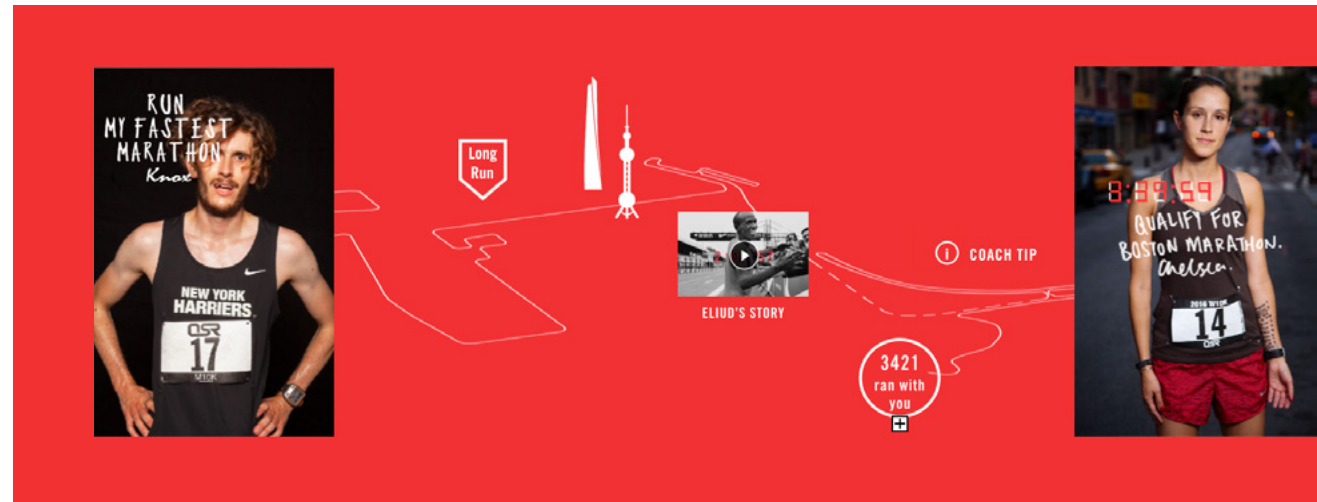
## DESIGN GOAL

To help marathon runners prepare for Shanghai Marathon Day throughout 3 months.

## CONCEPT

Through brainstorming, we came up with the idea of a digital “journey journal” where users can track their progress and get rewards if they accomplish certain milestones: 1st run, break 1st personal best and 4 weeks running challenge.

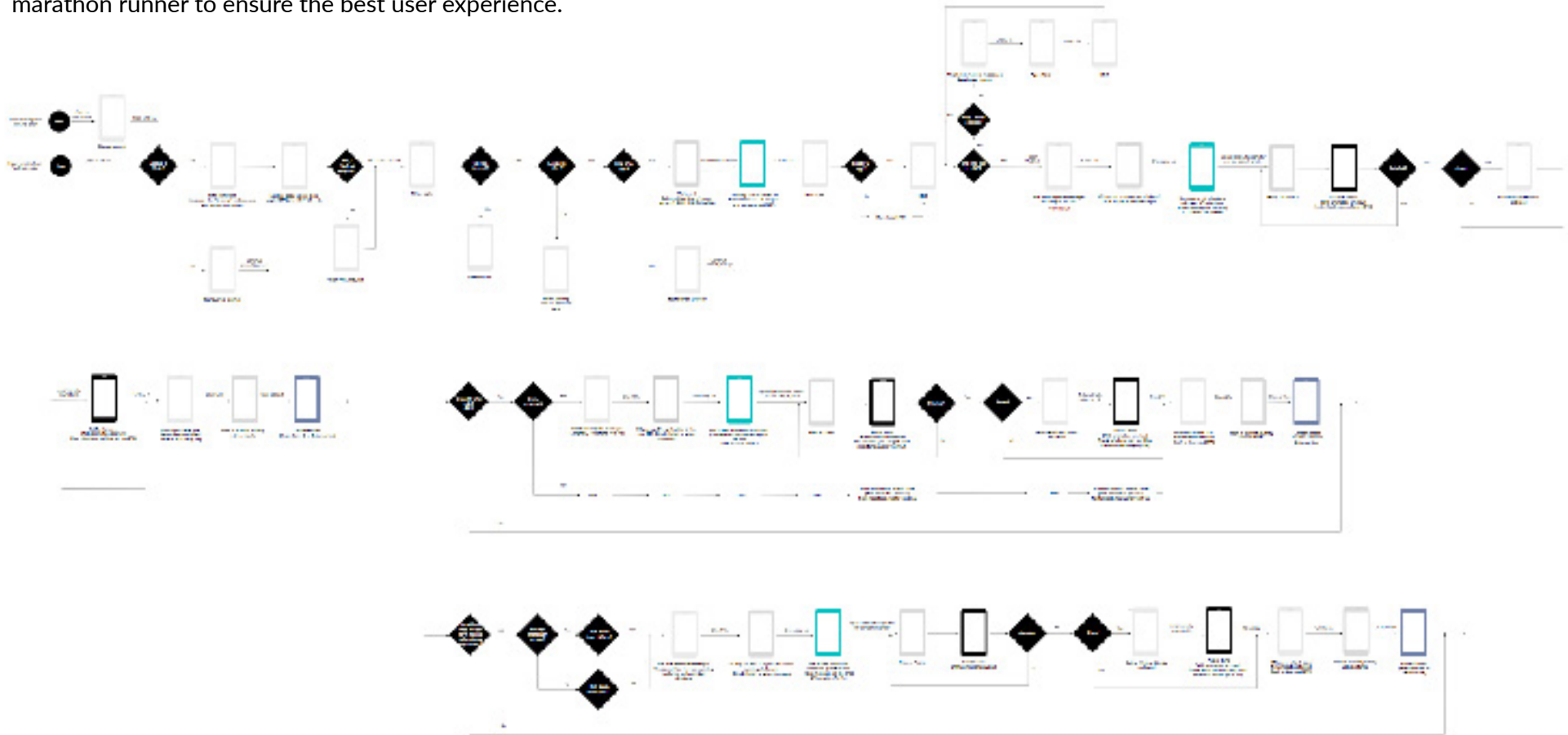
3 months of preparation could be tough, so we want to motivate users with our mobile site and Nike Run Club App.





## USER FLOW

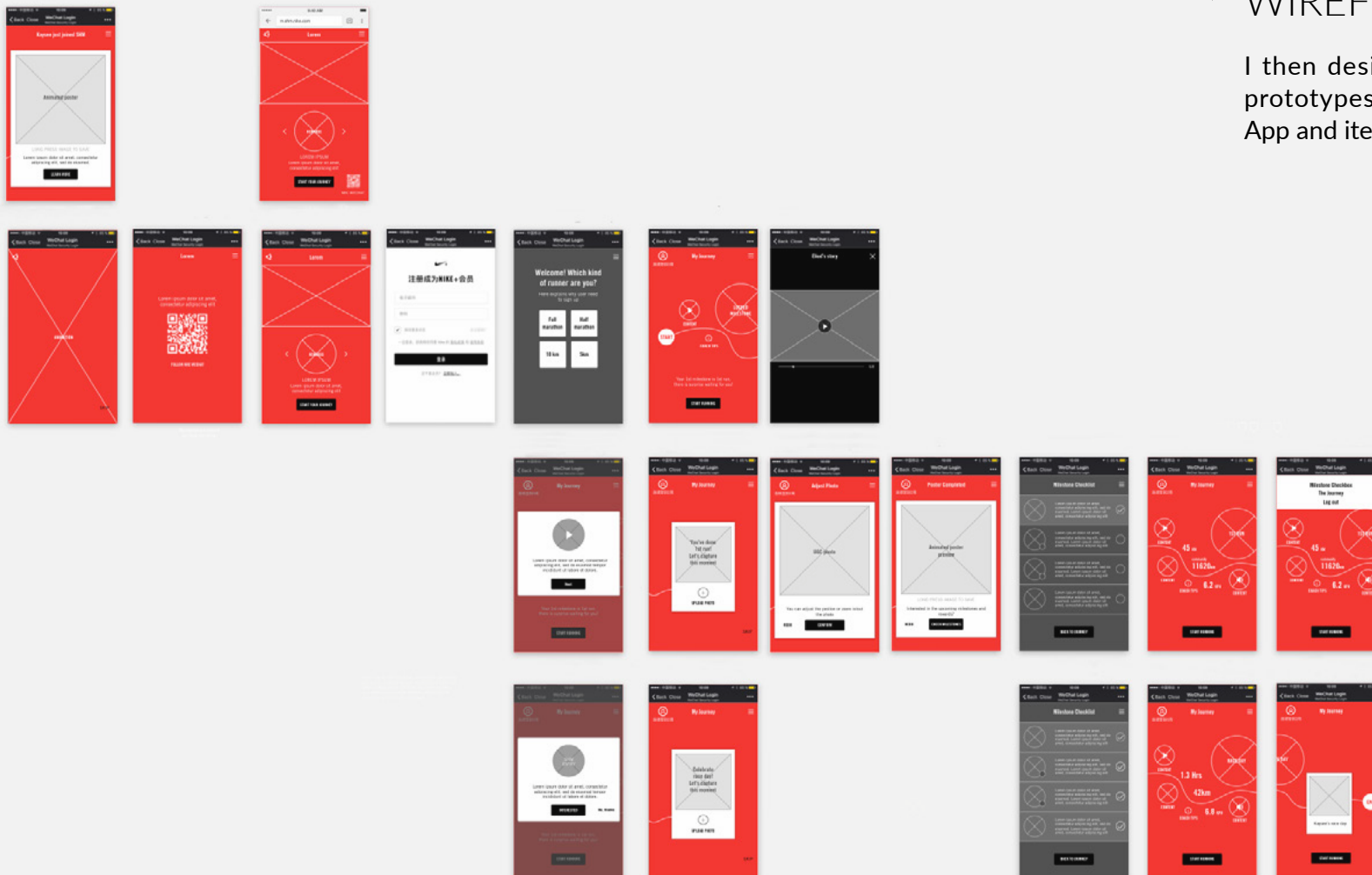
I iteratively designed the user flows of different scenarios while working closely with the developer, our client and a marathon runner to ensure the best user experience.



Note: The deliverables in this project cannot be zoomed to view details.



I then designed the wireframes and prototypes using Sketch and Marvel App and iterated after guerilla testing.







6

## PULSE

Empathic & Interaction design  
Mar. - June 2014 | Team work

PULSE is a gadget which enables you to sense and record the heart-beat and accordingly alter the tempo of music through PULSE application to make a unique piece of music in a certain mood. The soundtrack can be amplified on any surfaces with vibration to share with others or slow down fast heart beats, and can also be sent to your friends or family via PULSE application so that they can perceive your feelings in an innovative way.



## DESIGN GOAL

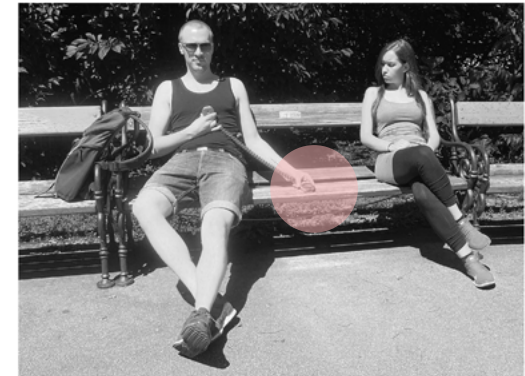
To enable users to share their emotions and communicate with each other in a perceivable way.

## INSIGHT

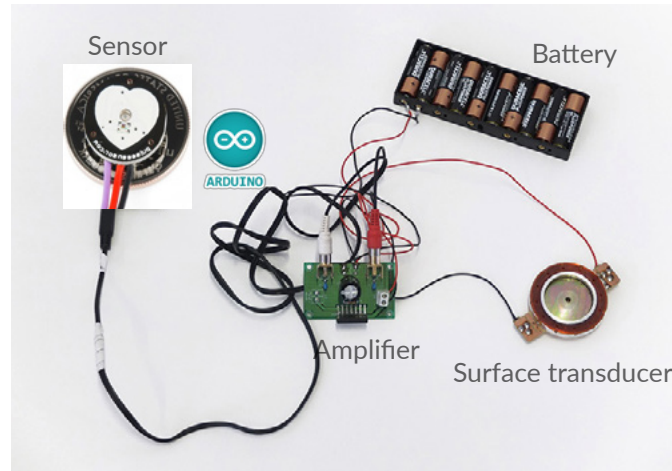


Research shows that most mothers pick up their babies and cradle them on the left side close to their hearts so that the baby stops crying and softly falls asleep. Heartbeat is unique and it in some way reflects our emotions such like anxiety, excitement and so on. We tend to be influenced when hearing and feeling it.

## EXPERIMENTS & EXPLORING



We experimented on people's reactions towards a vibrating device playing different recorded heartbeat in public.



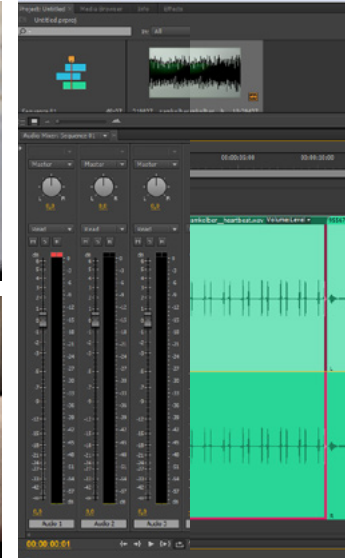
We prototyped a gadget to further experiment on how different heartbeats and rhythms affect us. The gadget was made of two parts: a pulse sensor (Input) and a surface transducer (Speaker) which amplifies the pulse on any surfaces.



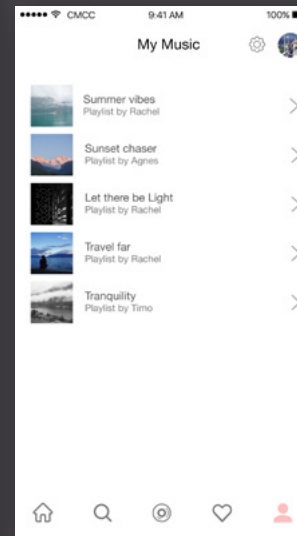
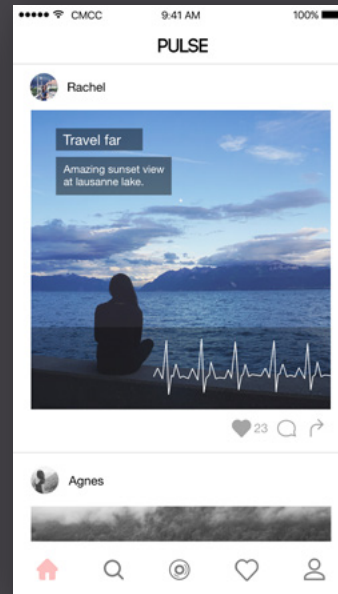
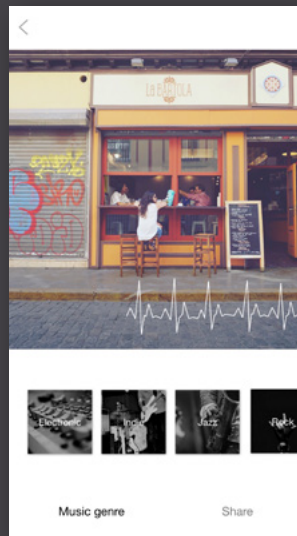
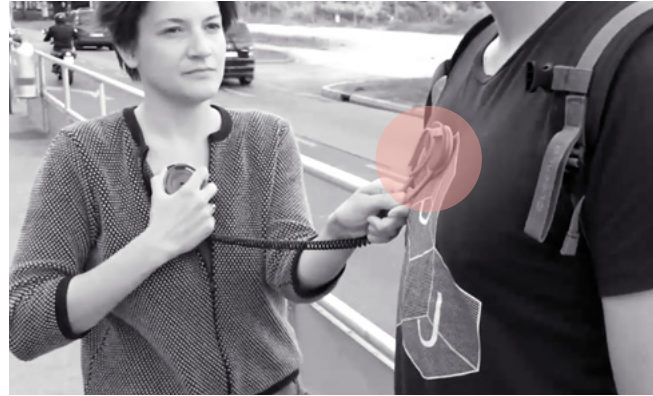
## TECHNICAL STUDY & PROTOTYPING

We recorded pulses in different situations with our gadget and amplified them with a vibration speaker on various surfaces to see how it affects us. Result shows that the vibration of others' pulses can affect ours to some extent.

We then refined the design of the gadget and iteratively prototyped with 3D printing to get the most ergonomic shape.







## SCENARIOS

You can alter the tempo of various music templates with your heartbeat and share it via PULSE application or play it on any surfaces through a vibration loudspeaker. And when your heart beats too fast, PULSE can calm you down.



# INTERESTED IN COOPERATION?

DROP ME A LINE AND LET'S CHAT!

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