Travello app: design process report

• USABILITY TEST

• **PROTOTYPE**

• WIREFRAMES

• NAVIGATION

• PAPER PROTOTYPING

• USER FLOWS

○ USE CASES AND FEATURES

• FEATURE PRIORITIZATION

• STORYBOARDS

• SCENARIOS

• PERSONAS

O COMPETITOR ANALYSIS

 RESEARCH: INTERVIEWS

• PROBLEM STATEMENT

The Problem

While travelling in itself is a great experience and most people have positive memories from their trips, the planning and logistics can cause a lot of stress. When learning about a new place, users need to look at various sources of potential sights and activities and gather information into one place. Traveling with friends adds challenges as there is no easy way to make a plan together or share individual's top spots. Then, during the trip, it is hard to retrieve previously collected information to sightsee in a most optimal way.

Goal

This project focuses on reducing the stress of travelling and time spent on logistics to make the experience more enjoyable.



Interviews with potential users

The hypothesis of certain pain-points associated with travelling were confirmed with user interviews. The common goals derived from the conversations were as follows:

- planning ahead of time
- not missing out
- ensuring visiting all planned sights and activities
- tracking progress of their trip
- easily going from one place to another (next sight)
- collaborating with friends that also go on trip
- stress-free travelling

Target audience

People keen on travelling, young at the age between 20-40. The audience is cautious of time and wants to maximise relaxing time while on vacation.

PROBLEM STATEMENT **RESEARCH: INTERVIEWS** • COMPETITOR ANALYSIS • PERSONAS **O** SCENARIOS **O STORYBOARDS** • FEATURE PRIORITIZATION • USE CASES AND FEATURES • USER FLOWS • PAPER PROTOTYPING **O** NAVIGATION **O WIREFRAMES** • **PROTOTYPE O USABILITY TEST**

Interviews with potential users

Affinity map of the interview notes. Statement of the local division of the

STATEMENT RESEARCH: INTERVIEWS O COMPETITOR ANALYSIS • PERSONAS • SCENARIOS • STORYBOARDS • FEATURE PRIORITIZATION • USE CASES AND FEATURES • USER FLOWS • PAPER PROTOTYPING **O** NAVIGATION **O WIREFRAMES** • **PROTOTYPE O USABILITY TEST**

PROBLEM

Research findings

The qualitative analysis indicates that there is no means to plan a trip and quickly retrieve the data at a later stage. There is no way to efficiently share plans with co-travellers or amend plans on the fly. Above all, there is no easy way to get an overview of the stops and their order.

Post-interview problem definition

Travellers need a way to plan effectively because they want to save time, reduce travelling stress and focus on having fun.

Hypothesis

We believe that by creating a digital interactive itinerary for travellers we will achieve more relaxing travel experience. We will know this to be true when the time spent on planning and adjusting itinerary during a trip decreases.



The first step	after the	intervie	ws was t	o gather	r informa	ation abo	ut				•	RESEARCH: INTERVIEWS
existing trip planning means and compare the features they are offering to the users.							•	COMPETITOR ANALYSIS				
J											0	PERSONAS
											0	SCENARIOS
	EDITED CONTENT	LARGE IMAGES	OFFLINE CONTENT	BOOK- MARKING	SHARING	INTUITIVE	NOTIFICA- TIONS	SUGGESTED PLACES	PRIORITIZE PLACES	FREE	0	STORYBOARDS
GOOGLE TRIPS	no	yes	yes	yes	no	yes	yes	yes	no	yes	0	FEATURE PRIORITIZATION
LONELY PLANET	yes	no	yes	yes	no	no	no	no	no	no	0	USE CASES AND FEATURES
FROMER	yes	yes	yes	no	no	yes	no	yes	no	no	0	USER FLOWS
TRIP ADVISOR	no	yes	no	no	no	yes	no	yes	no	yes	0	PAPER PROTOTYPING
DK EYE WITNESS	yes	yes	yes	yes	no	yes	no	no	no	no	0	NAVIGATION
ROADTRIPPERS	no	yes	yes	yes	yes	yes	no	no	no	yes	0	WIREFRAMES
											0	PROTOTYPE

PROBLEM STATEMENT

Competitor analysis

Currently, there is no single offering that would allow users to input travel • USABILITY TEST plans and retrieve them offline, all in one place.

Creating personas

From the interview findings, two model personas were created. They exemplify behaviours of two main user groups that the app is targeting.

First group, defined through Ben, is a typical casual traveller that wants hustle-free aid while travelling so he doesn't need to look back at his notes too often.

Second group, shown through Samantha, focuses on a passionate organiser, who puts a lot of time into planning and often leads her group of travelling friends.

PROBLEM STATEMENT RESEARCH: INTERVIEWS COMPETITOR ANALYSIS • PERSONAS • SCENARIOS • STORYBOARDS • FEATURE PRIORITIZATION O USE CASES AND FEATURES • USER FLOWS • PAPER PROTOTYPING • NAVIGATION **O WIREFRAMES** • **PROTOTYPE O USABILITY TEST**



Ben

MARRIED • SOFTWARE ENGINEER • 25 YEARS

TRAVEL FREQUENCY

I don't like loosing time on things like logistics.



NEEDS / FRUSTRATIONS

A lot of poor information to look through Hard to prioritize places in an efficient way Doesn't like to waste time on logistics while on the trip (it takes away relaxation)

GOALS

Optimally adjusting plans on the fly Concise list of places to see on the day Tracking which places they have seen Being able to differentiate between "must-see" or "nice to see"

SUMMARY

Ben travels a lot with his wife. He usually plans a few months ahead of time. This is not a streamlined process as there is no easy way to exchange information between him and his wife. He jumps between different sources to create a perfect trip scenario. This takes a significant amount of effort.

During the trips Ben usually refers to his notes and guidebook to decide what is the next place to see. Sometimes, he misjudges time needed to see a particular sight, which causes a need to readjust the trip plan. Other times, he might mist a sight and, as he is determined not to miss out, he usually spends extra time travelling to go back. He usually doesn't come back to rearrange his plans or mark as "seen" during the trip.

PROBLEM STATEMENT RESEARCH: INTERVIEWS COMPETITOR ANALYSIS • PERSONAS **O** SCENARIOS • STORYBOARDS • FEATURE PRIORITIZATION • USE CASES AND FEATURES **O USER FLOWS** • PAPER PROTOTYPING **O** NAVIGATION **O WIREFRAMES** • **PROTOTYPE O USABILITY TEST**



Samantha

SINGLE • LEGAL OFFICE COORDINATOR • 33 YEARS

TRAVEL FREQUENCY

SIGHTSEEING INTENSITY

I try to plan an ideal trip; I can never get it perfect.

NEEDS / FRUSTRATIONS

A lot of work to plan and map detailed schedules of what to see every day	•	PROBLEM STATEMENT
Inefficient way of exchanging ideas with fellow	+	RESEARCH: INTERVIEWS
Only one hard copy of the plan.	•	COMPETITOR ANALYSIS
A lot of effort goes into making sure that the places are seen in order to the plan	•	PERSONAS
GOALS	0	SCENARIOS
Change the plan more easily and with less effort than rewriting sticky notes.	0	STORYBOARDS
Easy to share version of the plan Ability to prioritize	0	FEATURE PRIORITIZATION
Mapping the places and having them in order so they are easy to follow.	0	USE CASES AND FEATURES
SUMMARY	0	USER FLOWS
зиммаку Samantha usually travels with a group of friends. She is very organised. Hence, the burden of	0	USER FLOWS PAPER PROTOTYPING
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SUMMARY Samantha usually travels with a group of friends. She is very organised. Hence, the burden of creating a plan usually falls on her. Her friend make their preferred sight suggestions through a conversation thread on social media. While travelling, it takes her a lot of effort to	0 0 0	USER FLOWS PAPER PROTOTYPING NAVIGATION WIREFRAMES
SUMMARY Samantha usually travels with a group of friends. She is very organised. Hence, the burden of creating a plan usually falls on her. Her friend make their preferred sight suggestions through a conversation thread on social media. While travelling, it takes her a lot of effort to follow the trip itinerary. Due to the fact of having only one hard copy of the plan, the effort is on	0 0 0 0	USER FLOWS PAPER PROTOTYPING NAVIGATION WIREFRAMES PROTOTYPE
SUMMARY Samantha usually travels with a group of friends. She is very organised. Hence, the burden of creating a plan usually falls on her. Her friend make their preferred sight suggestions through a conversation thread on social media. While travelling, it takes her a lot of effort to follow the trip itinerary. Due to the fact of having only one hard copy of the plan, the effort is on her to lead the group. When she needs to make adjustments, she simply rearranges sticky notes in her guidebook. Sometimes, they are fiddly to handle and keep track of.	0 0 0 0	USER FLOWS PAPER PROTOTYPING NAVIGATION WIREFRAMES PROTOTYPE USABILITY TEST

Scenarios

Ben is on a trip with his wife. They meet a friendly local person who engages in a short conversation with them. The local recommends an off the beaten path sight that sounds very interesting to Ben and his wife. They decide to add this into their itinerary. Ben opens the travel app, searches for the name of the new sight and adds it to the itinerary for the day.

Samantha is travelling with her friends. She prepared a great list of things to do with the travel app. They are following the itinerary one by one. The app tells them how much time they have and weather they can accomplish all the planned activities. After a few hours of walking, it turns out that they completed itinerary for the day so Samantha opens the app and browses for nearby places of interest. She gives them priority and an updated itinerary is ready for her group to use.



Storyboards

The primary use case derived from the user research is to alter trip itinerary while already travelling. I decided to make this the focus of the primary use case that will be tested with users.



RECEIVING TRAVEL RECOMMENDATION

Ben is on a trip and wants to add a sight that a local person he met recommended him to see.



ADDING NEW SIGHT TO ITINERARY

Ben opens his travel app and adds a place of interest to his itinerary.



ITINERARY UPDATE

Ben follows the updated itinerary with a stop at the added sight.

•	PROBLEM STATEMENT
•	RESEARCH: INTERVIEWS
•	COMPETITOR ANALYSIS
•	PERSONAS
•	SCENARIOS
•	STORYBOARDS
0	FEATURE PRIORITIZATION
0	USE CASES AND FEATURES
0	USER FLOWS
0	PAPER PROTOTYPING
0	NAVIGATION
0	WIREFRAMES
0	PROTOTYPE
0	USABILITY TEST

Feature prioritization

User interviews as well as competitor analysis were a rich source of potential features. Based on a quick survey with potential users, the feature were organized into four buckets. These helped to define what needs to be developed for MVP.



PROBLEM STATEMENT STORYBOARDS PRIORITIZATION • USE CASES AND FEATURES PROTOTYPING

Feature prioritization

Further study of user flows and testing them with users helped to make a decision on the MVP features list. The following features are going to be necessary for the MVP. They enable users to be successful with tasks leading to completion of their goals and offer unique proposition comparing to the competitors.

Sight priority

This feature adds functionality that doesn't currently exist on the market. It will help the user achieve their goal of seeing the most important places. It will enable a clear view of what is not as important for them so they can make a decision very quickly.

List / map views

In order to efficiently see the itinerary and what is ahead of the user in terms of sights both views are needed. Whether they choose to follow a list or look at the map, this feature will enable quick orientation within the plan and space.

Reordering list

Changes to the plan are very common. Being able to adjust the order easily on the fly will make the experience more seamless.

Adding sights

This is a standard feature that other actions depend on. An intuitive to add places to the plan by name, location or photo will delight user performing the necessary tasks.

•	PROBLEM STATEMENT
•	RESEARCH: INTERVIEWS
•	COMPETITOR ANALYSIS
•	PERSONAS
•	SCENARIOS
•	STORYBOARDS
•	FEATURE PRIORITIZATION
0	USE CASES AND FEATURES
0	USER FLOWS
0	PAPER PROTOTYPING
0	NAVIGATION
0	WIREFRAMES
0	PROTOTYPE
0	USABILITY TEST

Use ca	ses and features		•	PROBLEM STATEMENT	
For the user testing to provide meaningful data, the tasks were aligned					
with the features so each step of the user could be evaluated.					
	TASK	FEATURE	•	PERSONAS	
Ben	Expand the itinerary	Adding sights	•	SCENARIOS	
	Looking at a map for the next sight/activity	Map view	•	STORYBOARDS	
	Directions to the next place	Connection to phone maps and navigation	•	FEATURE PRIORITIZATION	
	Using the app without internet	Offline mode	•	USE CASES AND FEATURES	
	Looking up places	Search function	0	USER FLOWS	
	TASK	FEATURE	0	PAPER PROTOTYPING	
Samantha	Looking at a list with itinerary for the day	List view	0	NAVIGATION	
	Marking sights with high and low importance	Prioritization functionality	0	WIREFRAMES	
	Tracking itinerary progress	Marking sights as seen and indication what is left		PROTOTYPE	
		from the itinerary	0	USABILITY TEST	
	Collaborating with friends	Share itinerary to view or to contribute			
	Looking around what else she can see	Browse function			

Initial user flow

The primary user flow facilitates top functionality of adding an item to itinerary while travelling to update day plan.



PROBLEM STATEMENT RESEARCH:

INTERVIEWS

COMPETITOR ANALYSIS

Screen flow

Based on the user flow, the primary screen flow has been defined.



• USABILITY TEST

PROBLEM STATEMENT RESEARCH:

INTERVIEWS

Paper prototyping

After the user flows with the primary tasks have been defined, a set of paper screens was used to test the ideas with users.



PROBLEM STATEMENT RESEARCH:

INTERVIEWS

COMPETITOR

Paper prototyping: insights

- Search results need to be displayed in a more intuitive way.
- Remove interaction with itinerary confirmation.

Design recommendations

- Auto-populating should be added rather than a separate screen.
- Itinerary confirmation should only appear for a few seconds.

Moving forward

• Test updated ideas with more users.	•	PAPER PROTOTYPING
 Improve detail to express the correct affordances. 	0	NAVIGATION
 Add option to change day where the sight is added. 	0	WIREFRAMES
 Add cost and priority to the list screen. 	0	PROTOTYPE
 Let friends pick places but so they make sense with the plan. 	0	
 Add distance between places, between each step. 	0	USABILITY TEST
 Option for a loose plan of what to do in the day 		

PROBLEM STATEMENT RESEARCH:

INTERVIEWS COMPETITOR

ANALYSIS

PERSONAS

SCENARIOS

FEATURE

USE CASES AND FEATURES

USER FLOWS

STORYBOARDS

PRIORITIZATION

• Add preferences and intensity of the trip.

Navigation: site map

Since the app is centred around performing one task, the structure of the site map is simple. The important element to note is that the opening screen should be always contextual and based on user's activities. For instance, the app would open on a trip dashboard that list all upcoming trips but it would open on a particular day plan if the user is currently travelling.



PROBLEM

Navigation: global

Some of the most common tasks performed by users will be placed in a sticky top navigation. This is to enable easy access and address user expectations. The needs defined through personas influence what tasks are going to be prominent in the global navigation.

Navigation: faceted

The search results lead to implementing faceted navigation. This is to enable a quick reduction of results that fulfil requirements of sight categories. These would need to be researched and tested to determine naming and granularity. A similar result can be achieved with filters. These two solutions could be A/B tested to find out what is users' preference.



User flows

User flows went through number of iterations after user testing. Unnecessary screens were removed to distil the interaction to the essential steps. Some of the tasks were difficult to find. The layout of the app has changed and it is reflected in the user flow. Current version recognises three main user flows: add an item to itinerary, browse nearby sights, and prioritize.





Wireframes

Taking the learnings from paper prototypes, a series of wireframes have helped to define further the functionality and flows through the app.



PROBLEM

Prototype: scenarios

Three task scenarios were defined to be used during the usability test:

Scenario 1

Scenario 2

User goal: Add a sight to their itinerary.

Task Scenario: While on a trip, you meet a fellow traveller who tells you about this amazing place that you must see. Add that place to your day itinerary. User goal: Prioritize sights.

Task Scenario: Looking at your next day of sightseeing, you realise that it might be too many activities. Find a way to prioritize so you can clearly see which places are most important. User goal: Browse places. Task Scenario: It is only

Scenario 3

afternoon but you have seen all the places that you intended for the day. Find a way to look around for extra sights and activities.

PROBLEM STATEMENT RESEARCH: INTERVIEWS COMPETITOR ANALYSIS PERSONAS SCENARIOS STORYBOARDS FEATURE PRIORITIZATION USE CASES AND FEATURES USER FLOWS PAPER PROTOTYPING NAVIGATION WIREFRAMES • PROTOTYPE

• USABILITY TEST

Prototype

Figma app was used to test usability with interactive prototypes.





Usability testing

Observations from usability testing revealed a number of improvements needed to be implemented for the app to function in an expected way. A plus delta evaluation method was used to define next steps.

Main user pain points

- Browse button is not intuitive to access from the plus search
- It is not clear how that the user has to drag places to re-order
- Users were confused as to what the priority does (how does it affect the plan)
- Some users thought that deleting places to de-prioritises them
- The final pop-up screen shows confusing information (not clear if it relates to the trip in general or the added place)



Recommendations and next steps

Recommendations for removing the key pain points:

- Making the browse button more prominent
- Creating a hint that the tiles can be dragged to reorder
- Making the priority work in a step-by-step fashion
- Auto-itinerary based on the priorities and settings
- Making the final pop-up screen clearer to what it refers to

Next steps to be taken to improve the app experience:

- Move the browse functionality on the timeline screen of a day
- Adding affordances to indicate functionality
- Making the prioritization work in a more intuitive way

