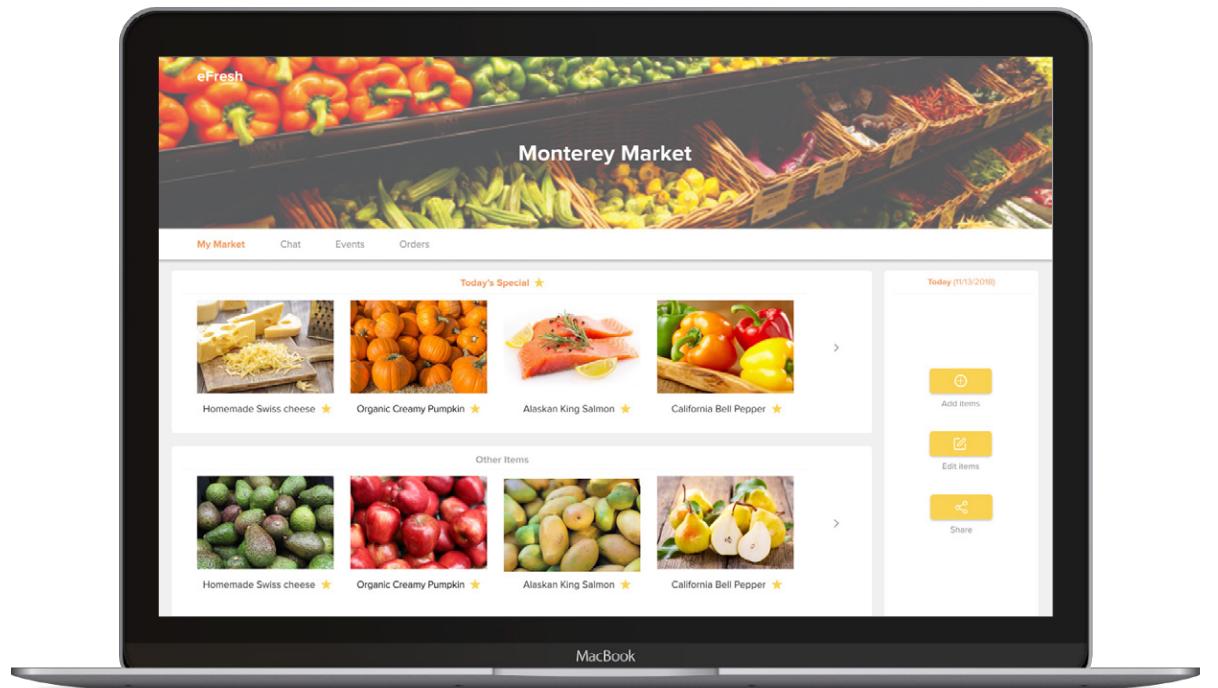


**Chengcheng Huang**  
**Product | User Experience Designer**

WORK SAMPLES 2016-2019  
FOR EYES ONLY — PLEASE DO NOT SHARE



## MOBILE AND DESKTOP UI & UX DESIGN

### eFresh

#### HELPING INDEPENDENT GROCERY MARKET OWNERS START ONLINE BUSINESS

A platform that helps independent local grocery market owners make more profits and engage better with the community by starting their own online business.

In order to support independent local grocery business and make healthy, seasonal groceries more accessible to people. We designed a holistic local grocery selling/shopping experience. I worked on designing the app and website for local grocery market owners.

**Team:** Chengcheng Huang; Andrew Nguyen; Rui Sun; Siyu Hou

**Date:** Sep 2018 - Dec 2018 (3 months)

**Role:** UX/UI Designer & Researcher

**Skills:** Desk research, ideation, JTBD, user flow, wireframing, user interview, lo-fi & hi-fi prototyping, user testing, ui design

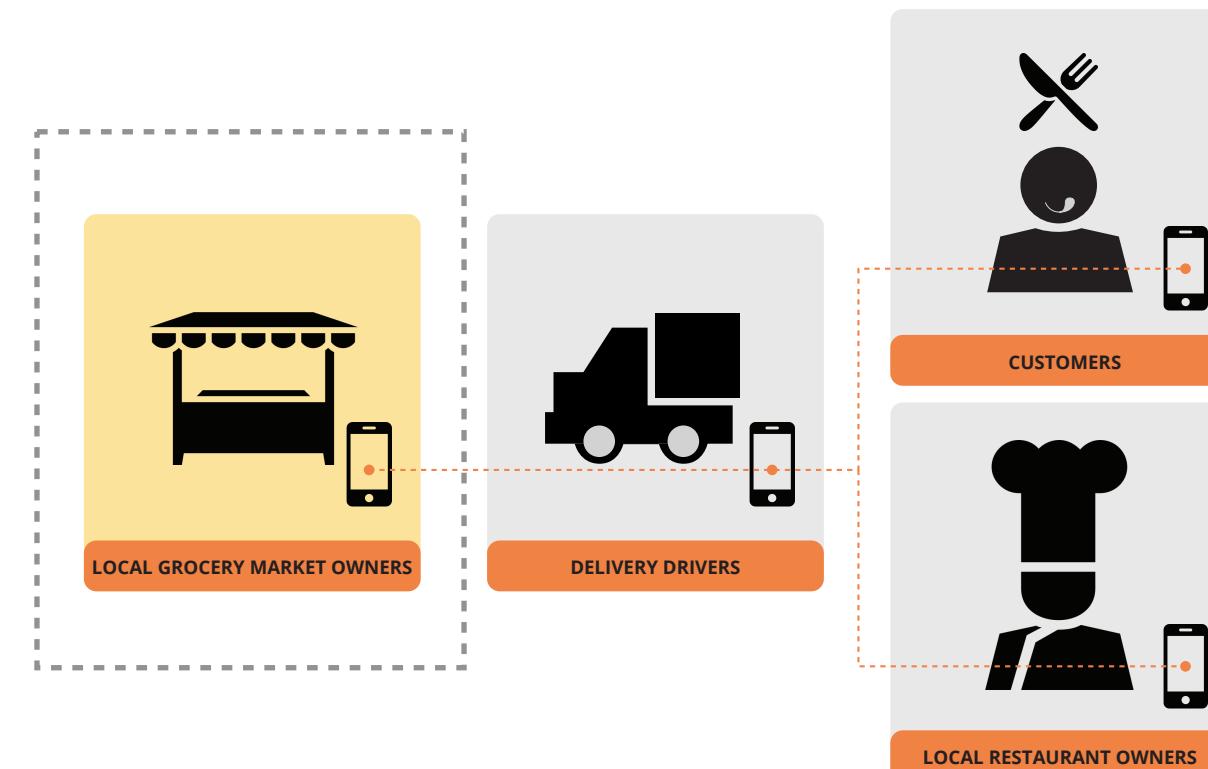
## THE CHALLENGE

Independent local grocery stores have been experiencing a decline in profits. What can we do to help independents make more profits and better serve their customers? Meanwhile, how to make seasonal healthy groceries more accessible to people?

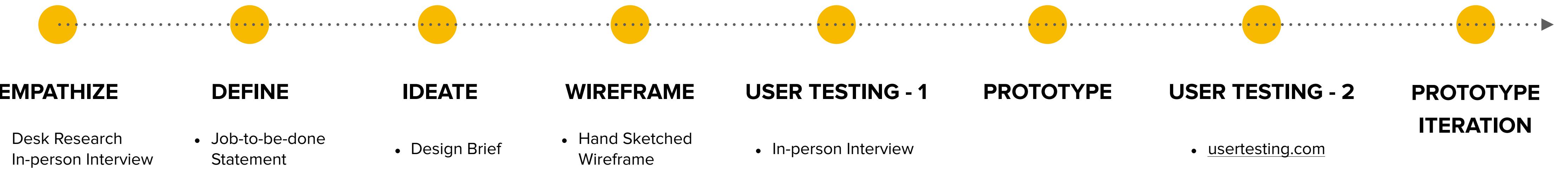


## THE OUTCOME

A holistic online grocery selling/shopping system - “eFresh”. It includes 4 different apps targeting different user types - local grocery market owners; individual customers; local restaurant owners and delivery drivers. I worked on designing the app for local grocery market owners.



# DESIGN PROCESS



# PROBLEM SPACE

- **Industry Research**

With decreased dollar sales, flat margins and higher expenses, the independent grocery sector saw net profit before taxes decline to 0.09% in 2017 from 0.98% the year before. EBITDA also fell to 1.4% from 1.85%, yet NGA(National Grocers Association)'s report said that result shows that independents remain cash-flowing.

Meanwhile, more and more people tend to shop groceries at local independent stores for their seasonal, fresh, organic products. While most of us still enjoy shopping in person, we'd also love to have this option to order groceries online and get them delivered when we do not have time. We went to visit some local independent grocery stores located at North Berkeley, a lot of owners express a desire to enable online sales in order to better serve their customers and make more profits. But they are worried about the technical issues of starting and managing an online store on their own.

- **Interview with local grocery market owners**



Raxakoul Coffee & Cheese owner

*"Yeah, we'd love to start online business. But we don't know how to do it and we don't want to put too much efforts to maintain it."*

Monterey Market owner

*"We used to be in partnership with a local Berkeley pizza place, but they canceled it after two years because we do not support delivery."*

Berkeley Natural Grocery Company manager

*"Online store with events marketing will be a nice way to engage with the community! Especially now since everything has gone online."*

# JOB STATEMENT

**USER:** Local grocery market owners  
**USER OBJECTIVES:** make more profits and promote their brand by starting online stores.

In order to better understand user needs and help them achieve their goals, I created this customer job-to-be-done statement targeting individual local grocery market owners.

	VERB	OBJECT	FUNCTIONAL GOAL	EMOTIONAL GOAL	SOCIAL GOAL
PRIORITY	WHAT IS THE CUSTOMER TRYING TO DO	TO WHAT OBJECT IS THE CUSTOMER TRYING TO DO THE VERB			
X	increase	grocery volume sales	make more profits	feel happy and satisfied about the increased sales	
X	provide instant service to	customers	help customers with their inquiries more instantly	feel happy that their customers get help and feel satisfied	secure their customers
X	advertise	market events	attract more people to come to their events	feel happy when bringing people together getting to know their market and grocery	make more friends in the community; gain popularity
X	find	a safe and fast delivery service with special care	get their grocery delivered to customers safe and in time	feel reassured when their customers are satisfied with their delivered grocery	secure their customers
	promote	their market brand	gain reputation	feel happy and a sense of self-achievement when they get popular	let the community know their market value and social responsibility

# SYNTHESIS

Targeting different user needs, I came up with 4 major features to help users achieve their goals.

User Needs

Online selling

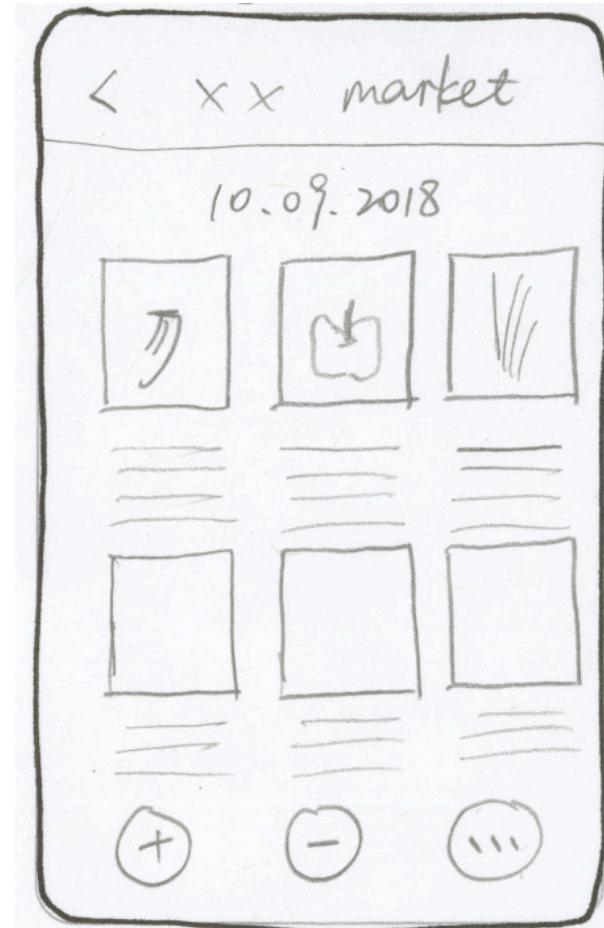
Assist customers  
in time

Better engage with  
community

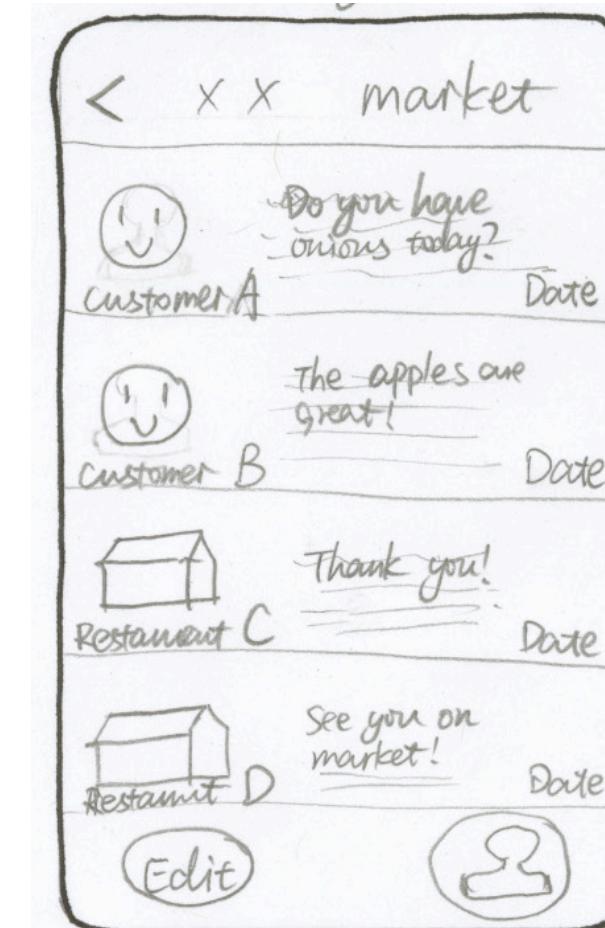
Enable reliable  
grocery delivery

Design Proposal  
/ Features

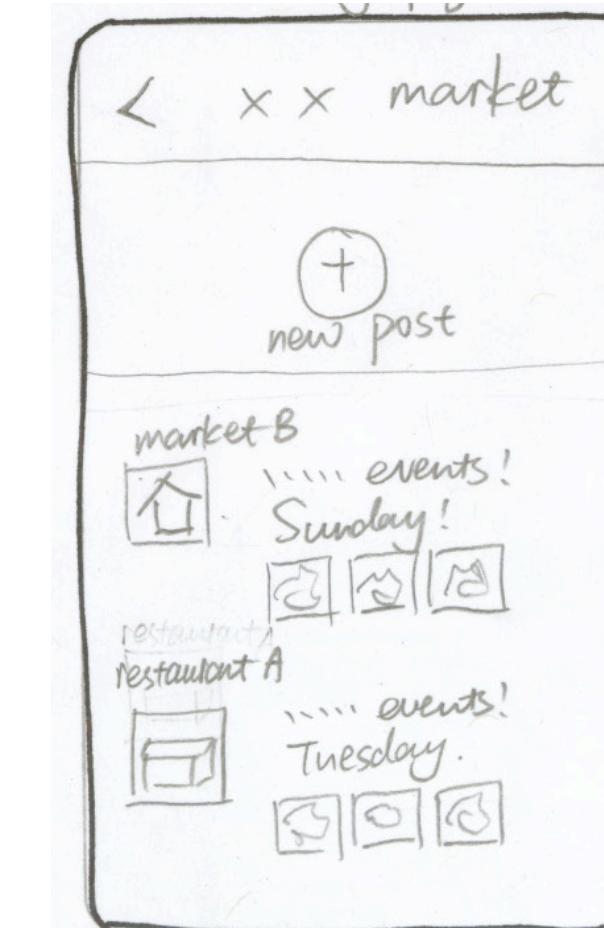
My Market



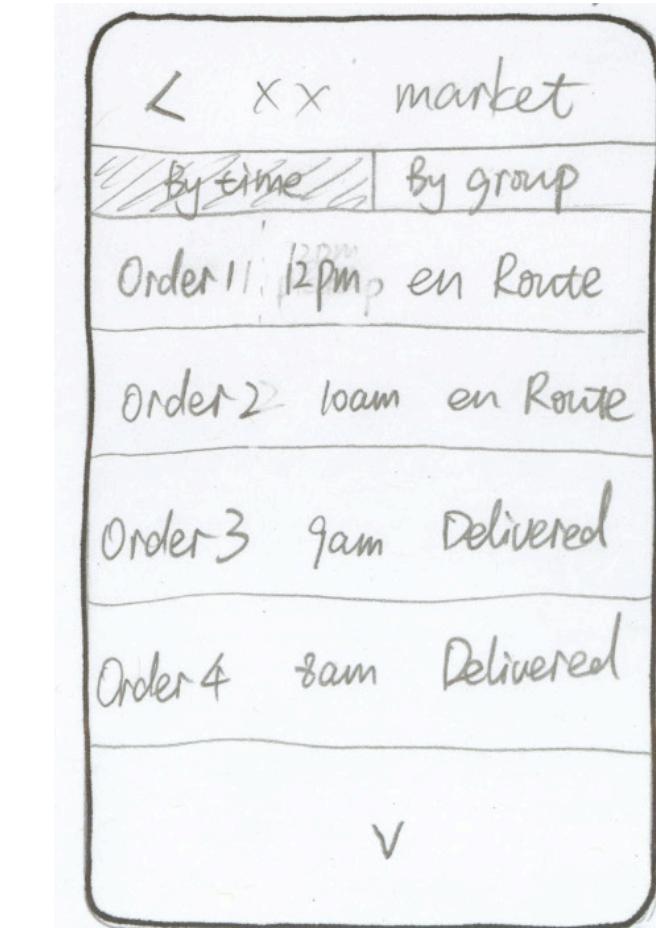
Chat



Events

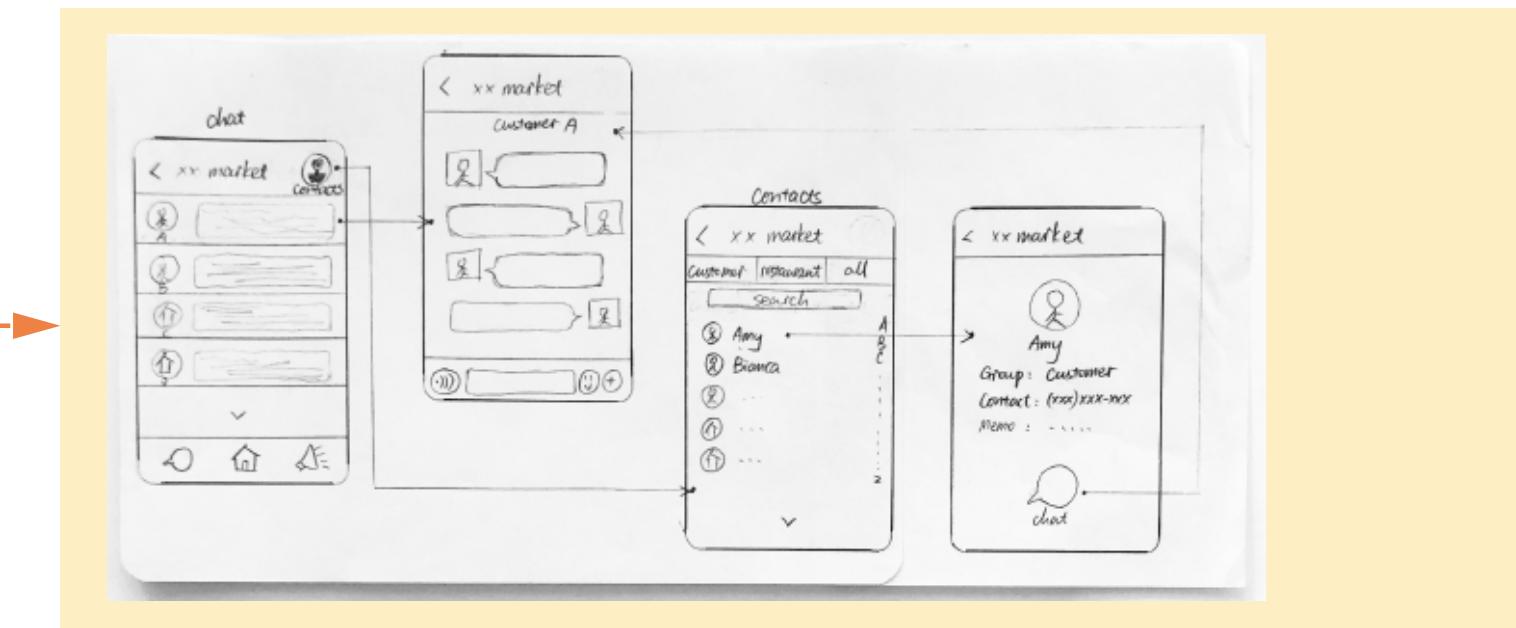


Order Status

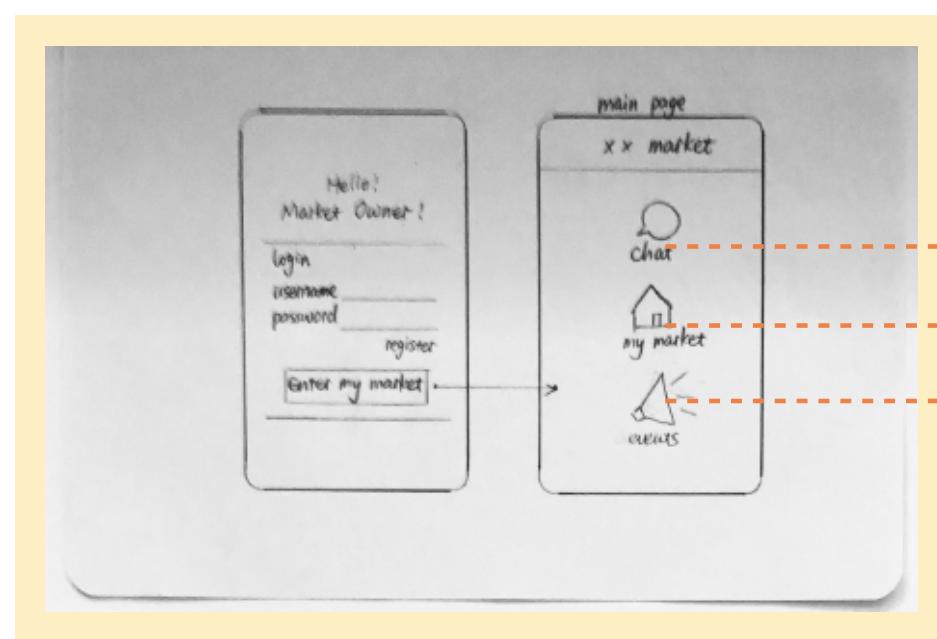


# WIREFRAME

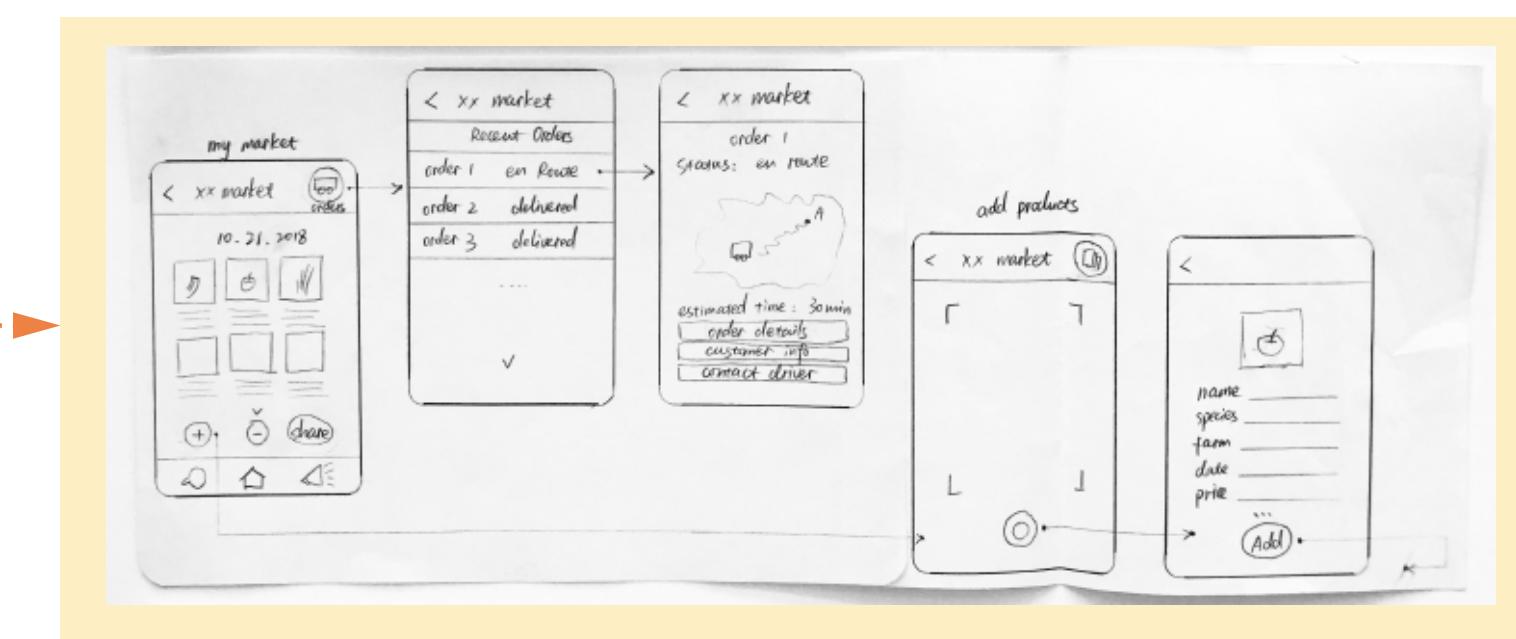
## Chat



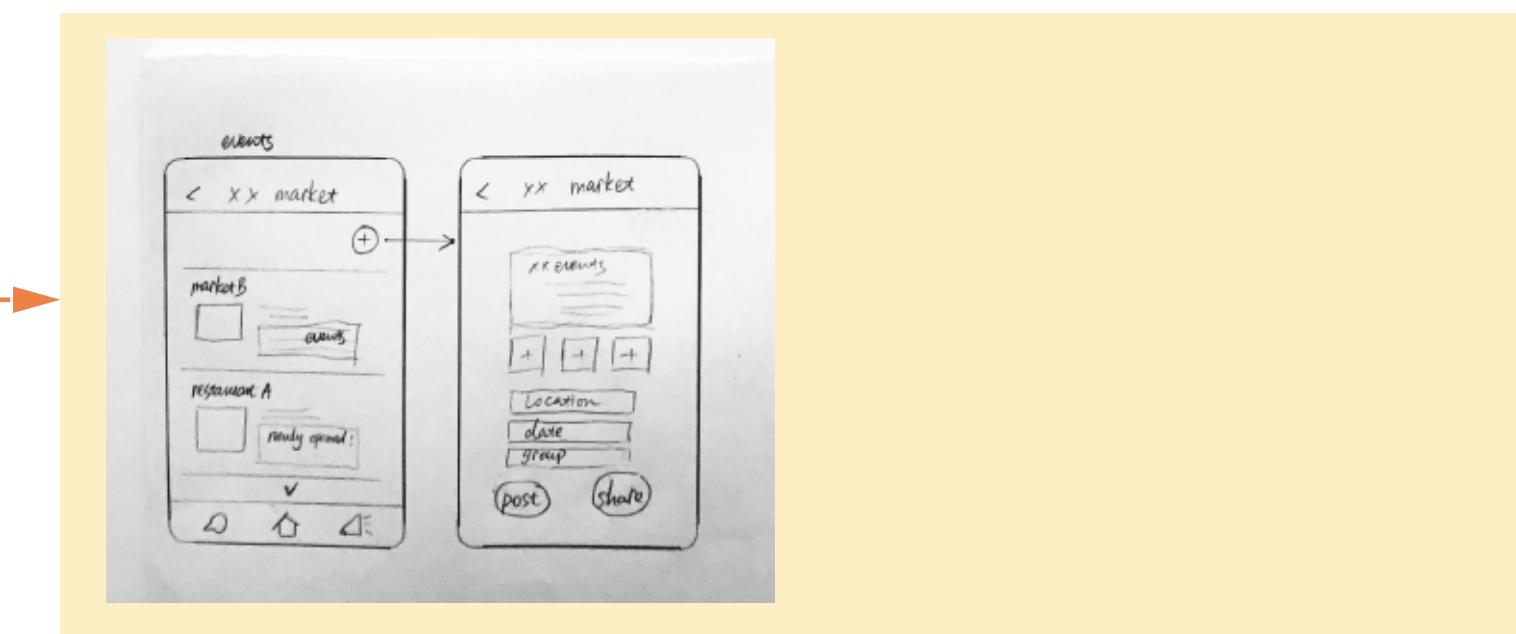
## Login page



## My Market + Order Status



## Events



# USER TESTING - 1

## Testing Format

In-person Interview

## Primary Objectives of Testing

Get initial feedback on:

- **Value Proposition**
- **Information Architecture**
- **User Flow of Major Features**

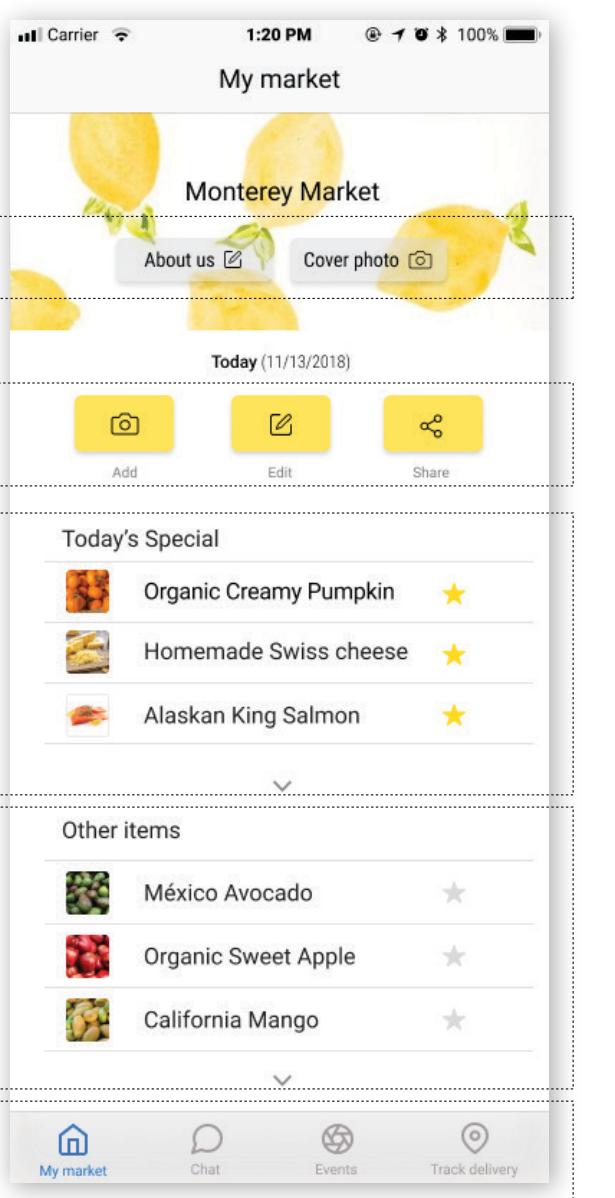
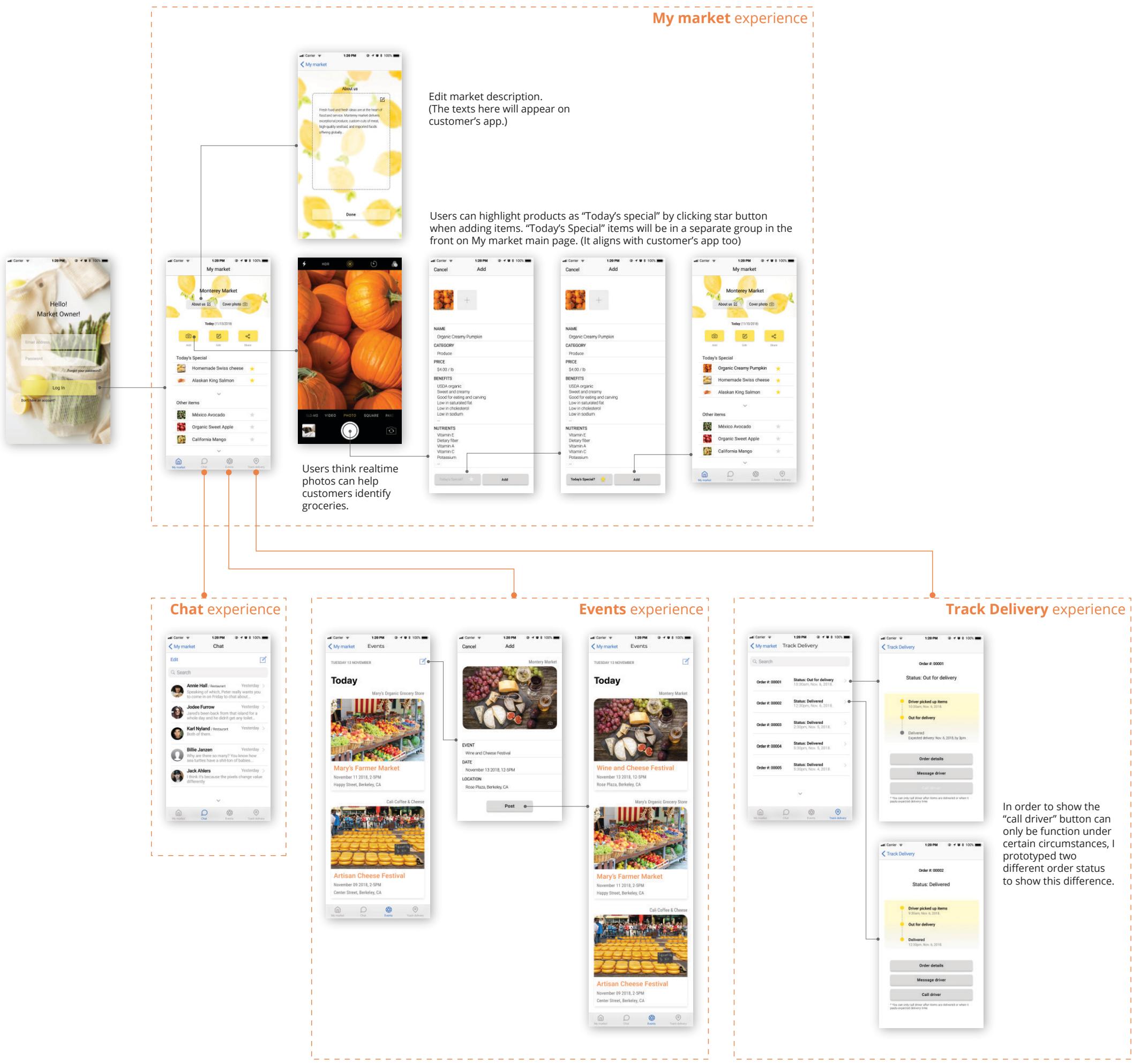
## User testing takeaways

1. Users want to show personality / history of the market.
2. Users want to highlight items.
3. Users want to check order status in a more direct way.
4. Users want a more effective way to list items.

## USABILITY TEST PLAN DASHBOARD

<b>AUTHOR</b> Chengcheng Huang	<b>CONTACT DETAILS</b> cc.huang@berkeley.edu	<b>FINAL DATE FOR COMMENTS</b> Oct.25.2018
<b>PRODUCT UNDER TEST</b>  What's being tested? What are the business and experience goals of the product?  An app designed for local independent grocery market owners.	<b>TEST OBJECTIVES</b>  What are the goals of the usability test? What specific questions will be answered? What hypotheses will be tested?  Do people agree with the value proposition - achieving their goals by starting an online store?  Do people understand the information architecture?  Do people feel good about user flow?  Are the features enough or too much?	<b>PARTICIPANTS</b>  How many participants will be recruited? What are their key characteristics?  6  Local, independent, community-based grocery markets.
<b>BUSINESS CASE</b>  Why are we doing this test? What are the benefits? What are the risks of not testing?  The test will address several key questions that will give design team future guidance for iteration.	<b>EQUIPMENT</b>  What equipment is required? How will you record the data?  Pen, paper, paper-based wireframe prototype.	<b>TEST TASKS</b>  What are the test tasks?  Start a conversation with your customer and check the contact information. Check the order status. Add products to the main page. Post market events on events center.
<b>PROCEDURE</b>  What are the main steps in the test procedure?		<b>LOCATION &amp; DATES</b>  Where and when will the test take place? When and how will the results be shared?  North Berkeley Oct.20-23
		

# PROTOTYPE V1



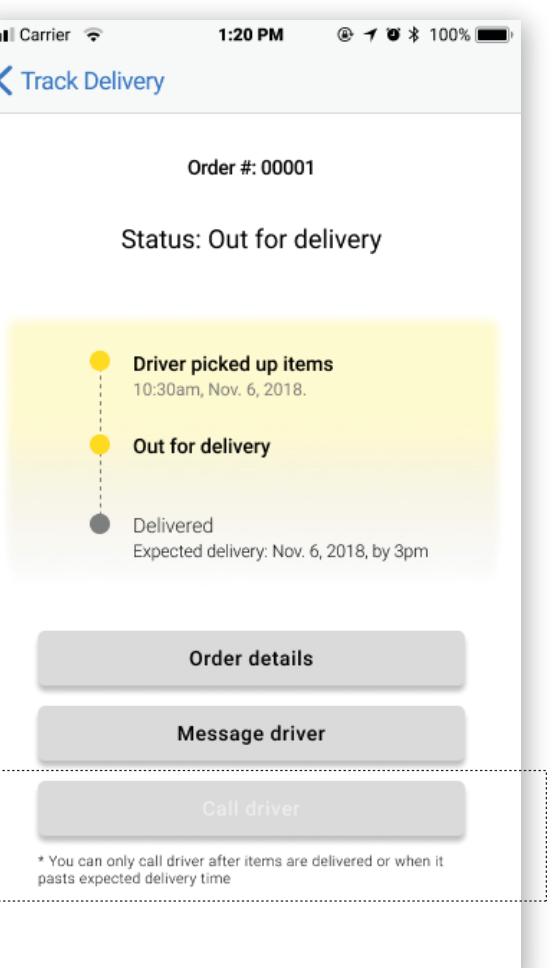
## My market page

- Use My market page as main page to navigate to different features (Chat, Events and Track delivery).
- Create hierarchy by grouping features.
- Use lists instead of card UI design for listing groceries to help users better organize their products and save space.



## Events page

- Use card UI design at events page to better integrate core information with clear hierarchy so that the page is tidier and more pleasing to the eye.
- Large events photos make the entire interface aesthetically delightful, simple and stylish with good usability, that's what you want to feel when you are on events page.



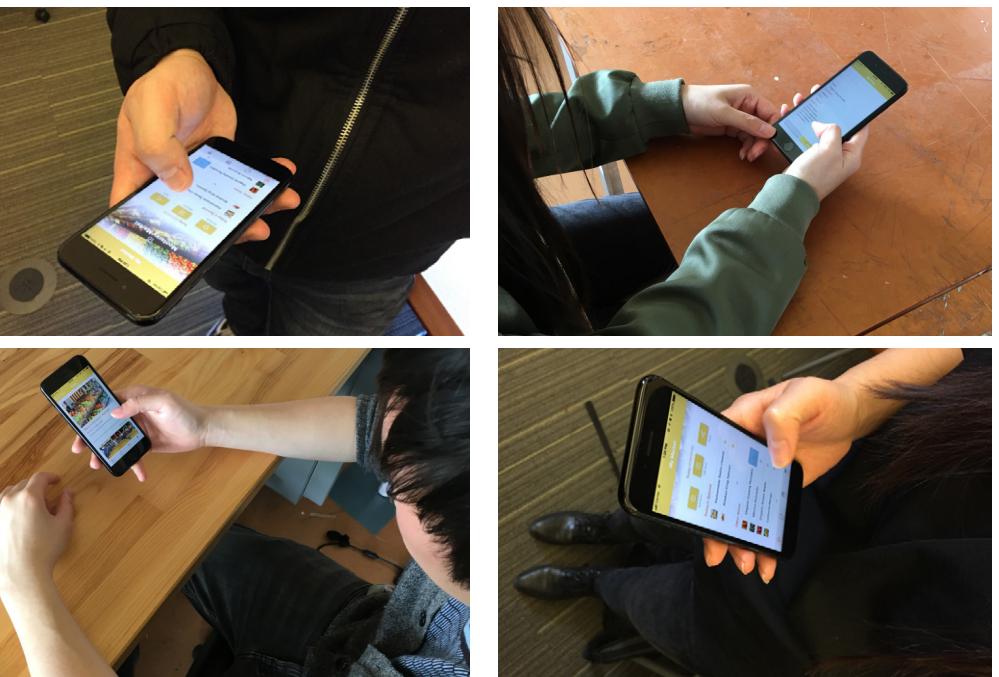
## Track delivery page

- Keep interface tidy and simple by only including core information that users would care.
- Use grouping to show clear information hierarchy.
- Users suggest making phone call can be disturbing when the driver is still driving. So I decide to only allow users to call driver when the items are delivered or past expected delivery time. And the explanation is also written below the button in texts in case users are confused.

# USER TESTING - 2

## Testing Format

Designer pilot testing + [usertesting.com](https://usertesting.com)



## Primary Objectives of Testing

Get detailed feedback on:

- User Flow of Certain Tasks
- User Interface

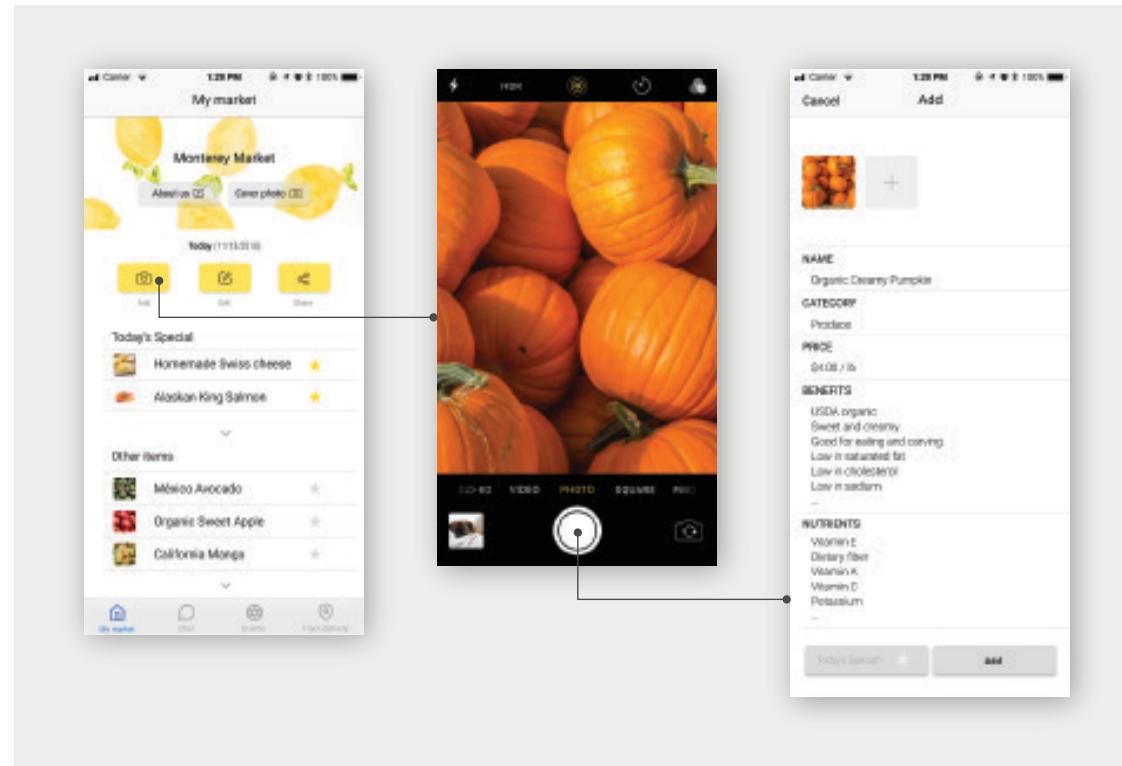
## User Testing Takeaways

- Users failed to highlight the items through the flow I designed.
- Users felt unnatural when adding items they are directly taken to camera page.
- Users felt they can't identify different orders only through numbers.
- Users wanted to see more detailed information about different events.
- Users felt confused about some icons.
- Overall interface does not seem holistic.

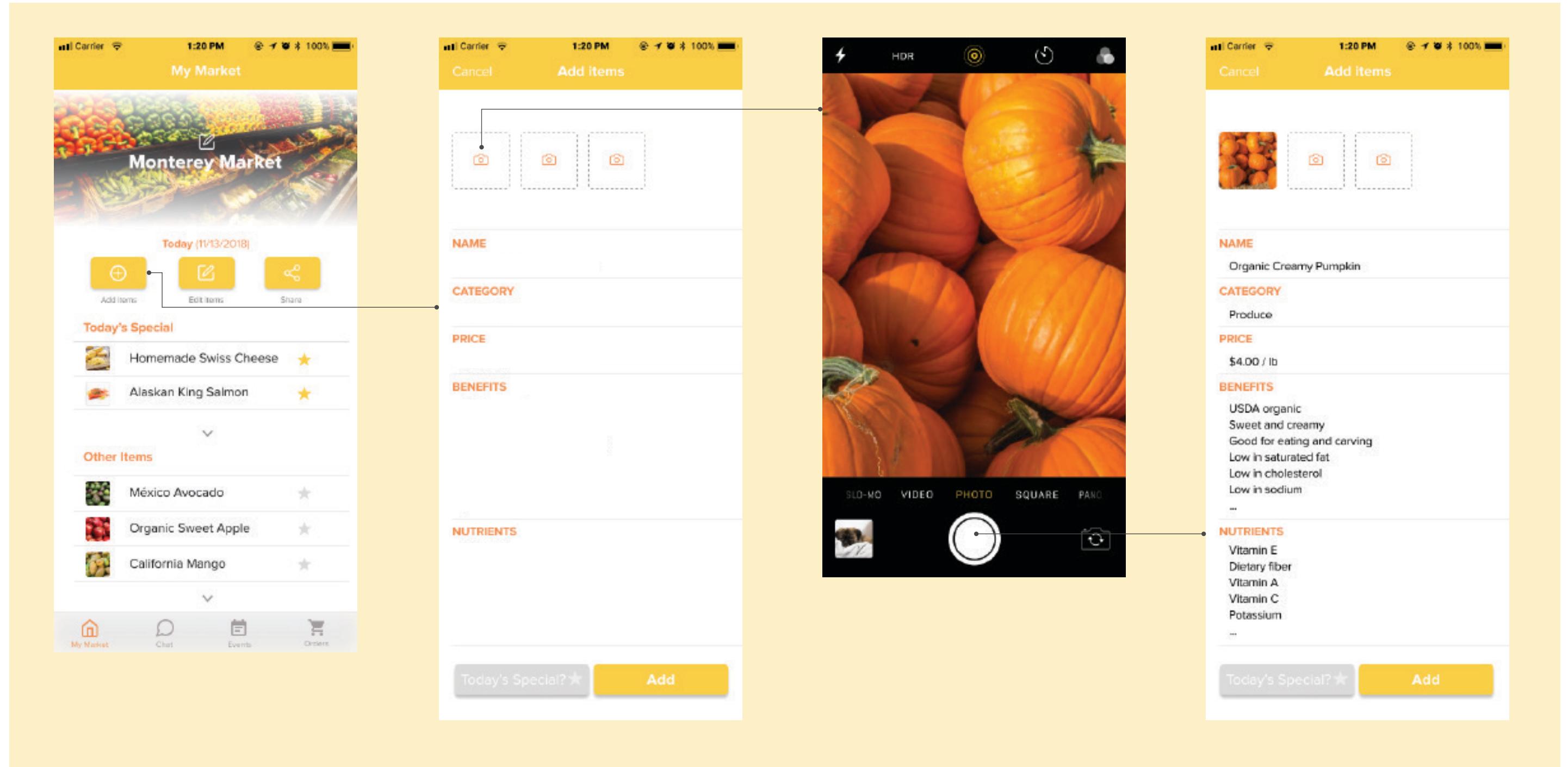
The screenshot displays the UserTesting platform interface. At the top, there's a 'Test Plan' section with a title 'Test Plan' and a subtitle 'An overview of the tasks and questions included in your test.' Below this is the 'User Testing' logo. The main content area is divided into several sections: 'Introduction' (with a scenario text), 'Tasks' (listing numbered instructions for the user), 'Questions' (with a list of 4 questions), and 'Responses' (showing a step-by-step process of a user completing tasks). The 'Tasks' section includes screenshots of a mobile application interface for a grocery market, showing various screens like 'My market', 'Today's Specials', and 'Events'. The 'Responses' section shows a user's progress through steps 3/21, 4/21, and 15/21, with options for rating the task difficulty.

# PROTOTYPE ITERATION

Before



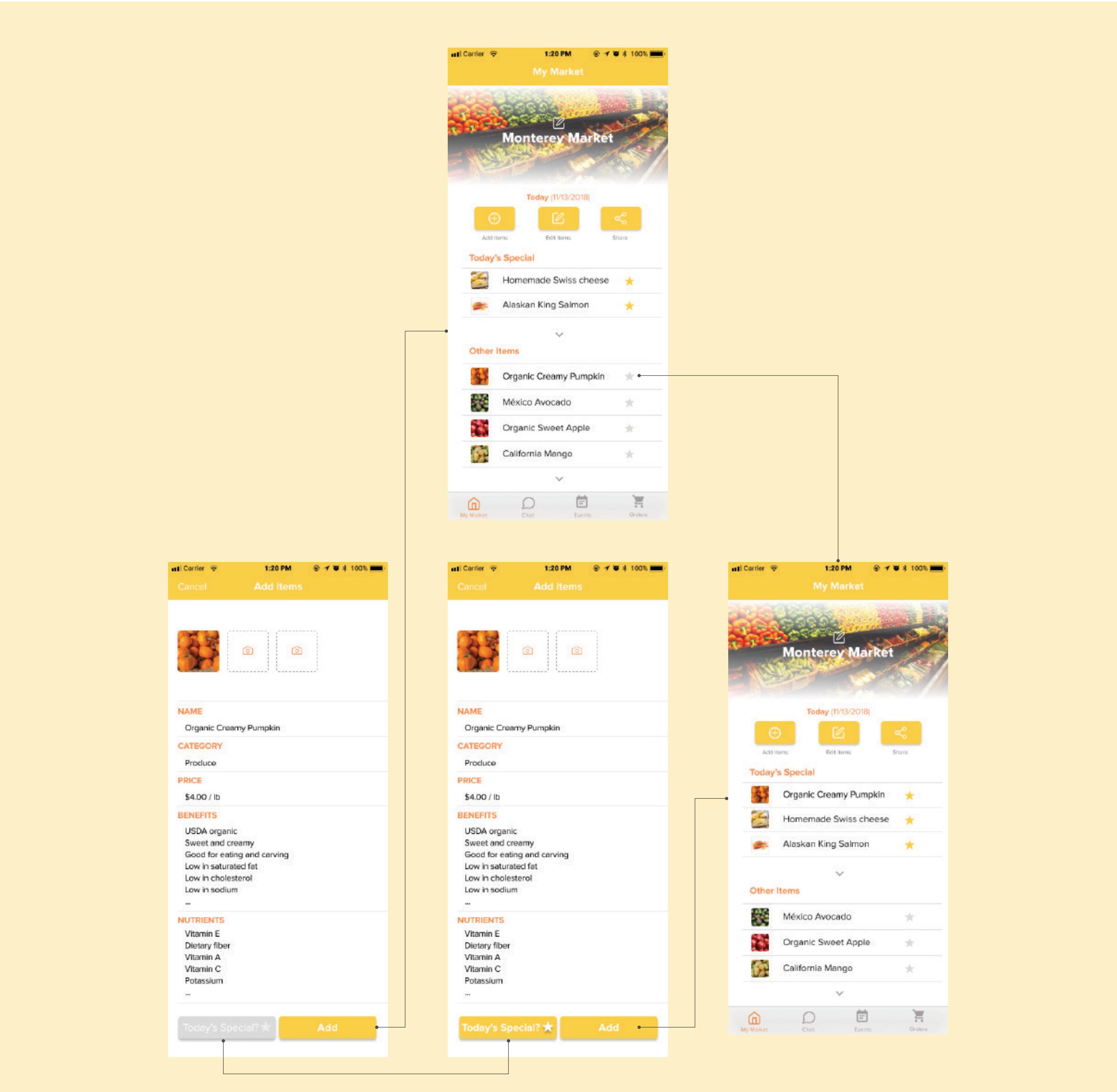
After



## 1. Adjusted user flow in adding items

After clicking “Add items” button, instead of being directly taken to camera page, users are presented with a template page of item information so that they can get an overview first. Then they can choose if they want to take a live photo or use existing photo.

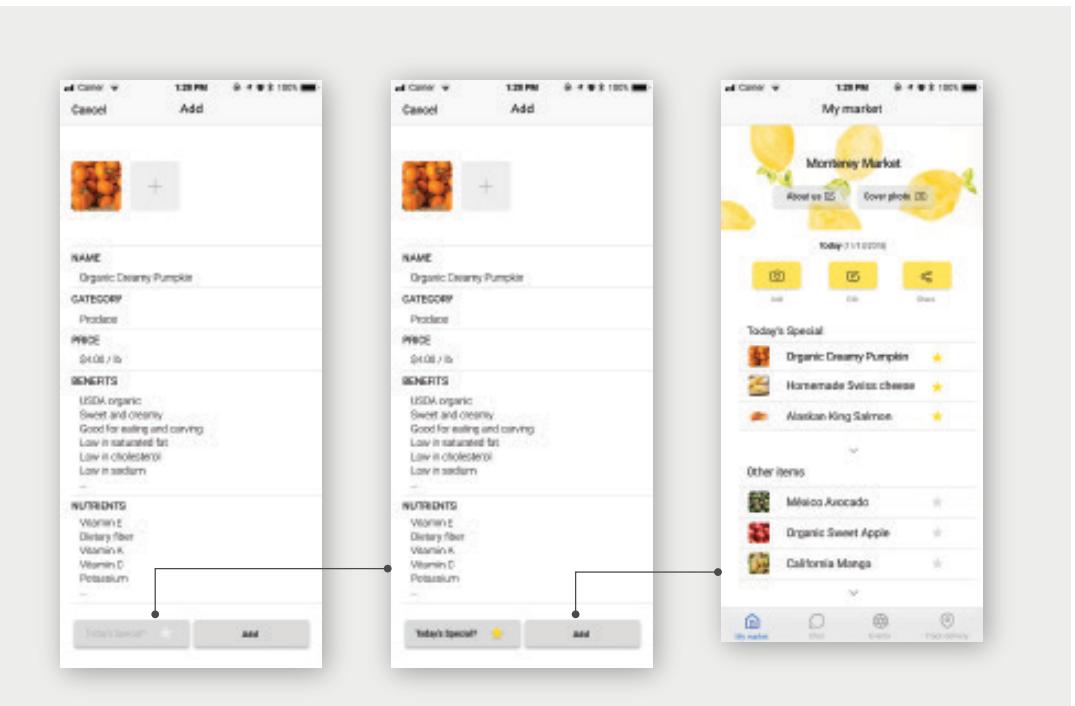
## After



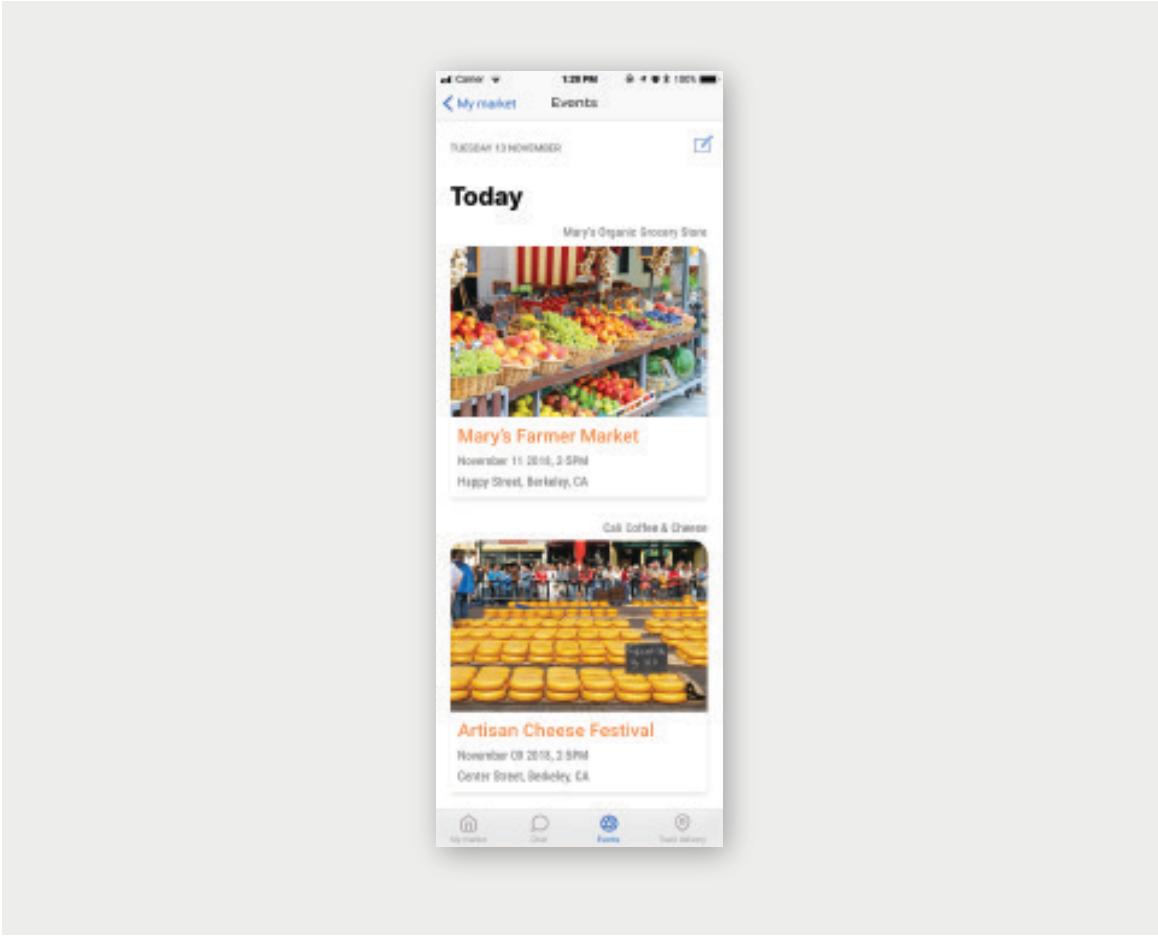
## 2. An additional flow for highlighting items

Users are given more options in performing the task - they can either mark it during adding process or highlight it directly on market main page (by clicking the star next to it)

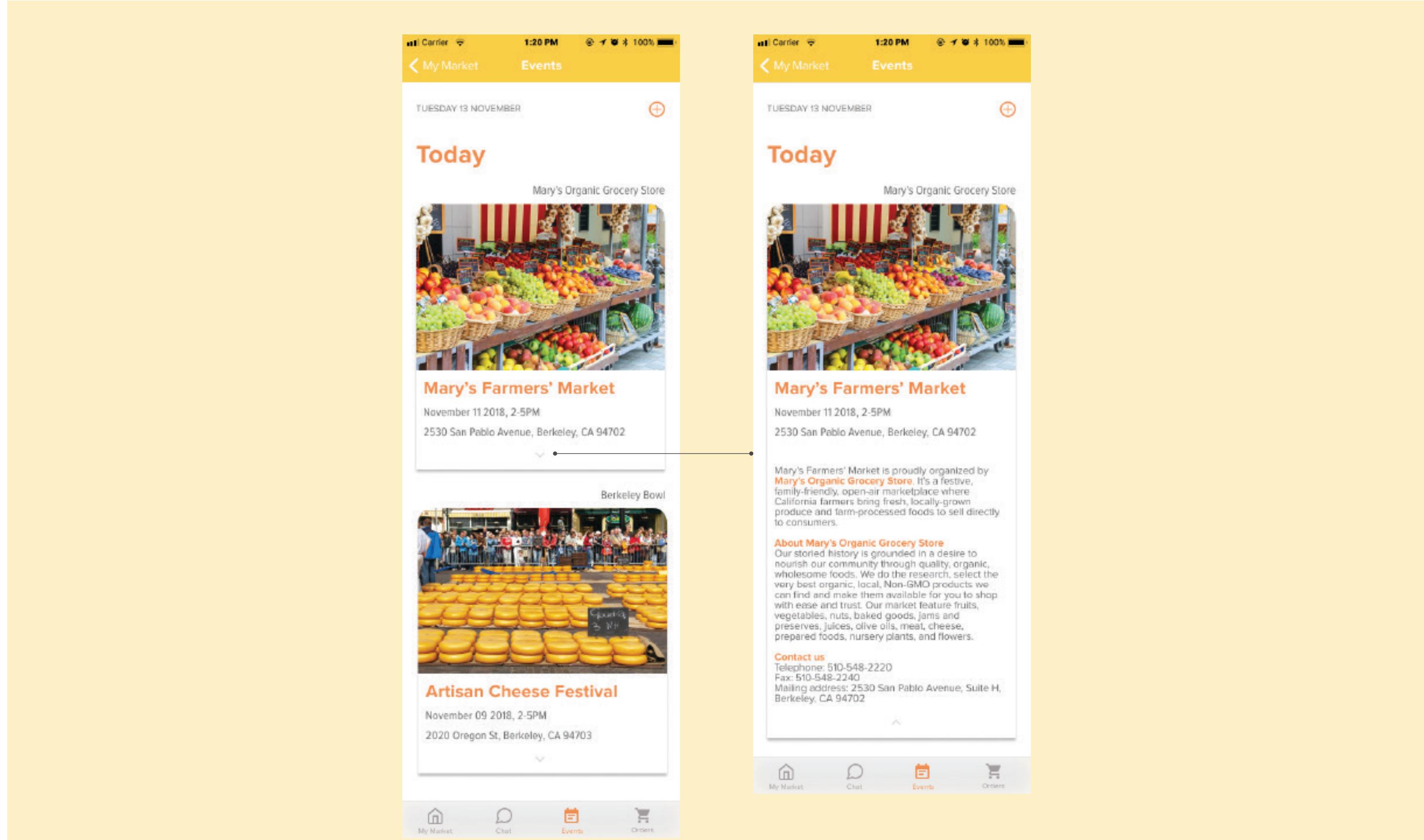
## Before



## Before



## After

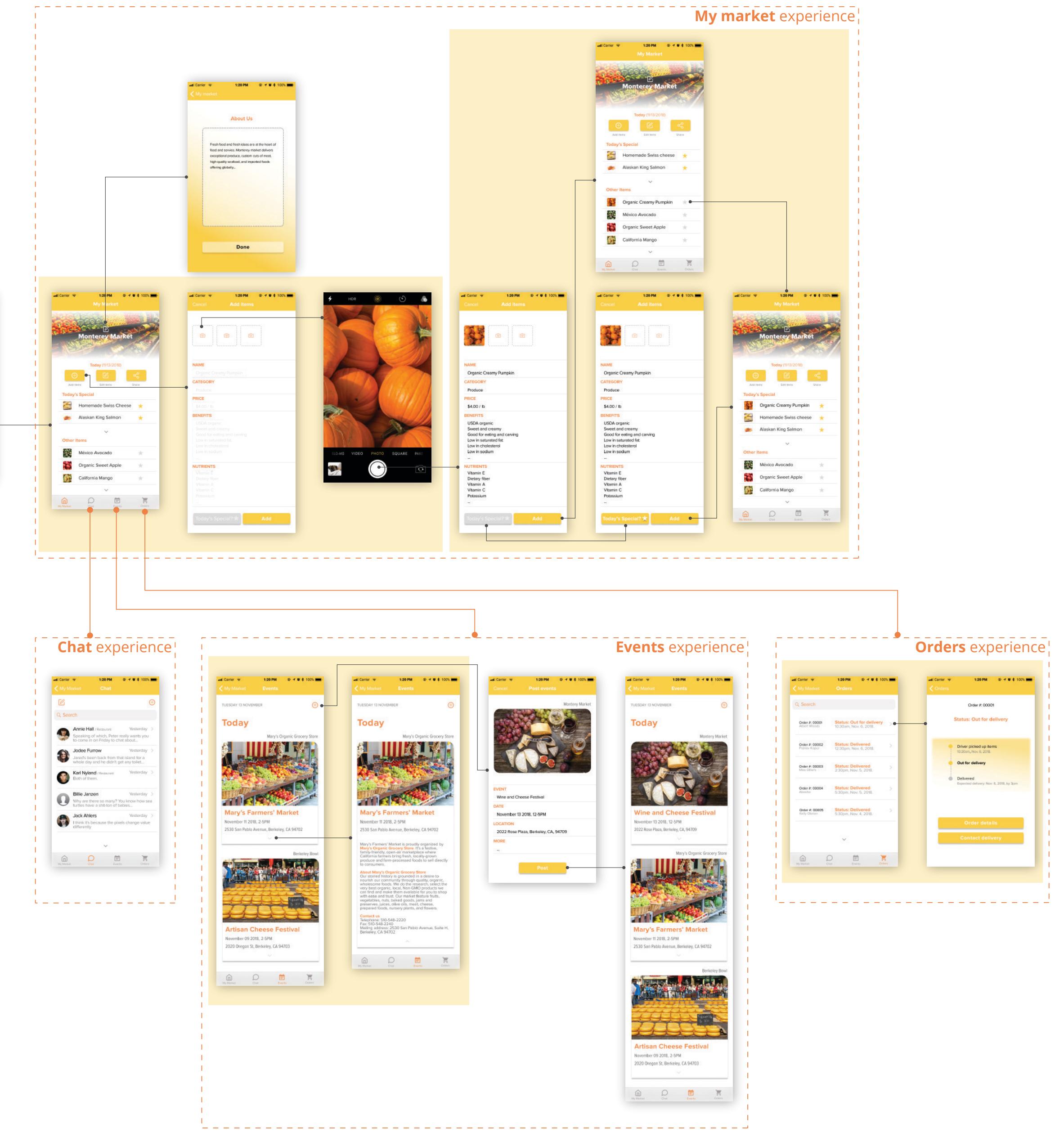
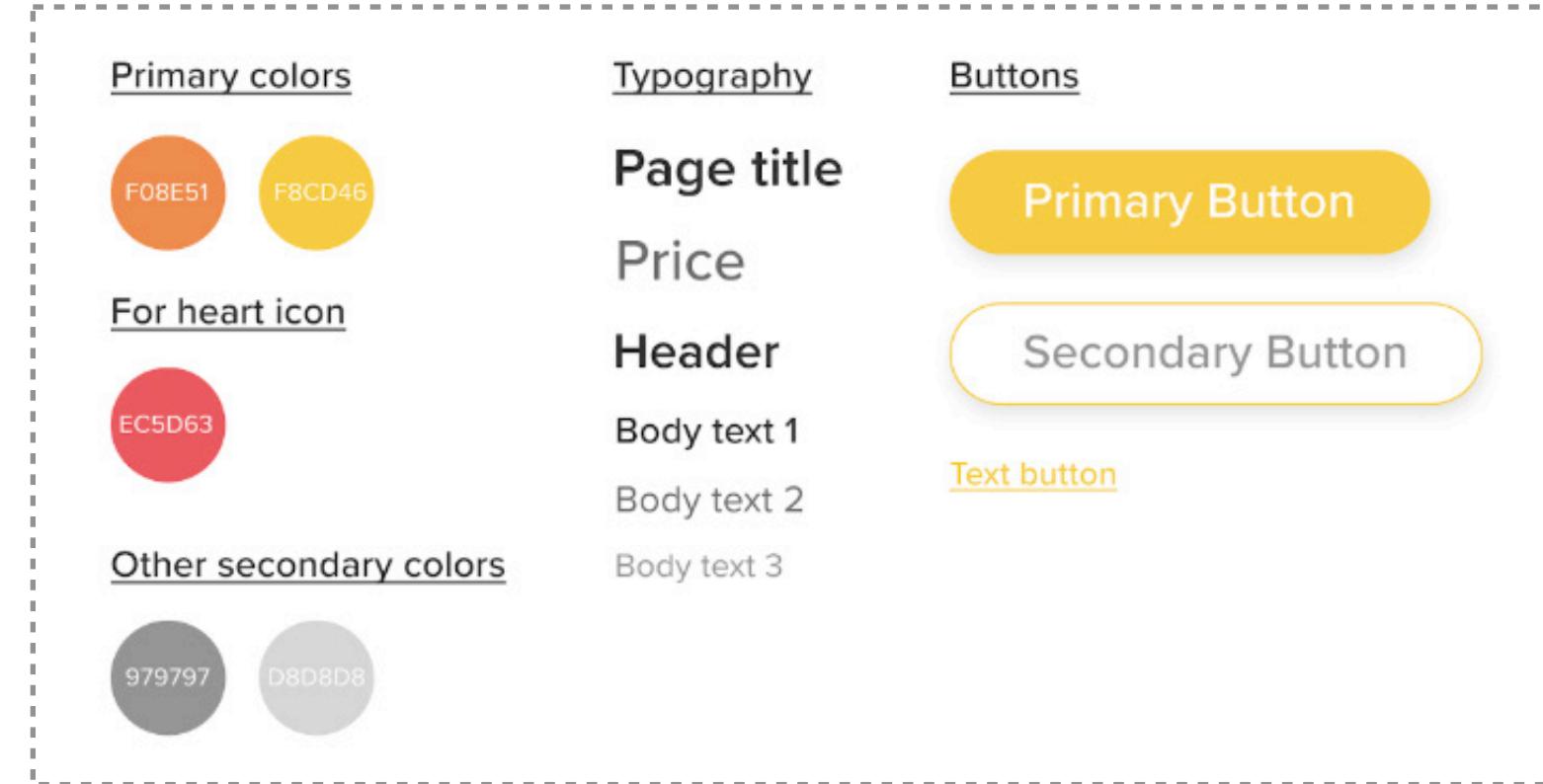


### 3. New user flow for checking events details

Users can check events details by clicking the arrow at the bottom of each events card.

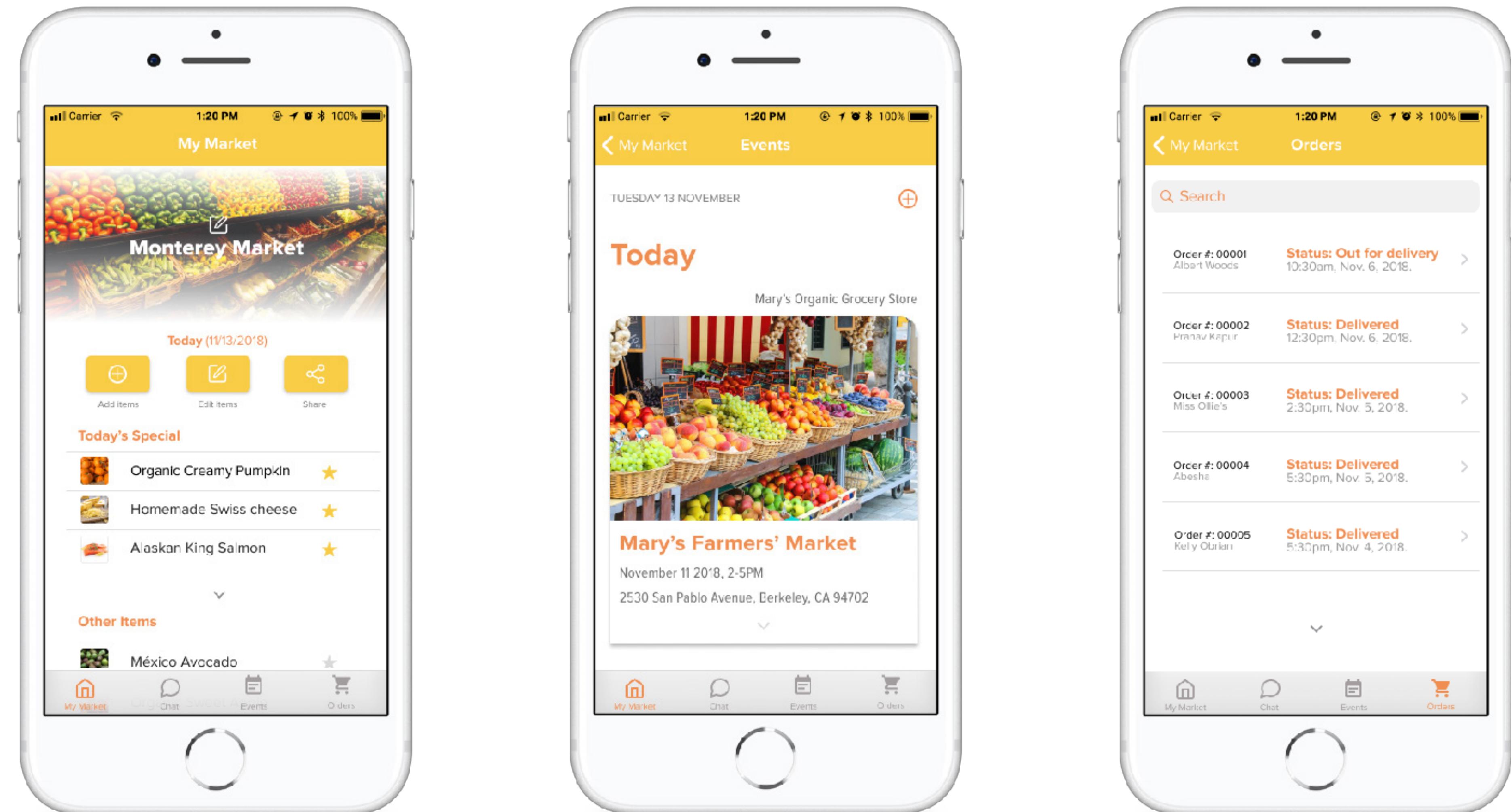
# UI DESIGN ITERATION

Iterated UI with a more developed material design library provided a holistic experience. It helped users better navigate within different features and presented a warm and inviting overall atmosphere.

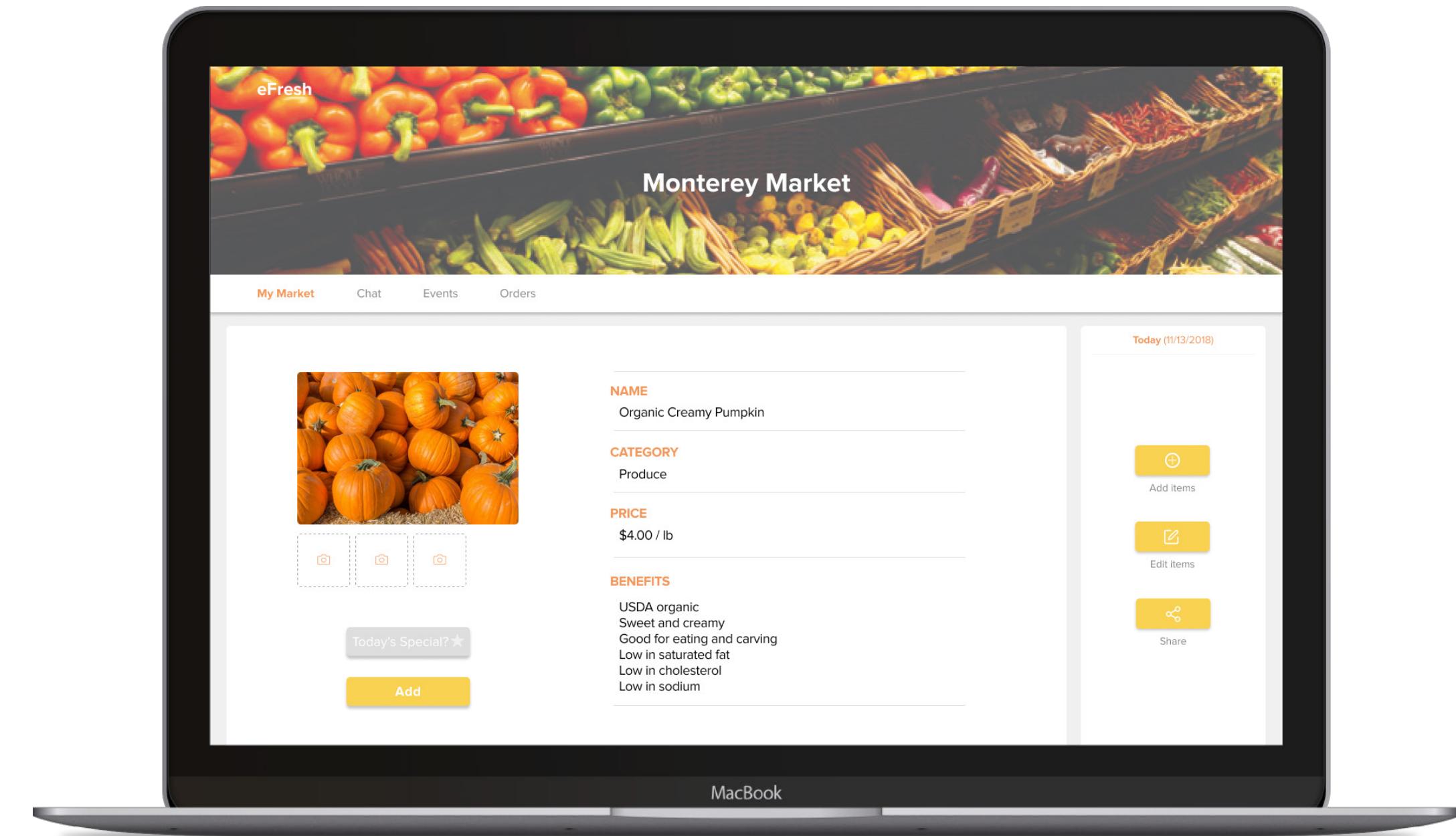
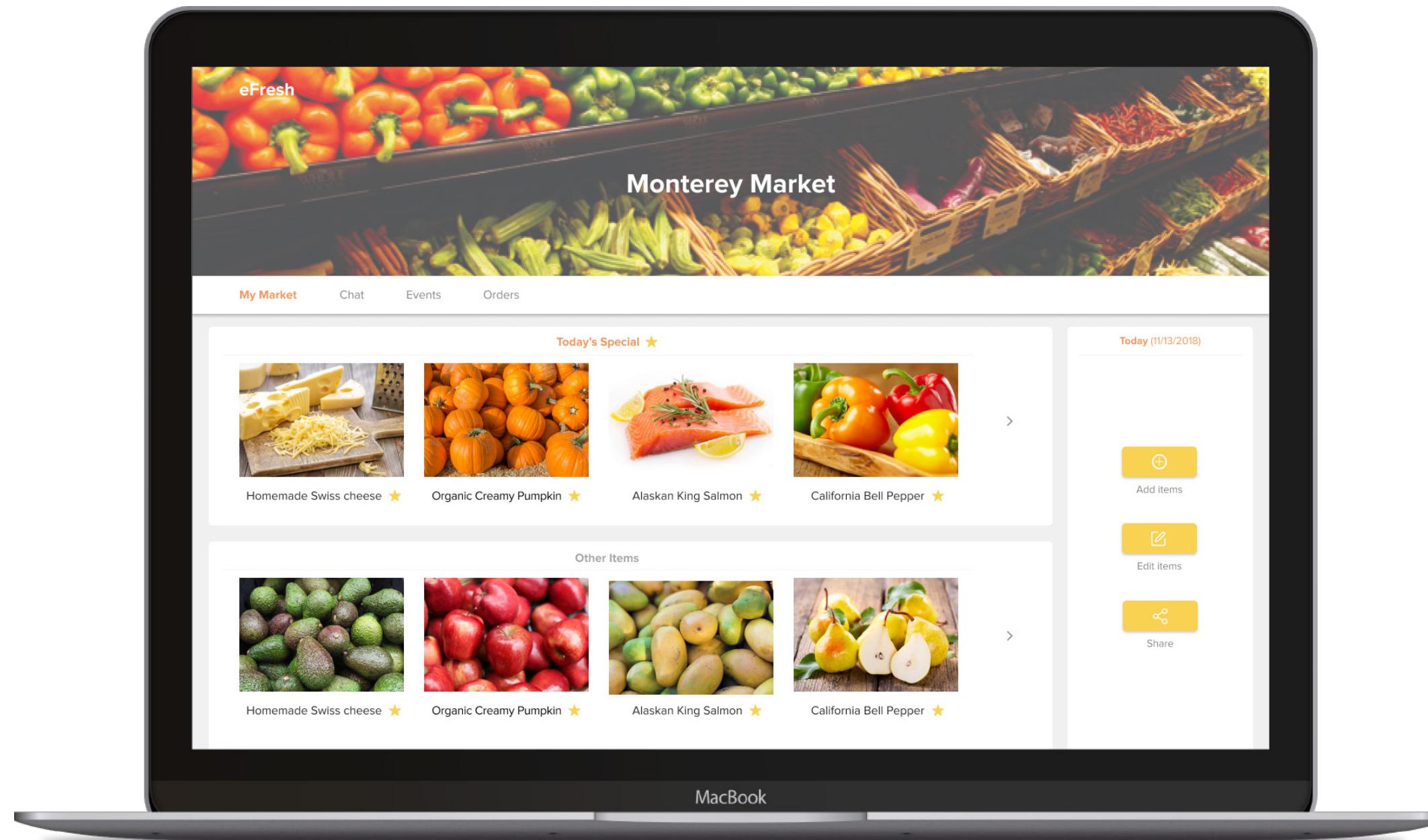


# FINAL PROTOTYPE SHOWCASE

<https://invis.io/efresh>



# DESKTOP DESIGN



# REFLECTION

## **What we did right:**

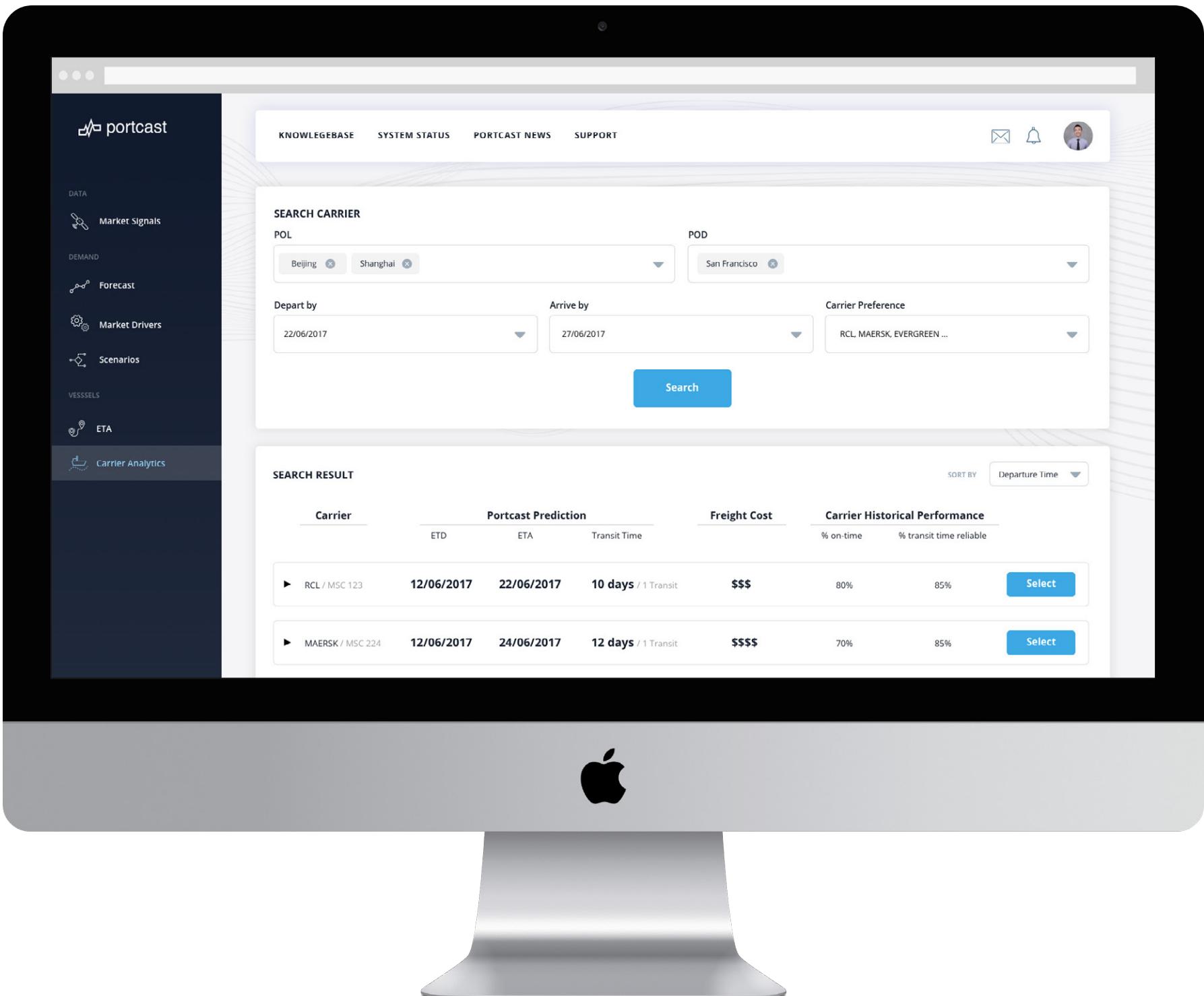
- 2 different user testing sessions are very fruitful in providing me with insights on different aspects.
- We learned a lot from each other through the collaboration process.

## **What didn't make it:**

- Till the end, we're still in lack of logical alignments between the 4 apps.
- The interview session is kind of lack of focus.
- UI design library comes at a very late stage of the project.

## **Next step:**

- Developing a more logical alignment between the 4 apps.
- Continue developing the desktop platform.
- Mobile platform implementation.



## DESKTOP UX&UI DESIGN AND DATA VISUALIZATION

# Portcast Analytics platform

### MAKING IT EASY TO CHOOSE A SHIPPING CARRIER

Designed a Carrier Analytics feature for a global shipping company (Portcast) to implement on their desktop platform. The feature includes search experience, way-finding experience and data visualization with clear information hierarchy.

**Client:** Portcast

**Team:** Neha Mittal(Project Manager), Ben Stukenborg(Product design lead), Chengcheng Huang(Product designer)

**Duration:** Feb 2019 - March 2019 (3 weeks)

**Role:** Product Designer

**Skills:** User research, industry research, job statement, user storyboard, user testing, prototype, UI design, data visualization

## THE CHALLENGE

Salespeople at shipping company want to use this platform to help them choose the right carrier for their business. But there are so many data and information provided, it's hard for them to navigate through all the information and finish their job.

## THE OUTCOME

A new platform focusing on search experience and way-finding experience with clearly-organized information hierarchy.

SERVICE	CARRIER	VESSEL	SCHEDULE			PORTCAST PREDICTION		HISTORICAL PERFORMANCE			
			YEAR	TONNAGE	ETD (POD)	ETA (POD)	TRANSIT TIME ▾	ETA (POD) ▾	TRANSIT TIME ▾	% ON TIME TRIPS ▾	Avg. Transit Time
MIRACOS	RCL	2010	...		6 FEB 12:00	8 FEB 00:00	2 days	16 FEB 00:00	10 days	80%	5 days
<b>POD</b> <b>PORT</b> <b>PIRT</b> <b>PORT</b> <b>POD</b>											
ETA	6 FEB 13:00	6 FEB 15:00	7 FEB 12:00	7 FEB 18:00	8 FEB 00:00						
ETD	X FEB XX:00	6 FEB 15:00	7 FEB 12:00	7 FEB 18:00	X FEB XX:00						
ABC123	MAERSK	2012	...		8 FEB 12:00	10 FEB 00:00	2 days	16 FEB 00:00	10 days	80%	5 days
QUEENOS	EVERGREEN	1910	...		2 FEB 12:00	11 FEB 00:00	9 days	16 FEB 00:00	10 days	80%	5 days



## THE RESULT

Client spoke highly about the final result:



Nidhi Gupta  
**Portcast CEO**

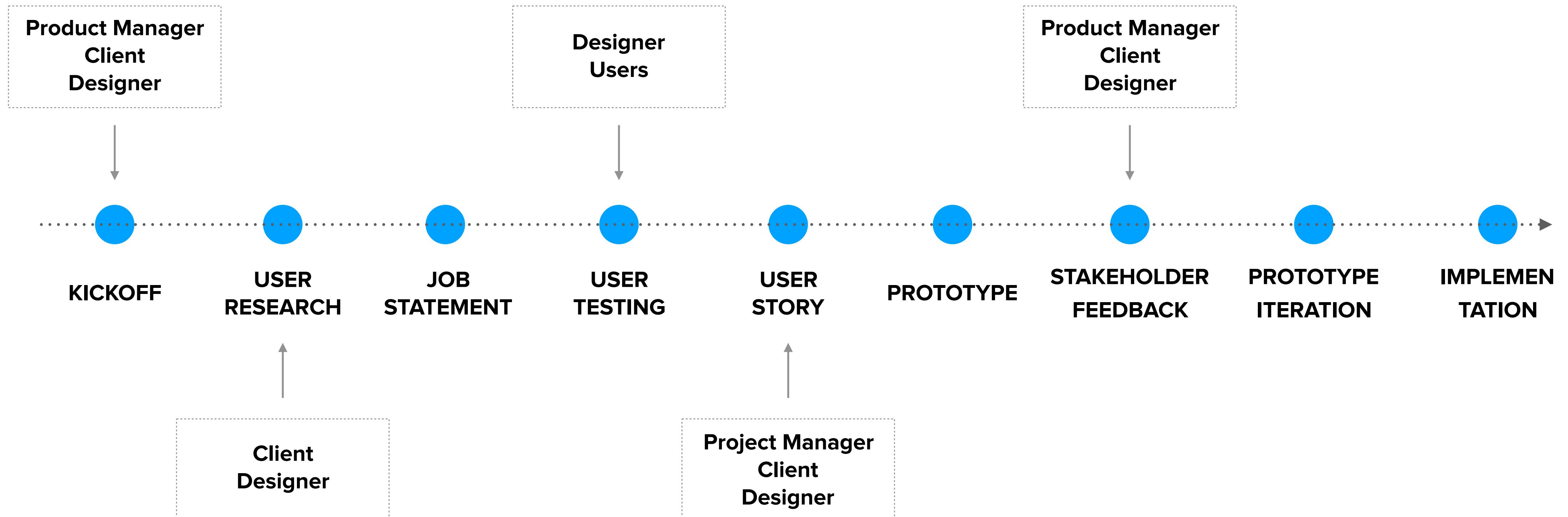
“It was definitely a successful - coming from where I had started to where we are, this was a significant change!

“I didn’t expect doing customer interview could bring so many useful insights. It was an eye opener for me. “

Now the prototype has been passed to engineers for implementation. I will stay with engineers on this project in case there’re other questions.

# DESIGN PROCESS

During the process, stakeholders are highly involved in different design phases, including PM, client, design lead and users of the platform.



# KICKOFF

During the kickoff meeting with stakeholders, we(RoadMap) discussed project current status, project scope, schedule etc with client.

## Goal:

Design a “Carrier Analytics” feature to be implemented on Portcast current platform.

The new feature is going to help users better choose a carrier based on the prediction Portcast provides.

## Final deliverables:

High-fidelity prototype ready for implementation.

## Project current status:

A few screenshots put together by client showing how she wants the new feature to be.

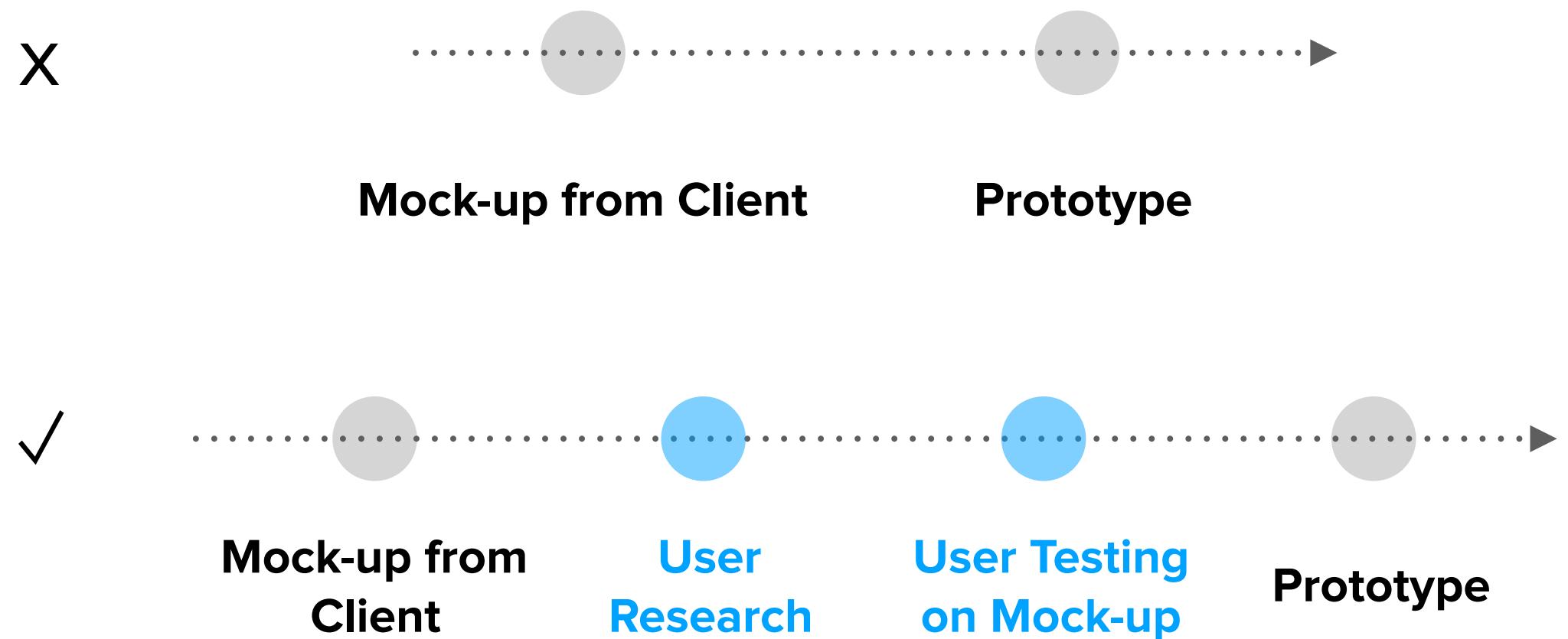
Screenshot of the Portcast Customer interface. The top navigation bar includes NEWS, API, and PORTCAST CUSTOMER (with a TP icon). The search filters are set to POL and POD, with a prediction start date of 2018-08-05. The main table displays three rows of data for vessels MIR 005, ABC 123, and QUEEN 001. The columns include SERVICE, CARRIER, VESSEL, YEAR, TONNAGE, ETD (POL), ETA (POD), TRANSIT TIME, PORTCAST PREDICTION, and HISTORICAL PERFORMANCE. The 'BY SERVICE' button in the search bar is circled in red.

Service	Carrier	Vessel	Year	Tonnage	ETD (POL)	ETA (POD)	Transit Time	Portcast Prediction	Historical Performance
MIR 005	NCL	2010	....	6 FEB 12:00	8 FEB 00:00	2 days	16 FEB 00:00	10 days	80% 5 days
ABC 123	MAERSK	2012	....	8 FEB 12:00	10 FEB 00:00	2 days	16 FEB 00:00	10 days	80% 5 days
QUEEN 001	EVERGREEN	1910	....	2 FEB 12:00	11 FEB 00:00	9 days	16 FEB 00:00	10 days	80% 5 days



## Challenges:

- Tight schedule
- Client already put up a design proposal
- Not familiar with logistic industry and especially this user case.



## Our approach:

- Propose a new workable schedule to client;
- Convince client of the value on user research and user testing and ask her to arrange a testing session with the real users;
- Collaborate with client on doing user research. Combine industry research and client interview to make sure research scope is right.



Industry Research

+



Client Interview

# SYNTHESIS

## USERS

### User type-1

**Salespeople at shipping company** (like DHL)

They will be looking for data on how to best guide manufacturers about the best carrier or route to take to send their goods from A to B in immediate future

### User type-2

**In-house logistic person at manufacturers/retails** (like Siemens or Apple)

They will be looking for data on how to choose the best carrier or route to send their goods from A to B in immediate future

# JOBS & PAIN POINTS

## User type-1

Salespeople at shipping company

### Job Statement

“When I want to be more in control of the shipping schedule and satisfy my customers, I want to see a more accurate predicted transit time and historical delivery information of that carrier, so I can guide manufacturers to choose the best carrier to send their goods to their customers in time.”

### Concern

[Transit time / Journey + Cost](#)

### Pain Points

1. The transit time is not accurate and reliable.  
User can't guarantee when the goods will get delivered. They might get bad feedback from customers if the goods arrive late.
2. Hard to obtain comprehensive data about different carriers and vessels.

## User type-2

In-house logistic person at manufacturers/retails

### Job Statement

“When I want to plan shipping effectively and reduce costs, I want to compare the reliability and performance of the vessel and also the prices of different carriers, so I can select the best carrier to ship my goods.”

### Concern

[Cost + Transit time / Journey + Reliability](#)

### Pain Points

1. The transit time is not accurate and reliable.  
User can't guarantee when the goods will get delivered. They might get bad feedback from customers if the goods arrive late.
2. Hard to obtain comprehensive data about different carriers and vessels.

# USER TESTING

## User Testing Format:

“think aloud” user test with the real users from Singapore through video call.

## Preparation:

Mock-up for user test, test plan, user test script

## Primary Objectives for User Testing:

- Value Proposition - verify the hypothesis on user's job/needs
- Information hierarchy
- User flow

## Procedure:

1. Introduction
2. Warm-up: ask users questions about daily work to get them into the job mood.
3. Test: users are given a task (“choose the right carrier for your business/client”).  
They are asked to speak out any thoughts they have and any frictions they encounter when performing the task.
4. Post-test interview: further interview users with more detailed questions relating to the task and user flow.
5. Wrap-up

## • User Test Script

Hi, thanks for being here to do this user test. Our design decision on prototype iteration will be made based on the test results. I'm xxx. I'll be the moderator of this test. This test session will be audio recorded.

Before the test, Yusen, can you talk about your workflow in terms of choosing a shipping method for your company? Is there any specific information you care about? How do you make a decision?

Thank you!

This is a prototype of the “Carrier Analytics” feature to help users compare different shipping methods and make the best decision based on the information provided. Now, you are the customer. The task for you is to choose the best shipping method for your business. Please speak out any thoughts or feelings you have when observing the information and navigating the feature.

(At the end) Do you think you can choose the best shipping method for your business based on the information provided by this feature? Is the information here enough for you to make this decision? What's missing? Is there any frustration you experience when performing the task?

Thank you for your participation in this user test. Have a good day!

## • Test Plan

USABILITY TEST PLAN DASHBOARD				
AUTH-ON	CONTACT DETAILS	FINAL DATE FOR COMMENTS		
Chengcheng Huang				
<b>PRODUCT UNDER TEST</b> What's being tested? What are the business and experience goals of the product?  The “Carrier Analytics” feature of Postest that helps customer check and compare different shipping choices and make a decision.	<b>TEST OBJECTIVES</b> What are the goals of the usability test? What specific questions will be answered? What hypothesis will be tested?  Get to know the real user needs, what is the job they want to hire this product to do.	<b>PARTICIPANTS</b> How many participants will be recruited? What are their key characteristics?  1 Yusen(a shipping company)	<b>TEST TASKS</b> What are the test tasks? Think aloud test  Ask user to check the shipping choices by service and by carrier and check historical performance.	<b>RESPONSIBILITIES</b> Who is involved in the test and what are their responsibilities?  Nidhi (lead the test) Chengcheng (take notes) Ben
<b>BUSINESS CASE</b> Why are we doing this test? What are the benefits? What are the risks of not testing?  The test will address several key questions that will give design team future guidance for iteration.	<b>EQUIPMENT</b> What equipment is needed? How will you record the data? Audio recording equipment, Descrip:  Ask user to describe what he sees and what information he most cares about. Ask user to talk about the flow he goes through and how he thinks about it.			<b>LOCATION &amp; DATES</b> Where and when will the test take place? When and how will the results be shared?  Over internet: Wed Feb 27
<b>PROCEDURE</b> What are the main steps in the test procedure?				
0-2 min introduce participants	2-3 min introduce the platform and feature	5-15min carry out the test tasks	15-20 min post-test interview	20-22 min wrap up the interview
				22-25 min organize the notes

# USER STORY

## Job: Choose the right carrier for the business

After user research and testing session, I created this storyboard to help demonstrate the interaction between users and the platform and to show how the feature can best help users finish their job.

The storyboard also reveal important insights on the major experience through the platform; information with top priority and the overall user flow.



# USER STORY KEY INSIGHTS

2 major experience through the platform

## SEARCH

POL \_\_\_\_\_ POD \_\_\_\_\_ TRADELANE \_\_\_\_\_  
DATE  depart by  arrive by  
SEARCH



I log into Portcast and open this Carrier Analytics page. I start putting in info about location and date.

## WAYFINDING

CARRIER	VESSEL	PORTCAST PREDICTION			PRICES	HISTORICAL PERFORMANCE		
		sort by	total capacity	ETA POD		TRANSIT TIME	ACCURACY	% ON TIME TRIPS
SELECT	RCL	21,000 TEU	▶ jun 22 - jun 24	0 - 2 days	80%	\$15	80%	10 days
SELECT	MAERSK	19,000 TEU	▶ jun 23 - jun 26	3 - 4 days	85%	\$18	70%	12 days
SELECT	EVERGREEN	18,500 TEU	▶ jun 23 - jun 26	0 - 4 days	70%	\$16	70%	11 days



Oh great! I see all the data about the carriers that are available and can do the job for my client within that time range.

# USER STORY KEY INSIGHTS

Information with top priority (crucial in decision-making)

## JOURNEY PREDICTION

PORTCAST PREDICTION			
ETA(POD)	TRANSIT TIME	ACCURACY	
▼ Jun 22 - Jun 24	8 - 12 days	80%	
POL	PORT	PORT	POD
EIA	Jun 20	Jun 22	Jun 22
ETD	Jun 20	Jun 22	Jun 23
► Jun 23 - Jun 26	9 - 14 days	85%	
► Jun 23 - Jun 26	9 - 14 days	70%	



I click the arrow in order to see more detailed information about the transit time and different ports.

## PRICE

PRICES
\$\$\$
\$\$\$\$
\$\$\$



Okay, I think I've got pretty good overview on transit time prediction. Now I want to see the costs.

# PROTOTYPE V1

## Problems:

- Information is too cramped on one page
- No clear information hierarchy
- Hard to navigate through

## Solution:

Refer to “booking flight” experience.

**Instead of choosing a carrier, user actually is choosing a journey.**

The screenshot shows a web-based prototype for shipping information. At the top, there is a search bar with fields for POI (set to Shanghai Shenzhen), POD (set to San Francisco), Date (set to Jun 22-27), and Carrier Preference (set to KLL MAERSK). Below the search bar is a table titled "Schedule by Carrier". The table has columns for Carrier (PCL, MAERSK, EVERGREEN), Service String (MFA 005, ABC 123, QUEEN 05), Vessel (VESSEL A, Vessel C, Vessel D), ETA (Jun 15, Jun 16, Jun 15), Transit Time (3 days, 4 days, 3 days), and Departure Dates (Jun 12, Jun 12, Jun 12). To the right of the table, there are sections for "Prices" and "Historical Performance". On the left side of the main content area, there is a sidebar with icons and labels for "Market Signal", "Forecast", "Market Drivers", "Scenarios", and "ETA".

Carrier	Service String	Vessel	Schedule by Carrier		Schedule by Forecast Prediction			Prices	Historical Performance	
			ETA	Transit Time	ETD	ETA	Transit Time			Confidence Level %
PCL	MFA 005	VESSEL A Vessel 0	Jun 15	3 days	Jun 12	Jun 20-24	8-12 days	80%	\$\$\$	80%
MAERSK	ABC 123	Vessel C	Jun 16	4 days	Jun 12	Jun 21-26	8-14 days	70%	\$\$\$	70%
EVERGREEN	QUEEN 05	Vessel D Vessel E	Jun 15	3 days	Jun 12	Jun 21-26	8-14 days	70%	\$\$\$	65%

# PROTOTYPE V2

- Clear information hierarchy
- Clean and simple interface
- Put information with less importance in drop-down menu

The screenshot shows the left panel of the Prototype V2 interface. At the top, there are dropdown menus for 'Shanghai; Shenzhen' (set to 'San Francisco'), 'Date' (set to '06/27/2019'), and 'Carrier' (set to 'RCL, MAERSK ...'). Below these are three bar charts under the heading 'Historical Performance': 'Wk On Time', 'Avg. Total Time', and 'Vessel Availability'. The 'Wk On Time' chart shows values of 95%, 90%, and 95% for RCL, WCLX, and EG respectively. The 'Avg. Total Time' chart shows values of 3.5 days, 3.7 days, and 3.9 days. The 'Vessel Availability' chart shows values of 95%, 90%, and 95% for RCL, WCLX, and EG respectively.

**Schedule by Portcall Prediction:**

Carrier	ETA	ETD	Time Diff	Prices
RCL	06/12	06/22	8 - 12 days	\$55
MAERSK	06/12	06/24	9 - 14 days	\$\$\$\$
EVERGREEN	06/12	06/24	9 - 14 days	\$\$\$\$

This screenshot shows the right panel of Prototype V2. It includes the same top-level navigation and historical performance charts as the left panel. Below the charts, the 'Schedule by Portcall Prediction' section is identical to the left panel.

A blue circle highlights the 'RCL' row in the schedule table. A tooltip for 'RCL' provides more detail:

Detailed Schedule by Portcall Prediction		
Port	ETA	Notes/Condition
POL	06/12 10:00 AM	80%
PORT	06/15 10:00 AM	80%
POD	06/22 10:00 AM	80%

Below this, two additional portcall details are shown:

Schedule by Carrier			
Carrier	ETA	Time Diff	
ETL	06/12	06/15	3 days
Order	Seattle Shipp.	Varied	
RCL	MIRA 005	EVENT VARIOUS PRCF	

At the bottom, the 'MAERSK' and 'EVERGREEN' entries from the main table are expanded:

Carrier	ETA	ETD	Time Diff	Prices
MAERSK	06/12	06/24	9 - 14 days	\$\$\$\$
EVERGREEN	06/12	06/24	9 - 14 days	\$\$\$\$

## **Stakeholders Feedback**

- Shock on how simple and clear the page is, comparing to the previous design. But satisfied with the outcome based on user research and testing.
- Adjust some parts of the search features
- Add historical performance
- Adjust filter feature to help sort results

# PROTOTYPE ITERATION

## SEARCH: INPUT LOCATION

The initial prototype shows a search interface with two dropdown menus: 'POL' and 'PCD'. A dropdown menu for 'PORT' is open, listing 'Beijing', 'Shanghai', 'Shenzhen', and 'Ningbo'. A dashed box highlights this dropdown.

- User Testing indicated users want to be able to input multiple locations for searching

The second prototype shows a modified search interface. The 'PORT' dropdown from the first prototype has been removed, and the location inputs have been combined into a single multi-select field labeled 'Start typing to search'.

The third prototype shows a search interface with separate input fields for 'Depart by' and 'Arrive by'. The 'PORT' dropdown from the previous prototypes has been removed.

The fourth prototype shows a search interface with a combined multi-select input field for both 'Depart by' and 'Arrive by' ports. The 'PORT' dropdown from the previous prototypes has been removed.

# PROTOTYPE ITERATION

## SEARCH: INPUT DATES

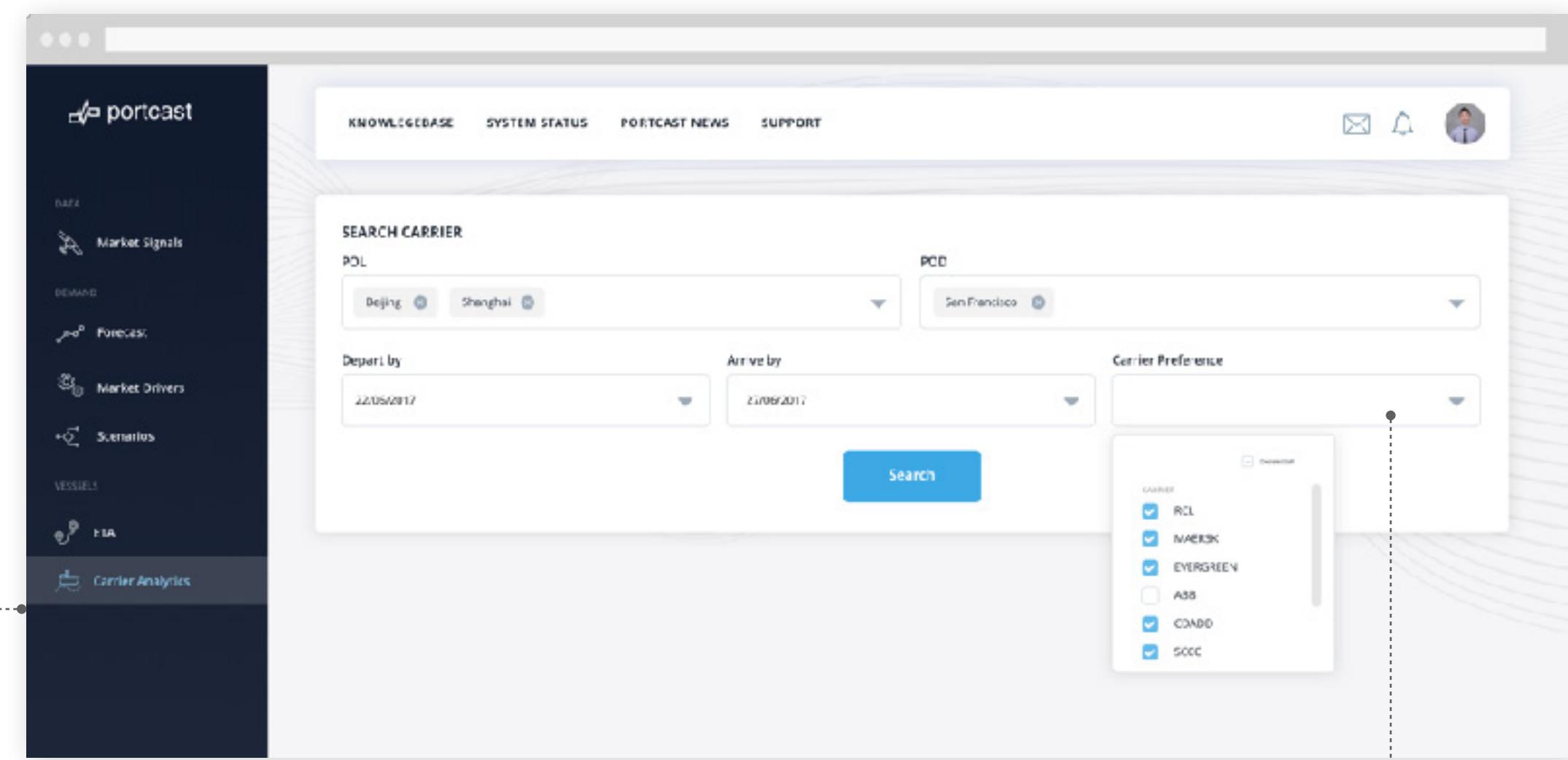
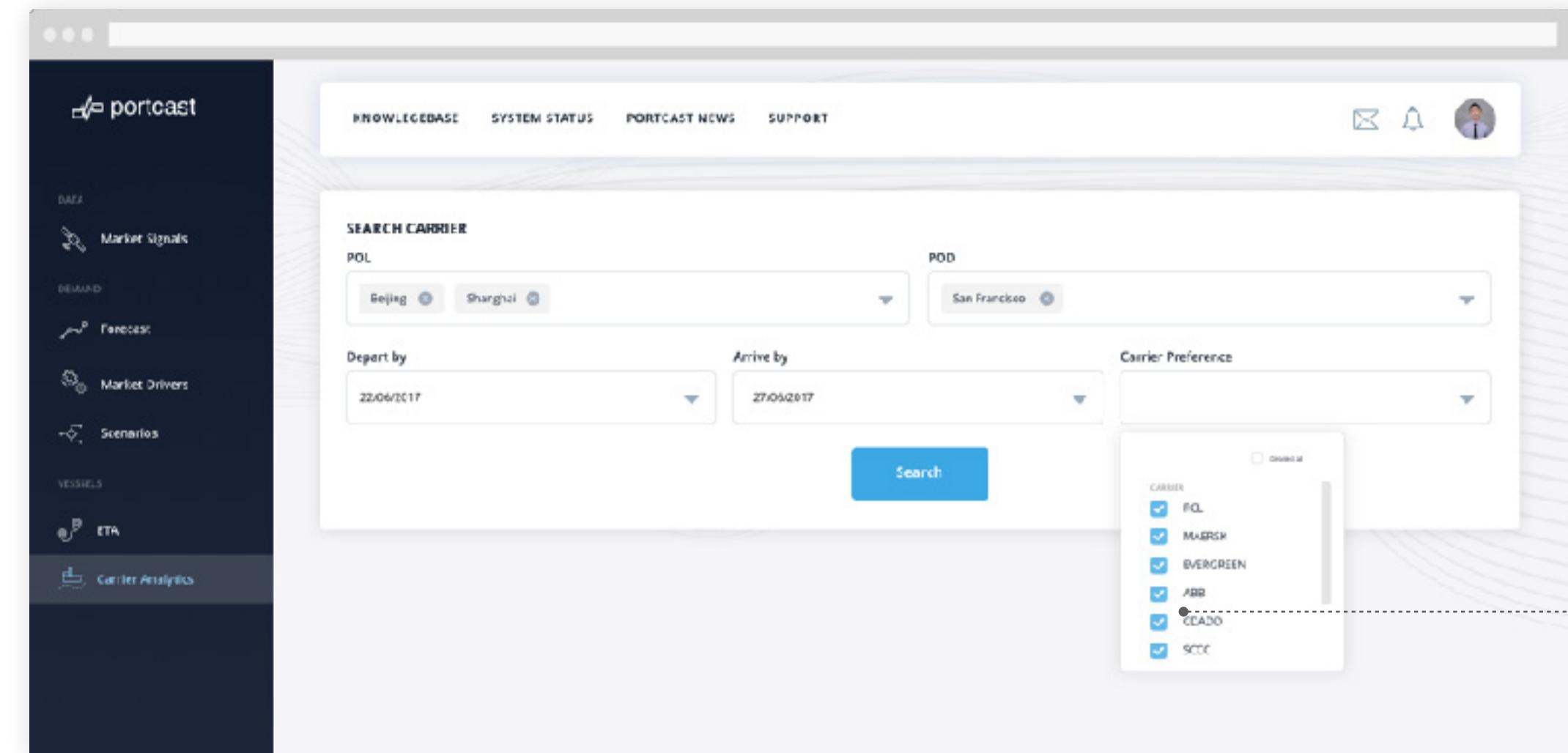
The initial prototype shows a search form with 'Depart by' and 'Arrive by' date pickers. Both pickers are set to a single date, June 20, 2017. A dashed box highlights the date pickers, and a callout notes: 'User Testing indicated users want to see all the possible results within a certain range of dates.'

The second prototype shows the 'Depart by' date picker set to June 20, 2017, and the 'Arrive by' date picker set to June 30, 2017. A dashed box highlights the date pickers.

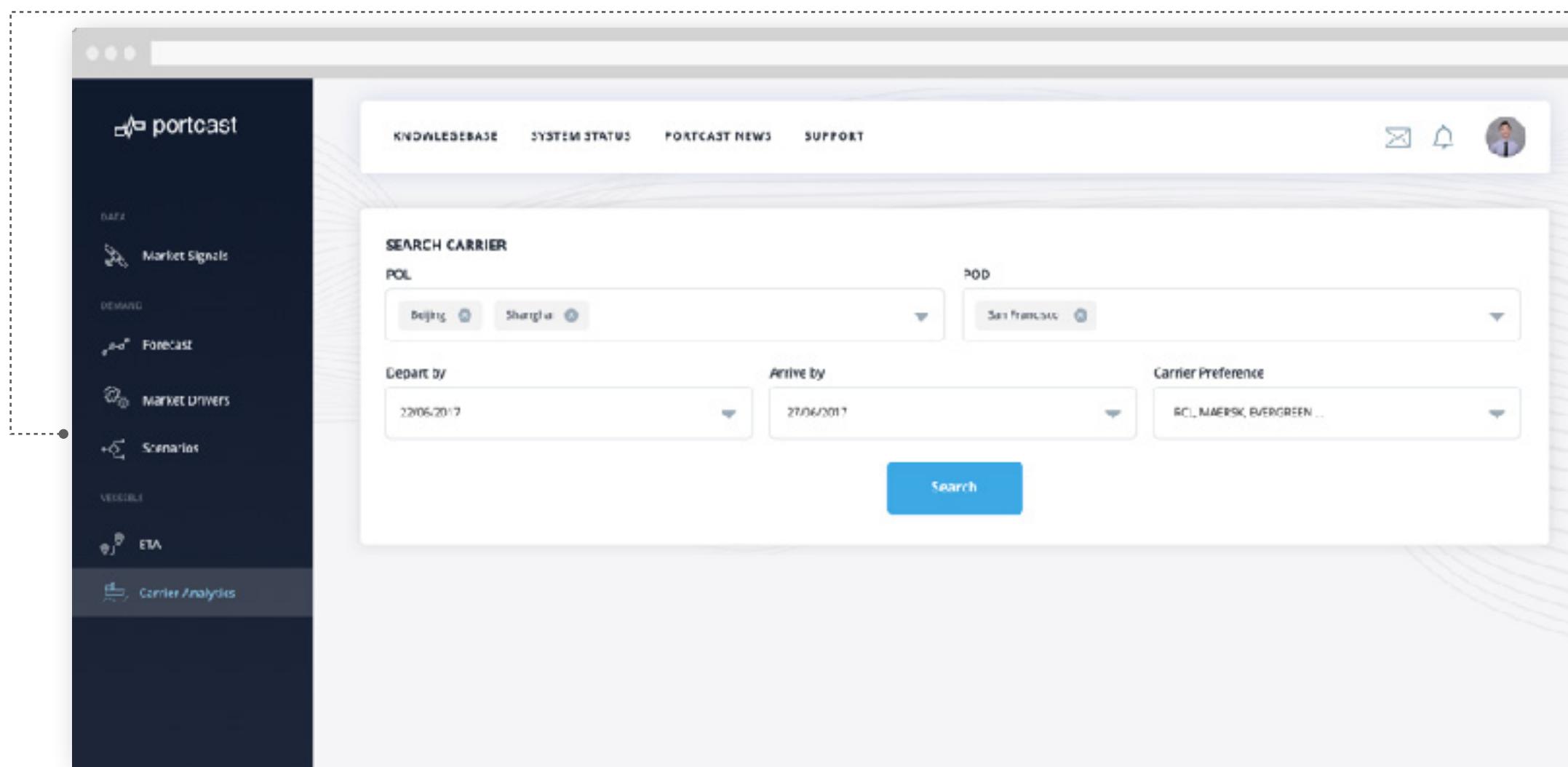
The third prototype shows the 'Depart by' date picker set to June 20, 2017, and the 'Arrive by' date picker set to June 30, 2017. A dashed box highlights the date pickers.

The final prototype shows the 'Depart by' date picker set to June 20, 2017, and the 'Arrive by' date picker set to June 27, 2017. A dashed box highlights the date pickers.

# PROTOTYPE ITERATION



- User Testing indicated users want to be able to control the carriers shown in the result (avoid the ones they don't trust / only show the ones they know etc). But the default setting is showing all the possible carriers.



# SEARCH: CONTROL CARRIER PREFERENCE

# PROTOTYPE ITERATION

The image displays two wireframe prototypes of a 'Carrier Analysis' search results page. Both prototypes have a header with a logo and the title 'Carrier Analysis'. Below the header is a search bar with the placeholder 'SEARCH RESULT'. The main content area is a table with the following columns:

Carrier	Portcast Prediction			Freight Cost	Carrier Historical Performance	
	STO	ETA	Transit Time		% on-time	% transit time reliable
▶ PCL / MSC 123	12/06/2017	22/06/2017	10 days / 1 Transit	\$\$\$	80%	55%
▶ MAERSK / MSC 224	12/06/2017	24/06/2017	12 days / 1 Transit	\$\$\$\$	70%	85%
▶ EVERGREEN / MSC 233	12/06/2017	24/06/2017	12 days / 1 Transit	\$\$\$\$	70%	75%

Each row contains a 'Select' button. Below the table is a section titled 'HISTORICAL PERFORMANCE' with a disclosure arrow.

The right-hand prototype shows a sorting dropdown menu with the following options:

- Departure Time (selected)
- Arrival Time
- Transit Time
- Freight Cost
- % on-time - HF
- % transit time reliable - HF

# WAYFINDING: SORTING RESULTS

- After meeting with stakeholders, we agreed on adding this filter box to help users best sorting results.

# PROTOTYPE ITERATION

- The iterated prototype still focuses on emphasizing the information with primary level hierarchy - **Journey Prediction** and **Freight Cost**.
- After synthesizing the feedback from stakeholders and users, I added more information to display on search result (carrier info and historical performance). But they are in 2nd hierarchy.
- All the other information will be displayed in drop-down menu in order to keep the main result display page clear and simple.

# WAYFINDING: NAVIGATING THROUGH INFO

## Hierarchy

Primary Level Hierarchy  
2nd Level Hierarchy  
3rd Level Hierarchy

## Information

Journey Prediction + Freight Cost  
Carrier Info + Historical Performance  
Detailed Journey Prediction etc

# PROTOTYPE ITERATION

# WAYFINDING: PORT ALERT

The image displays two side-by-side wireframe prototypes of a 'Carrier Analysis' search results page. Both prototypes have a dark header bar with the title 'Carrier Analysis' and a light-colored main content area.

**Left Prototype (Actual State):** This version shows a port with an abnormal situation. The port 'POD' is highlighted in red. A tooltip appears when hovering over it, stating 'Port has some kind of problem or delay'. The rest of the interface is identical to the right prototype.

**Right Prototype (Ideal State):** This version shows the same port without the red highlight or tooltip, indicating a normal state.

**Search Results Table:** Both prototypes feature a table with columns: Carrier, Portcast Prediction (with CTD, ETA, and Transit Time), Freight Cost, and Carrier Historical Performance (% on-time and % transit time reliable). Each row includes a 'Select' button.

**Detailed Voyage Prediction by Portcast:** Below the table, there are two tables showing voyage details. The first table lists ports: POL, JAKARTA, and POD. The second table lists arrival, departure, and transit times, along with service string, vessel ID, transit port, and destination terminal information.

**Historical Performance:** At the bottom of each prototype, there is a section titled 'HISTORICAL PERFORMANCE' with a small arrow icon.

- Client requested to show alert information on port when there's abnormal situation (that might leads to a possible delay). The port with abnormal situation appears in red color. When users hover over it, they can see the alert and decide whether they want to choose this voyage or not.

# PROTOTYPE ITERATION

**Carrier Analysis**

**SEARCH RESULT**

Carrier	Portcast Prediction			Freight Cost	Carrier Historical Performance																																					
	STD	ETA	Transit Time		% on-time	% transit time reliable																																				
RCL / MSC 123	12/06/2017	22/06/2017	10 days / 1 Transit	\$\$\$	80%	55%																																				
<b>Detailed Voyage Prediction by Portcast</b> <table border="1"> <thead> <tr> <th>Port</th> <th>Arrival</th> <th>Departure</th> <th>On/Offair</th> <th>Vessel Details</th> <th>Departure (POD)</th> <th>Arrival (POD)</th> <th>Transit Time</th> <th>Confidence Level by Portcast</th> </tr> </thead> <tbody> <tr> <td>POL</td> <td>-</td> <td>12/06 0800am</td> <td>12/06 0800am</td> <td>EVENT</td> <td>06/12</td> <td>06/20</td> <td>8 days</td> <td>80%</td> </tr> <tr> <td>JAKARTA</td> <td>15/06 10:00am</td> <td>16/06 2:00am</td> <td>16/06 0800am</td> <td>EVENT</td> <td>Service String</td> <td>Callao 800</td> <td>Transit Port</td> <td>Destination Terminal</td> </tr> <tr> <td>POD</td> <td>22/06 9:00am</td> <td>-</td> <td>-</td> <td>NAVIOS</td> <td>VIRAS 005</td> <td>Suez Canal</td> <td>Jakarta</td> <td>ADK</td> </tr> </tbody> </table>							Port	Arrival	Departure	On/Offair	Vessel Details	Departure (POD)	Arrival (POD)	Transit Time	Confidence Level by Portcast	POL	-	12/06 0800am	12/06 0800am	EVENT	06/12	06/20	8 days	80%	JAKARTA	15/06 10:00am	16/06 2:00am	16/06 0800am	EVENT	Service String	Callao 800	Transit Port	Destination Terminal	POD	22/06 9:00am	-	-	NAVIOS	VIRAS 005	Suez Canal	Jakarta	ADK
Port	Arrival	Departure	On/Offair	Vessel Details	Departure (POD)	Arrival (POD)	Transit Time	Confidence Level by Portcast																																		
POL	-	12/06 0800am	12/06 0800am	EVENT	06/12	06/20	8 days	80%																																		
JAKARTA	15/06 10:00am	16/06 2:00am	16/06 0800am	EVENT	Service String	Callao 800	Transit Port	Destination Terminal																																		
POD	22/06 9:00am	-	-	NAVIOS	VIRAS 005	Suez Canal	Jakarta	ADK																																		

**HISTORICAL PERFORMANCE**

**Carrier Analysis**

**SEARCH RESULT**

Carrier	Portcast Prediction			Freight Cost	Carrier Historical Performance	
	STD	ETA	Transit Time		% on-time	% transit time reliable
RCL / MSC 123	12/06/2017	22/06/2017	10 days / 1 Transit	\$\$\$	80%	55%

**Detailed Voyage Prediction by Portcast**

Port	Arrival	Departure	On/Offair	Vessel Details	Departure (POD)	Arrival (POD)	Transit Time	Confidence Level by Portcast
POL	-	12/06 0800am	12/06 0800am	EVENT	06/12	06/20	8 days	80%
JAKARTA	15/06 10:00am	16/06 2:00am	16/06 0800am	EVENT	Service String	Callao 800	Transit Port	Destination Terminal
POD	22/06 9:00am	-	-	NAVIOS	VIRAS 005	Suez Canal	Jakarta	ADK

**HISTORICAL PERFORMANCE**

**On Time Performance**  
% trips on-time

Carrier	% trips on-time
RCL	80%
BUFFE	30%
EVERGREEN	75%

**Transit Time Performance**  
Avg. Transit Days

Carrier	Avg. Transit Days
RCL	10
MATRIX	12
EVERGREEN	12

- Historical Performance box provides additional graphs in helping users compare the reliability of carriers. But it's with low level hierarchy, and we don't want the graphs to disturb the main results display. So users can only see it after clicking the arrow.

# WAYFINDING: COMPARING RELIABILITY

# PROTOTYPE ITERATION

# WAYFINDING: MAKING A SELECTION

The image shows two wireframe prototypes of a user interface, connected by a dashed line indicating a transition from one state to the next.

**SEARCH RESULT PAGE (Left):**

- Header:** Carrier Analytics
- Section:** SEARCH RESULT
- Table Headers:** Carrier, Portcast Prediction, Freight Cost, Carrier Historical Performance
- Table Data:**
  - Row 1:** RCL / MSC 123, 12/06/2017, 22/06/2017, 10 days / 1 Transit, \$55, 80%, 55%, **Select**
  - Row 2:** Detailed Voyage Prediction by Portcast (with tables for POL, JAKARTA, POD)
  - Row 3:** MAERSK / MSC 224, 12/06/2017, 24/06/2017, 12 days / 1 Transit, \$555, 70%, 55%, **Select**
  - Row 4:** EVERGREEN / MSC 233, 12/06/2017, 24/06/2017, 12 days / 1 Transit, \$555, 70%, 75%, **Select**
- Section:** HISTORICAL PERFORMANCE
- Charts:**
  - On Time Performance:** % trips on-time (RCL: 80%, MAERSK: 70%, EVERGREEN: 75%)
  - Transit Time Performance:** Avg. Transit Days (RCL: 10, MAERSK: 12, EVERGREEN: 12)

**SELECTED CARRIER INFO PAGE (Right):**

- Header:** Carrier Analytics
- Section:** SELECTED CARRIER INFO
- Table Headers:** PortcastPrediction
- Table Data:** RCL / MSC 123, 12/06/2017, 22/06/2017, 10 days / 1 Transit, \$55
- Section:** SchedulePredicted by Carrier
- Table Headers:** Port, Arrival, Departure, On/Off, Vessel Details
- Table Data:**
  - POL 12/06 8:00am 12/06 6:00am EVENT
  - JAKARTA 15/06 10:00am 16/06 2:00am EVENT
  - POD 21/06 9:00am - NAVIOS
- Section:** Detailed Voyage Predictor by Portcast
- Table Headers:** Departure (POL), Arrival (POD), Transit Time, Confidence Level by Portcast
- Table Data:** 0612, 0620, 8 days, 80%
- Section:** ServiceString
- Table Headers:** On/Off, Transit Port, Destination Terminal
- Table Data:** MIRA DIVS, Suz Canal, Jakarta, ABX
- Buttons:** Download as PDF or CSV

- After users make a selection, they'll be directed to a page with all the information listed. They can download the info sheet as reference for future tasks.

# Before

POL  
POD  
Prediction start date: 2018-08-05  
DEPART BY ARRIVE BY  
Download  
BY SERVICE BY CARRIER  
Search Schedules  
Service Carrier Vessel Schedule Portcast Prediction Historical Performance  
YEAR TONNAGE ETD (POL) ETA (POD) TRANSIT TIME ETA (POD) TRANSIT TIME % ON TIME TRIPS AVG. TRANSIT TIME  
MIRA 005 RCL 2010 ... 6 FEB 12:00 8 FEB 00:00 2 days 16 FEB 00:00 10 days 80% 5 days  
POI PORT PORT PORT POD  
ETA 6 FEB 12:00 6 FEB 15:00 7 FEB 12:00 7 FEB 18:00 8 FEB 00:00  
ETD X FEB XX:00 6 FEB 15:00 7 FEB 12:00 7 FEB 18:00 X FEB XX:00  
ABC 123 MAERSK 2012 ... 8 FEB 12:00 10 FEB 00:00 2 days 16 FEB 00:00 10 days 80% 5 days  
QUEEN 05 EVERGREEN 1910 ... 2 FEB 12:00 11 FEB 00:00 9 days 16 FEB 00:00 10 days 80% 5 days

## Iteration:

- Users can control and also have more freedom in setting search criteria.
- Results display is with clearer information hierarchy.
- Overall interface is simpler and clearer.
- Users can sort results as they wish.

# After

SEARCH CARRIER  
POL  
Beijing Shanghai San Francisco  
Depart by: 22/06/2017 Arrive by: 27/06/2017 Carrier Preference: RCL, MAERSK, EVERGREEN...  
Search  
SEARCH RESULT  
Carrier Portcast Prediction Freight Cost Carrier Historical Performance  
ETD ETA Transit Time % on-time % transit time reliable  
RCL / MSC 123 12/06/2017 22/06/2017 10 days / 1 Transit \$\$\$ 80% 85% Select  
Detailed Voyage Prediction by Portcall Scheduled Voyage by Carrier  
Port Arrive Departure Cut-off Week Details Departure (POL) Arrive (POD) Transit Time Carrier Level by Portcall  
POL - 12/06 6:00am 12/06 6:00am EVENT 06/12 06/20 8 days 80%  
JAKARTA 15/06 10:00pm 16/06 2:00am 16/06 10:00am EVENT Sanbi String Canal Info In-call Port Desination Terminal  
POD 22/06 5:00am - - NAVIOS MIRA 005 Suez canal Jakarta ASX  
MAERSK / MSC 224 12/06/2017 24/06/2017 12 days / 1 Transit \$\$\$ 70% 83% Select  
EVERGREEN / MSC 233 12/06/2017 24/06/2017 12 days / 1 Transit \$\$\$ 70% 75% Select  
HISTORICAL PERFORMANCE

# FINAL PROTOTYPE SHOWCASE

<https://invis.io/portcast-analytics>

The screenshot shows the Portcast Analytics search interface. On the left, a dark sidebar lists navigation options: DATA (Market Signals, Forecast), DEMAND (Market Drivers, Scenarios), VESSELS, and ETA. The main area has tabs for KNOWLEDGEBASE, SYSTEM STATUS, PORTCAST NEWS, and SUPPORT. A header bar includes a search icon, a bell icon, and a user profile icon. The central part is titled "SEARCH CARRIER" and contains fields for POL (Beijing, Shanghai) and POD (San Francisco). It also includes "Depart by" (22/06/2017) and "Arrive by" (27/06/2017) dropdowns, and a "Carrier Preference" dropdown (RCL, MAERSK, EVERGREEN...). A "Search" button is at the bottom. Below this is a "SEARCH RESULT" section with a table header: Carrier, Portcast Prediction (ETD, ETA, Transit Time), Freight Cost, and Carrier Historical Performance (% on-time, % transit time reliable). Two entries are listed: RCL / MSC 123 (12/06/2017, 22/06/2017, 10 days / 1 Transit, \$\$\$, 80%, 85%) and MAERSK / MSC 224 (12/06/2017, 24/06/2017, 12 days / 1 Transit, \$\$\$\$, 70%, 85%). Each entry has a "Select" button.

This screenshot shows the search results and historical performance interface. At the top, a "SEARCH RESULT" section displays the same table as the first monitor. Below it is a "Carrier Analytics" sidebar. The main area is titled "SEARCH RESULT" and contains a table header: Carrier, Portcast Prediction (ETD, ETA, Transit Time), Freight Cost, and Carrier Historical Performance (% on-time, % transit time reliable). Three entries are listed: RCL / MSC 123 (12/06/2017, 22/06/2017, 10 days / 1 Transit, \$\$\$, 80%, 85%), MAERSK / MSC 224 (12/06/2017, 24/06/2017, 12 days / 1 Transit, \$\$\$\$, 70%, 85%), and EVERGREEN / MSC 233 (12/06/2017, 24/06/2017, 12 days / 1 Transit, \$\$\$\$, 70%, 75%). Each entry has a "Select" button. At the bottom, there is a section titled "HISTORICAL PERFORMANCE".

# REFLECTION

## **What we did right:**

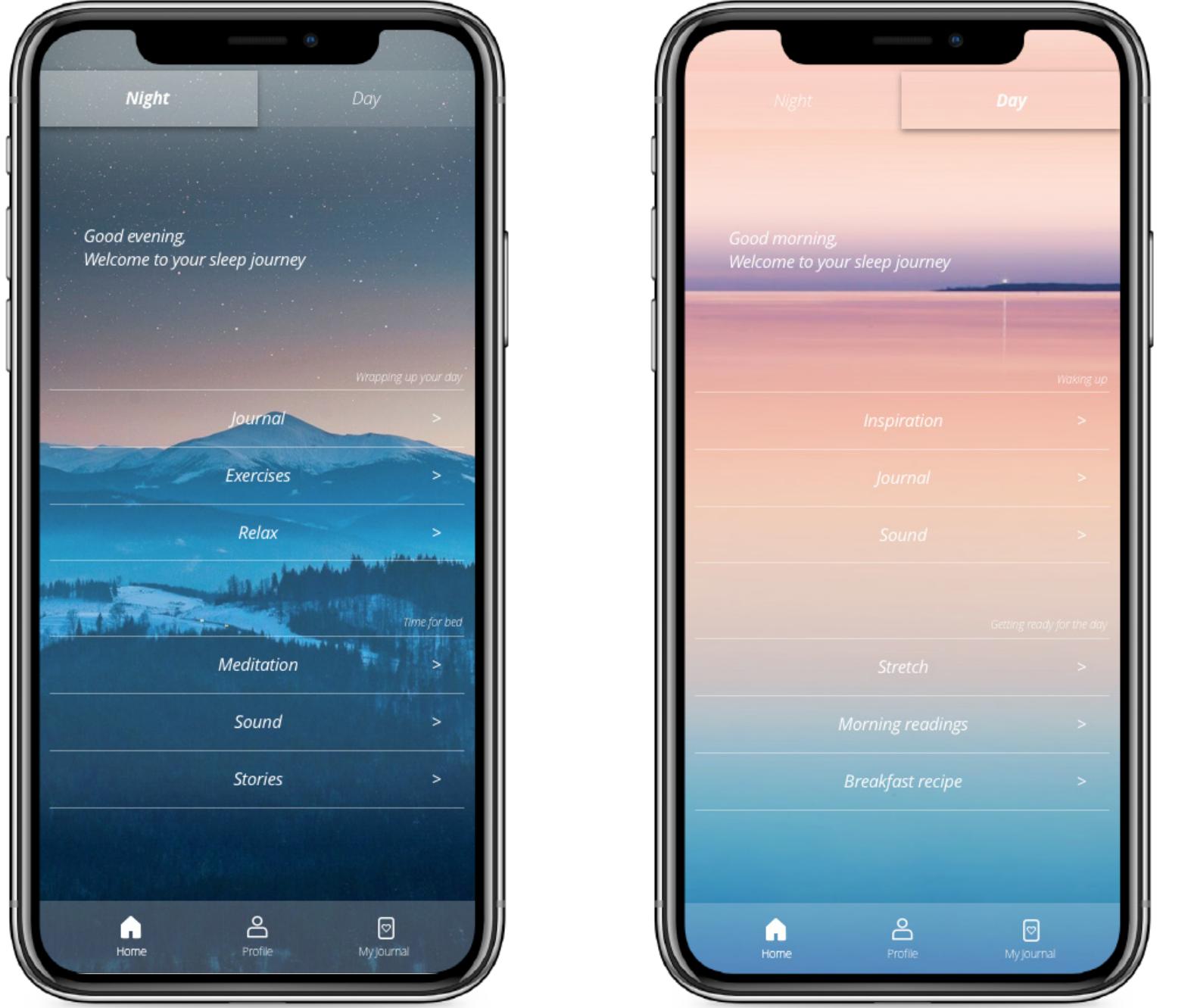
- User research and user testing provided us with very useful insights on future design.
- We worked with client through the process.

## **What didn't make it:**

- Due to the time limit, we can't conduct a 2nd round user testing on the iterated prototype.

## **Next step:**

- Implementation



## MOBILE UI & UX DESIGN

### Sleep Journey

#### TRANSFERRING BEDTIME EXPERIENCE TO A DELIGHTFUL JOURNEY

An app that helps people sleep better, maintain a good lifestyle and mental health through developing good habits around sleep time. It provides holistic and delightful experience with a comprehensive feature set aiming at different time periods around sleep. It helps people wrap up the day, relax before sleep, wake up refreshingly and get ready for the day. I further developed the UI Design library to complete the “journey” as a holistic experience - calming, dreamy and elegant. I dedicate myself to form and function, and I also believe in the strength in making things beautiful!

**Team:** Chengcheng Huang (Self-started project)

**Duration:** Jan 2019 - Feb 2019 (1.5 weeks)

**Role:** UX/UI Designer & Researcher

**Skills:** Survey design, user persona, user journey mapping, information architecture, wireframing, lo-fi & hi-fi prototyping, visual study, user testing, UI design

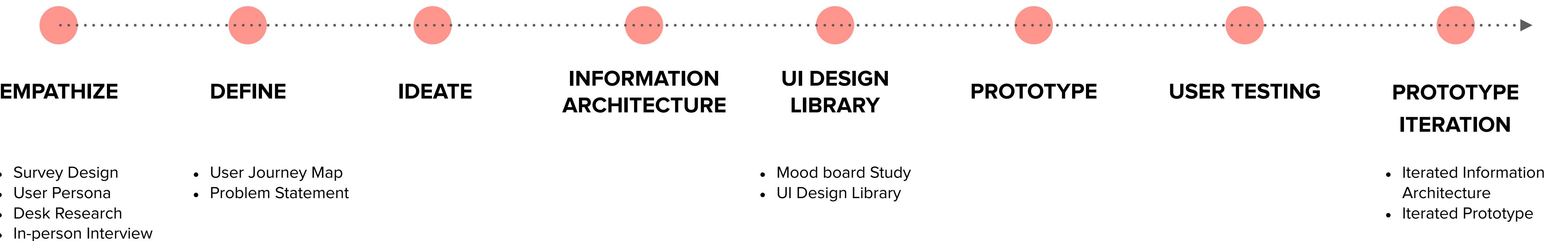
## **THE CHALLENGE**

More and more people suffer from sleep related problems. After investigation, I found out the major reason behind this problem is the stress from daily life and the incompleteness people feel when heading to bed. The stress is actually coming from the fear of losing control of their work and life.

## **THE OUTCOME**

An app not only provides you with the features that calm you down, but most importantly helps you get better control of your life and work. An app not only helps you sleep better, but also helps you build up a positive attitude to better handle stress.

# DESIGN PROCESS

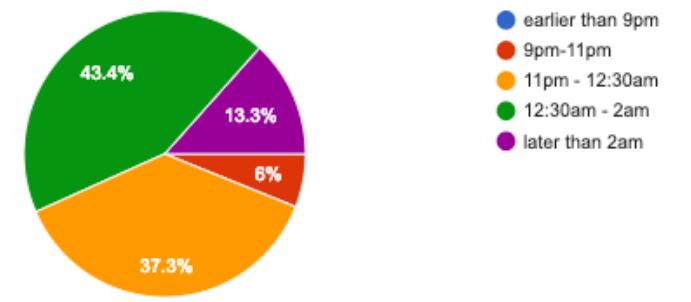
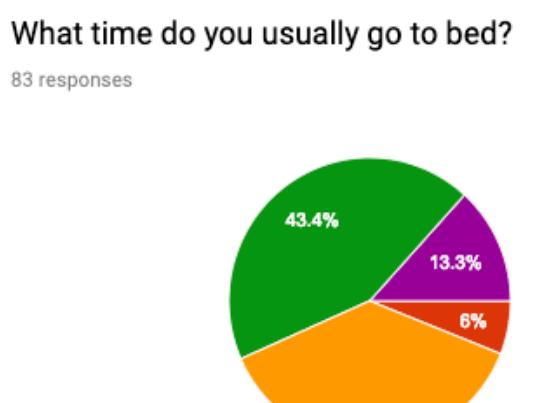
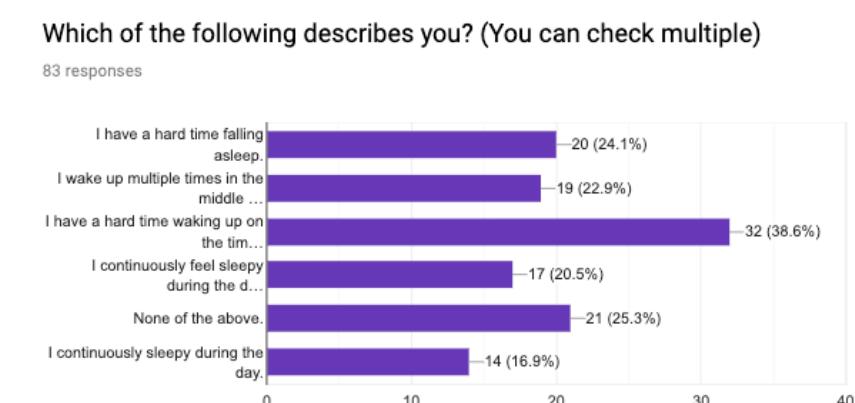
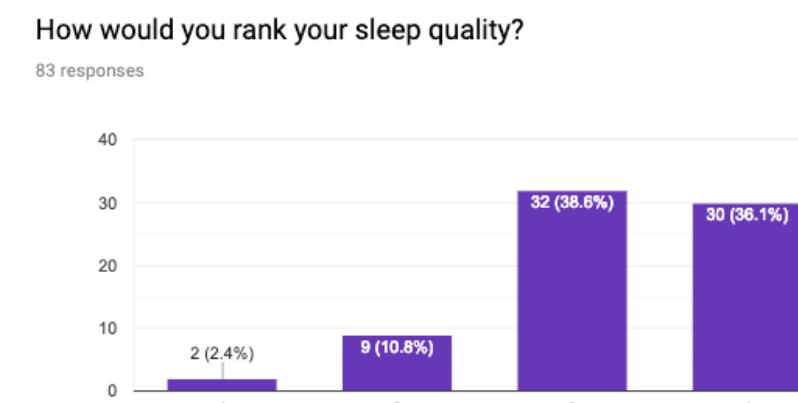


# SURVEY DESIGN AND INTERVIEW

## User Survey:

I designed and conducted a Sleep Behavior Survey targeting people aging from 18 to 34 to understand more about their sleep behavior, pain points, and needs. I received more than 150 responses. Here are some insights from the survey results:

1. Among all the responses, 96% of them usually sleep 5-8 hrs a day.
2. About 44% of the participants usually go to bed around 12:30-2:00 am; about 36% usually wake up around 7:00am-8:00 am.
3. Most of the participants rank their sleep quality not very satisfied.



## Interview:

I also interviewed some of the participants to get to know their sleep routine(pre-bed activities), the major concern about their sleep behavior, and the possible cause leading to it.

1. Most of the participants express they have a hard time waking up on time; a lot of them also feel they have a hard time falling asleep too.
2. A lot of the participants think pre-bed activities can help them sleep better, like taking a shower, reading, doing exercise etc.
3. Most of the participants think the cause of their sleep behavior is stress/anxiety. Many of the people say that their minds keep running even when they close their eyes and it usually takes a while for them to truly relax.

*"I usually do my work which requires much thinking right before going to bed, so I just keep thinking and cannot stop it instantly for sleep."*

Scott, 28, programmer

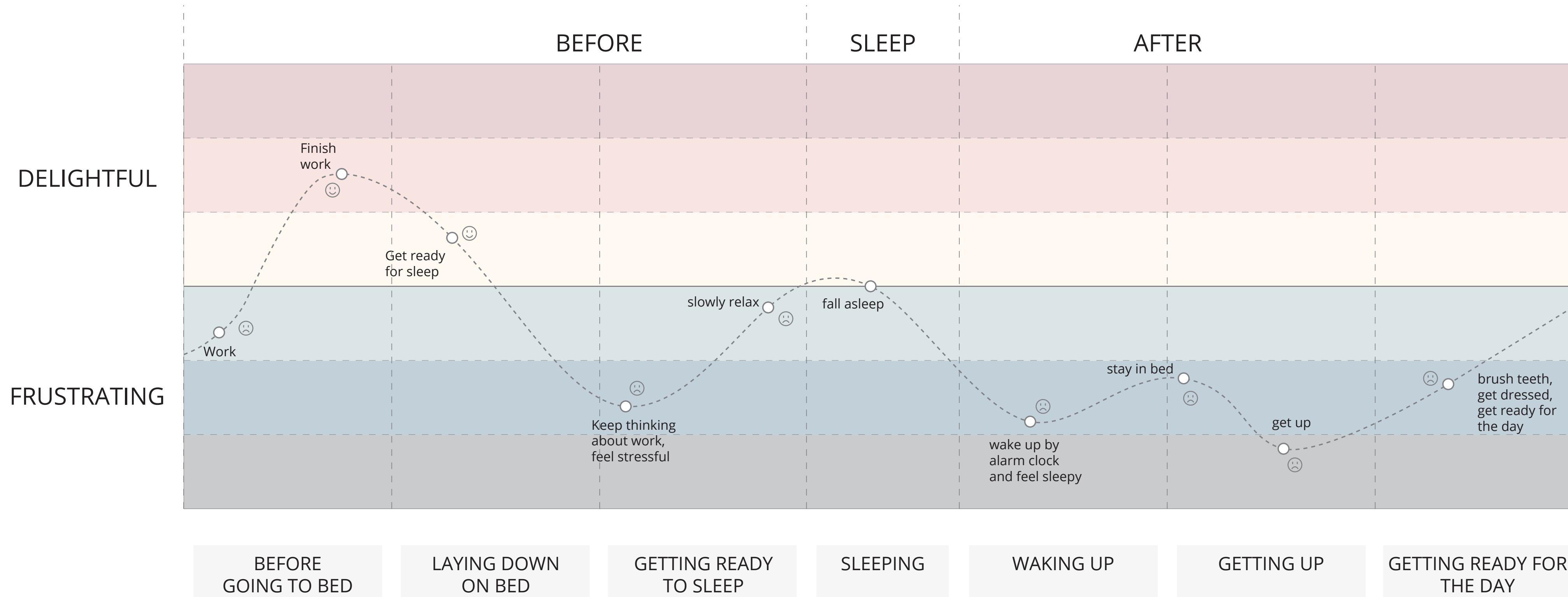
*"Long working hour during weekday makes me tried in mind. I feel stress in mind and cannot get relax easily. Sometimes getting nervous when I hear sounds in midnight."*

Daniela, 27, designer

*"I think too much. I usually plan my schedule for the next day right before I sleep."*

Kevin, 24, graduate student

# USER JOURNEY MAP



# USER PERSONA AND PROBLEM STATEMENT

## Stacy Morelli



Graduate student, 26, lives in Berkeley, CA

### Bio:

Stacy is a graduate school student majoring in Architecture. She's busy with her thesis design project and meanwhile she's been actively looking for a job after graduation. She loves her major but she's very stressed out. She always stays up late working on her portfolio and has a hard time falling asleep. When she wakes up, she also feels very sleepy and not in a good mood.

### Wants & Needs

- Fall asleep faster and stop thinking about work.
- Relax before bedtime.
- Feel good and refreshed when waking up.
- Get enough rest to stay energetic during the day so that she can be more productive while working and more social with her friends.

### Frustrations

- Always works till very late and forgets time. When she goes to bed, she's still thinking about work and can't fall asleep.
- Feels so sleepy and not in a good mood when waking up.

"I usually work on my project right before going to bed, so I just keep thinking and can't stop it instantly for sleep."

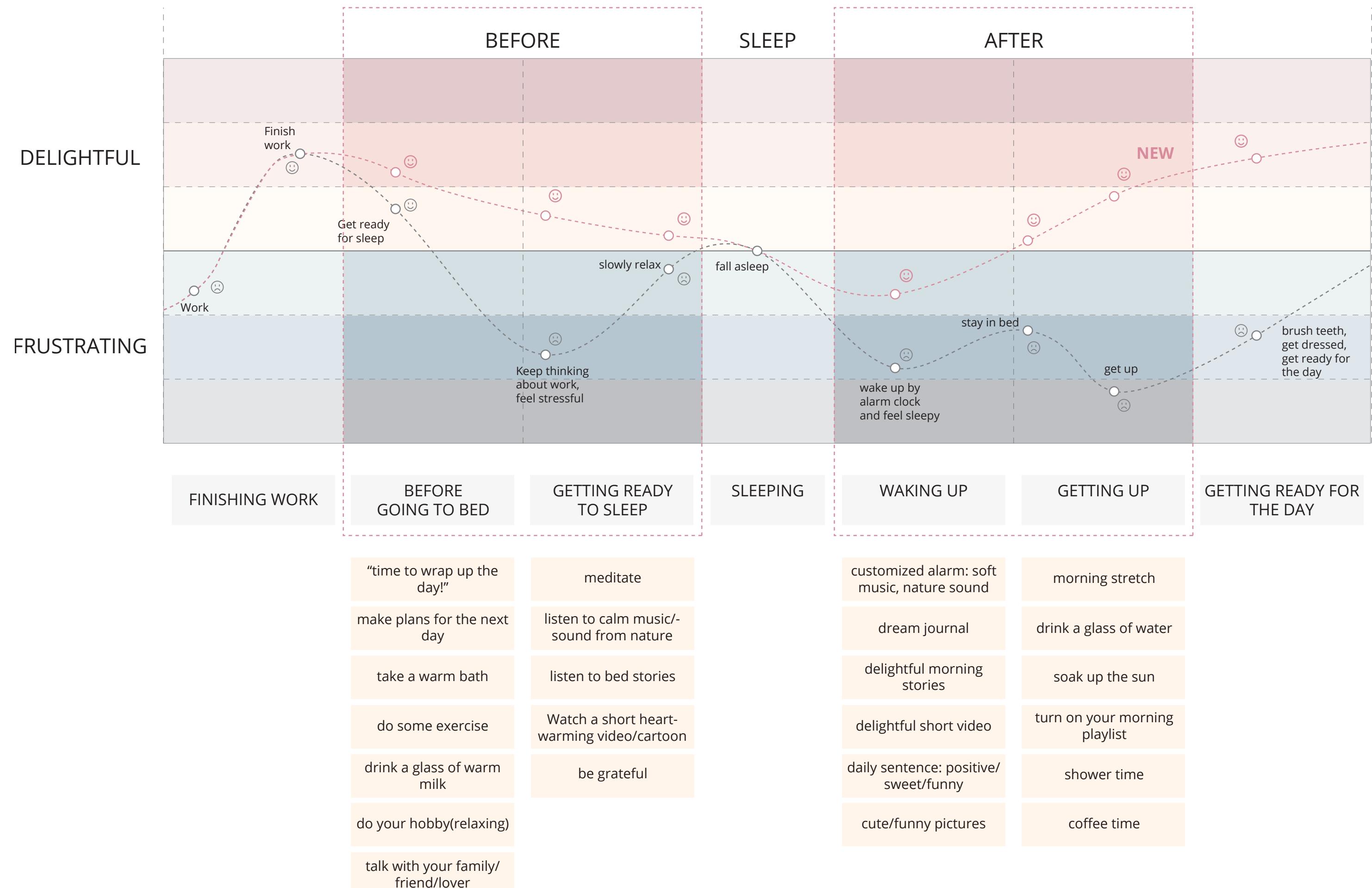
## The research led me to the problem statement:

***How might we make users' experience before and after sleep more delightful?***

***- How might we help users get relaxed and fall asleep easier?***

***- How might we help users feel refreshed and delighted when waking up?***

# DESIGN STRATEGY



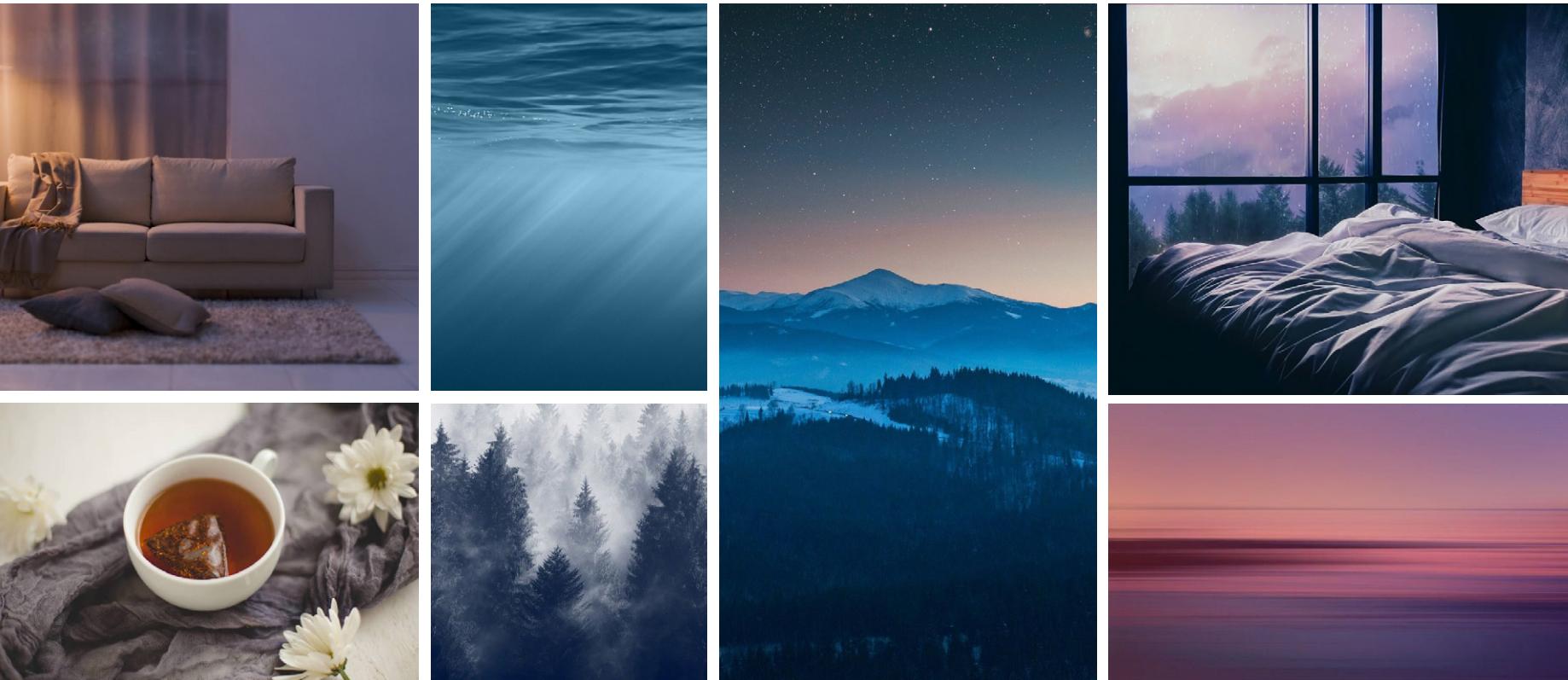
Based on the User Journey Map, I came up with design solutions to help improve users' experience at different stages around sleep time.

# INFORMATION ARCHITECTURE



# MOOD BOARD AND COLOR PALETTE STUDY

night

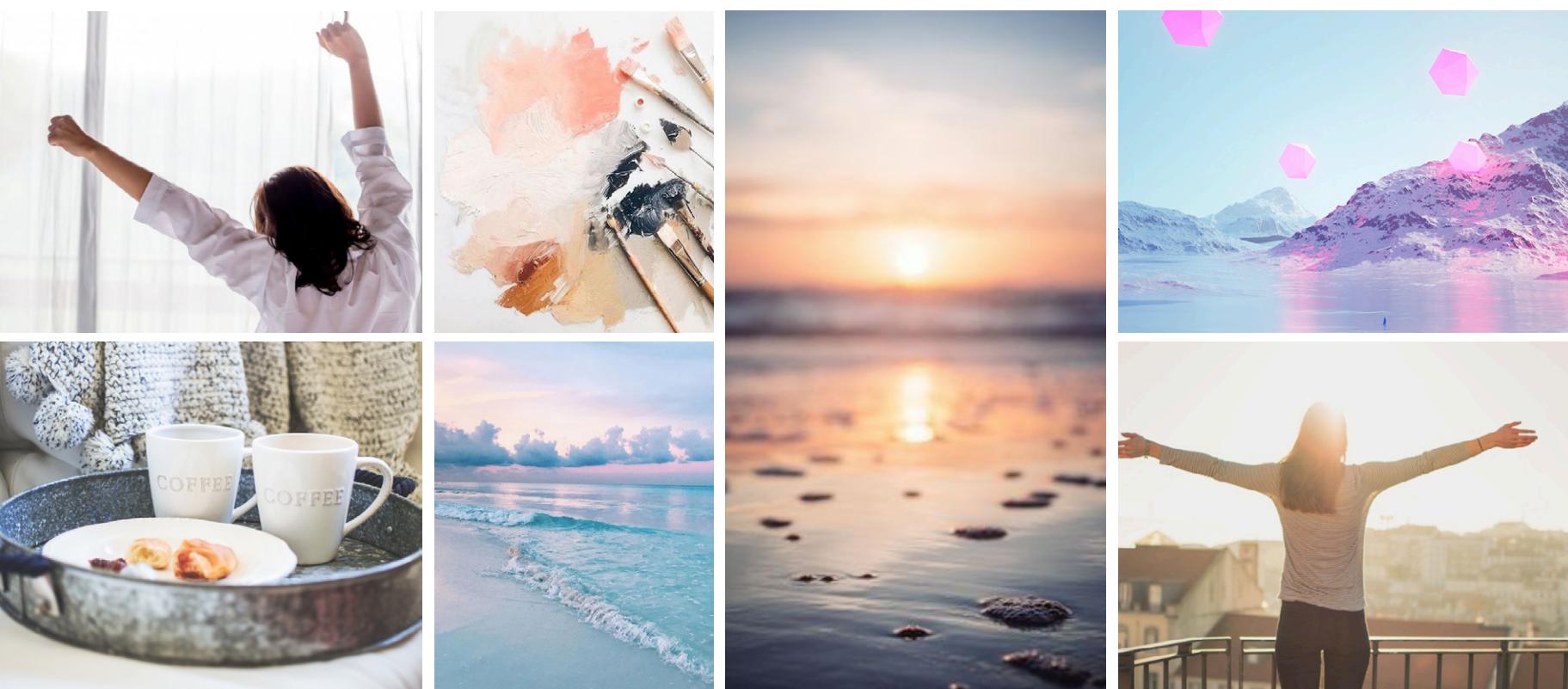


For night mode, I want to create a calm, serene, dreamy atmosphere. Imagine you are surrounded by woods, everything is so quiet. You feel you can finally release all the stress from day life, and close your eyes just enjoying the pure calmness of the nature.

For morning mode, I want to create a refreshing, inspiring and cozy atmosphere. Imagine you wake up, seeing the beautiful sunshine shining into your room. Having a cup of coffee, you feel motivated and excited about starting your day.

Meanwhile, in order to maintain the coherence within the app. The 2 mood boards also share similar color palette and overall atmosphere.

morning



Primary colors



Typography

*Title*

*Subtitle*

*Heading*

*Heading 2*

Body text 1

Body text 2

Secondary colors



# PROTOTYPE V1



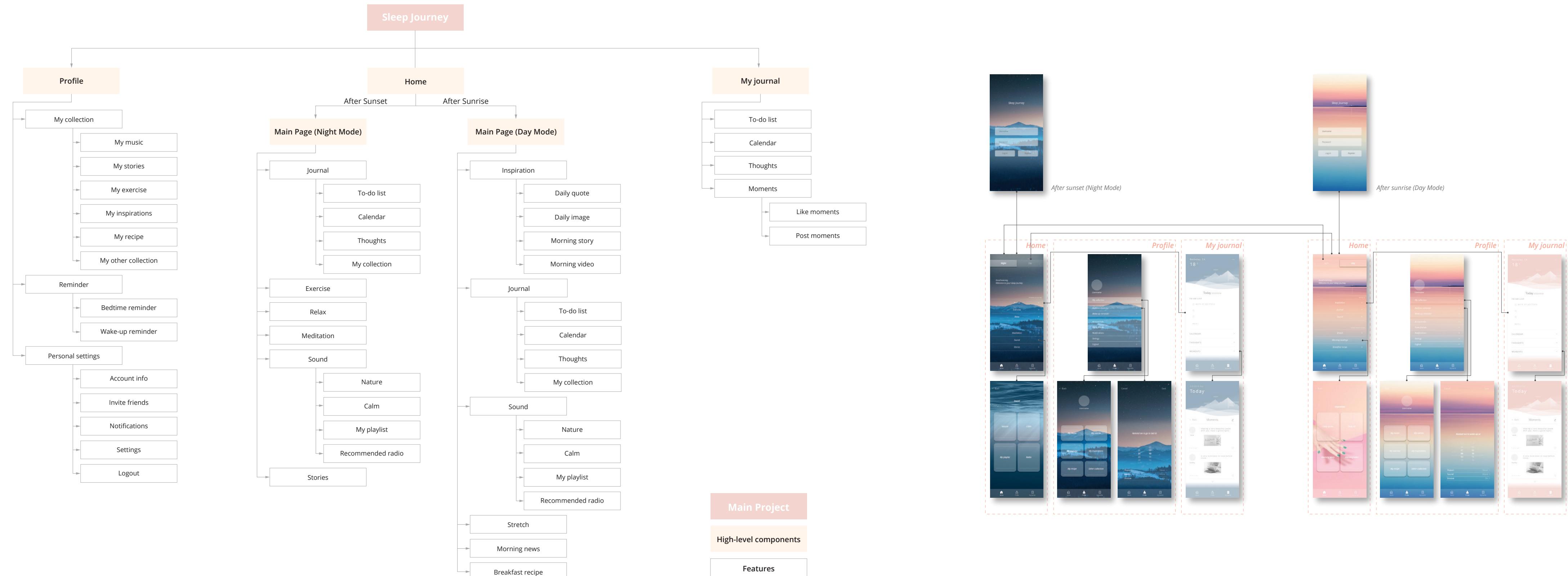
# USER TESTING

I found users (college students or new graduates) to do user testing for me with my prototype on inVision.

- **Key Findings**

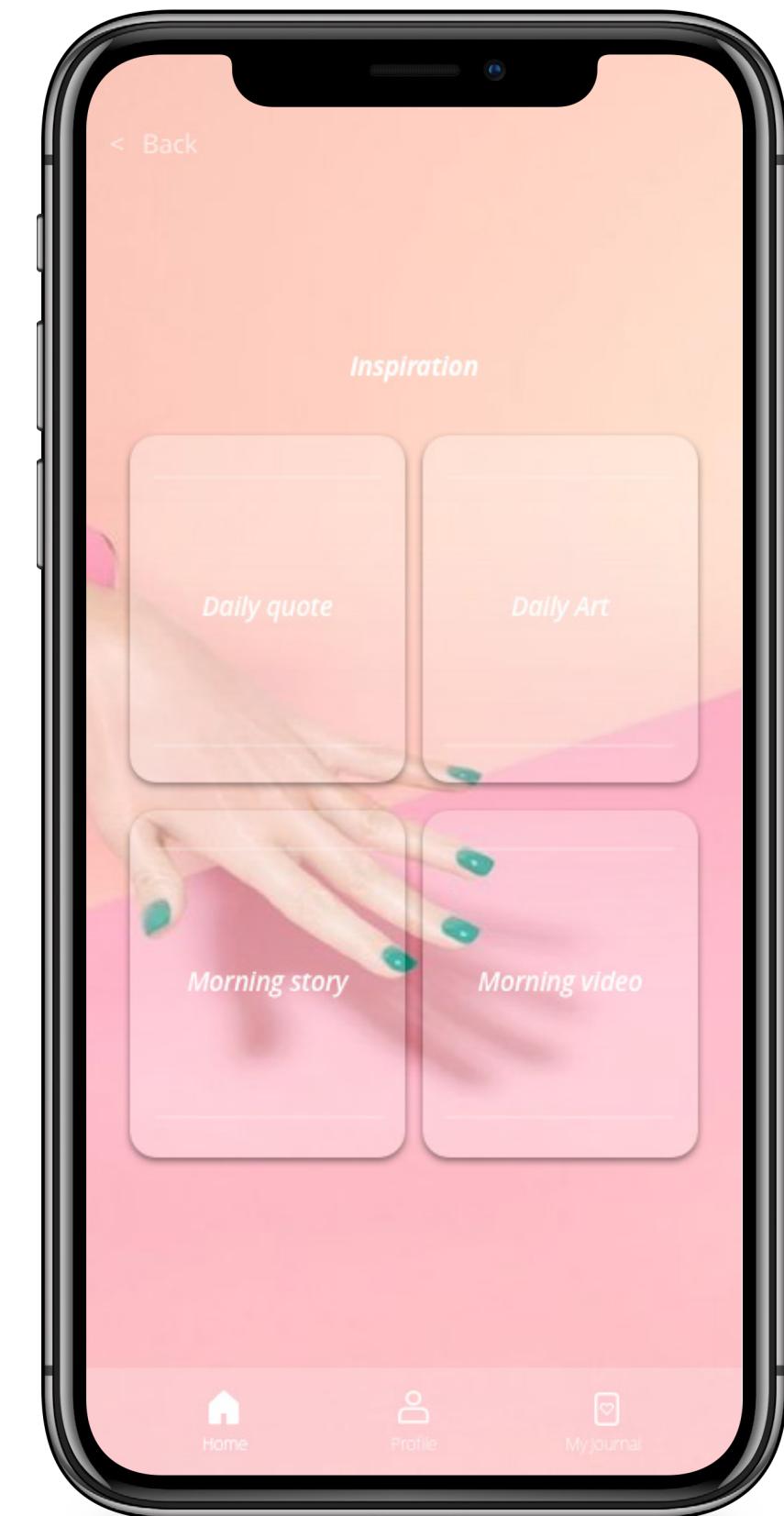
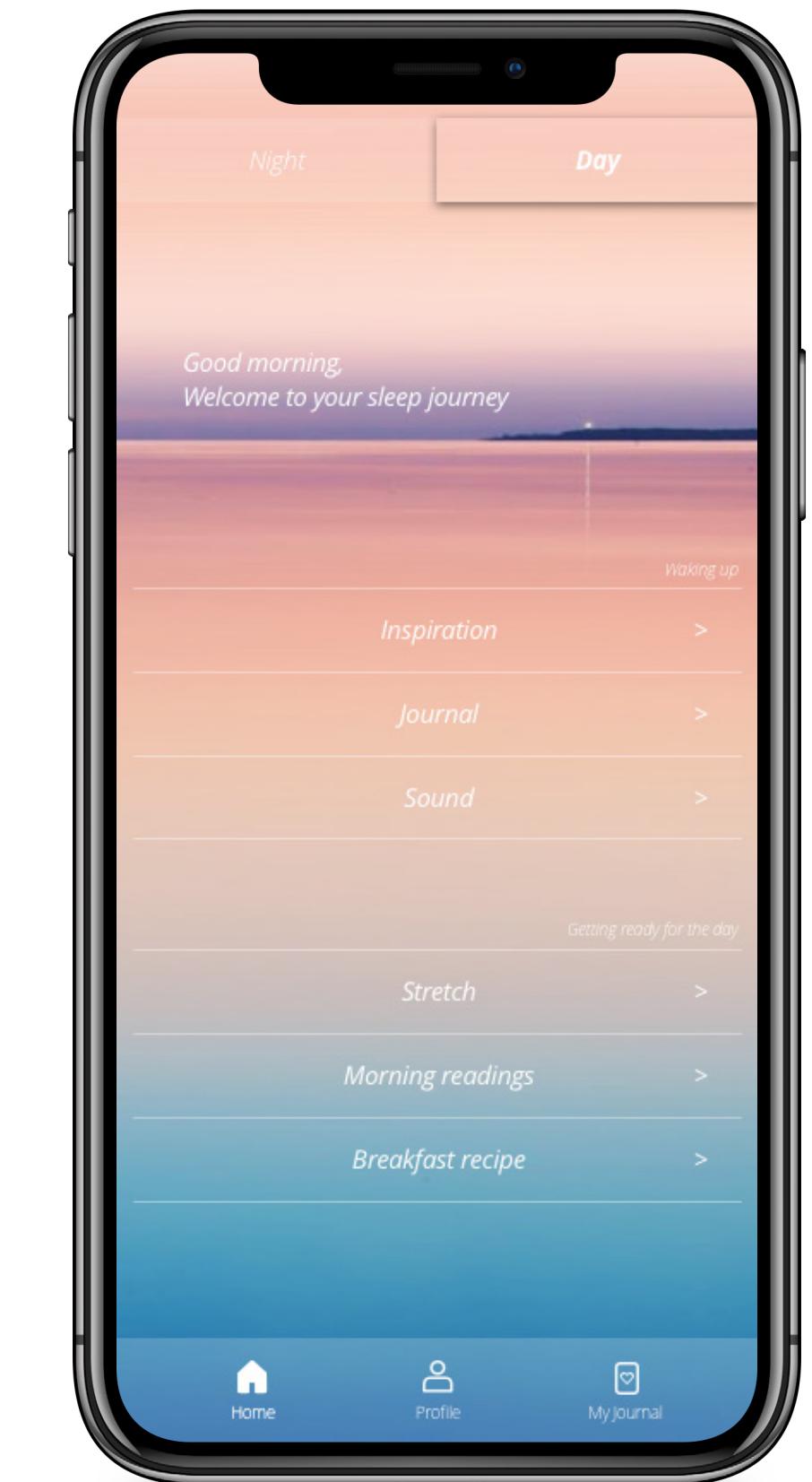
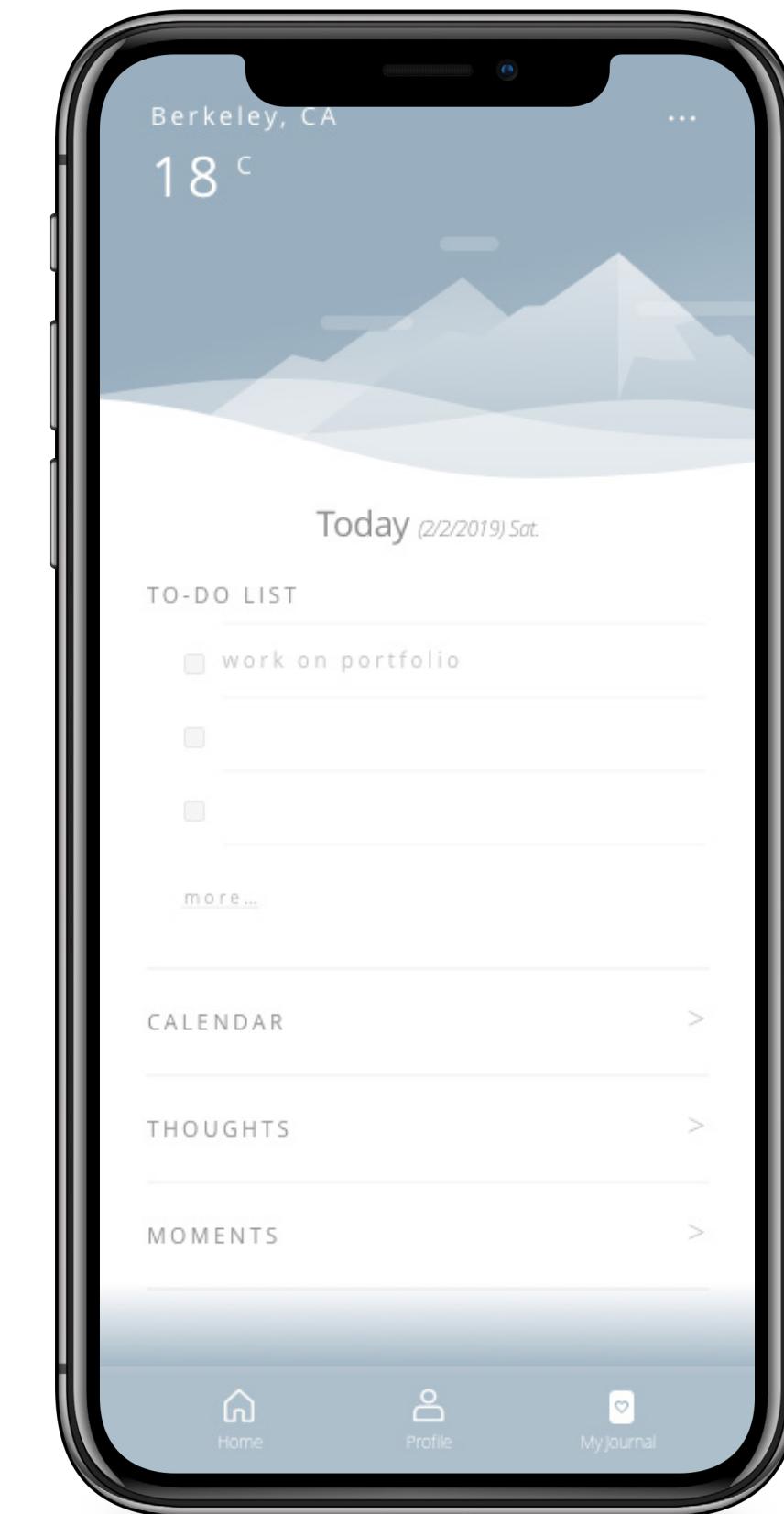
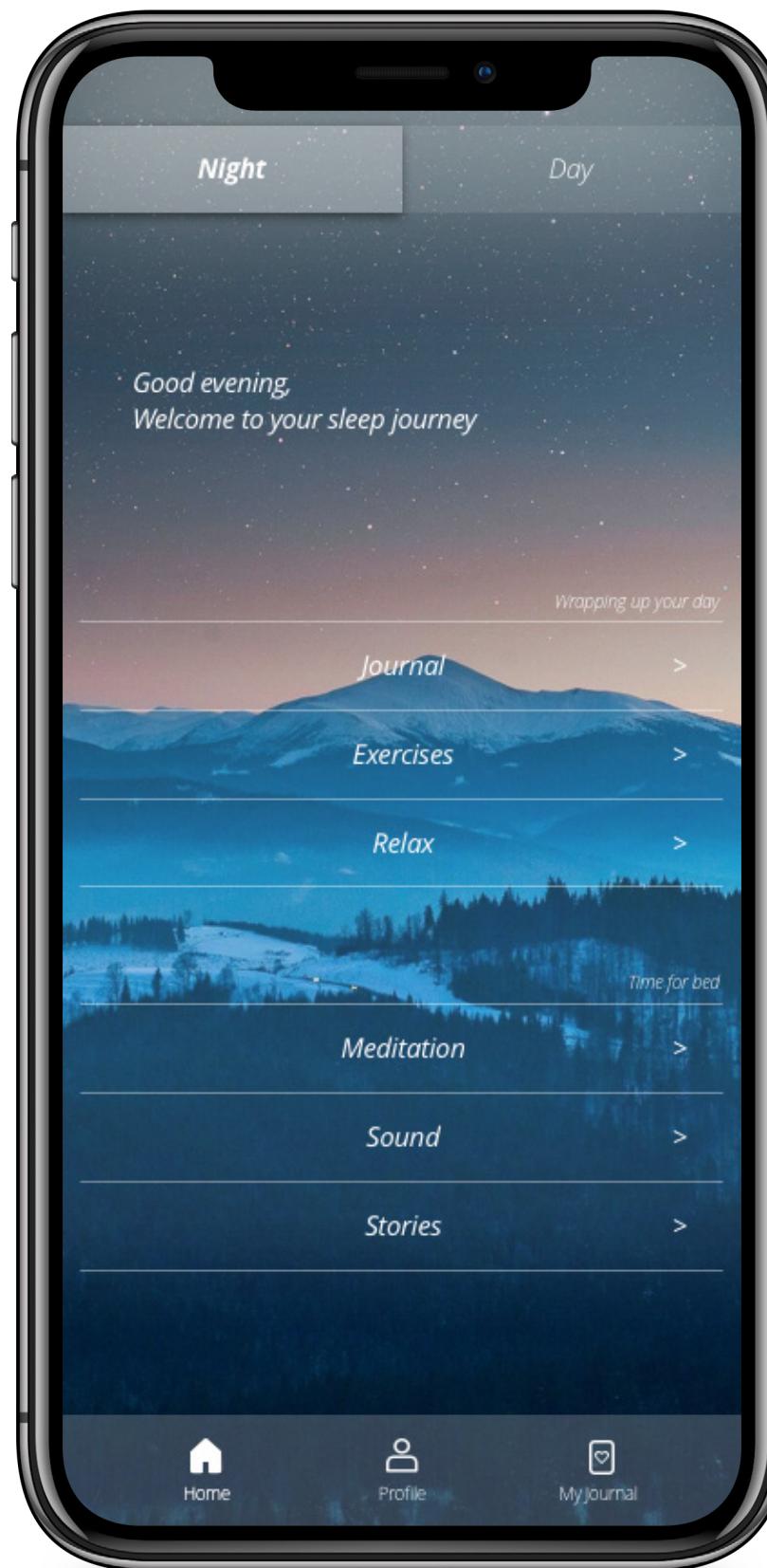
1. Users say they don't know what those names mean: bedtime,... and they don't want to click into it in order to figure it out.
2. Users don't like there're too many options to click at main page.
3. Users think Journal is an important feature, maybe it should always be kept at the bottom box.
4. Bedtime, sound, stories maybe used the most. A few users say they are not gonna use alarm, because prefer the alarm on ios.
5. Texts are hard to read on some ui, there is not enough color contrast with background
6. Texts are not consistent in colors.
7. Images are kind of sticking together, they do not seem like buttons.

# PROTOTYPE ITERATION



# FINAL PROTOTYPE SHOWCASE

<https://invis.io/sleepjourney>



Night mode

Day mode

# REFLECTION

## **What I did right:**

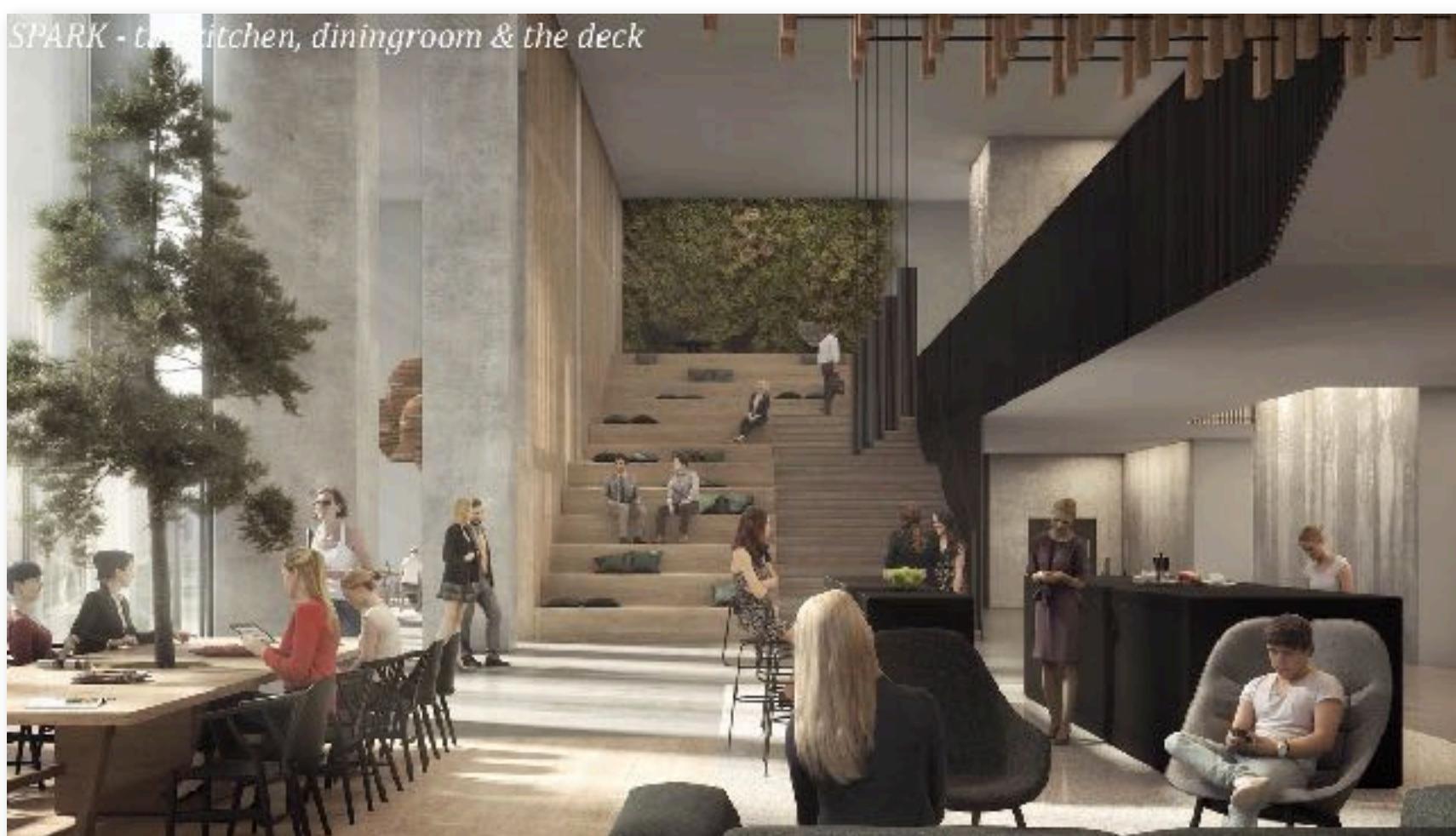
- User research provided me with profound insights and helped me better understand problems.
- User journey map is a great design tool for me.
- User testing provided me with significant insights on iteration (Information Architecture and Prototype)
- Mood board study provided me with inspiring ideas on interface.

## **What didn't make it:**

- I should conduct a 2nd round user testing on the iterated prototype.
- More polish on interface design (adjusting fonts etc).

## **Next step:**

- Conduct a 2nd round user testing.
- Implementation.



Brand Identity, Visual Design & Interior Design

## Skanska Identity & Design

### REDEFINING SKANSKA EXPERIENCE

Working closely with clients(SKANSKA) and design team at Henning Larsen from kickoff to shipping. Participated in research, visual design, new identity development for SKANSKA brand and interior design for their headquarter lobby in Warsaw. We designed and produced a brand brochure showing their heritage and culture. We redefined the purpose of lobby. We brought a sense of community and Scandinavian heritage to the design with the concept of Swedish summer house.

The final product (brand identity and interior design concept) was presented in Feb 2018 at Warsaw with a final product film. Now we are on the construction phase of the lobby interior.

**Client:** SKANSKA

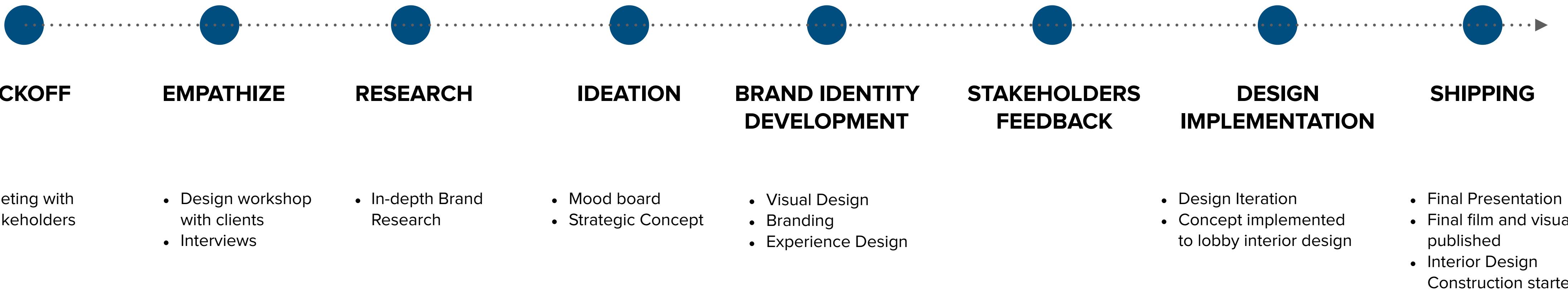
**Team:** Viggo Haremst(Design director), Claudia Sing(Project manager), Lucas Z(Senior designer), Chengcheng Huang(Designer)

**Duration:** Sep 2017 - Dec 2017 (3 months)

**Role:** Visual designer, Researcher, Inteior designer

**Skills:** Brand research, organizing design workshops, visual design, ideation, conceputal design, interior design, 3d digital modeling, moodboard, diagraming, illustration, branding

# DESIGN PROCESS



# KICKOFF

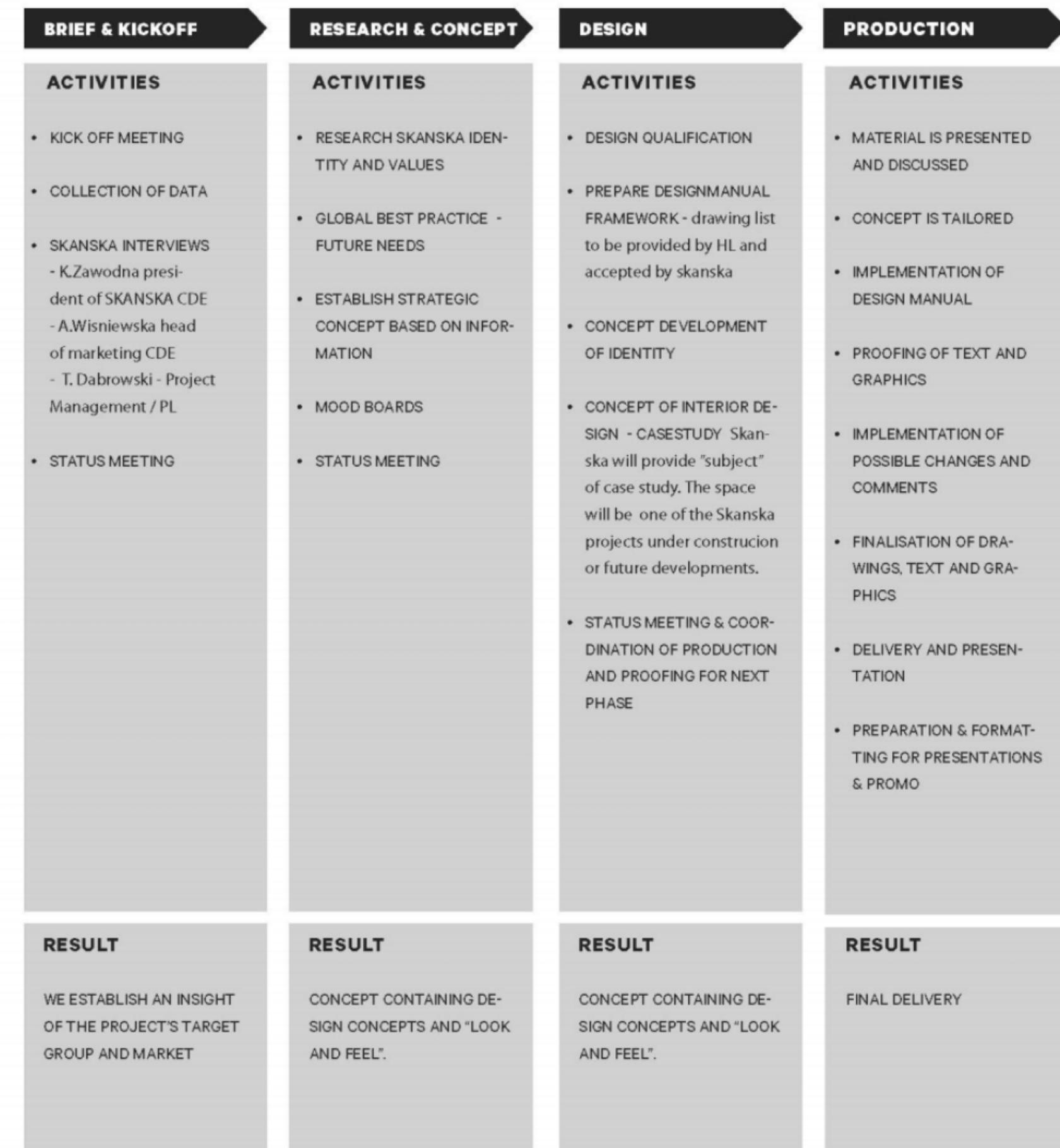
During the kickoff meeting with stakeholders, we(Henning Larsen) discussed project scope, schedule, final deliverables... with client.

## Goal:

- Develop a new identity for SKANSKA brand at central Europe market.
- Redefine the lobby experience with SKANSKA's new identity at Poland HQ.

## Final deliverables:

- A brochure presenting SKANSKA's new identity.
- A final movie showing the newly defined SKANSKA experience.
- Interior design of SKANSKA HQ lobby space based on the new identity.



# EMPATHIZE - DESIGN WORKSHOPS

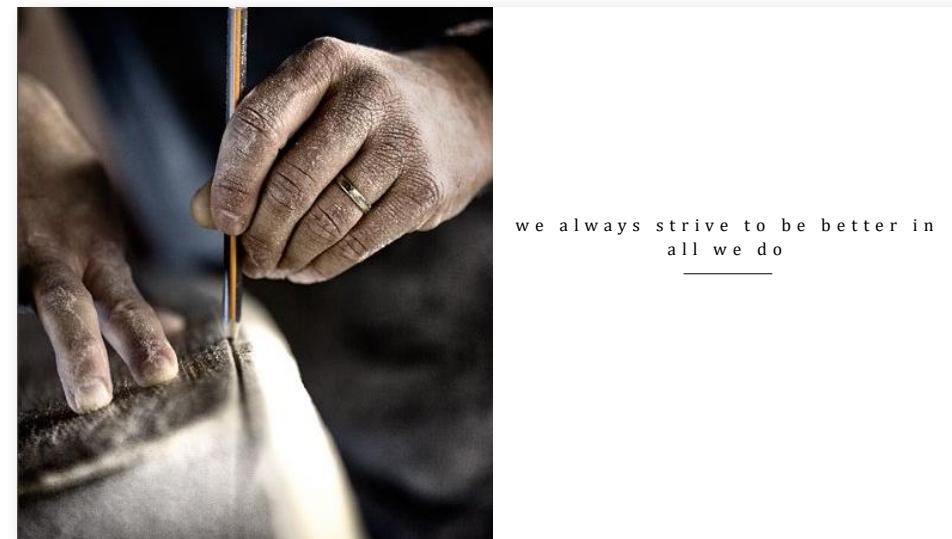
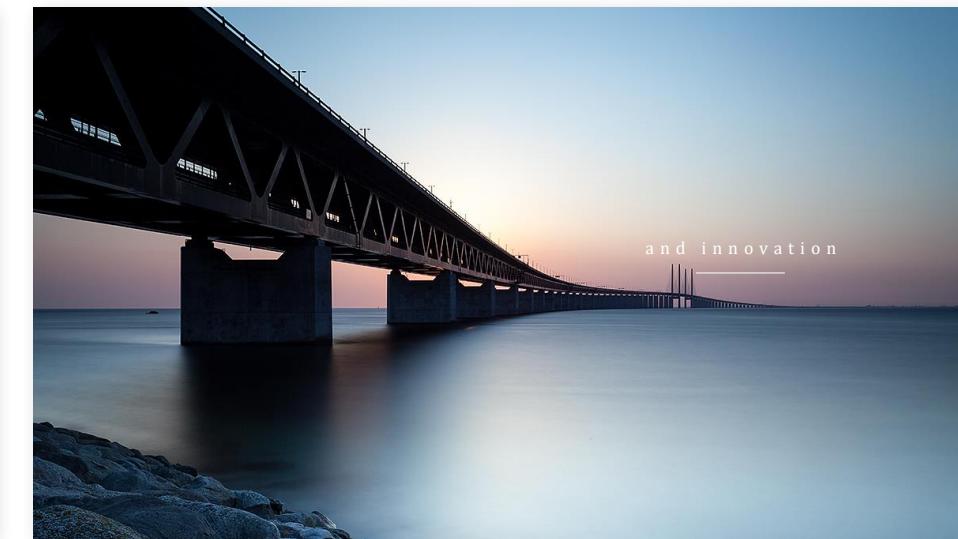
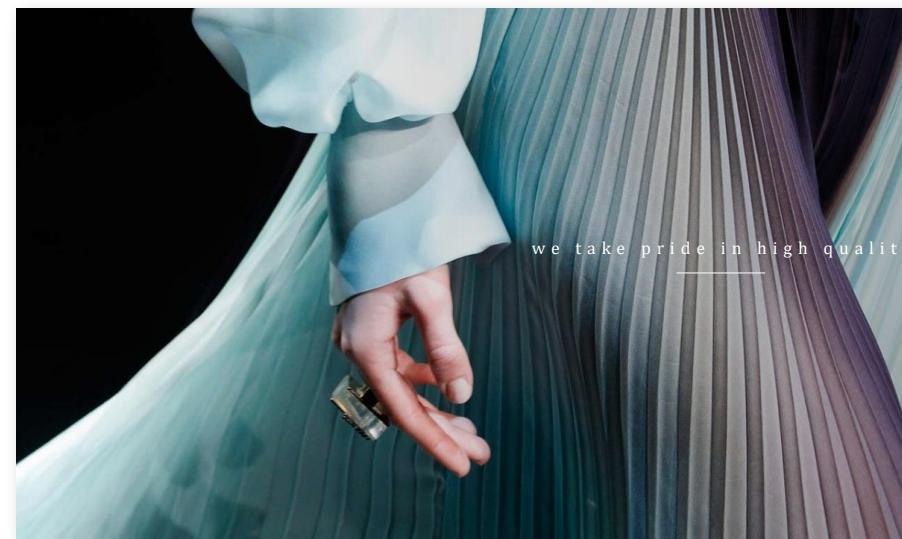
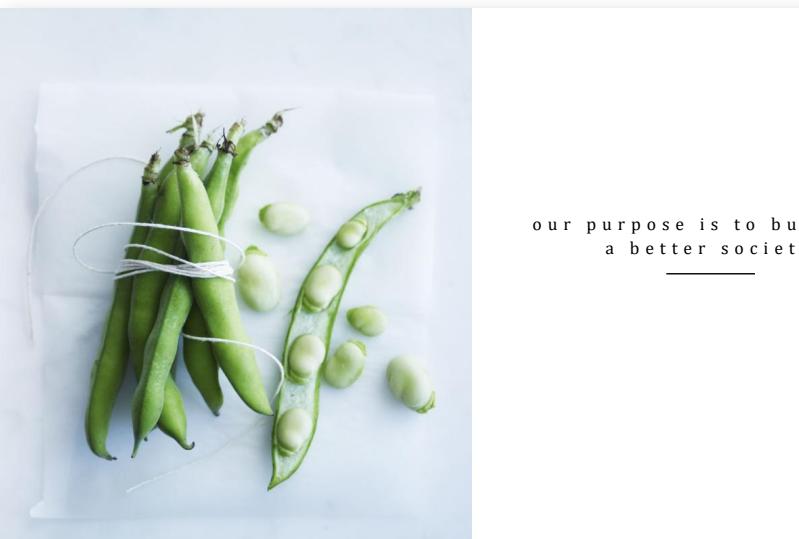
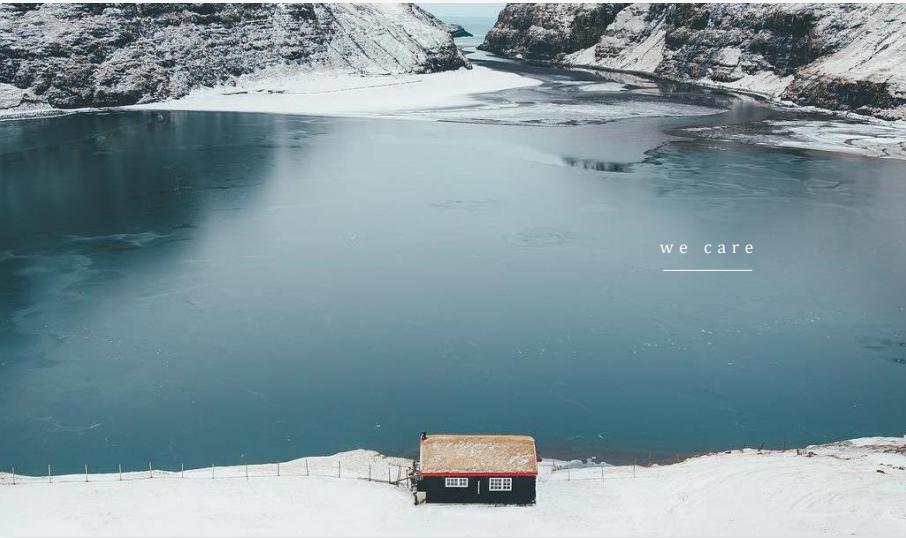
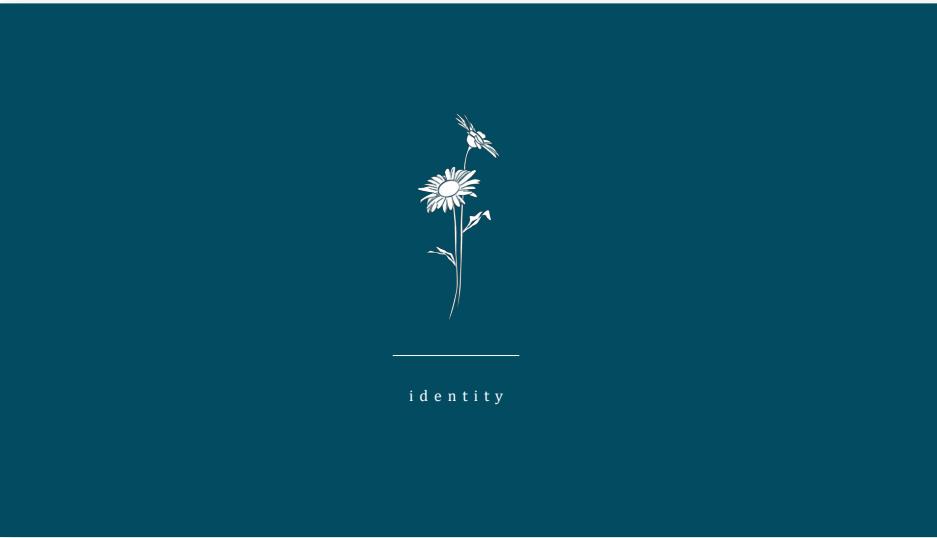
Through design workshops with clients, we got to know their understanding towards SKANSKA, the value of the brand they appreciate, the atmosphere they wish to have at their HQ lobby.



# BRAND RESEARCH



# BRAND IDENTITY DEVELOPMENT



*We care for the lives of people and the environment*

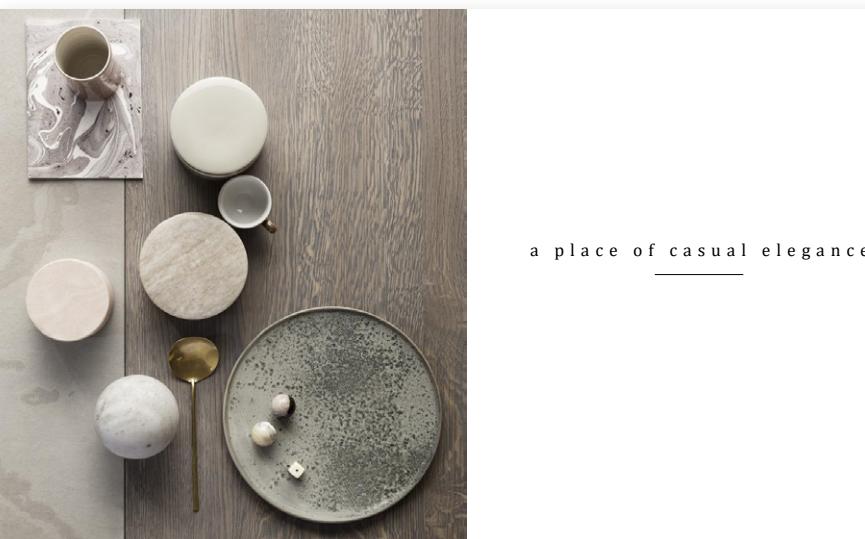
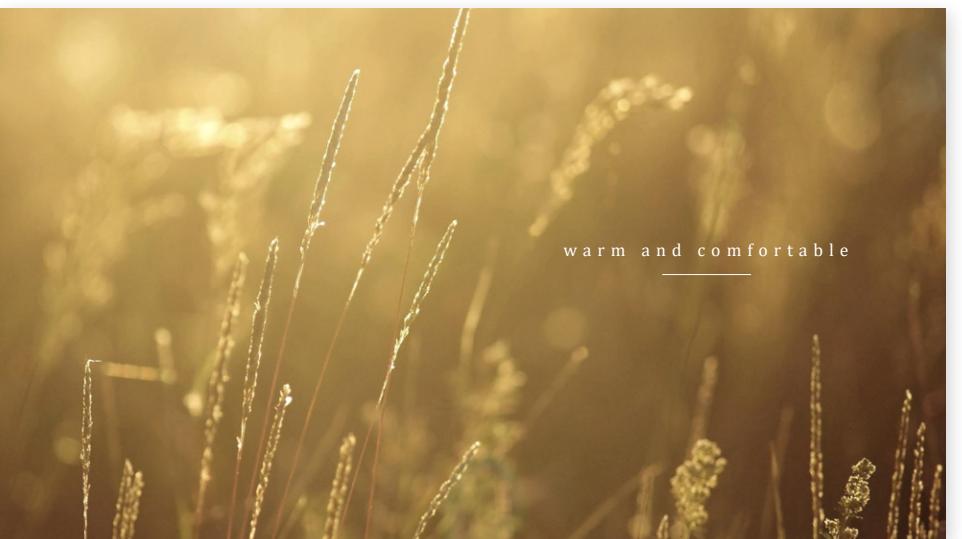
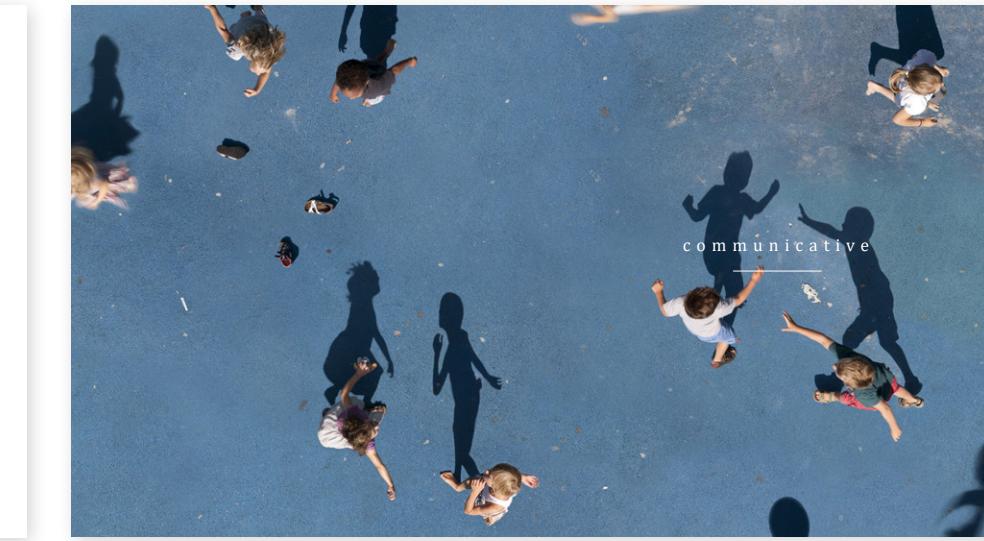
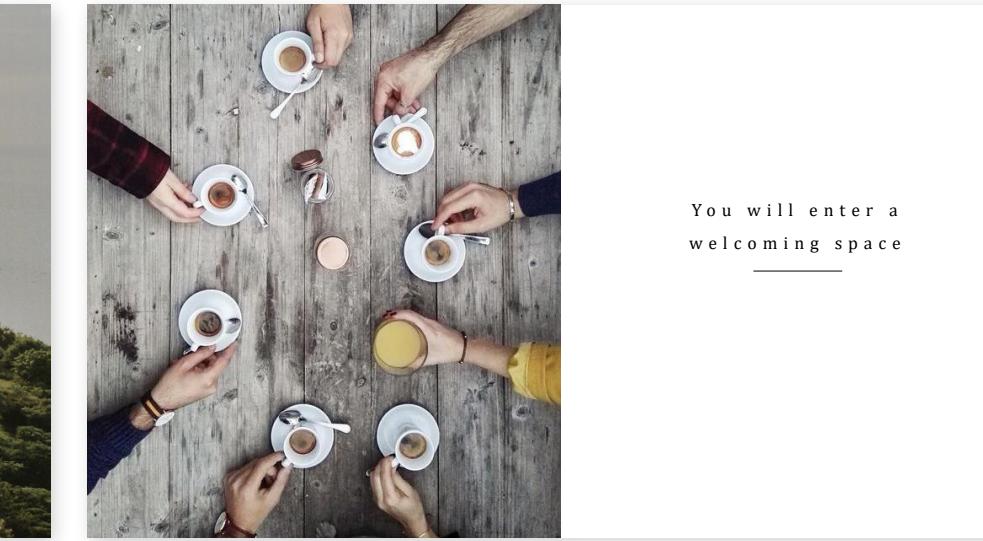
*Our purpose is to build for a better society.*

*We take pride in high quality and innovation.*

*We always thrive to be better in all we do with strong belief in our Scandinavian roots.*

*Skane, where we are from.*

# BRAND IDENTITY DEVELOPMENT

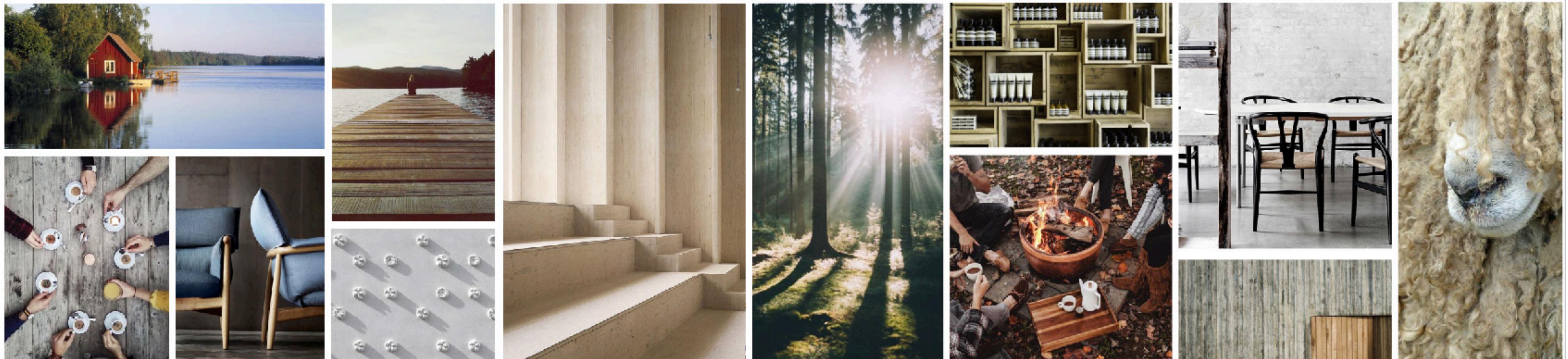


Based on the design workshop we had with client and our in-depth desk research on their brand. We designed this poetic brochure showing our understanding towards their new brand identity emphasizing their **Scandinavian roots, social responsibility** and **attention to high quality**.

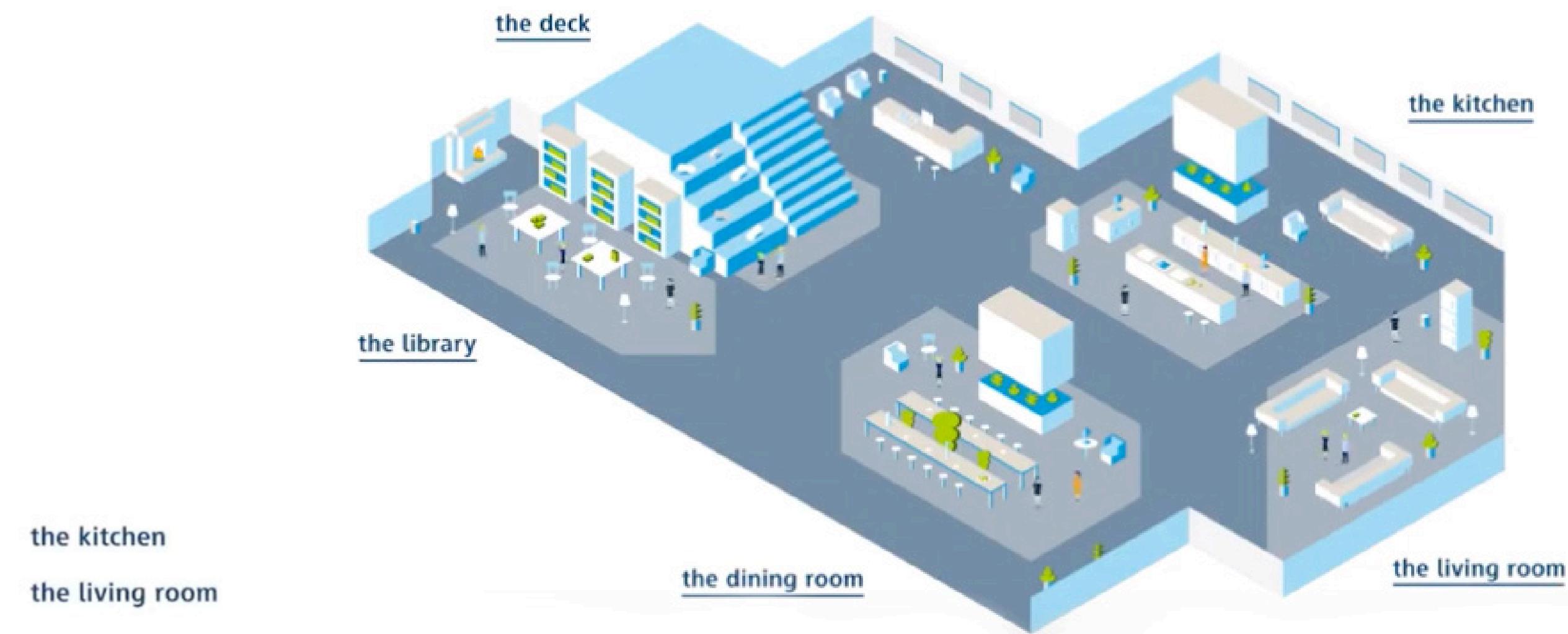
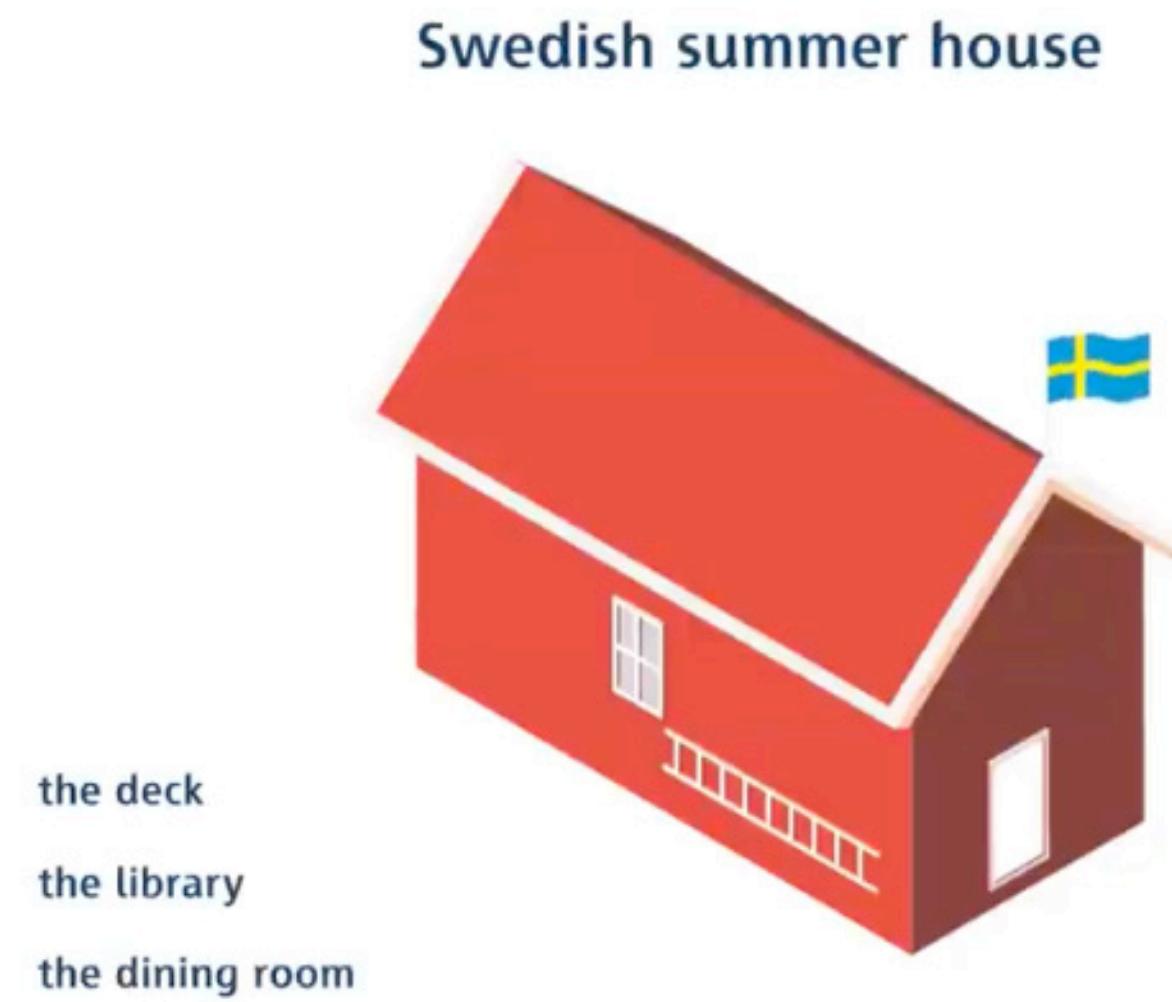
# STRATEGIC CONCEPT AND MOOD BOARD

**Identity - Reinventing our heritage**

**Lobby - The vision of a Swedish summer house**



# CONCEPT IMPLEMENTATION - LOBBY INTERIOR DESIGN



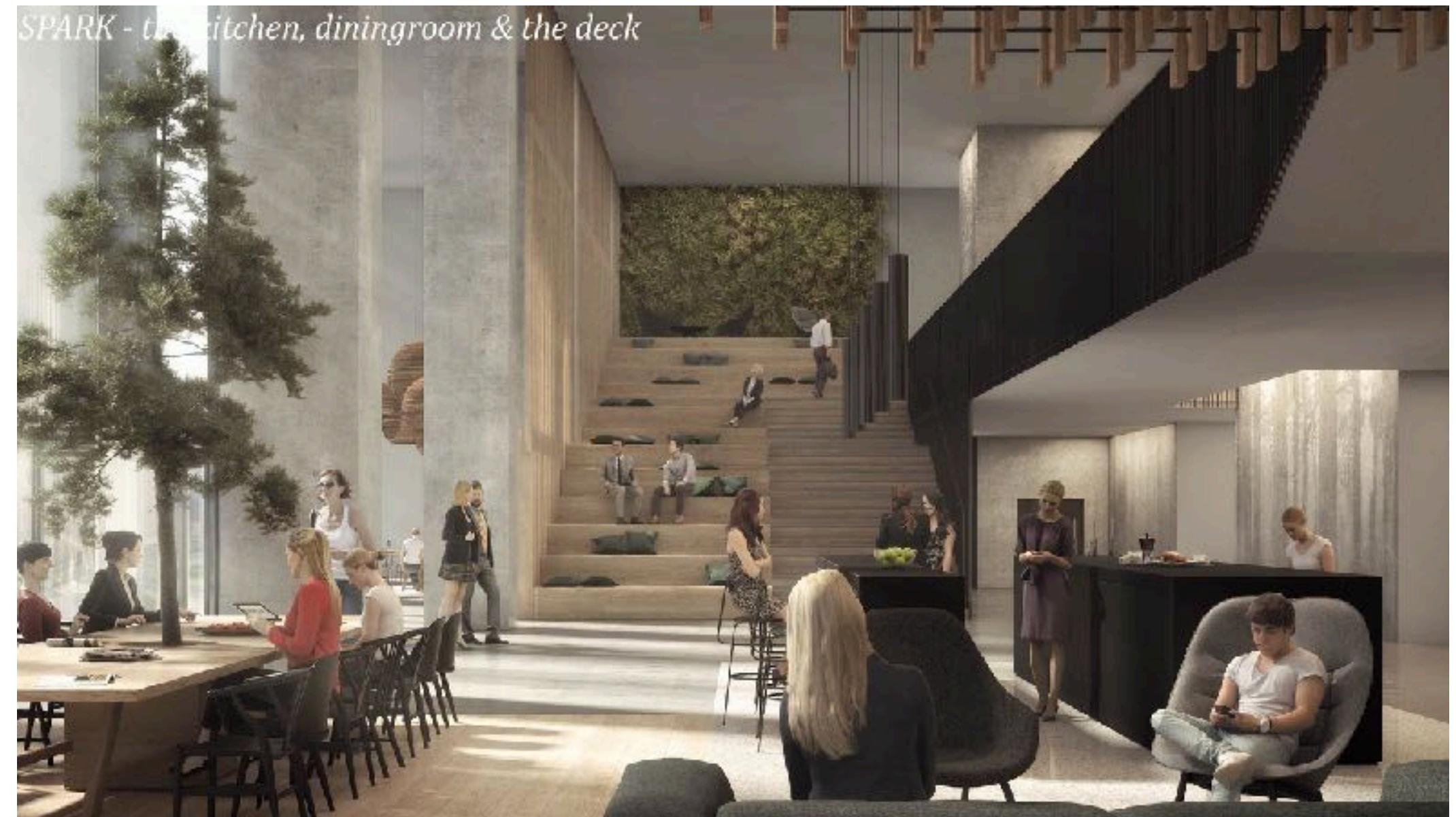
# PRODUCT SHIPPING

## FINAL PRODUCT FILM

<https://www.youtube.com/redefining skanska experience>



Brand Identity Brochure



Interior Design Visualization

## UX RESEARCH & STRATEGIC DESIGN



## Spatial Utilization Study

### IMPROVING BAY AREA WORKPLACE UTILIZATION

Worked closely with strategist and design director on a spatial utilization and human behavior research targeting bay area workplace (case study on M Moser office in San Francisco). Defined problems based on human activity heatmap, spatial occupancy data etc. Conducted strategic design on improving workplace utilization and providing better working experience for employees.



**Client:**

M Moser Associates

**Team:**

Elfreda Chan(Strategist), Chengcheng Huang

**Duration:**

July 2017 (3 weeks)

**Role:**

Researcher & Strategic designer

**Skills:**

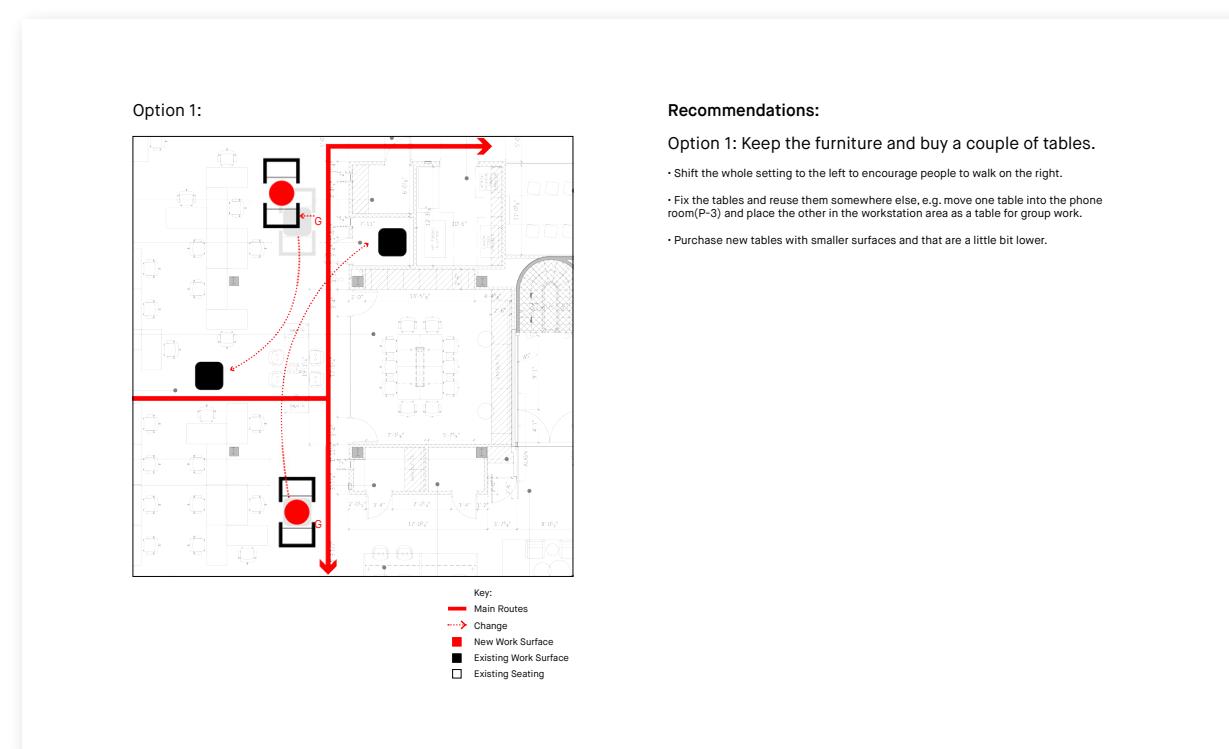
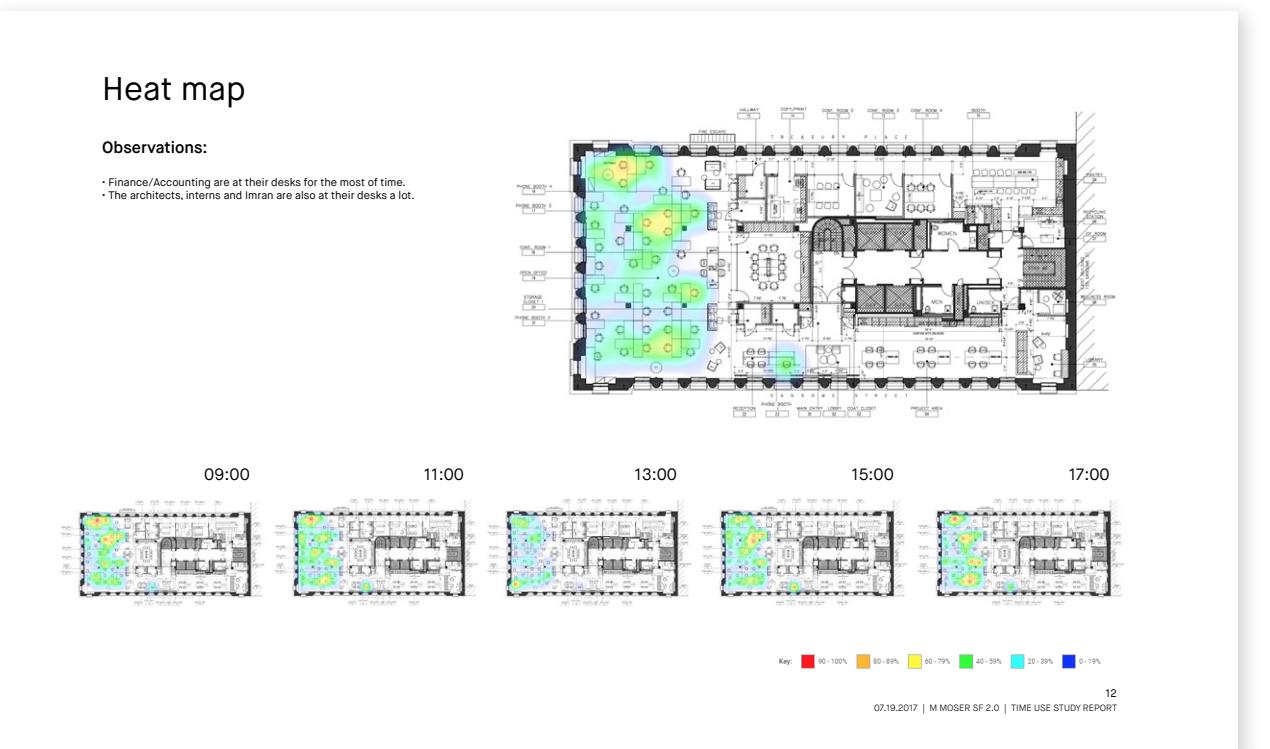
Research, spatial study, data visualization, ideate, define problem space

## THE CHALLENGE

In bay area, more and more people express dissatisfaction on their workplace environment at office or tend to work from home, which might lead to the lack of efficiency while working. So what can employers do to increase their workplace utilization and make employees feel more satisfied about their working environment?

## THE OUTCOME

A spatial utilization report showing the current situation based on observation and data analysis; defining pain points and strategic design proposals to solve the problems.



# OBSERVATION AND USER RESEARCH

I conducted both quantitative research and qualitative research to understand the current situation and pain points.

## Research Methods:

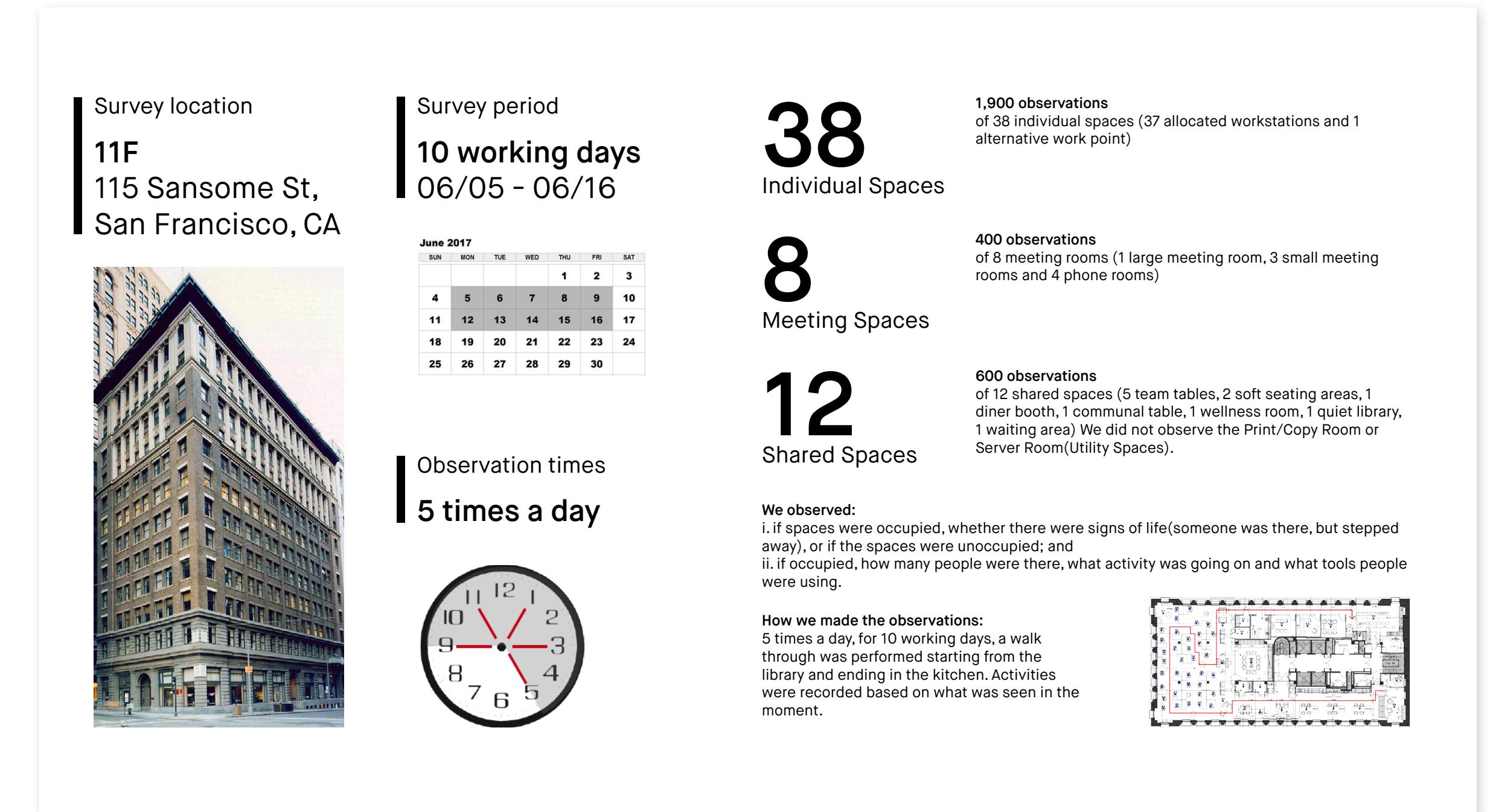
- Observation
- Ethnographic Research
- Data Analysis

## Research Period:

2 weeks

## Research Goal:

- Understand current space utilization and human activities.
- Define pain points.
- Propose strategic design solutions to the problems.



# OBSERVATION FINDINGS

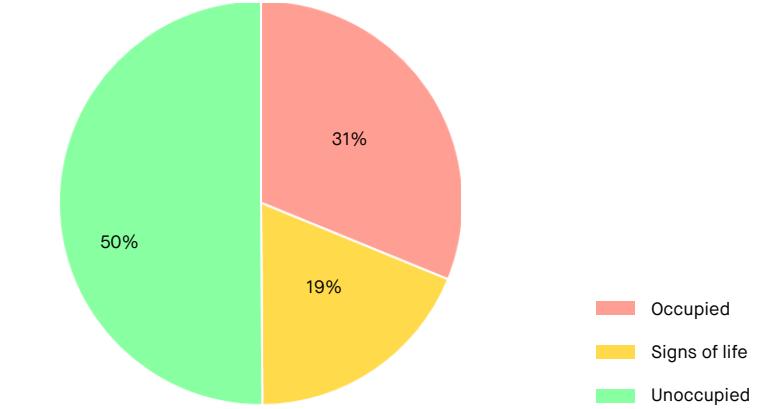
- About only 30% of the office space is actually occupied.
- Less than 40% of the personal desks are occupied.
- Less than 20% of the meeting rooms are occupied.
- Kitchen area tends out to be the most popular spot.
- “Individual work” is the most popular activity, followed by “2P conversation”.

## Overall Occupancy

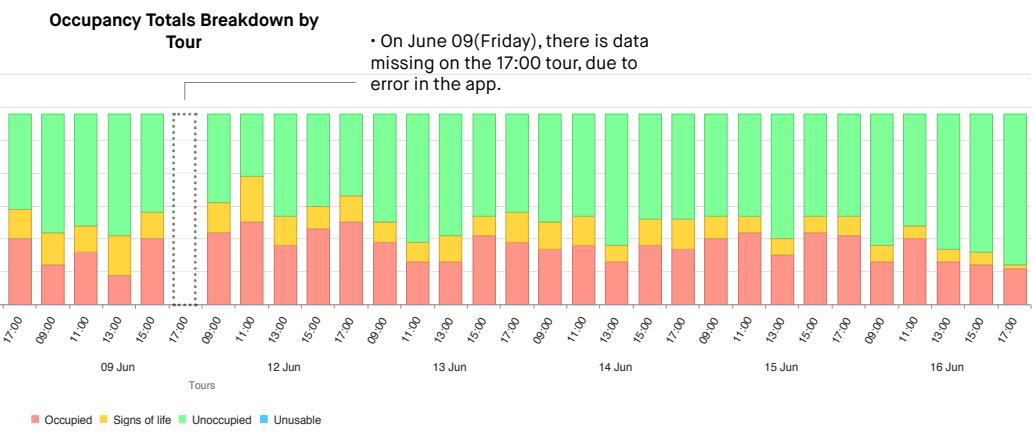
### Observations:

- In general, the office is only half occupied.
- The busiest days tend to be Mondays; while the quietest days tend to be Fridays, which is unsurprising as we have flexible Fridays with approximate half of our people out of office on these days.
- The busiest time of day is 11:00; while the quietest time of day is 13:00, when people are either coming back from their lunch breaks, or still out at lunch.

- On June 06(Tuesday), many people were out for training on this day, which didn't really affect the data significantly as the following Tuesday seemed quiet as well. These may be popular client meeting days.



Legend:  
■ Occupied  
■ Signs of life  
■ Unoccupied

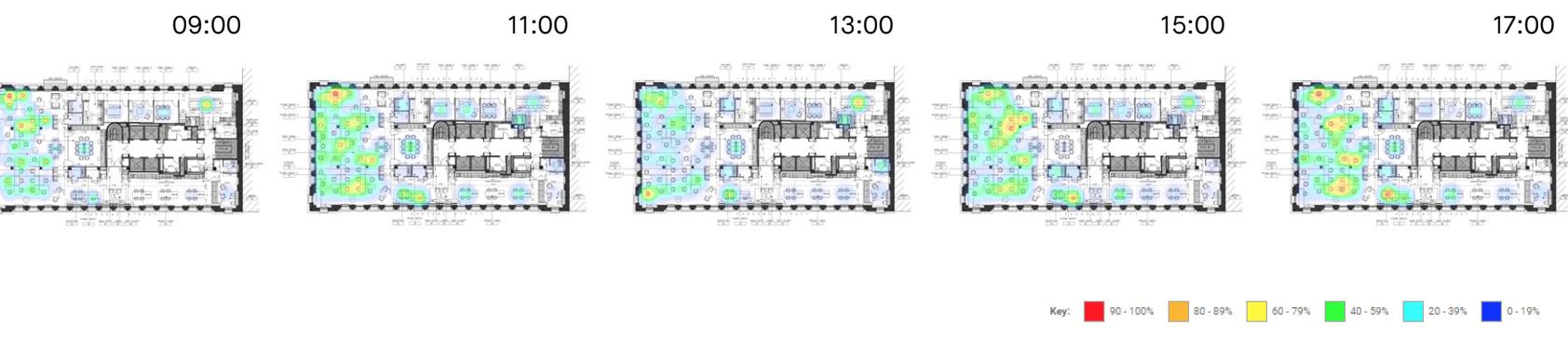


- On June 09(Friday), there is data missing on the 17:00 tour, due to error in the app.

## Heat map

### Observations:

- The kitchen area is a very popular spot throughout the day, especially breakfast and lunch time.
- The team table next to Shannon is very popular, but the ones in the library are less so. This could be because materials are occupying the surfaces most of the time and the locations are relatively far from the main work area.
- Both grey soft seating areas are almost never used.
- The team table in front of the large conference room is relatively well used possibly due to its convenient location, but still not as popular as the table next to Shannon.
- The quiet library is relatively under-utilized, and those who do use it are the same few people.
- The waiting area is almost never used. Its aesthetic value exceeds its actual function. It's great to look at and gives a great first impression, but people rarely interact with it.



Key: 90 - 100% 80 - 89% 60 - 79% 40 - 59% 20 - 39% 0 - 19%

# PAIN POINTS

**Phone rooms (P)** - Underutilized. The direction of the door swings leaves limited room for furniture and different activities.

**Soft Grey Seating (G)** - Rarely used. The dimension between furniture is awkward for human. Being at the center of circulation zone also makes it less appealing to use.

**Team Tables in the library (T)** - Underutilized. Stools are not comfortable. And useable surface of the table is limited.

**Quiet Library (Q)** - Underutilized. The space gets very disorganized and messy from time to time. Sometimes it's being used as storage place due to its very isolated location.

**P**

Existing:  
Rarely used:  
**P-1** **P-3**



Sometimes used: (Better)  
**P-2** **P-4**



Suitable activities:

- Phone call / Video Conference
- Heads-down Individual Work
- Informal Meeting / Group Work

Condition / Challenge:

- Limited room for furniture because doors open inward.
- In P-1 and P-3, the furniture only supports one or half the activities mentioned above.
- In P-1, furniture is not very comfortable.

**G**

Existing:  
Rarely used:  
**G**

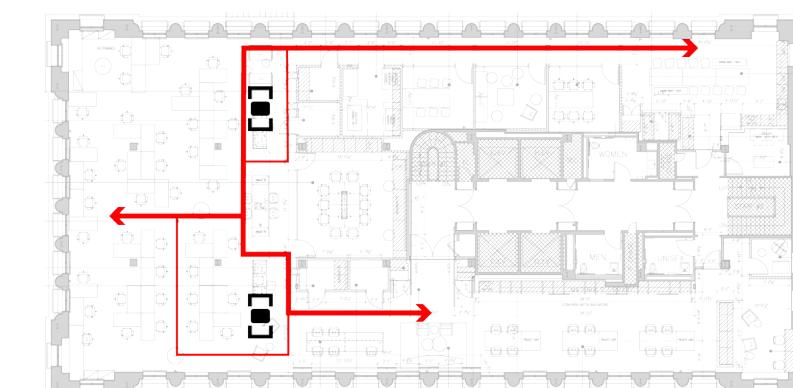


Suitable activities:

- Heads-down Individual Work(Mostly)
- Informal Meeting / Group Work

Condition / Challenge:

- Table is broken
- The dimension between table and seat is awkward: The U-shape lounge makes it very hard to get in/out with the large table in the way.
- Very distracting location.
- In lack of power outlets.



Key:  
— Main Routes  
— Secondary Routes

**T**

Existing:  
Rarely used:  
**T**



Suitable activities:

- Heads-down Individual Work
- Informal Meeting / Group Work
- Material layout space

Condition / Challenge:

- Materials are occupying most of the surfaces.
- Stools are very uncomfortable – heavy and hard.

**Q**

Existing:  
Rarely used:  
**Q**



Suitable activities:

- Heads-down Individual Work

Condition / Challenge:

- The location and orientation of the work table is not very comfortable. (feels like you are being pushed to the corner)
- It gets very messy sometimes. One possible reason is that there is too much free space, the space gets very disorganized.
- The space frequently gets used as a store room, adding to the discomfort.

# PROBLEM-SOLVING AND STRATEGIC DESIGN

## Phone rooms (P)

**Recommendations:**

- For P-1 and P-2, doors to be open outward where possible, to provide more space inside the room.
- All the phone rooms to include a surface that fits both a phone and a laptop; P-1, P-3 and P-4 tables should be larger (40”L x 40”W x 30”H) and at a suitable height for heads-down individual work.
- Consider a banquette seat in P-3 to allow for more than one person.
- Consider changing P-1 to a desk and task chair set up.

## Team Tables in the library (T)

**Recommendations:**

- Create more room for storing material palettes, etc
  - Change the middle table to a storage table, primarily for storing material palettes;
  - Have some small tables next to designer's workstations, so that they can bring the material palettes to their work area, instead of leaving them on the team tables.
- Replace the stools with more comfortable and lighter ones (easier to move), ideally height-adjustable.

## Quiet Library (Q)

**Recommendations:**

- Keep the sofa area, and make the existing work table into a storage unit.
- Place two separate freestanding tables (Or move the tables from soft grey seating areas) in the center of the space and locate the task chairs on opposite sides. Provide power and task lighting appropriately.

## Soft Grey Seating (G)

**Option 1:**

**Recommendations:**

Option 1: Keep the furniture and buy a couple of tables.

- Shift the whole setting to the left to encourage people to walk on the right.
- Fix the tables and reuse them somewhere else, e.g. move one table into the phone room(P-3) and place the other in the workstation area as a table for group work.
- Purchase new tables with smaller surfaces and that are a little bit lower.

## Soft Grey Seating (G)

**Option 2:**

**Recommendations:**

Option 2: Rotate the furniture to support individual work only.

- Divide each setting to two individual work spaces by rotating the seats to face the corridor, and purchase new laptop tables (provide power if possible).
- Fix the old tables and reuse them somewhere else.

## Soft Grey Seating (G)

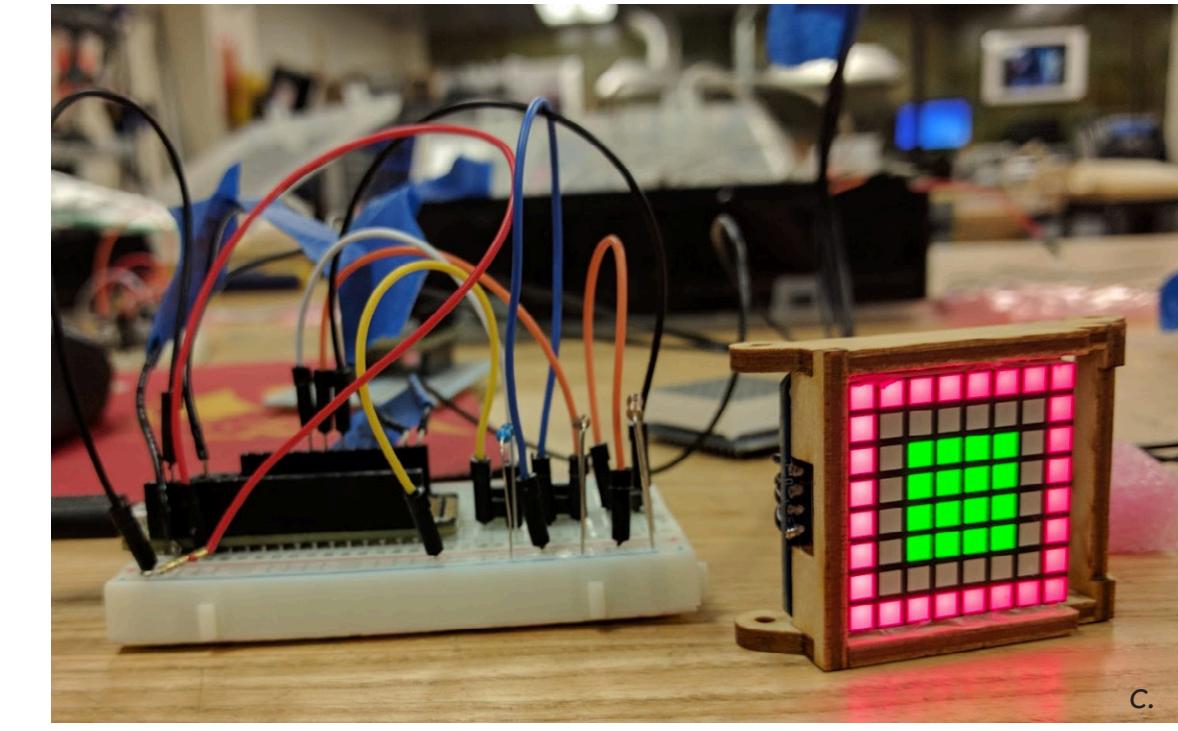
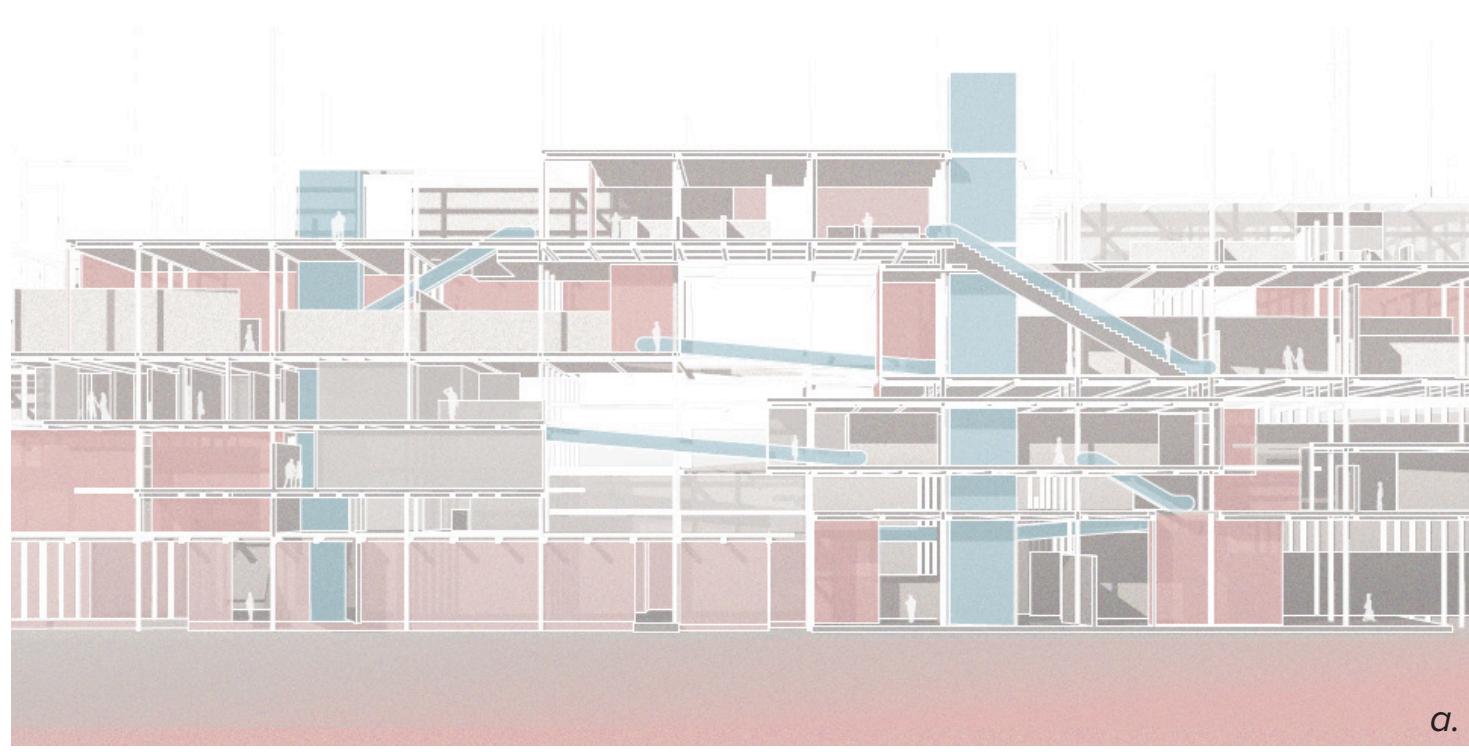
**Option 3:**

**Recommendations:**

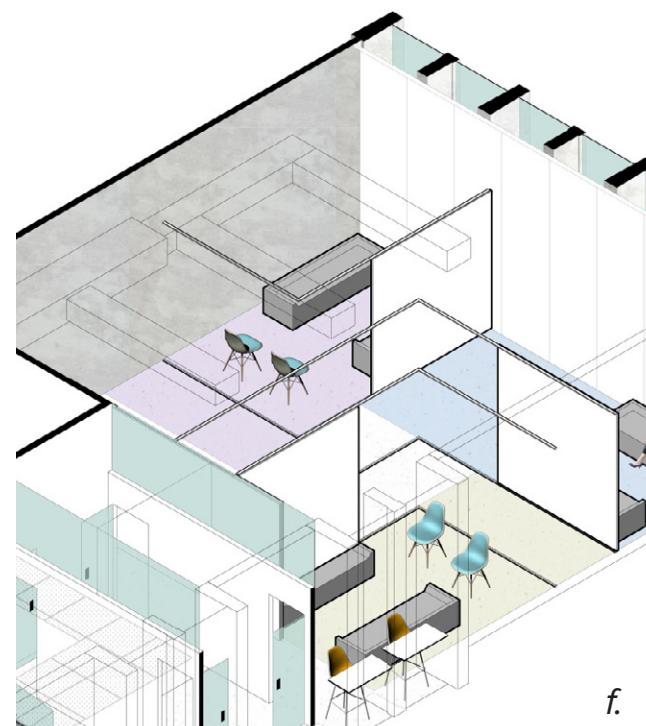
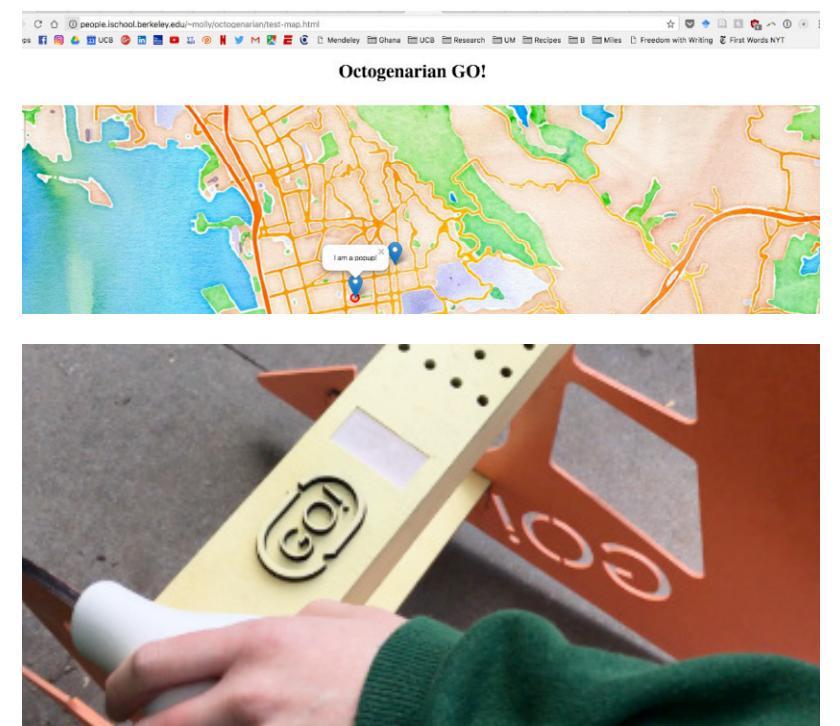
Option 3: Replace the furniture completely.

- Change the setting to be a semi-enclosed "C"-Shape booth, keeping the high-back (52in H) as a barrier.
- Replace the table to match the dimension of the seat. (ideally with adjustable height)
- Add power outlets.

## **OTHER DESIGN PROJECTS**



d.



g.

a. **Architectural Design**, Museum in Los Angeles

b. **Pavilion Design**, Lightweight shell structure

c. **Electronic Product Design**, Alarming device for protest

d. **Furniture Design**, Body-conscious chair

e. **Interactive Product Design**, Senior walker with web mapping system

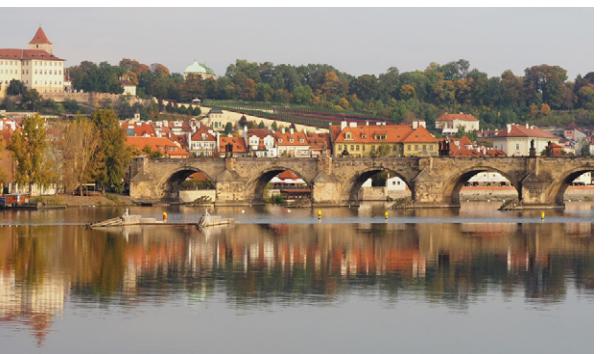
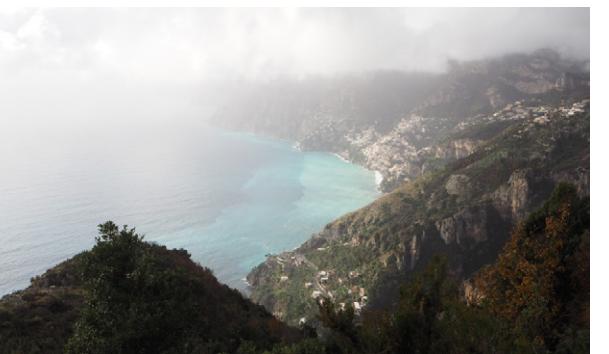
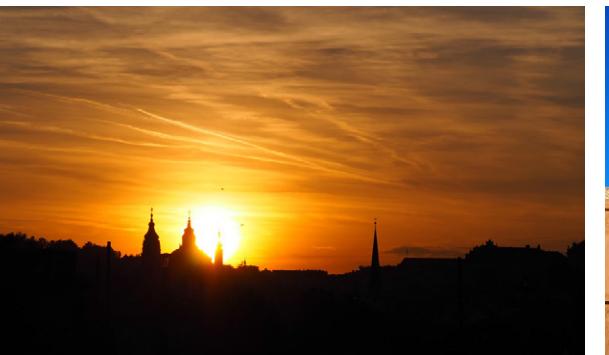
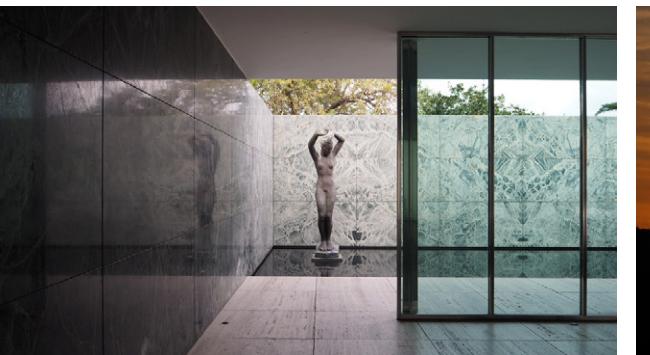
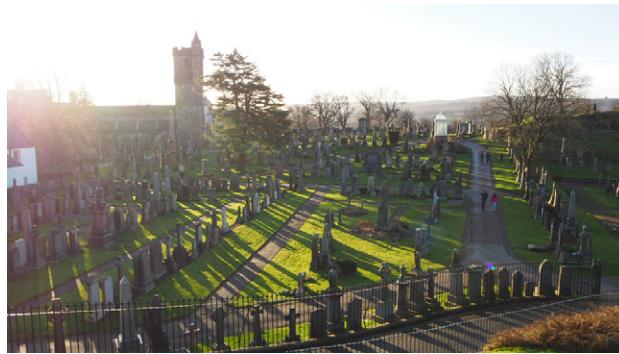
f. **Interior Design**, Flexible learning environment in collaboration with Herman Miller

g. **Wearable Product Design**, Farm-to-Label kit

**WHEN I'M NOT DOING DESIGN....**



## As a Traveler & Photography Enthusiast...



# Chengcheng Huang

## Product | User Experience Designer

cchuangx.github.io/portfolio.pdf  
510-570-6819  
cc.huang@berkeley.edu

### EXPERIENCE

#### RoadMap | Product Designer

01.2019 - Present | Berkeley, USA

- Designed a Carrier Analytics feature for a global shipping company to implement on their desktop platform. The feature includes search experience, way-finding experience and data visualization with clear information hierarchy.
- Worked with project manager and product design lead, I conducted user research, prepared and moderated the whole user testing session, finished defining problem space and storyboarding on user flow.
- Finished several rounds of iteration on prototype and presented them to client. Client highly appraised the final result. Now the project has been passed for implementation.

Reference: Ben Stukenborg (ben.stukenborg@gmail.com)

#### Henning Larsen | Designer

09.2017 - 07.2018 | Munich, Germany

- Worked closely with project manager and clients (Autodesk and Skanska) from kickoff to shipping on brand identity development, visual design and experience design.
- Organized design workshops with clients to get to know their needs and goals.
- Implemented brand identity ideas on interior design of Skanska HQ lobby and Autodesk workspace in Munich. Clients spoke highly of the final results.
- Participated in multiple international design competitions from research, ideation to architectural design.

Reference: Viggo Haremst (VH@henninglarsen.com)

#### M Moser Associates | Design and Strategy Intern

04.2017 - 07.2017 | San Francisco, USA

- Conducted Space Utilization Studies on M Moser's office environment through a 2-week observation. Finished a report with data analysis on utilization heatmap, defining problems and strategic design on improving office space utilization.

### SELECTED PROJECTS

#### Sleep Journey | Mobile UX/UI Design

01.2019 - 02.2019 | Self-started Project

Designed an app that helps people sleep better and maintain a better lifestyle by encouraging users to develop good habits before sleep and after waking up.

#### eFresh | Mobile and Desktop UX/UI Design

Sep 2018 - Dec 2018 | UC Berkeley School of Information

Designed a platform (app and website) that helps independent local grocery market owners start their own online store to make more profits and engage with the community better.

#### Farm-to-Label | Wearable Product Design

Apr 2017 - May 2017 | Jacobs Institute for Design Innovation

Designed and fabricated "Farm-to-Label" kit to allow users cultivating clothing, creating living ecosystems on their garments. Project was featured on Jacobs website.

### EDUCATION

#### University of California, Berkeley

08.2015 - 05.2019 | Berkeley, USA

Master's DE Certificate, Interaction Design  
Master of Architecture, Environmental Design

#### Central China Normal University

03.2012 - 06.2015 | Wuhan, China

Associate Degree of Science, Psychology

#### Huazhong University of Sci & Tech

09.2010 - 06.2015 | Wuhan, China

Bachelor of Architecture

### SKILLS

#### Design

Strategic design  
User journey mapping  
Concept sketches  
Information architecture  
Wireframes & mock ups  
Storyboard  
Data visualization  
UI graphics  
Illustration  
Web design  
Product design  
Branding  
Visual design  
Video editing

#### Prototyping

Digital prototyping using Invision / Sketch / Figma  
Physical prototyping using 3D printer / Laser cutter

#### Research & User Testing

Desk research  
Survey design  
In-person interview  
Persona  
Data analysis with SPSS  
Usertesting.com

#### Software

Sketch / Figma / InVision / Keynote  
Adobe Illustrator / Photoshop / InDesign / Premiere  
AutoCAD / Fusion 360 / Rhino / Revit / SketchUp  
HTML / CSS / JS

# THANK YOU!