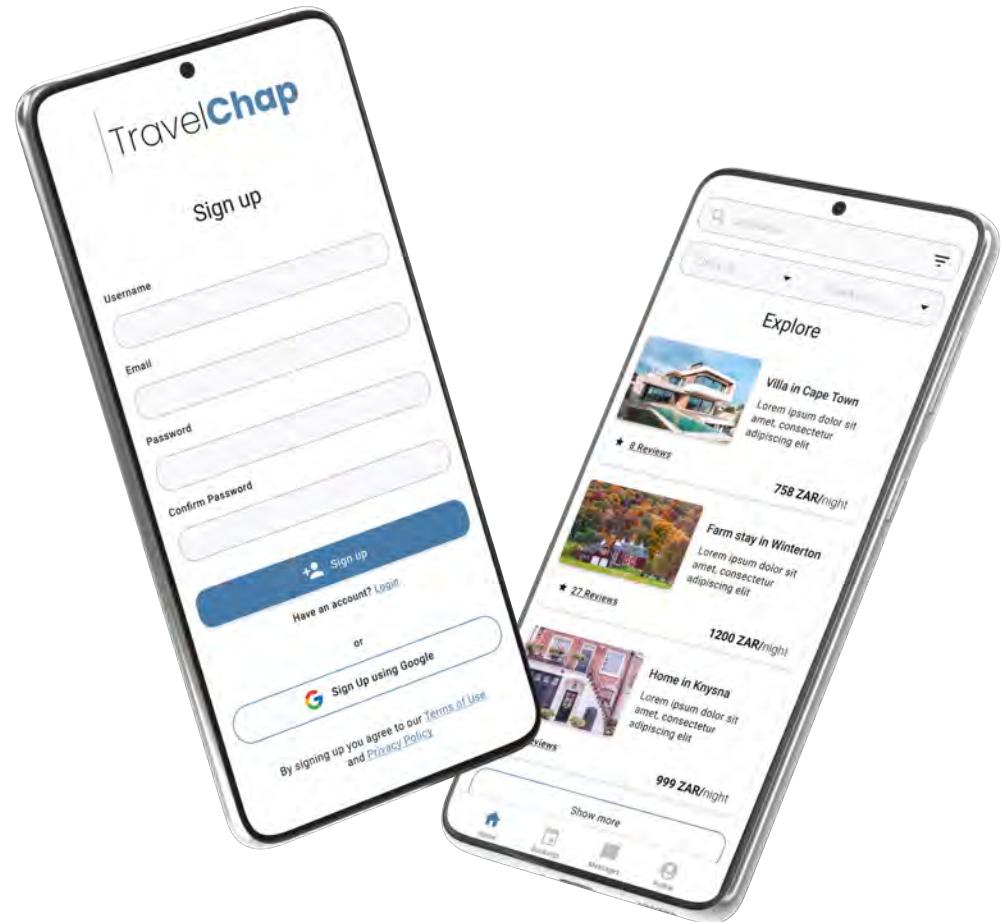


# TravelChap

Travel **safe**

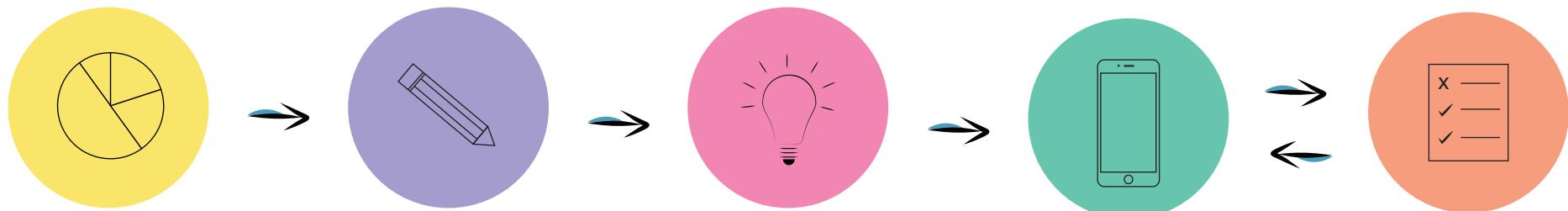
## UX Case Study

TravelChap is a digital tool designed to help expose women to new experiences by making it possible for them to easily travel anywhere in South Africa safely



# Project Overview

This case study is a project done for the University of Johannesburg. Other than group research, I was the sole designer and was responsible for all of the following:



## Research

- Secondary Research- FIRMA Model
- Cultural Probe
- User Interviews
- Affinity Diagram
- Personas

## Strategy

- Minimum Viable HCD- Strategy
- Experience Model

## Ideate

- Customer Journey
- User Journey
- Task Flows

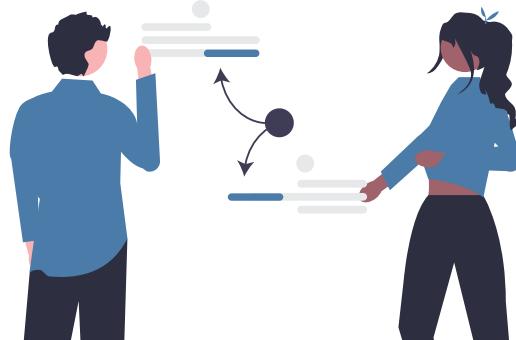
## Prototype

- Wireframes
- Low-fidelity
- High-fidelity

## Test

- Usability testing
- Implementing feedback

# Project Overview



## The problem

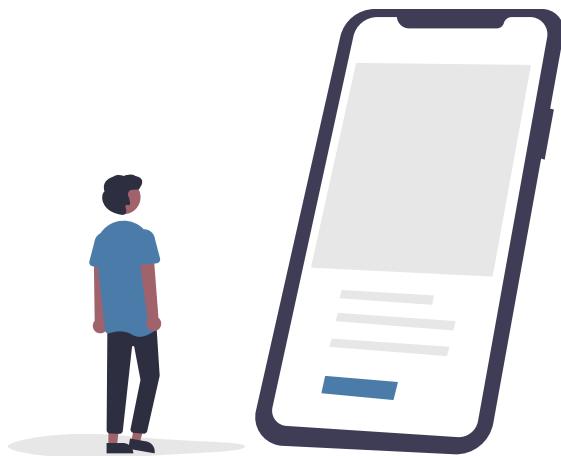
South African women are limited when it comes to places they can visit because they feel unsafe traveling to certain holiday destinations



## The solution

The solution to this problem is a digital app that makes traveling safely as a women possible. Safety is strictly enforced on all accommodation offerings, and comes with a local host who guides you around the area and helps keep you safe

# Project Overview



## The Product

The product being designed is a mobile app that allows you to book accommodation anywhere in South Africa



## Product Duration

February 2022 - (In progress)

# Table of Contents

## Research

User Research: Summary/ **1**

Firma Model/ **2**

Cultural probe/ **3-4**

Interview Guide/ **5**

Affinity Diagram/ **6**

Psychological Drivers/ **7**

Persona/ **8-9**

## Strategy

Minimum Viable HCD Strategy/ **10**

Experience Model/ **11**

## Ideation

Customer Journey/ **12-13**

User Journey/ **14**

Task Models/ **15-18**

## Low-fidelity Mockups

Paper Wireframes/ **18-23**

Wireframes (User flows)/ **24-30**

## Test

Usability studies/ **31-32**

Implementing feedback/ **33**

## High-Fidelity Mockups

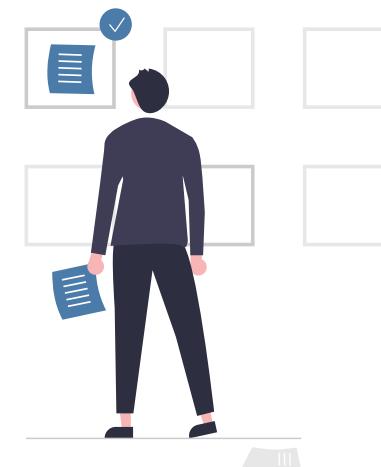
Prescedent Board/ **34-35**

Style Guide/ **36**

UI Mockups/ **37-42**

Next steps/ **43**

## References/ **44**



# User Research: Summary



In order to ideate a design solution that will improve the experience of vacationing in South Africa. I collected secondary research using the FIRMA Model which allowed me to gain a broad understanding of various factors surrounding vacationing in South Africa. In addition, interviews were conducted.

Together with a group of 6 students, we conducted 30 in-person interviews with users who travel in South Africa in order to collect qualitative data.

In order to sort and identify relationships in the collected data we made an affinity diagram. This allowed us to identify ways in which vacationing in South Africa could be improved.

Primary pain points identified were safety concerns, bad road conditions, unexpected costs and high fuel prices.

<p><b>Culture</b></p> <ul style="list-style-type: none"> <li>Multicultural</li> <li>Clothing and religion are underlying similarities amongst many southern African countries.</li> <li>Tourism is a key driver in many southern African countries where traditional African food, clothes, and handcrafted art pieces are sold at outdoor markets</li> <li>In Southern Africa, there are an estimated 1,500 unique languages</li> <li>A South African citizen's patterns of travel are heavily influenced by the socioeconomic status, historical prejudices, and geographical location.</li> </ul>	<p><b>Politics</b></p> <ul style="list-style-type: none"> <li>Political instability –Level of corruption, leadership and "inconsistent application of democracy" are variables that deter tourists from certain destinations. Ferreira (2016)</li> <li>Tourist safety – Level of crime and its media coverage.</li> <li>Public Turmoil – In Southern Africa, examples of public turmoil include racism, xenophobia, and labour- and social unrest. For example in 2015, South Africa experienced widespread xenophobic attacks, which resulted in a statistical decline in International Tourism. Ferreira (2016)</li> </ul> <p><b>Economy</b></p> <ul style="list-style-type: none"> <li>Job creation</li> <li>Sector transformation</li> <li>Economic growth</li> <li>Affordability</li> <li>High expenditure during peak seasons</li> <li>Covid regulations</li> <li>Domestic travel highly encouraged</li> </ul>	
<p><b>Environment</b></p> <p>1.Physical:</p> <ul style="list-style-type: none"> <li>Petrol stations are a major stopping point for travelers</li> <li>Train stations</li> <li>Airport</li> <li>Animal sanctuaries are well-known in Southern Africa</li> <li>Hotels and gaming lodges</li> </ul> <p>2.Technological:</p> <ul style="list-style-type: none"> <li>Internet access</li> <li>Online bookings</li> <li>Websites to review and gain access to activities that places have to offer</li> <li>Wifi availability</li> <li>Google maps</li> <li>Social media</li> <li>Mobile apps</li> </ul> <p>How has covid affected this:</p> <ul style="list-style-type: none"> <li>Places are unkept due to a lack of staff</li> <li>Tourist activities are closed and jobs are lost</li> <li>Websites cannot be updated due to lack of visits and activity</li> <li>Reviews worsen as areas are not up to standard</li> </ul>	<p><b>History</b></p> <ul style="list-style-type: none"> <li>The tourism industry plays a key role in telling the historical stories of many southern African countries.</li> <li>Tourist facilities were exclusively made available to the small South African white population.</li> <li>As part of its offensive foreign policy, the apartheid regime sought to consolidate South Africa's power over Southern Africa. Consequently, South Africans were isolated from the rest of the world.</li> </ul> <p><b>Society</b></p> <ul style="list-style-type: none"> <li>Take safety precautions</li> <li>Covid Vaccinations are mandatory for traveling to most countries</li> <li>Insure use of insect repellent to prevent malaria/ malaria tablets</li> <li>Societal norm to go site seeing while traveling, such as seeing the Big 5, visiting table mountain, Victoria falls ext.</li> <li>Many Historical places to visit. Eg museums, heritage sites, memorials</li> </ul>	<p><b>FIRMA Model</b></p> <p><b>Marketplace</b></p> <ul style="list-style-type: none"> <li>Petrol stations for travelers to fuel up cars and buy necessary items</li> <li>Kiosk Stands sell items at a higher price as they target tourists. These items are usually Ostrich Eggs, animal sculptures, animal skins, traditional items etc.</li> <li>Travel and holiday destination stores sell and deliver essential items to travelers and vacationers such as camping equipment, bug repellents, clothing etc</li> <li>Tourist shops hold a lot of items that contain historic information about Southern Africa</li> <li>Hotels designs are usually themed to the country and carry historic backgrounds to attract more cliental.</li> </ul> <p>How has covid affected this:</p> <ul style="list-style-type: none"> <li>Prices have to decrease</li> <li>Expenses have to decrease</li> <li>Stores are closing due to a lack of customers</li> <li>People are being retrenched</li> </ul> <p><b>The Organisation</b></p> <ul style="list-style-type: none"> <li>Travel agencies</li> <li>Resorts</li> <li>Recreational Facilities</li> <li>Airlines</li> <li>Conference centres</li> <li>NGOs</li> </ul> <p><b>The Users</b></p> <ul style="list-style-type: none"> <li>School kids</li> <li>Varsity students</li> <li>Adults,</li> <li>Families</li> <li>Businessmen and Business woman</li> <li>Travel Agents</li> <li>Resort Managers.</li> <li>The elderly</li> </ul> <p><b>Legacy</b></p> <p>Safety - High levels of crime</p> <ul style="list-style-type: none"> <li>Credit card fraud, muggings and petty theft. (For example, handbags stolen from people eating at restaurants)</li> <li>Vehicle hijackings and robbery.</li> </ul> <p>Poor road conditions – Some roads are in terrible conditions due to poor maintenance, this can make travelling dangerous. (Van As, 2020)</p> <p>Load shedding – Load shedding can negatively affect your travel experience in Southern Africa. (Van As, 2020)</p>

# Primary research: Cultural Probe

I gave a cultural probe to a user to complete.

## Basic Information

Gender: \_\_\_\_\_

Age: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

Occupation: \_\_\_\_\_

Where do you live? \_\_\_\_\_

Q: What do you want to get out of your vacation?

- Rest and relaxation       Adventure and exploring
- Learn about history and culture       Quality time with family/friends
- Other (please specify) \_\_\_\_\_

Q: What level of physical activity do you engage with on holiday?

- Very Active       Moderate
- Light       Very limited
- Other (please specify) \_\_\_\_\_

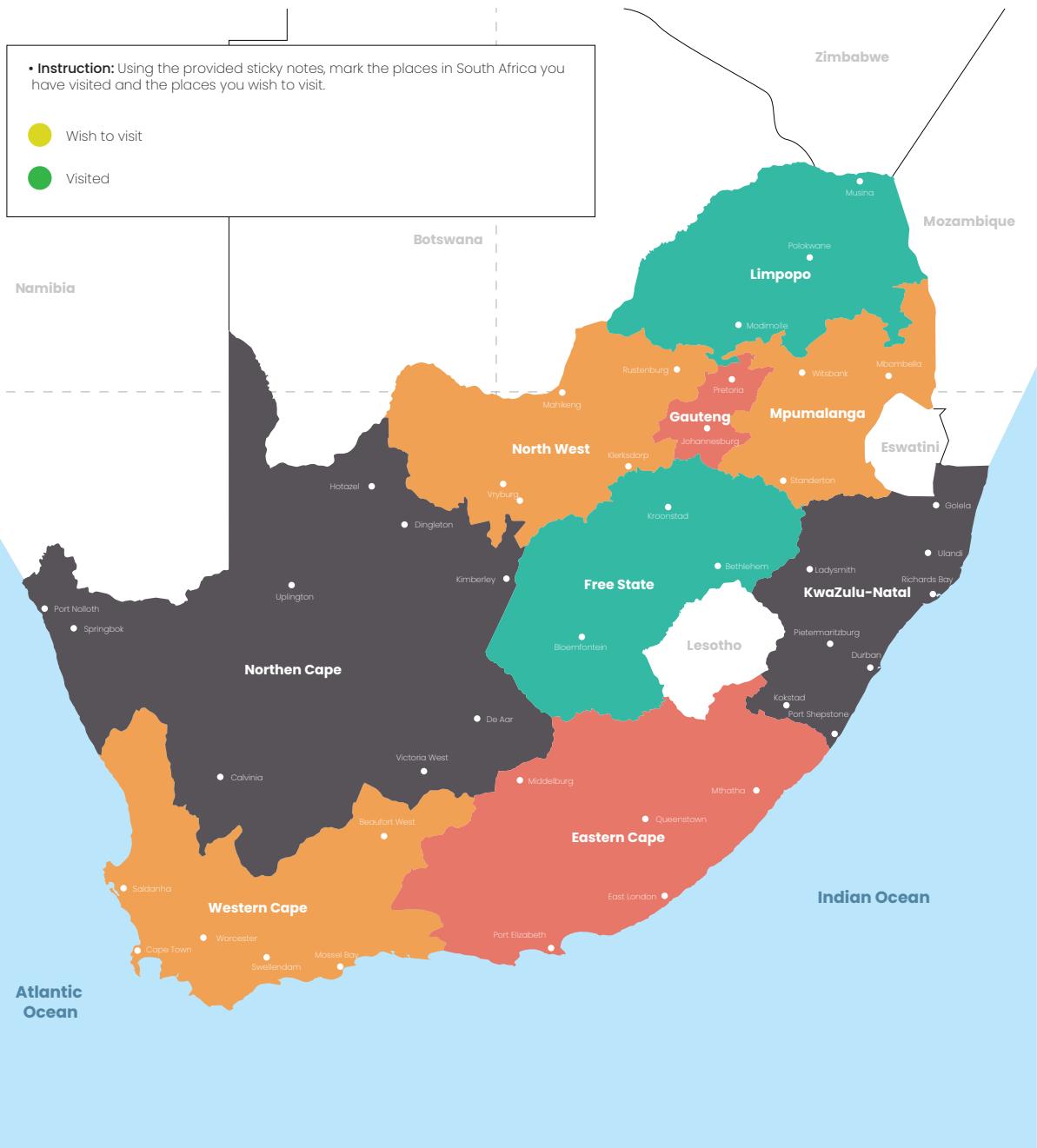
Q: Approximately, what would your spending limit be for a two-week vacation in South Africa?

- 0 - 10 000       10 000 - 20 000
- 20 000 - 30 000       30 000 - 40 000
- Other (please specify) \_\_\_\_\_

• Instruction: Using the provided sticky notes, mark the places in South Africa you have visited and the places you wish to visit.

● Wish to visit

● Visited



# Primary research: Cultural Probe

Q: List some of the essential items you take with on vacation.

## Would you rather?

For example:

Travel by horse



Travel by camel



Travel by plane



Travel by car



Travel to the sea



Travel to mountains



Vacation in a tent



Vacation in a cabin



Skydive



Shark cage dive



Vacation with friends



Vacation with family



Vacation with your pets



Vacation without your pets



Stay with a stranger



Stay with someone you know



Eat at a restaurant



Eat takeout at home



Q: What advice would you give to a foreigner planning a vacation in South Africa?

## Vacationing in South Africa

Q: How do you usually decide where you want to go on vacation?

Q: Describe your ideal Southern African holiday.

Q: Briefly describe your most recent vacation.

# Primary research: Interview Guide

The interview guide utilized for conducting interviews is as follows:

## Demographics

- Do you consider yourself to be a person who likes to travel?
- What is your gender?
- How old are you?
- What is your ethnicity?
- What is your occupation?
- In which province do you live in?

## Purpose of travel

- Who do you usually go on holiday with?
- What are your reasons for travelling?
- What is your favorite travel destination in Southern Africa and why?
- What type of holiday do you enjoy?
- How often do you go on holiday?
- What activities do you like to do on holiday and why?
- What mode of transport do you use?
- Where would you expect to stay?
- When do you like to go on holiday?
- How long do you normally go on holiday for?
- Describe your ideal Southern African holiday
- What are the negative aspects of travelling in Southern Africa?

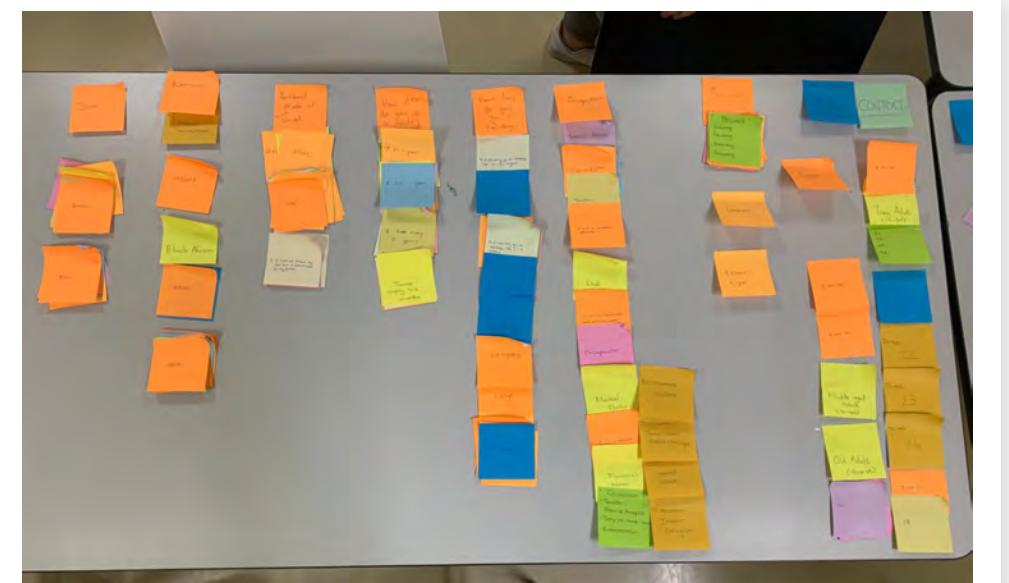
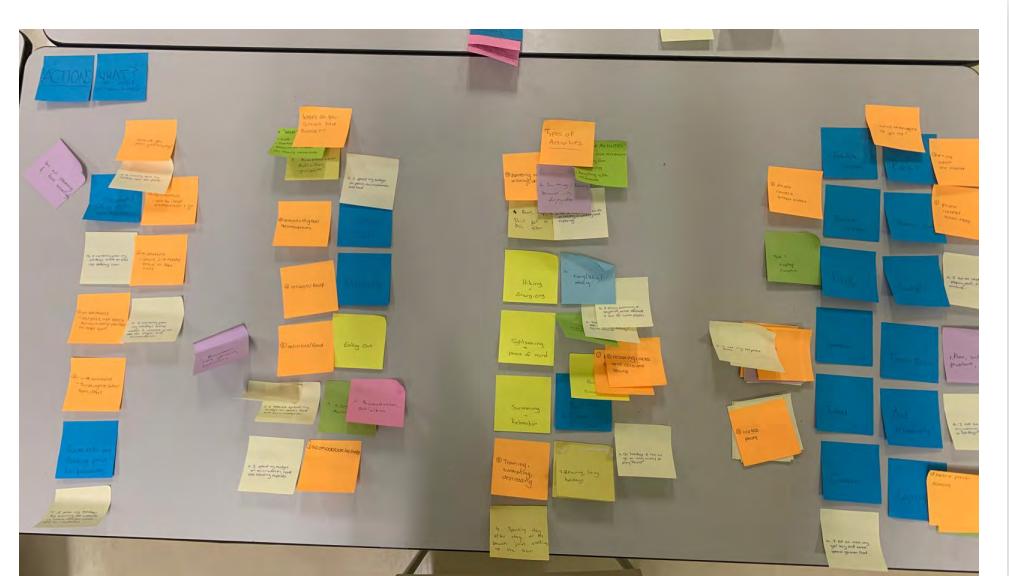
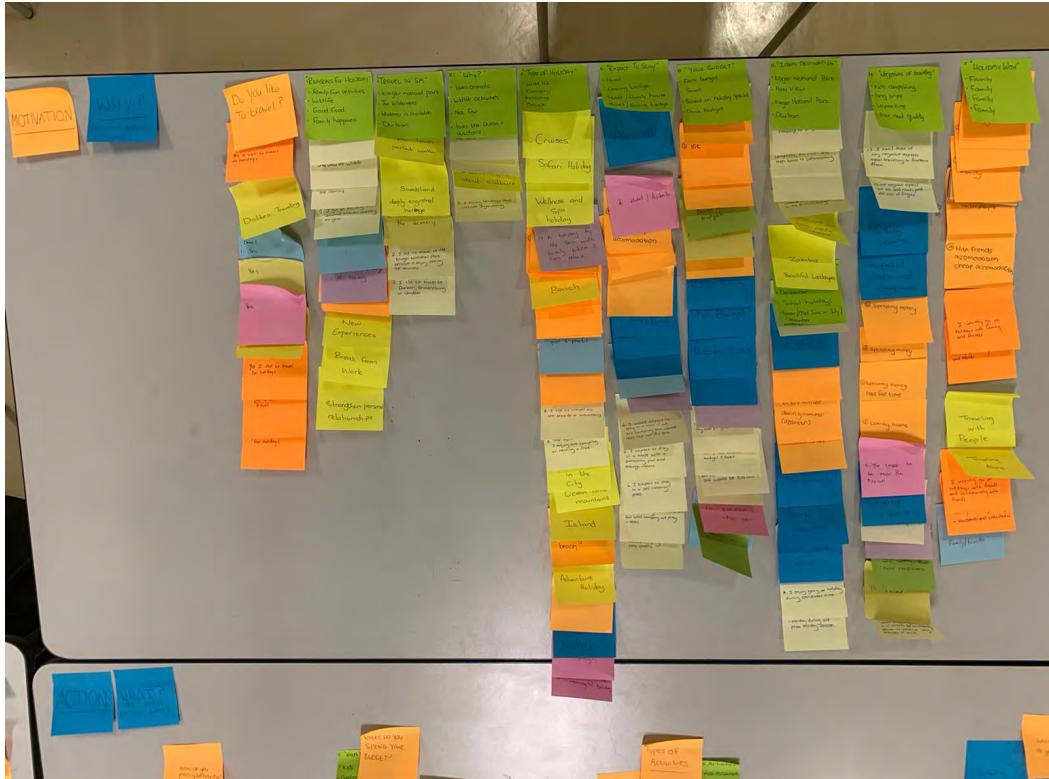
## Travel Preparations

- What is your budget?
- Where do you like to spend it?
- What do you like to take with you on holiday?
- Hoe do you currently plan your holidays?
- What digital devices if any, do you use frequently on holiday?



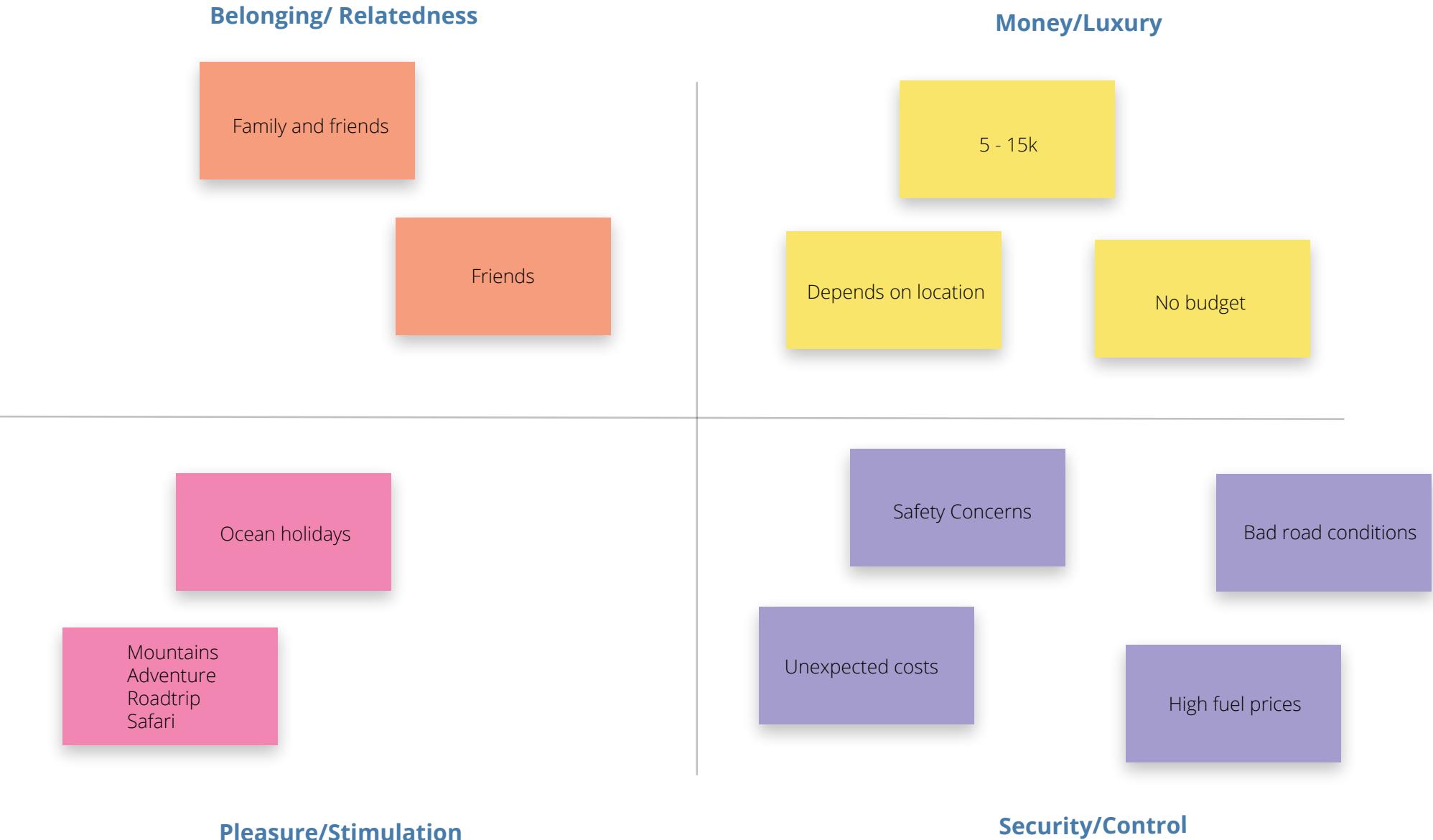
# Affinity Diagram

An affinity diagram is a method used to sort interview responses and find relationships between data



# Psychological Drivers

The affinity diagram revealed the primary psychological drivers of interview participants regarding vacationing in South Africa





"I look forward to traveling with my family"

Name: Jane Calhoun

Location: Gauteng, South Africa

Occupation: Mechanical Engineer

Age: 39

Education: BA: Mechanical Engineering

## Biography

Jane studied at the University of Witwatersrand, once she had completed her degree she was offered a job at a large corporation. She is a busy and hardworking women that works long hours far away from home. As a result, she does not spend as much time with her family as she would like. To make up for this she **takes her family on long vacations so that she can spend quality time with them**.

She **likes taking them to destinations near the mountains** where she can hike or a roadtrip down to the Kruger National Park so that her kids can enjoy the animals. **She enjoys going during non-peak holiday seasons to avoid high accomodation costs.**

Outside of work, she enjoys reading books, golf and long walks.

## Environmental considerations

Jane is aware that **travelling in South Africa is expensive and dangerous** but her work schedule does not allow her to travel too far from home. **She is extremely frustrated about the countries poor service delivery** which negatively affects her local holiday experiences.

**She prefers going on holiday by car** rather than by plane because she is able to spend more time with his family on roadtrips but the road conditions frustrate her.

## Key frustrations & challengers

- Frustrated about the **poor quality road conditions**, making it dangerous to travel to holiday destinations with the family
- Finds it frustrating when **unexpected costs** arise while on holiday
- Challenging to find time to spend with family

## Task-based considerations

### Technology

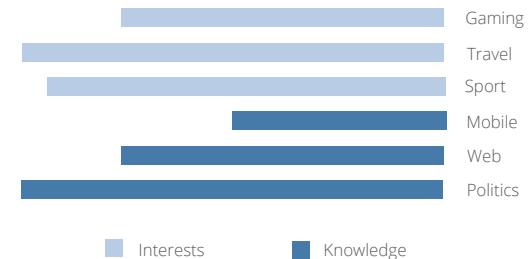
- Takes laptop and phone on holiday
- Books accommodation online and occasionally over the phone

### Goals

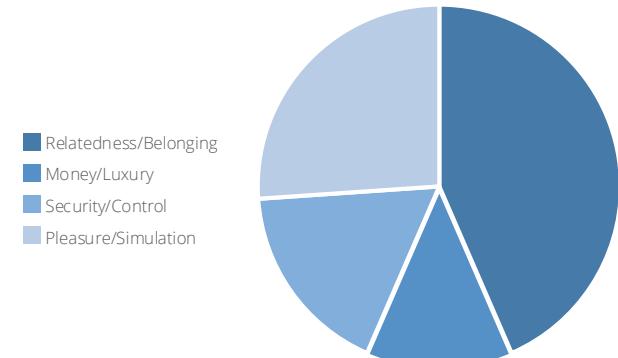
- To go on holiday with family at least twice a year for 1-2 weeks
- To go to a destination where I can swim and hike with the family

### Spending

- No holiday budget but spends money on fuel, activities, food and accommodation



## Psychological drivers





"I love to travel because it helps me unwind"

Name: Laila Patel

Location: Gauteng, South Africa

Occupation: Interior Designer

Age: 26

Education: BA: Interior Design

## Biography

Laila recently completed a BA in Interior Design at the University of Cape Town where she has lived her whole life. As a result of her excellent academic achievements she was able to land a job for a startup company in Rosebank, Johannesburg.

She works really long hours and finds it necessary to travel at the end of the year in order to unwind and prepare for the long year ahead. [She often catches herself day dreaming at work about going to the ocean and tanning on the beach](#). Outside of work she enjoys gyming to combat long hours behind a desk and binging series to relax. Often you will find her falling asleep to the tv series "The World's Most Extraordinary Homes".

## Environmental considerations

Laila finds it important that her holiday destination have [wifi availability with internet access](#) so that she is able to keep in contact with her family/friends and post pictures on social media. She loves travelling by plane but often finds it cheaper if she travels by car and splits the costs with her family and friends.

She is also aware that South Africa is a country with lots of crime, however she wishes she felt safe travelling as a young women. She has to be aware of her surroundings at all times, often hearing terrible stories on the news about crimes targeted at women and finds it very frightening.

## Key frustrations & challengers

- Travelling is expensive due to [high fuel prices](#)
- Safety is a concern when traveling due to the [high level of crime](#) in South Africa
- Challenging to save 5-15k for a flexible holiday budget

## Task-based considerations

### Technology

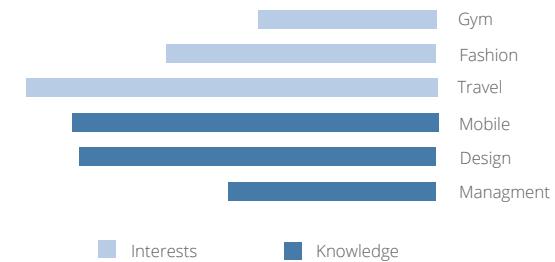
- Takes laptop, phone and camera on holiday
- Books accomodation online - booking.com or AirBnb

### Goals

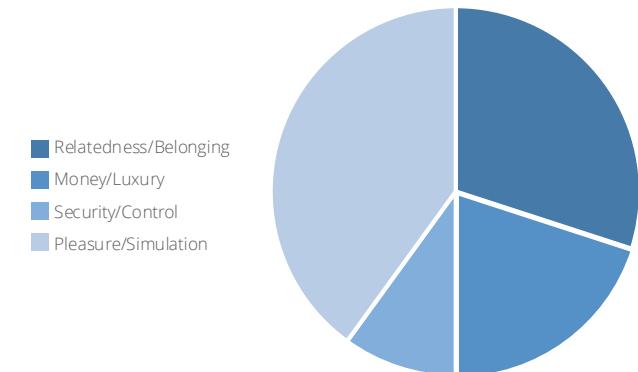
- To go on holiday with family and friends at least once a year for a few nights
- To go to a destination where she can really unwind and take relaxing walks

### Spending

- Spends holiday budget on fuel, activities, food and accomodation



## Psychological drivers



# Minimum Viable HCD Strategy

## Diagnosing problems:

South African women are unable to visit certain holiday destinations because of the following needs:

1. Safety/control – Women feel unsafe due to high crime levels in South Africa
2. Relatedness/belonging – Friends and family are often reluctant to visit certain destinations
3. Money/luxury – Renting accommodation in a good area is often unaffordable, especially for younger adults
4. Pleasure/stimulation – Women are often unable to visit favorable or dream destinations

## A guiding policy for dealing with the challenge:

Enabling women to travel effortlessly and exposing them to unique experiences

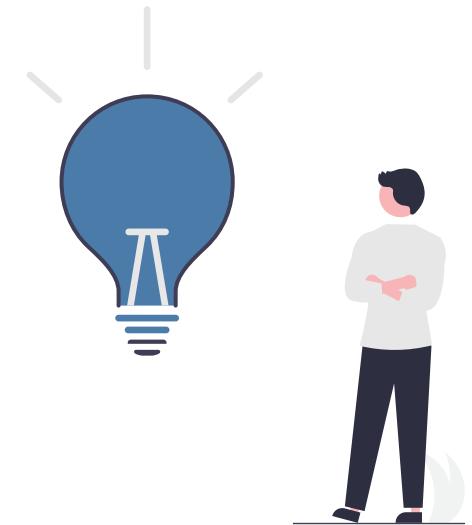
## The following will occur:

- Users will feel safer travelling with people who know the dangerous regions and social aspects of the area.
- Many people will take the opportunity to visit new destinations which will promote new experiences
- Users will be able to experience local culture, food and activities
- Users will learn more about the area from local residents' knowledge of the area

## Coherent actions designed to carry out the guiding policy:

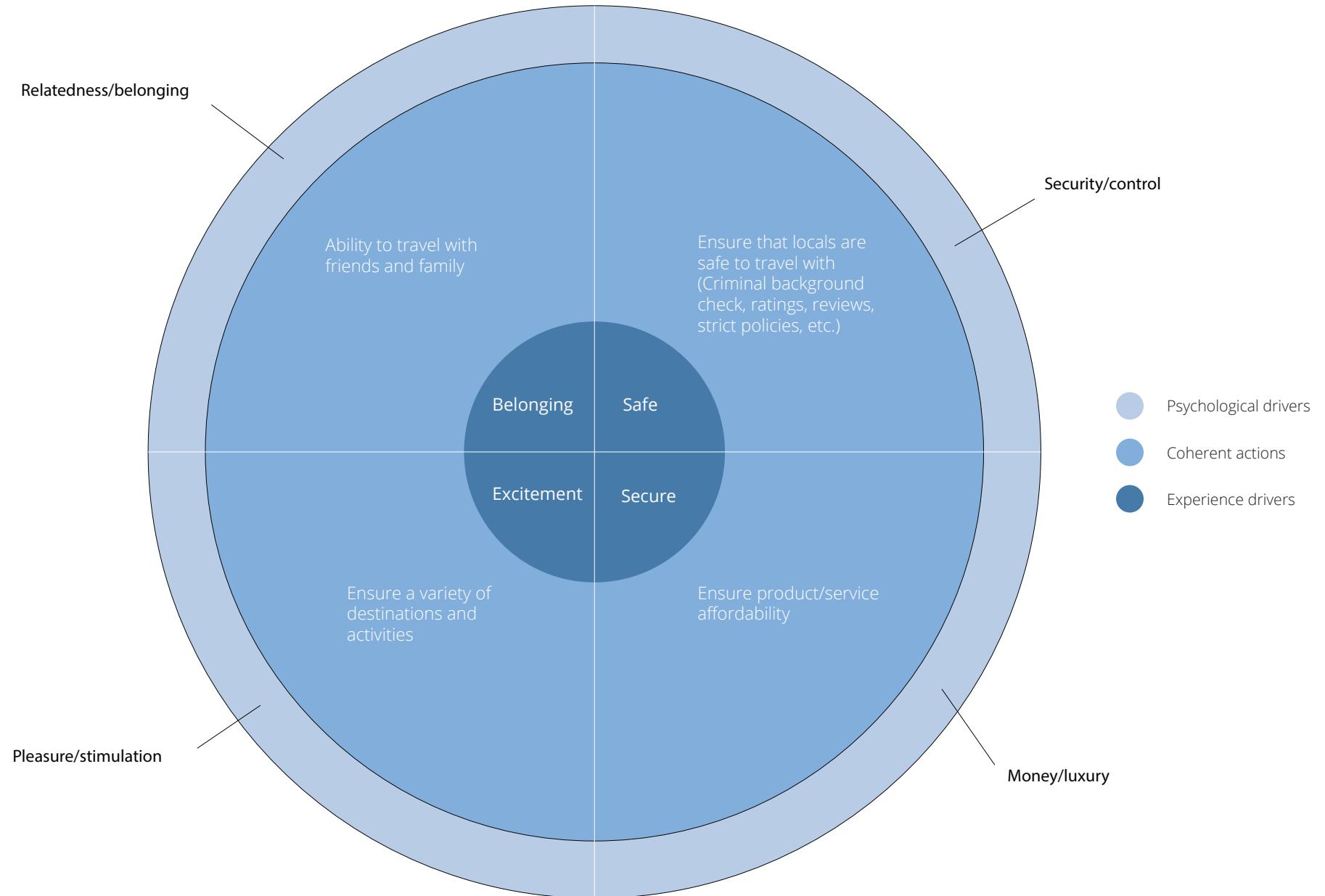
In order for this to occur, as designers, we have to provide the following:

1. Safety/control – Ensure that locals are safe to travel with (Criminal background check, ratings, reviews, strict policies, etc.)
2. Relatedness/belonging – Detailed information that reassures friends and family
3. Money/luxury – Ensure product/service affordability
4. Pleasure/stimulation - Ensure that a variety of destinations and activities are included



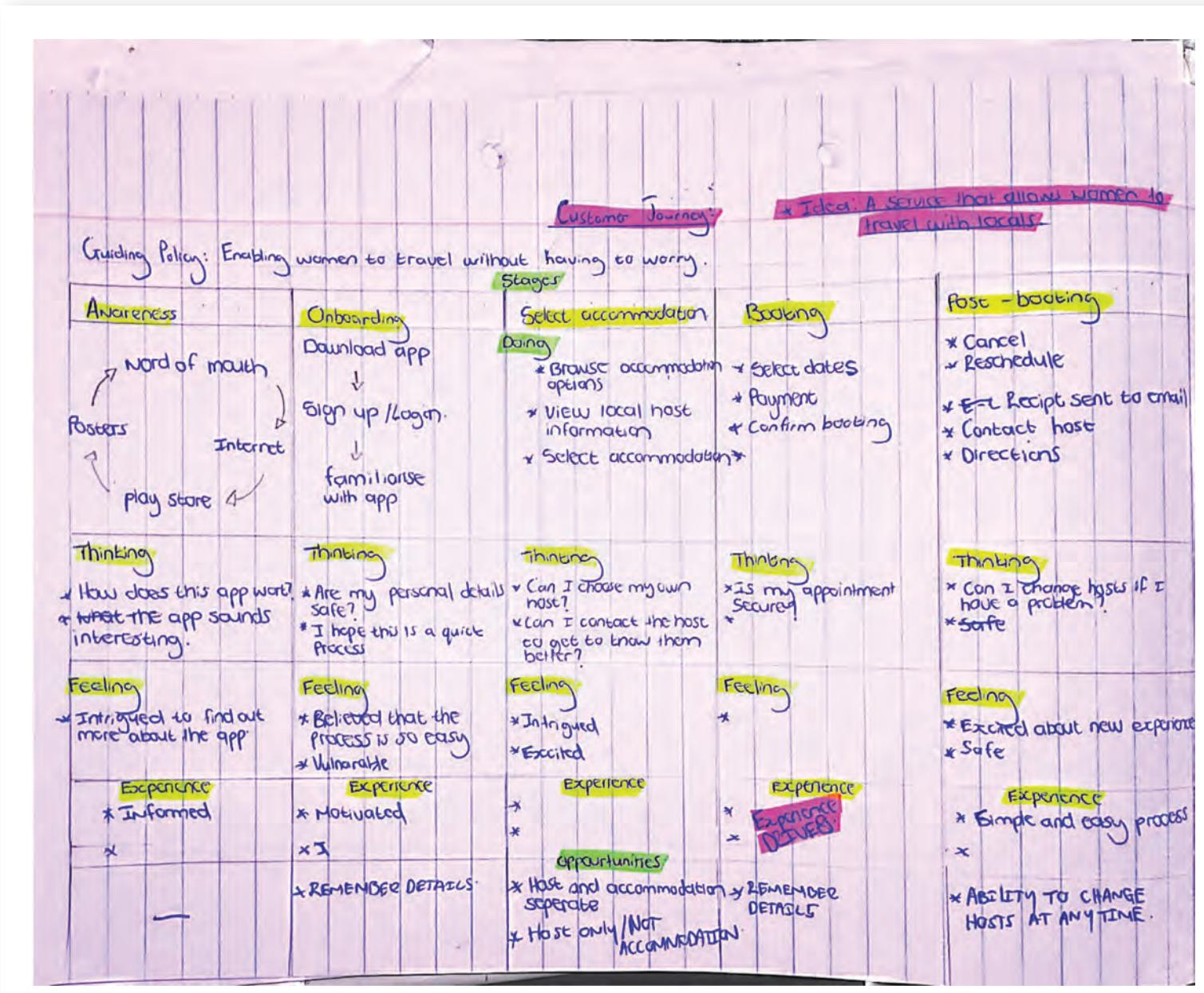
# Experience Model

Guiding policy: Enabling women to travel effortlessly and exposing them to unique experiences



# Customer Journey - Rough Work

A customer journey is the visual representation of the overall journey customers take when interacting with a service



# Customer Journey

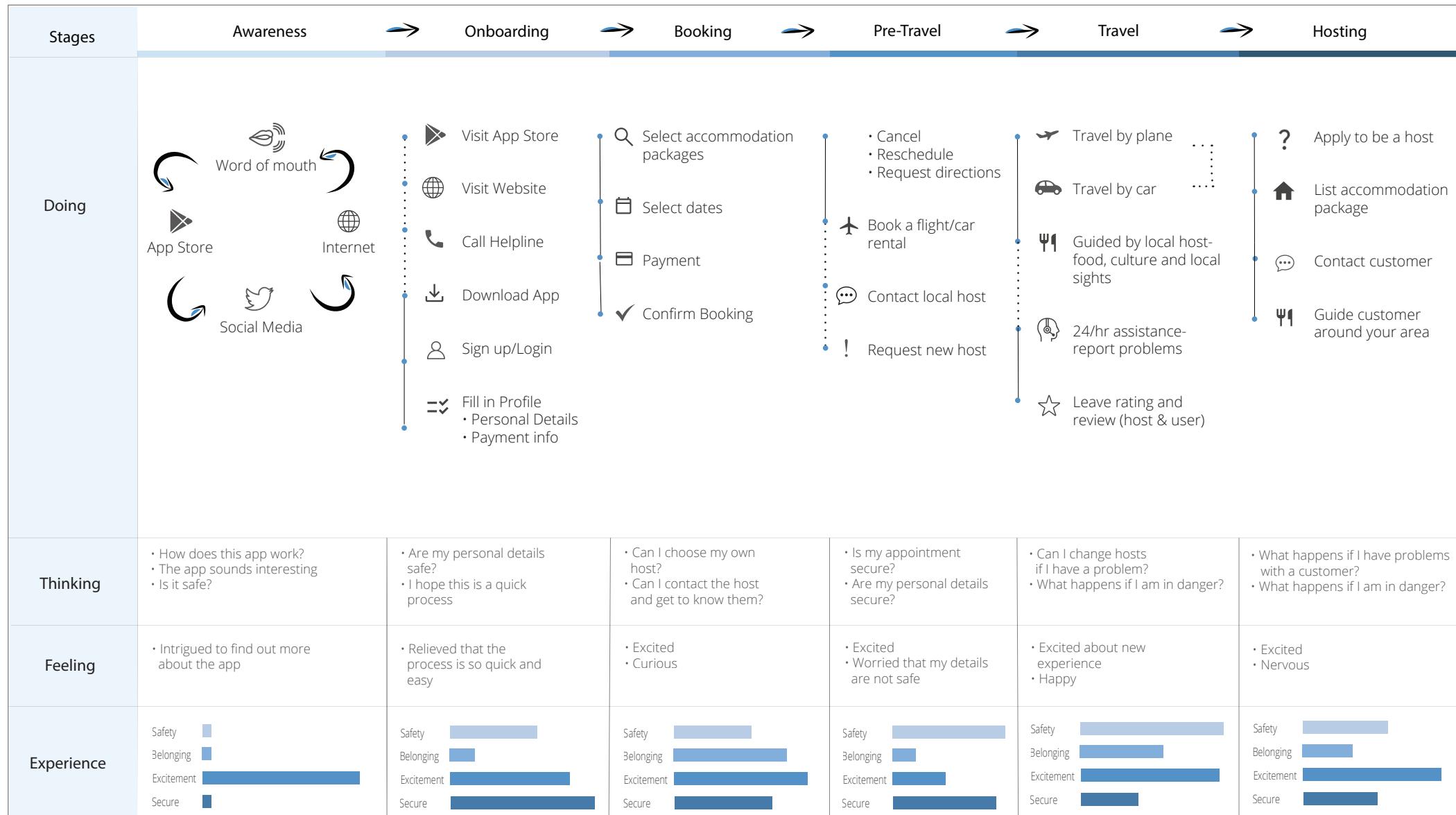
Guiding policy: Enabling women to travel effortlessly and exposing them to unique experiences

Ensure users are safe  
- ratings, background checks, reviews

Travel with friends and family

Ensure variety of destinations and activities

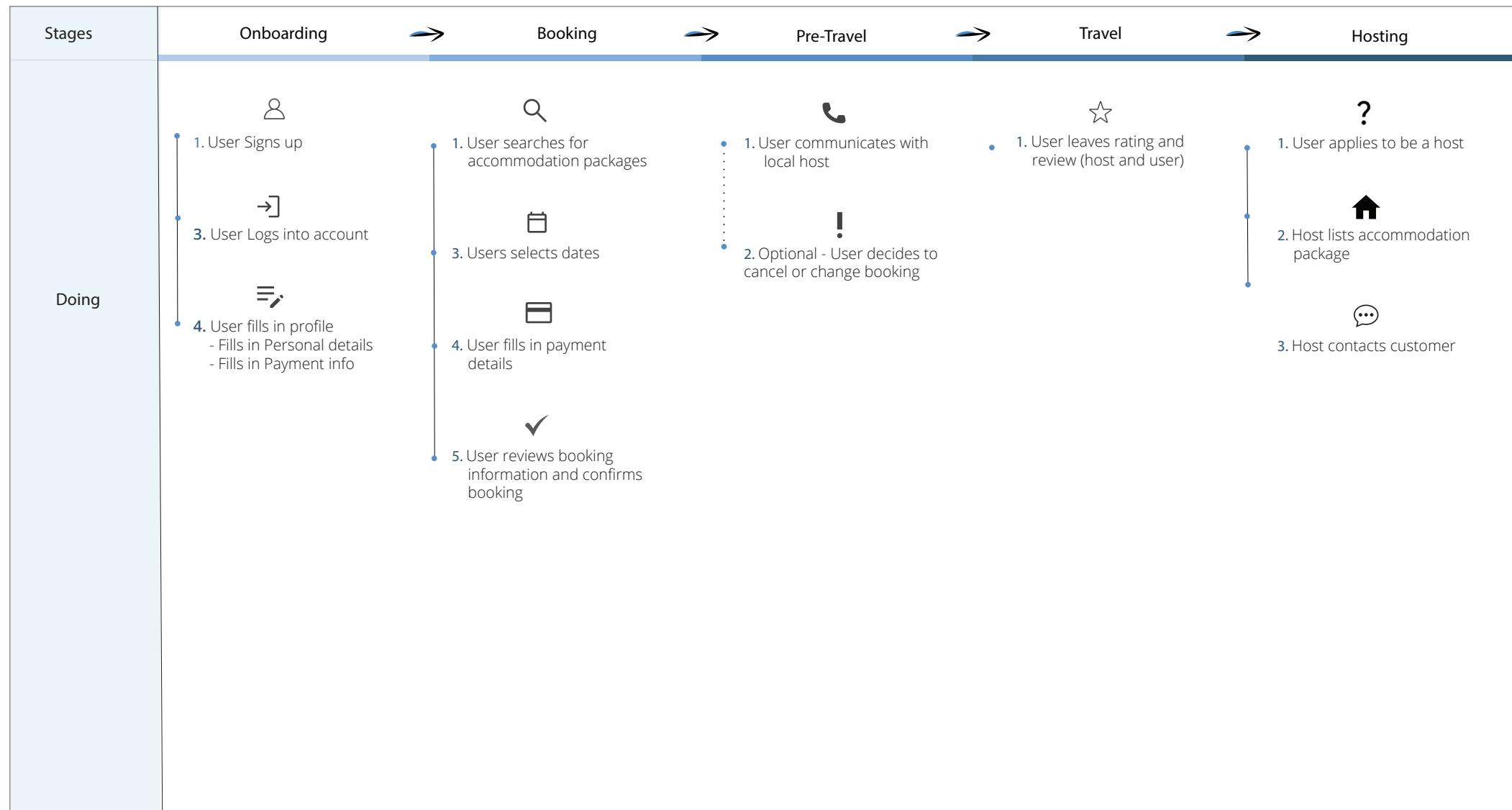
Ensure product/service affordability



# User Journey

A user journey is the visual representation of the journey a user takes when interacting with a particular service such as a mobile app.

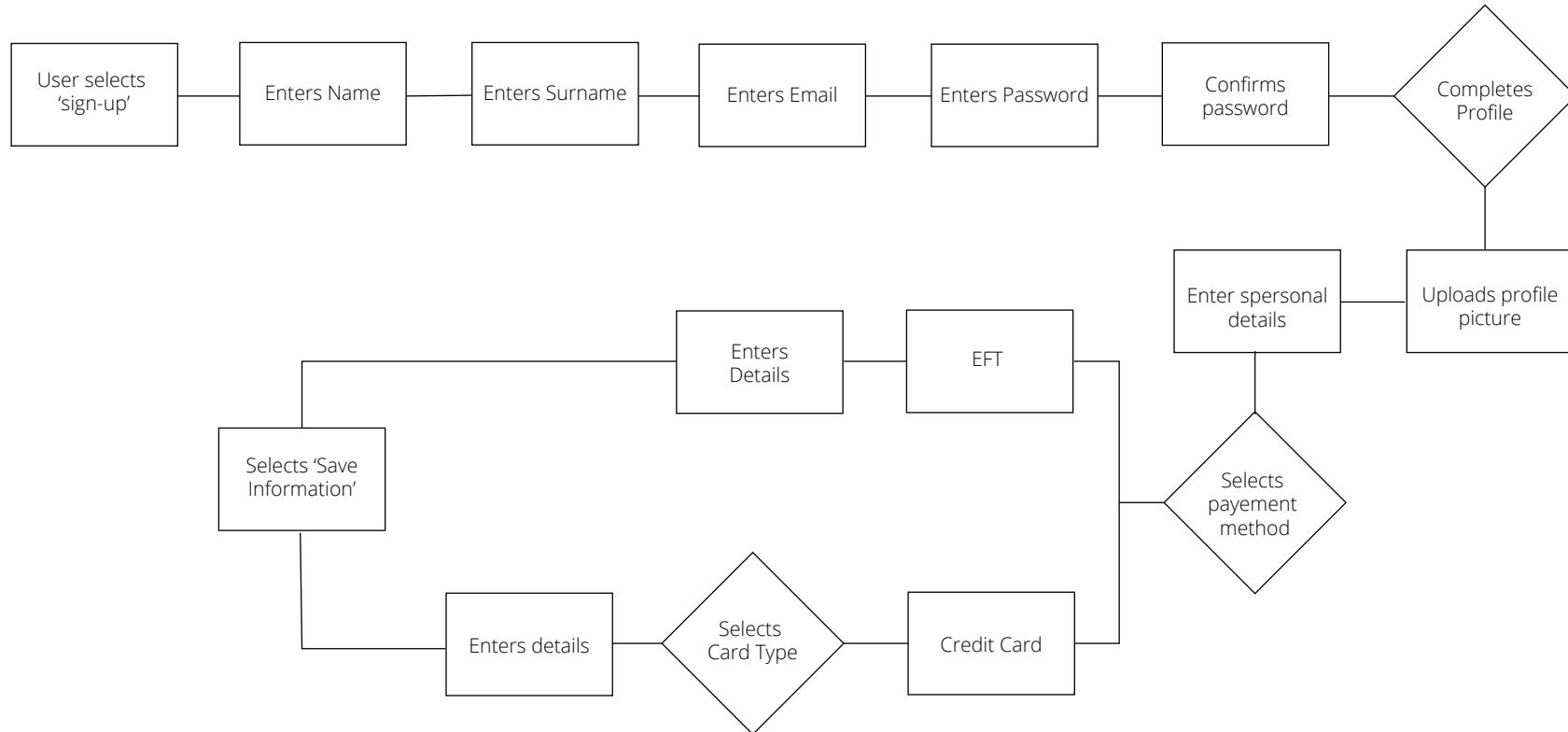
Guiding policy: Enabling women to travel effortlessly and exposing them to unique experiences



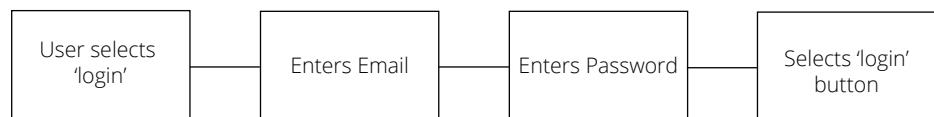
# Task Flow Onboarding

Task flows are a visual representation of the individual interactions a user performs when going through the app

## Scenario: User makes an account

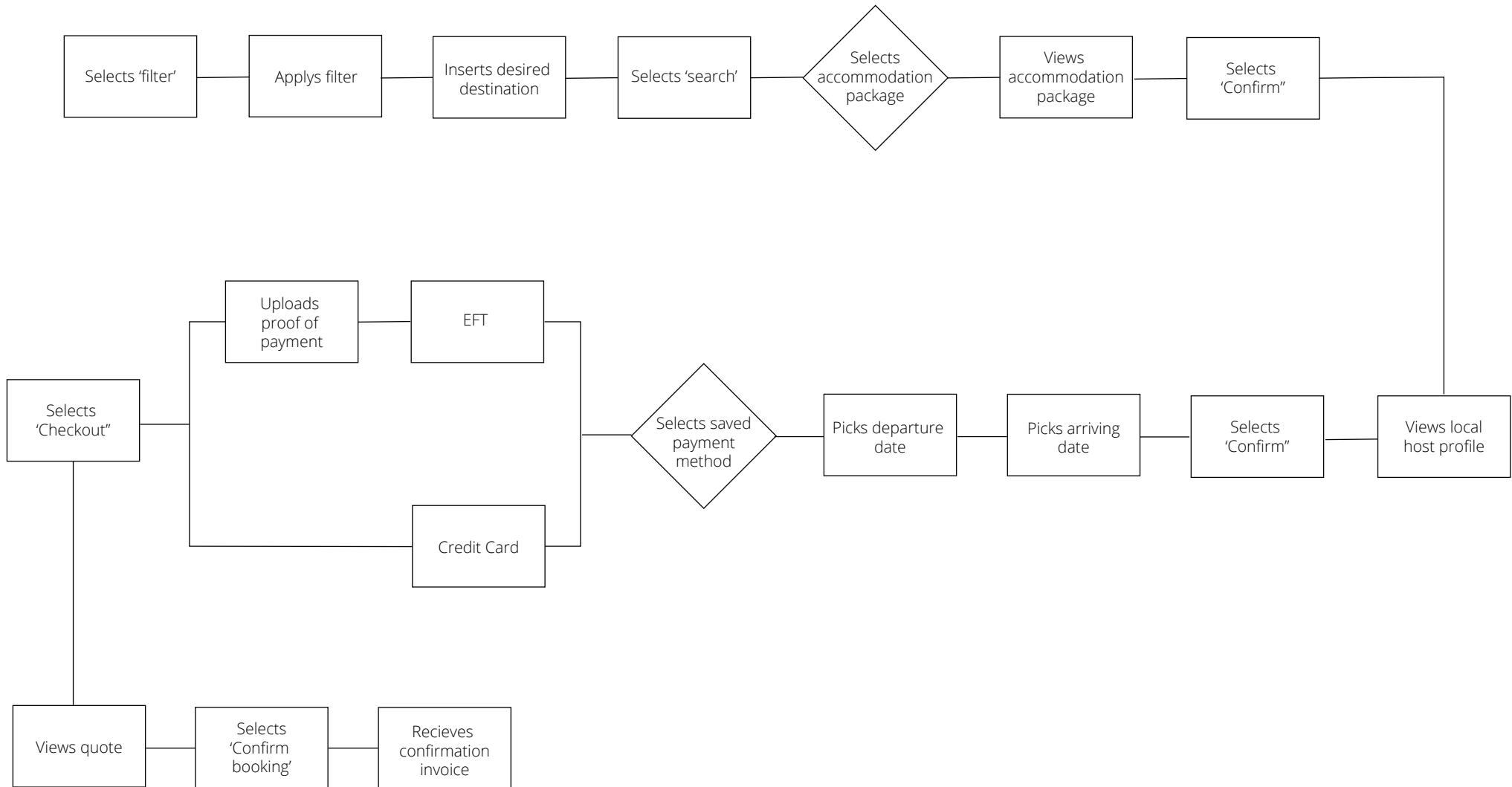


## Scenario: User logs into their account



# Task Flow Booking

**Scenario:** User books an accommodation package

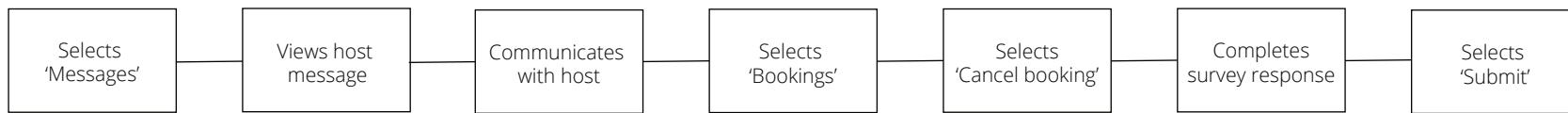


# Task Flow Pre-travel and Travel

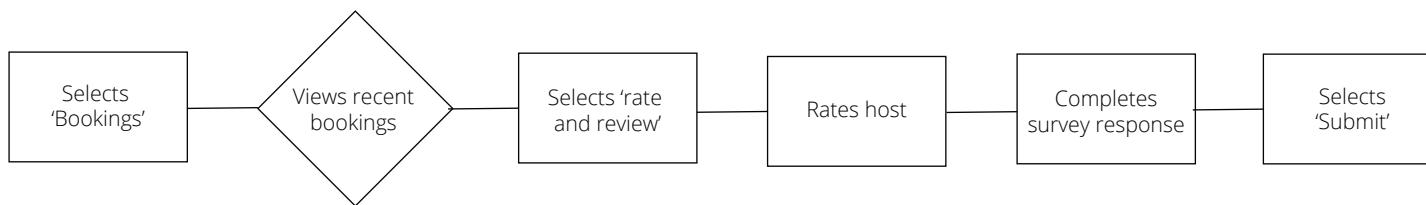
**Scenario:** User communicates with local host



**Scenario:** User communicates with local host and decides to cancel booking

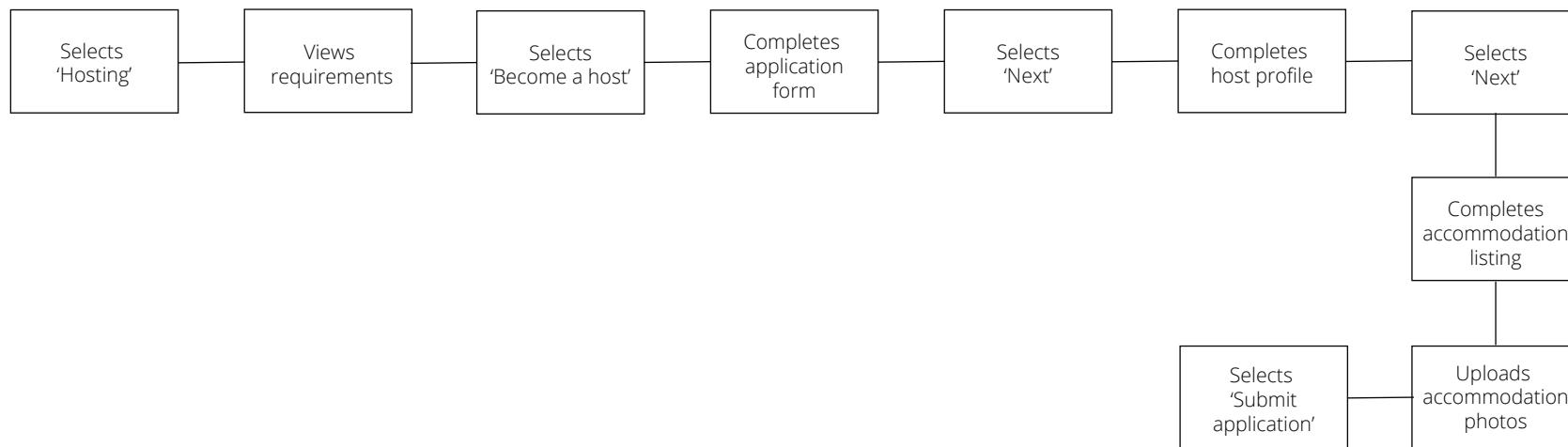


**Scenario:** User rates and reviews the local host based on their experience



# Task Flow Hosting

**Scenario:** User applies to become a host and lists accommodation package

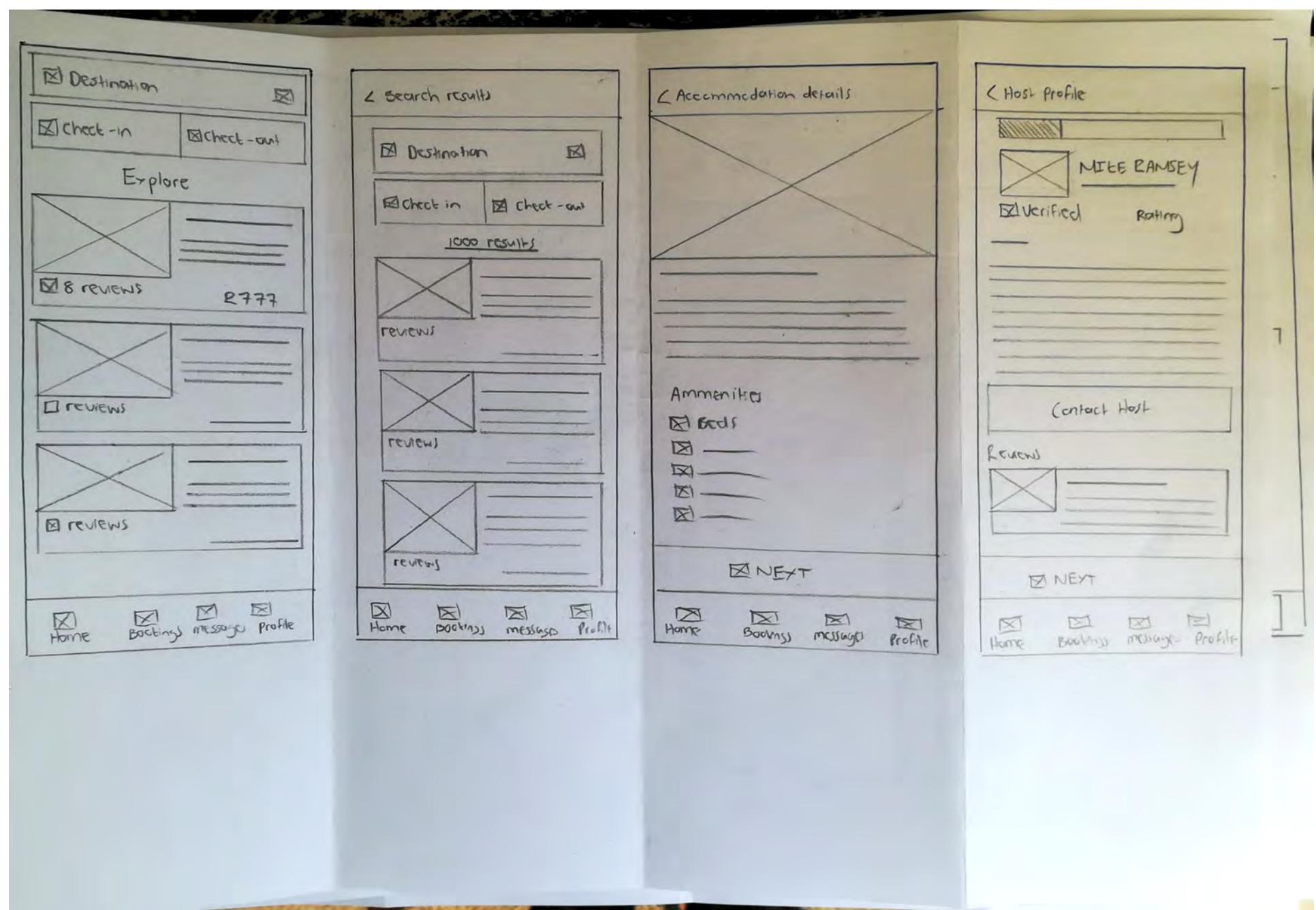


# Paper Wireframes

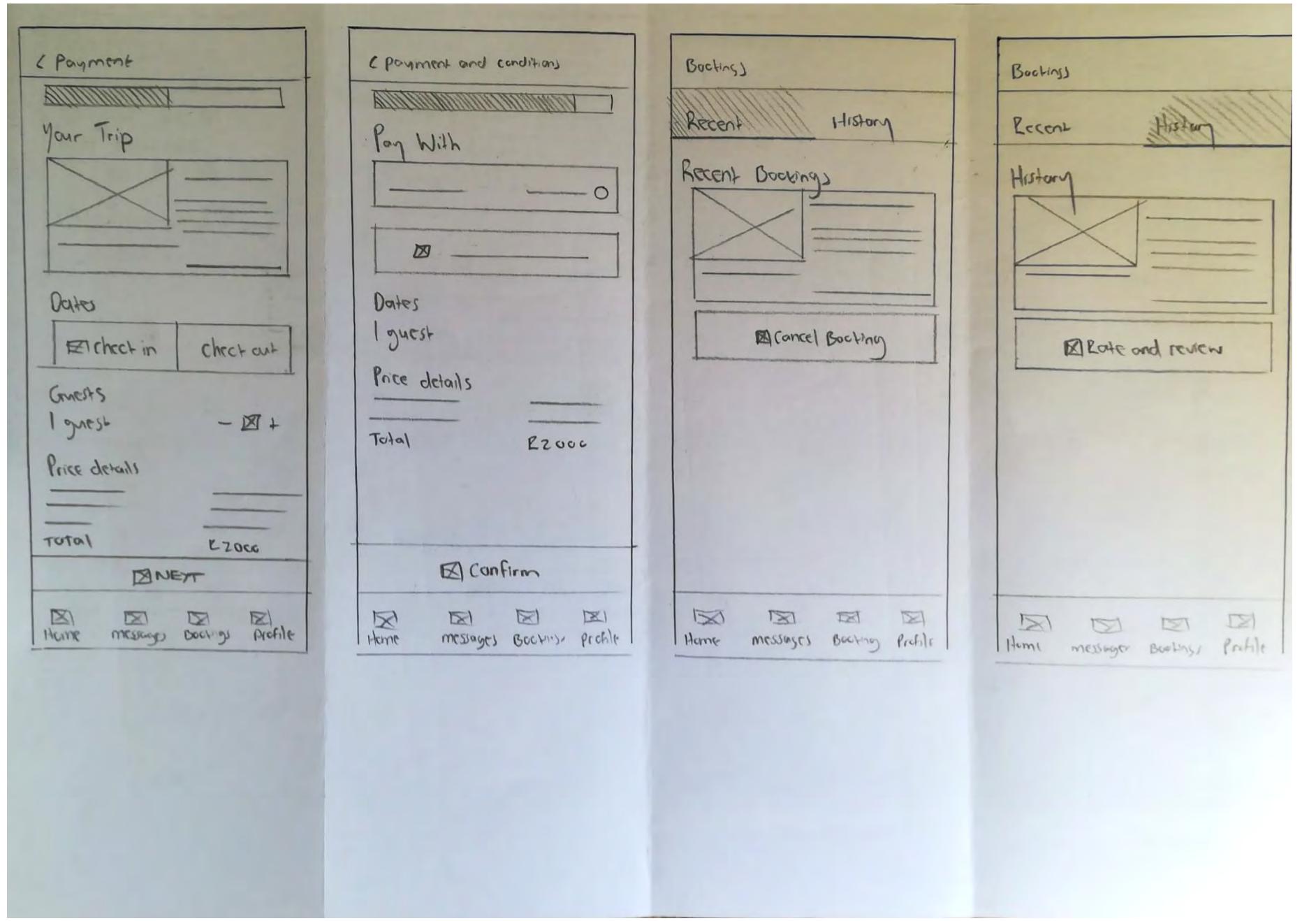
The image shows four wireframe sketches for a user interface, likely from a paper prototype. The sketches are arranged in a row and represent different steps in a sign-up or login process.

- Sign Up:** A form with fields for Username, Email, Password, and Confirm password. It includes a "Sign Up" button with a checked checkbox and links for "Have an account? Sign up" and "Sign up using Google".
- Login:** A form with fields for Username and Password. It includes a "Forgot password?" link, a "remember password" checkbox, a "Login" button with a checked checkbox, and links for "Don't have an account? Create one" and "Sign in using Google".
- Complete profile:** A form for entering personal details. It includes fields for Title, Fullname, Country, City, and Mobile phone. It features an "upload profile picture" section with "Upload" and "Remove" buttons, and "Skip" and "Next" buttons at the bottom.
- Enter payment details:** A form for payment information. It includes fields for Cardholder name, Cardholder Name, Expiration date, and Cvv. It features a "Complete profile" checkbox, a "Payment method" dropdown menu, and "Skip" and "Next" buttons at the bottom.

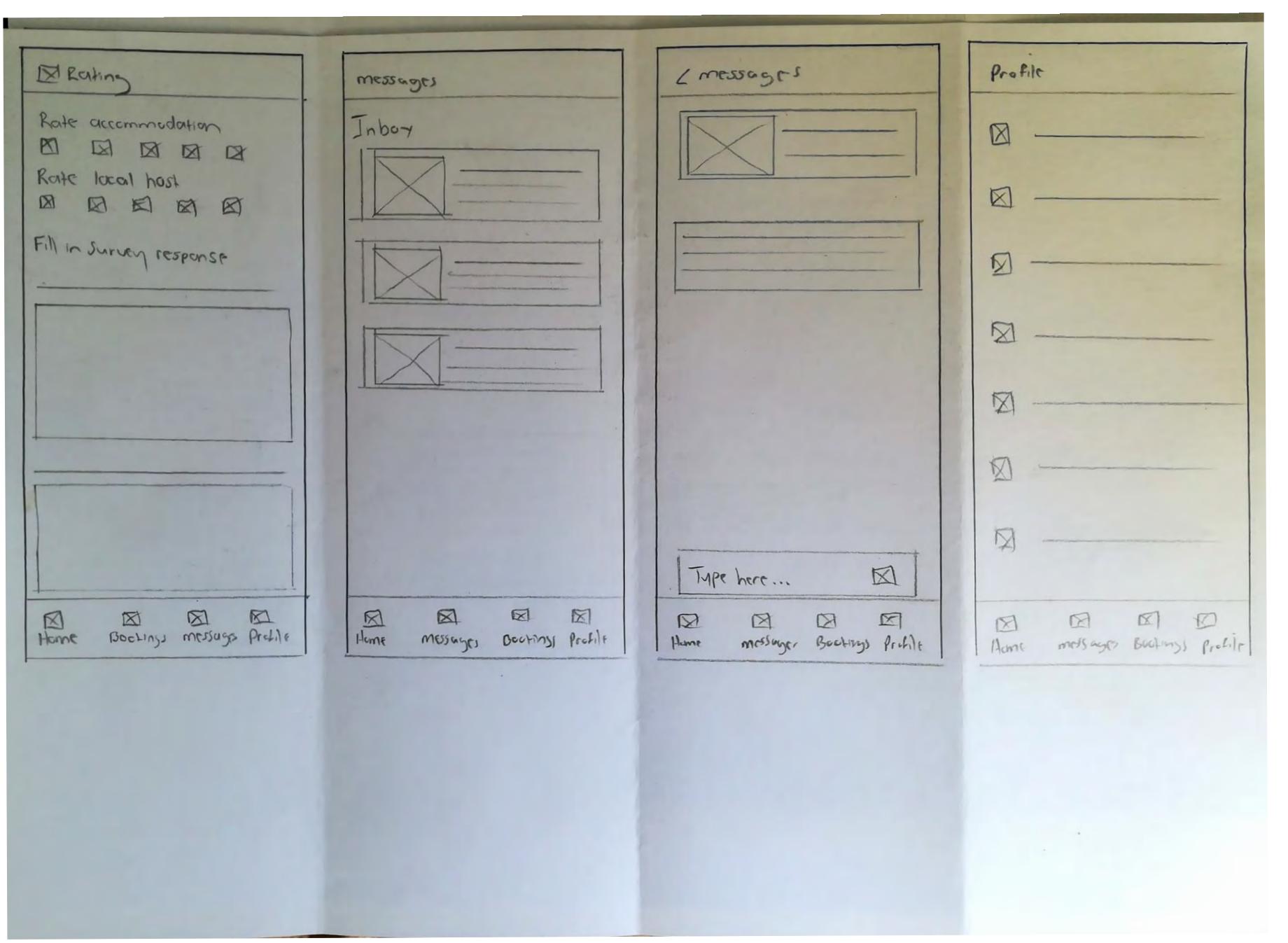
# Paper Wireframes



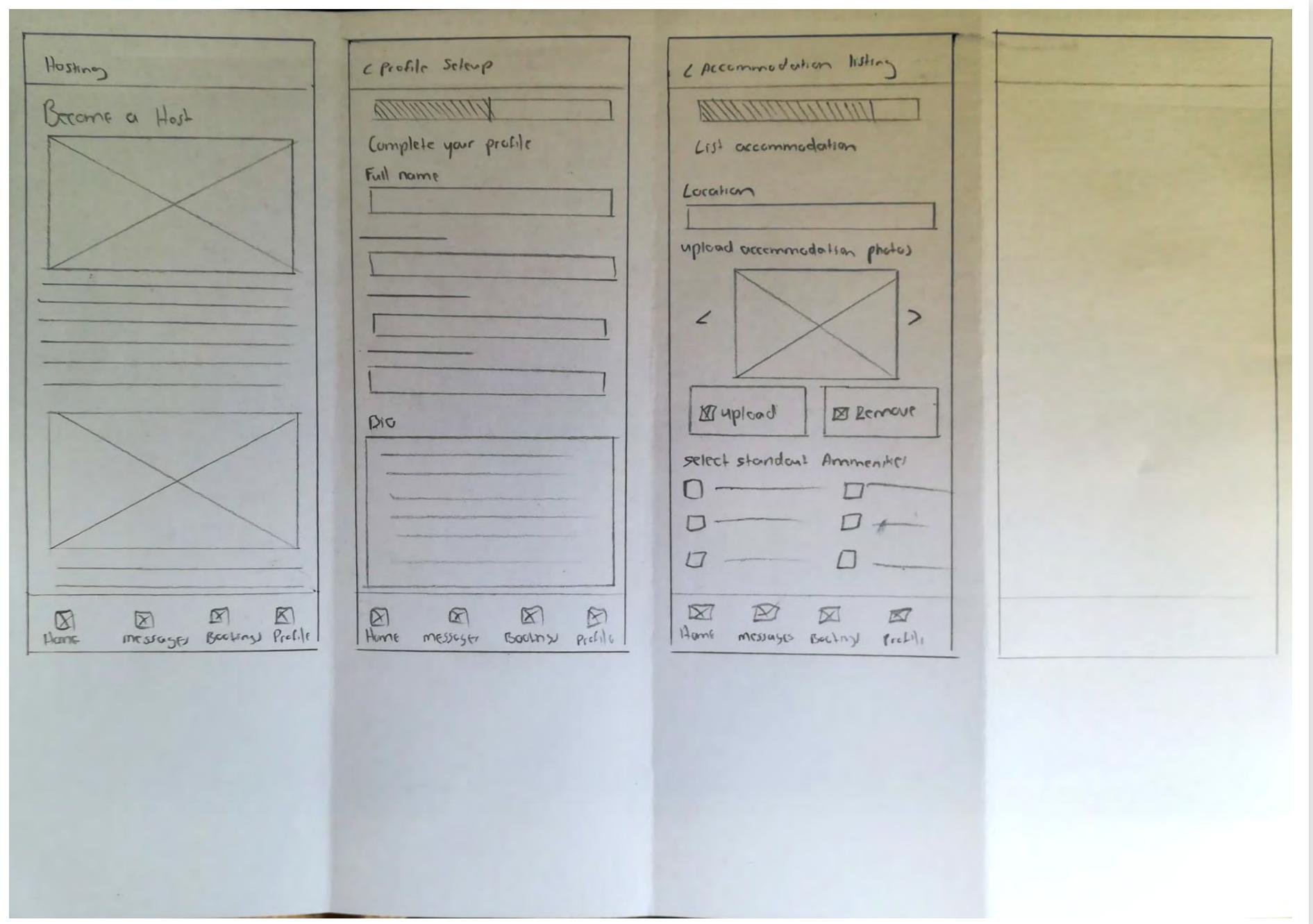
# Paper Wireframes



# Paper Wireframes



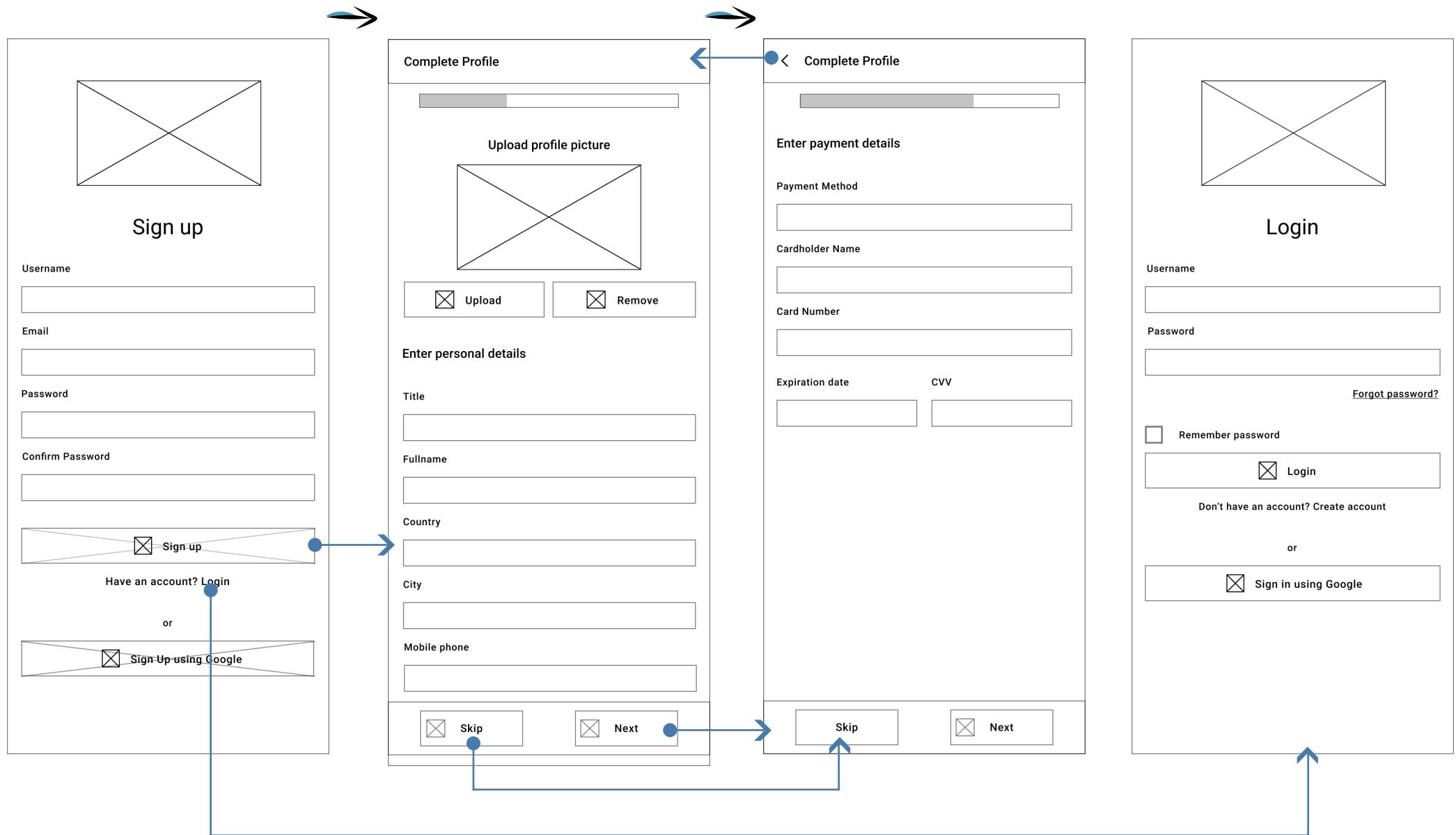
# Paper Wireframes



# Wireframes

## User flow - Onboarding

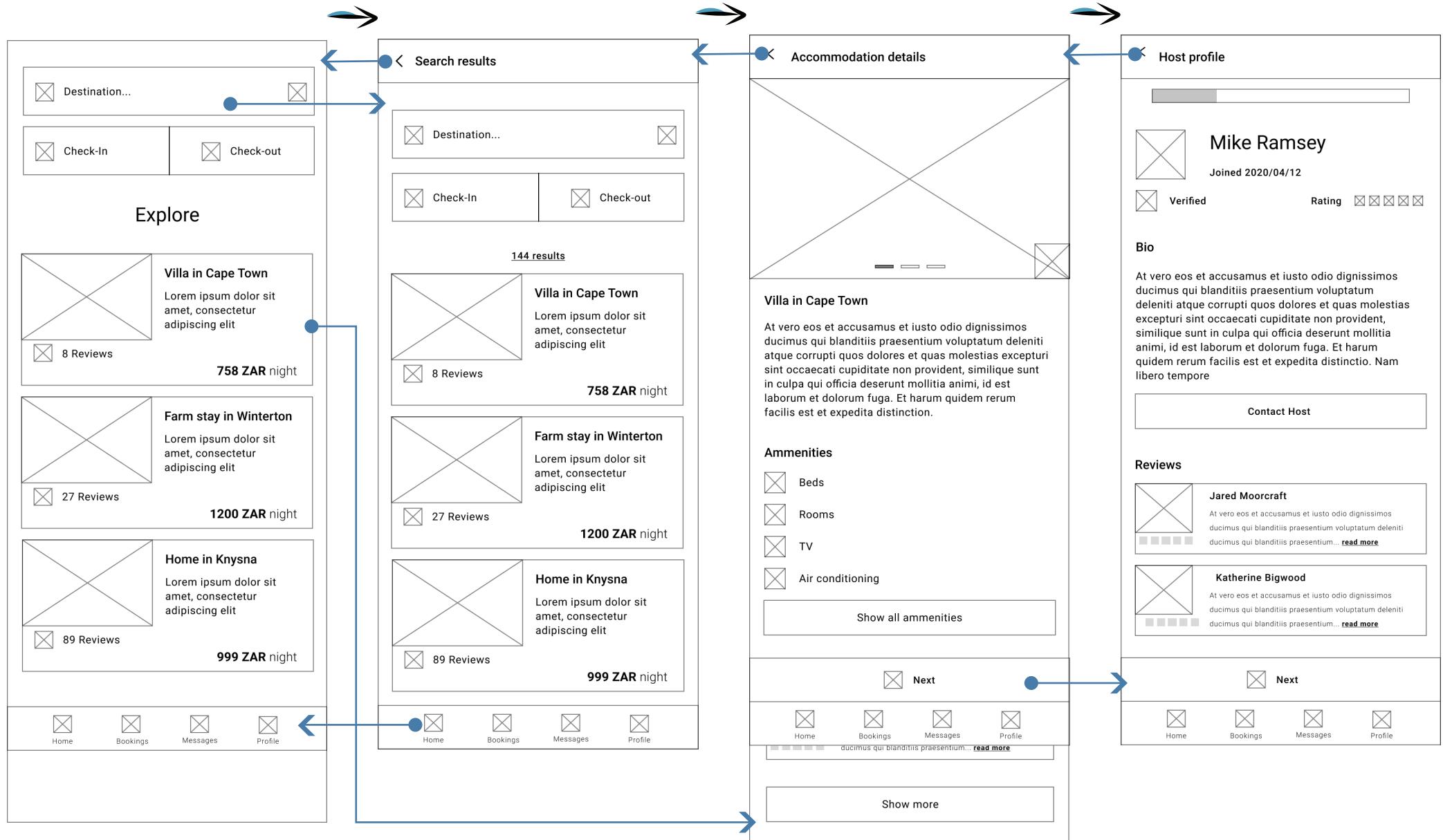
Scenario: User makes an account or logs in



# Wireframes

## User flow - Booking

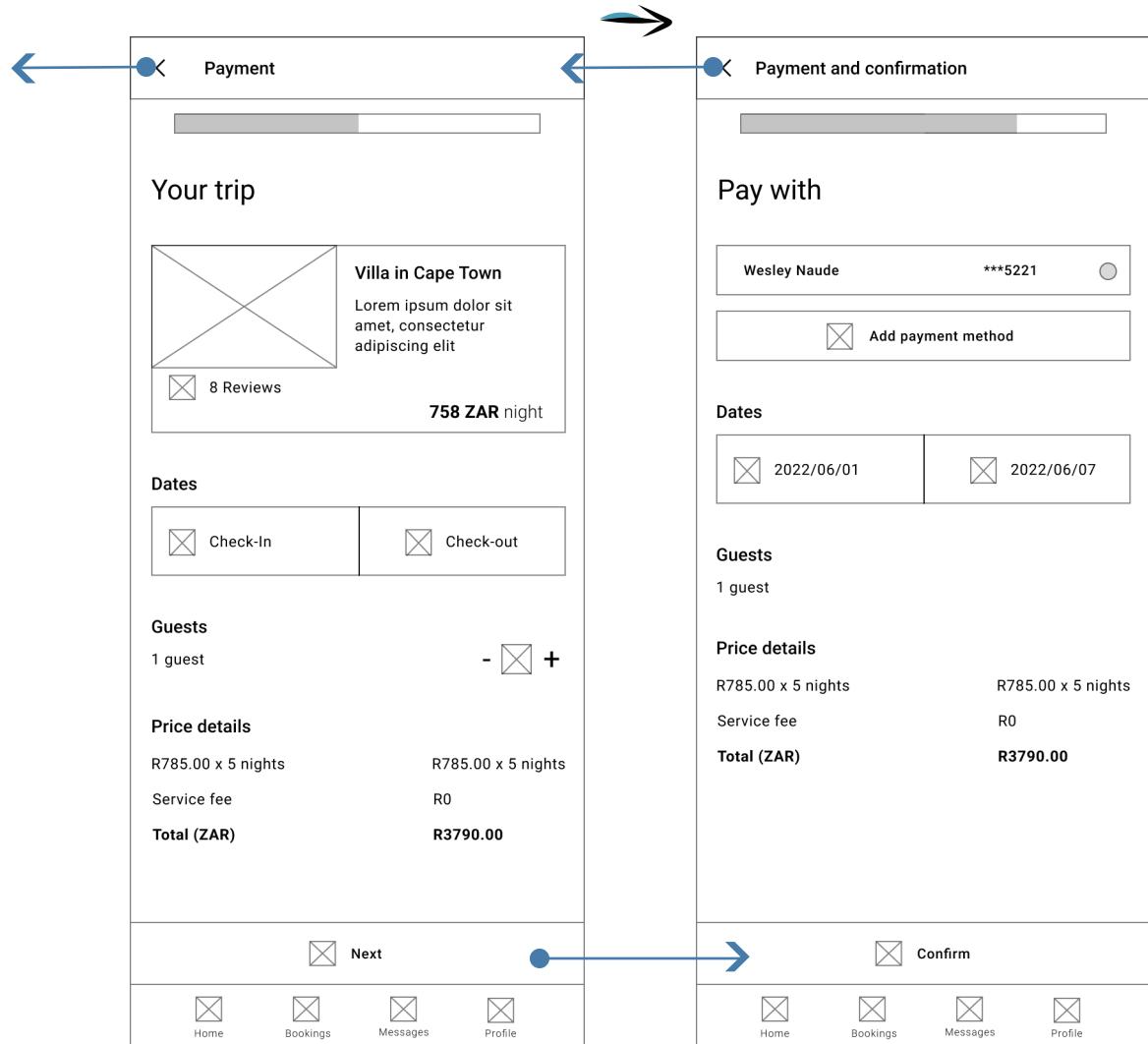
Scenario: User books an accommodation package



# Wireframes

## User flow - Booking

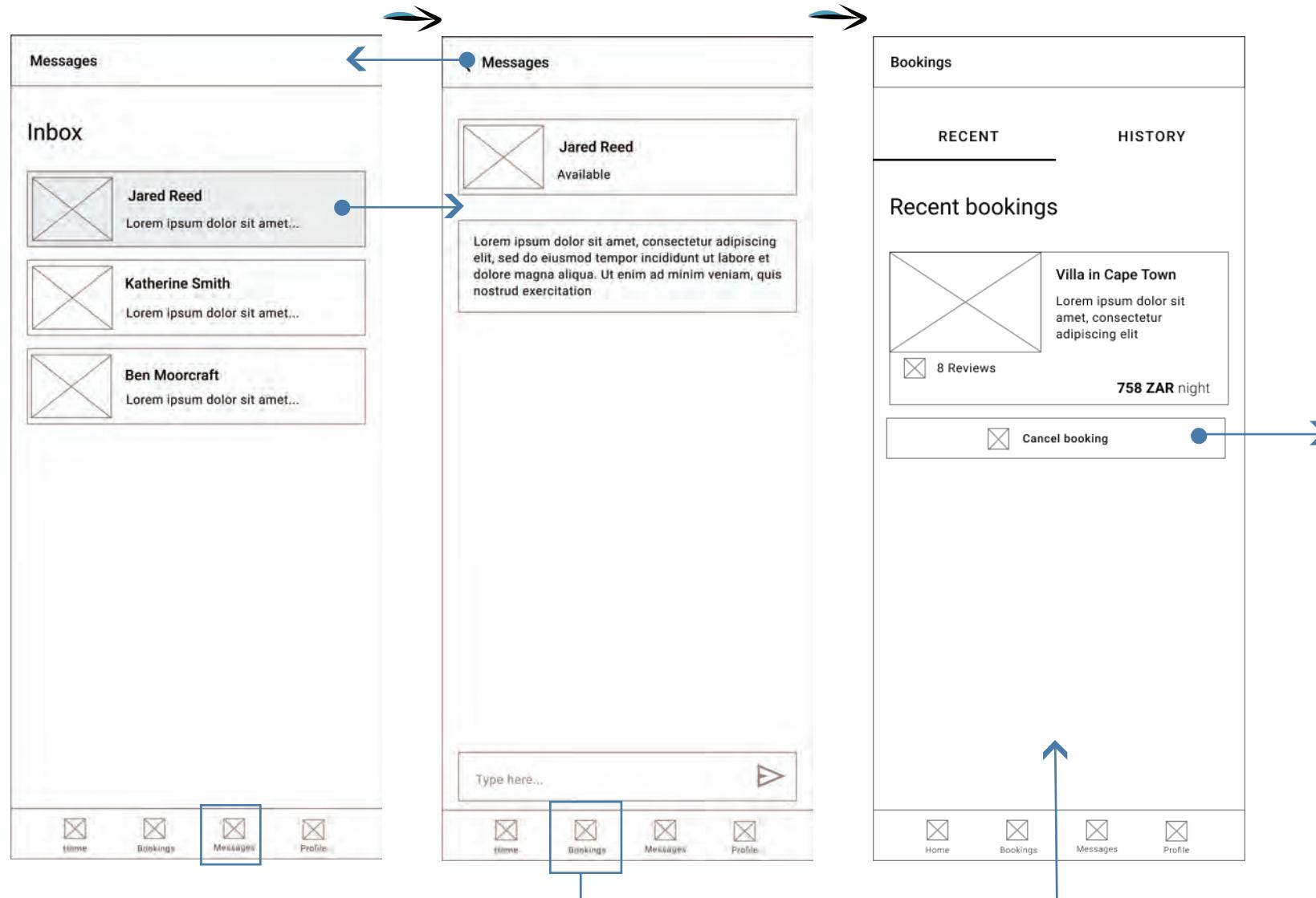
Scenario: User books an accommodation package



# Wireframes

## User flow - Pre-travel

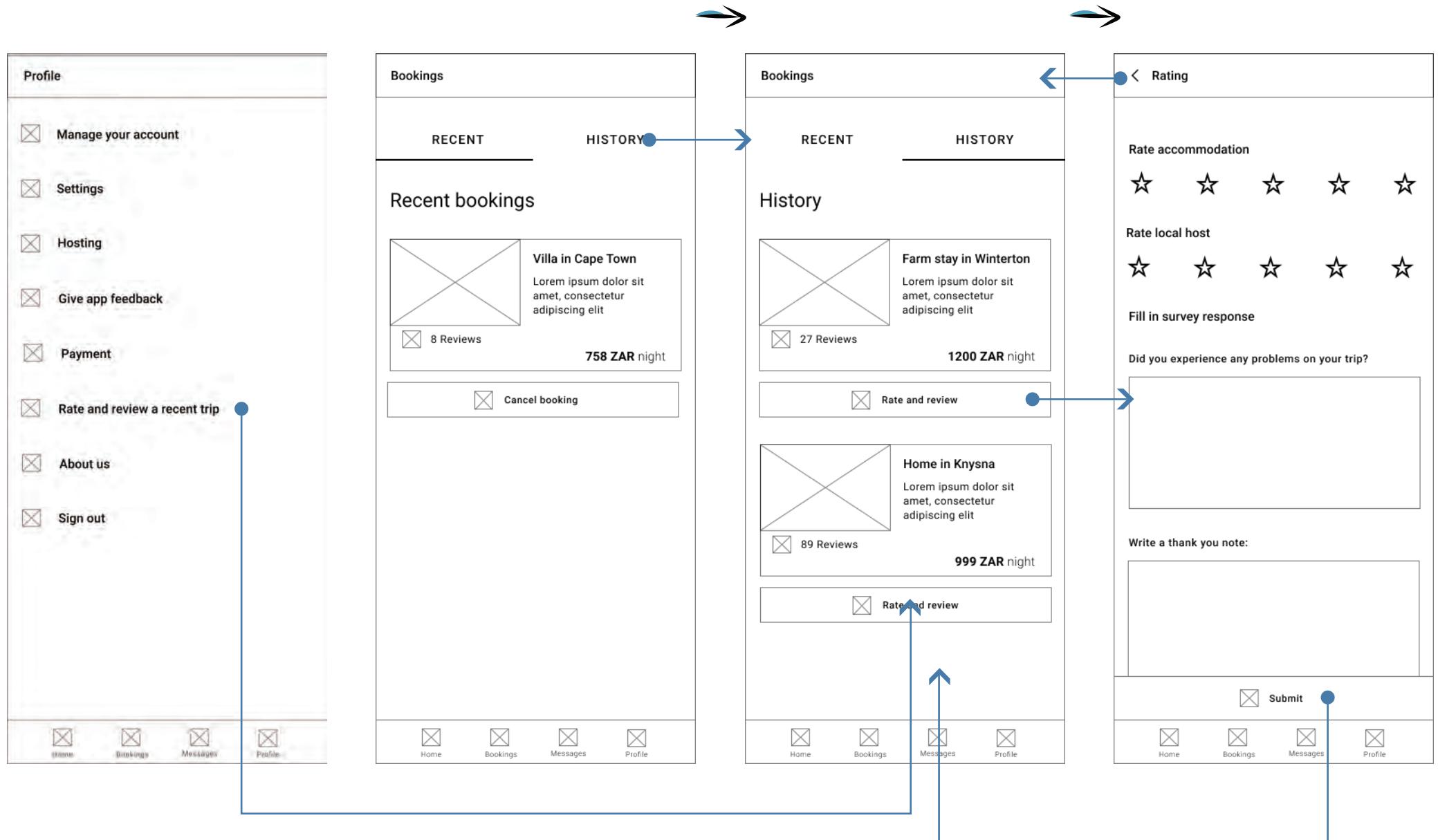
Scenario: User and host message each other. The user has the option to cancel booking



# Wireframes

## User flow - Travel

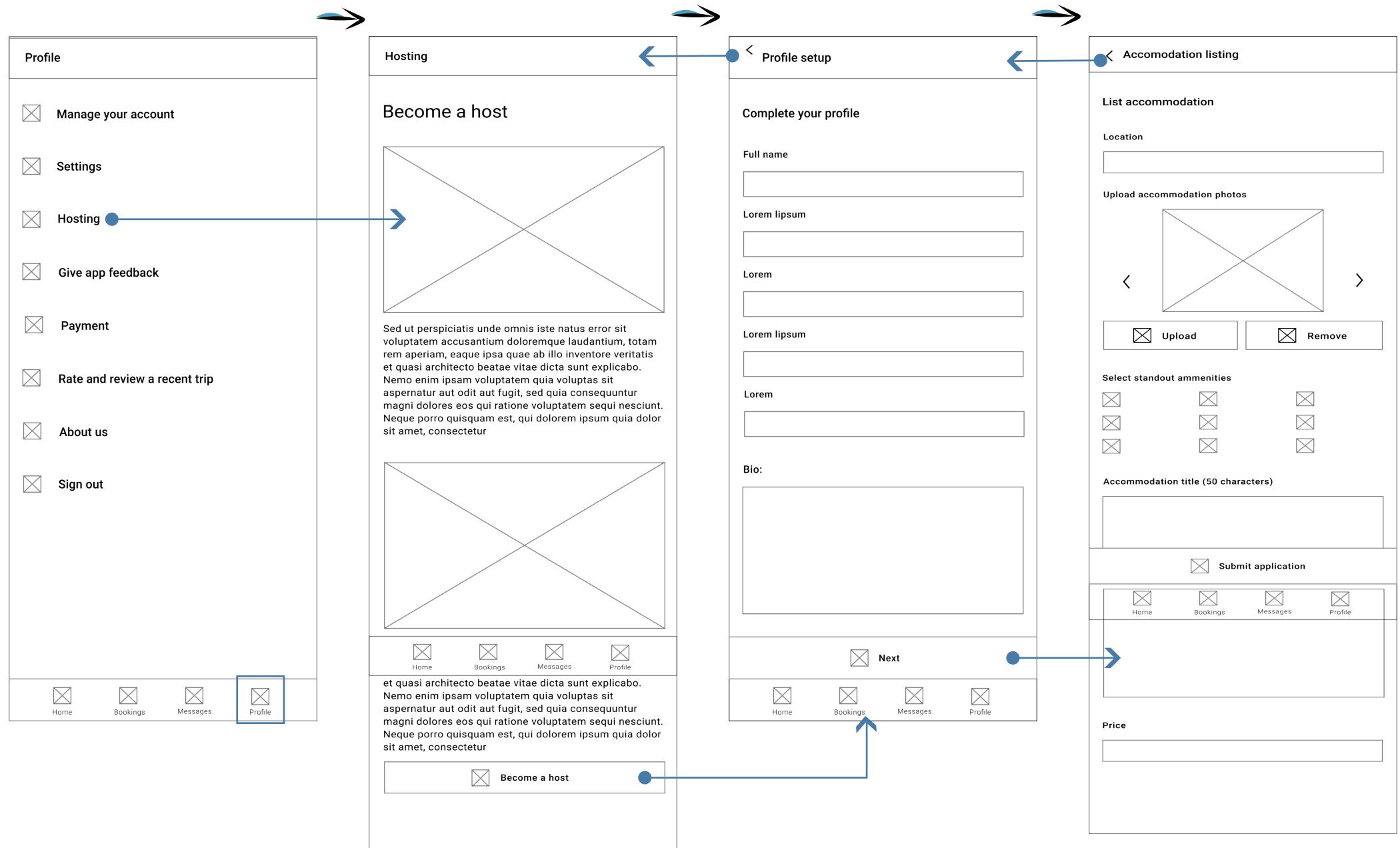
Scenario: User rates and reviews their holiday experience



# Wireframes

## User flow - Hosting

Scenario: User books an accommodation package

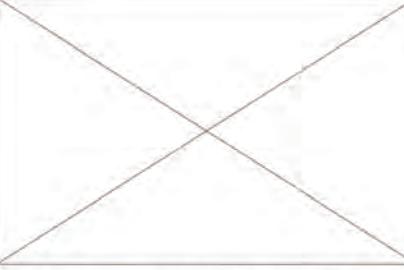


# Wireframes

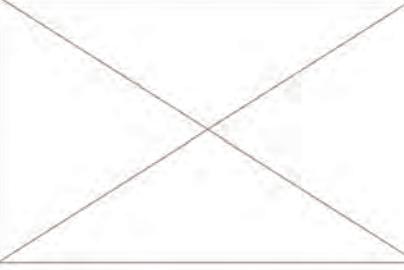
## Additional screens

< About

### About



Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur

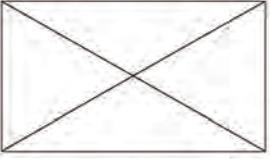


et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur

Home    Bookings    Messages    Profile

< Manage account

### Manage account

Upload profile picture  
  
 Upload    Remove

Enter personal details

Title:

Fullname:

Country:

City:

Mobile phone:

Save

< Payment

### Payment methods

Wesley Naude   \*\*\*5221

Add payment method

→ **Pay with**

Payment Method:   
Cardholder Name:   
Card Number:   
Expiration date:  CVV:

Save

←  Payment

Home    Bookings    Messages    Profile

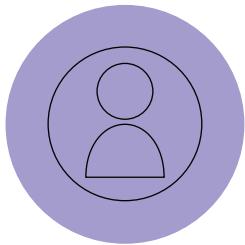
# Usability Study: Parameters

A usability study is a research method that is used to test how easy it is for users to complete core tasks in a design and helps identify elements in a design that contribute towards a negative user experience



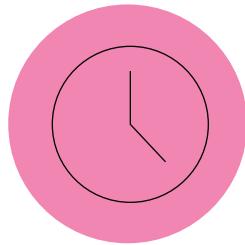
## Study Type

Moderated usability study



## Participants

2 participants (so far)



## Length

10-15 Minutes



## Location

University of Johannesburg

# Usability Study: Findings

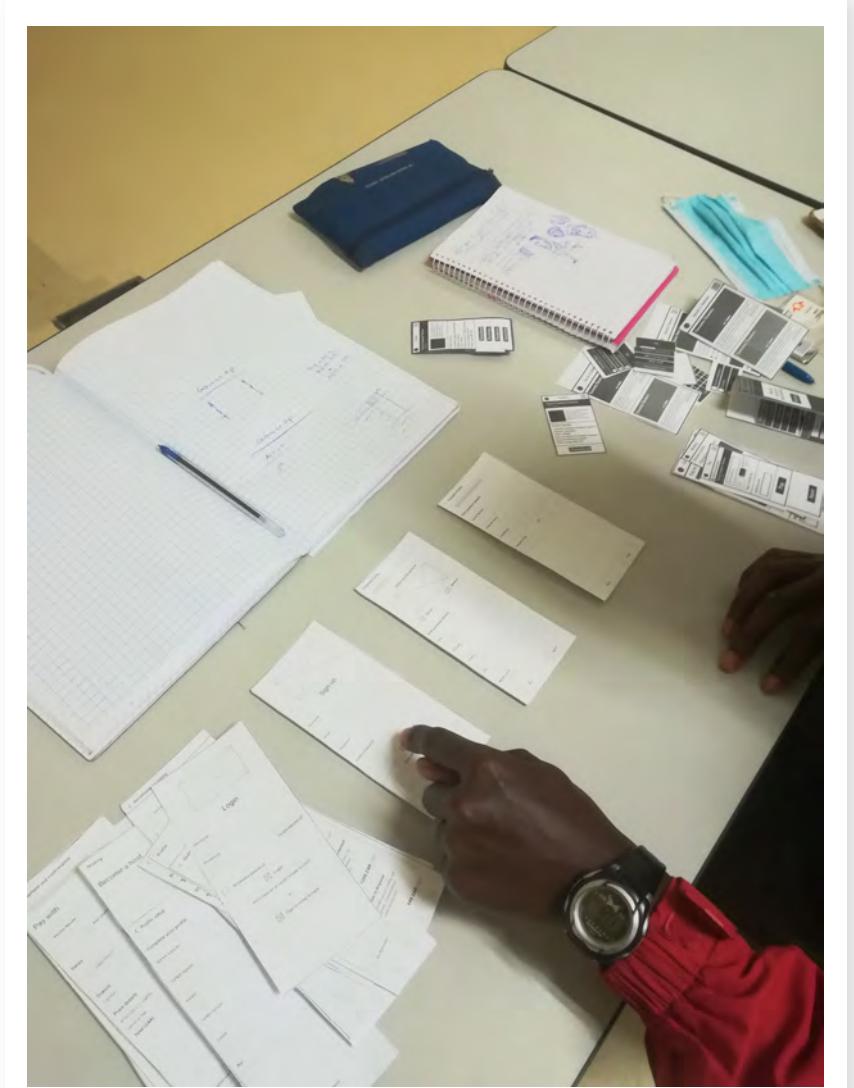
I conducted moderated usability studies using paper prototypes. I analysed the users feedback as they completed prompts in the prototypes. Listed are the following findings sorted from the most to the least critical:

## Round 1 findings: Low-fidelity prototype

1. User 1 was not able to find the option to rate trip
2. Both users expected to see a price after accommodation details
3. User 1 expected an About us section

## Round 2 findings: High-fidelity prototype

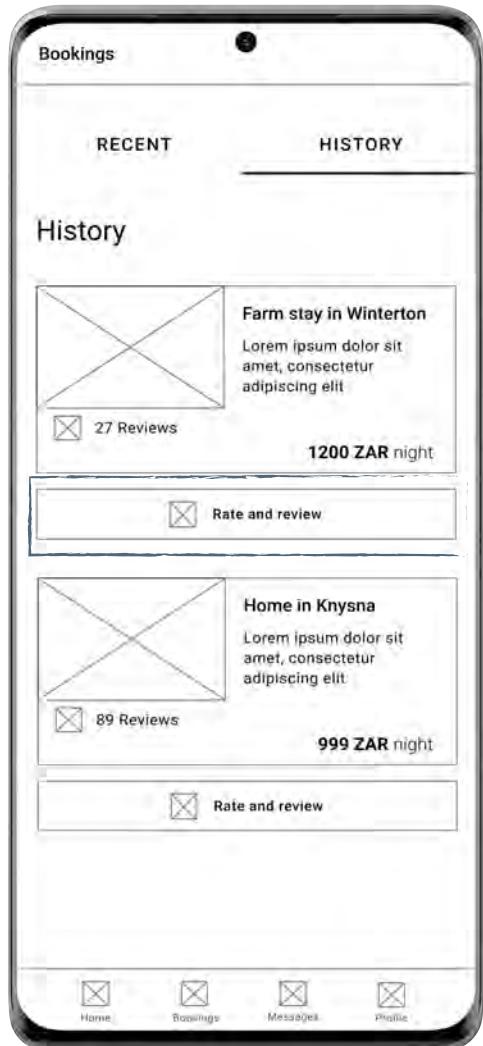
- (Yet to be completed)



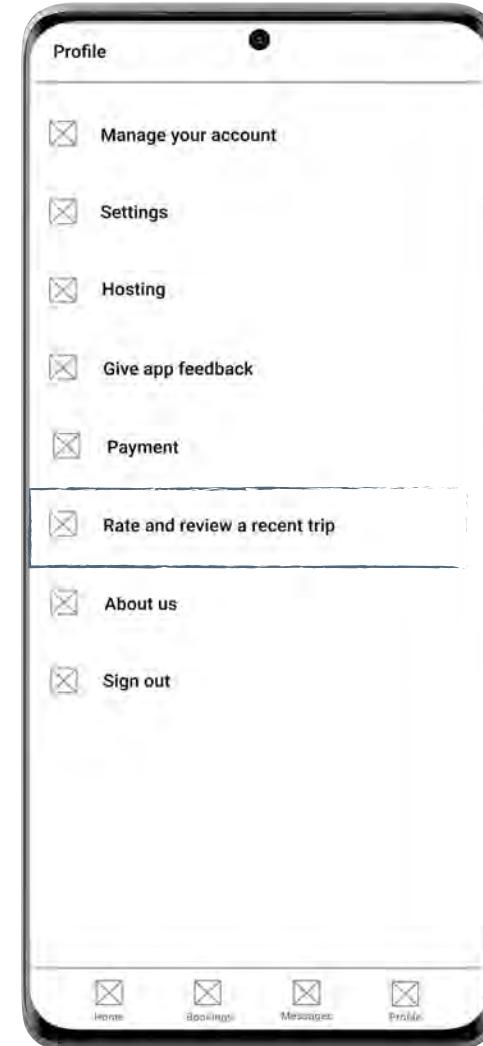
# Implementing Feedback

In addition to rate and review being on the booking screen, I added “rate and review a recent trip” to the profile menu because users navigated to the profile menu when searching for this feature

Before usability study



After usability study



# Style Guide

## Buttons

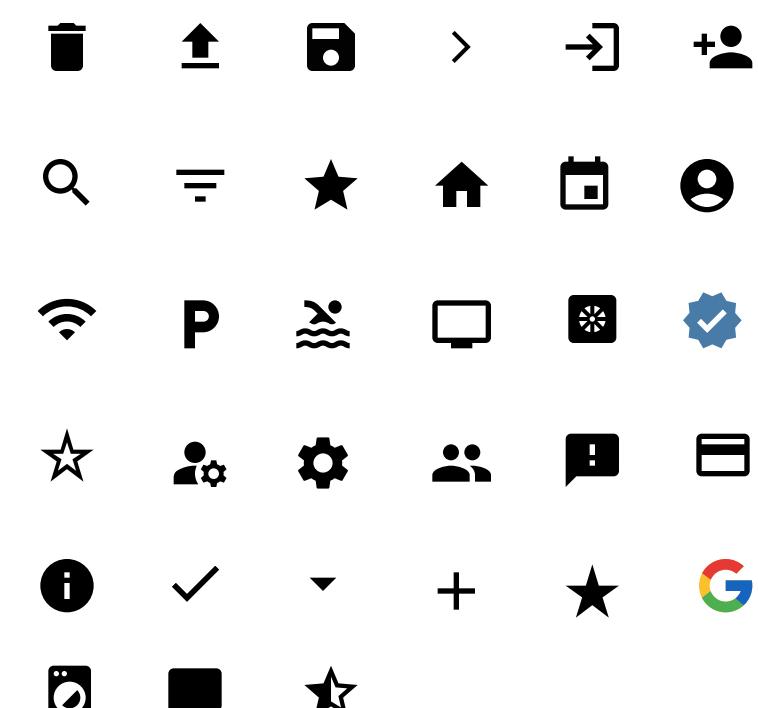
Primary



Secondary



## Iconography

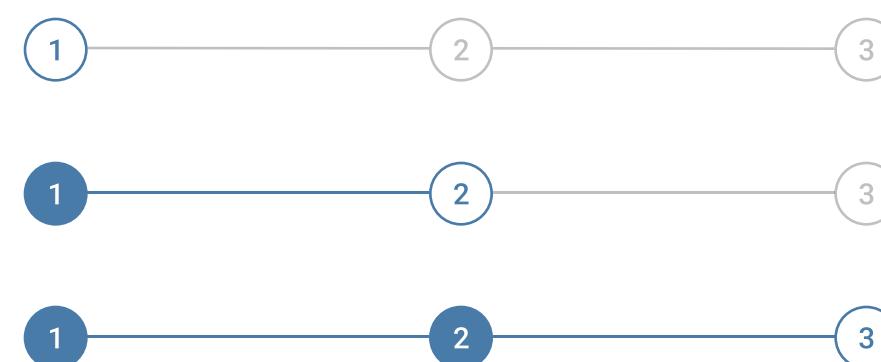


## Logo

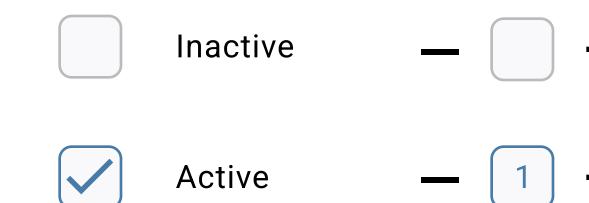


## Components

### Progress indicator



### Checkbox and Add



### Tabs

Active

RECENT HISTORY

Inactive

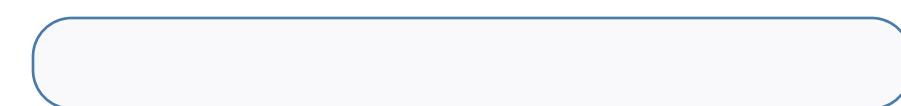
RECENT HISTORY

### Input field

Inactive



Active



### Dropdown



### Navigation

Inactive

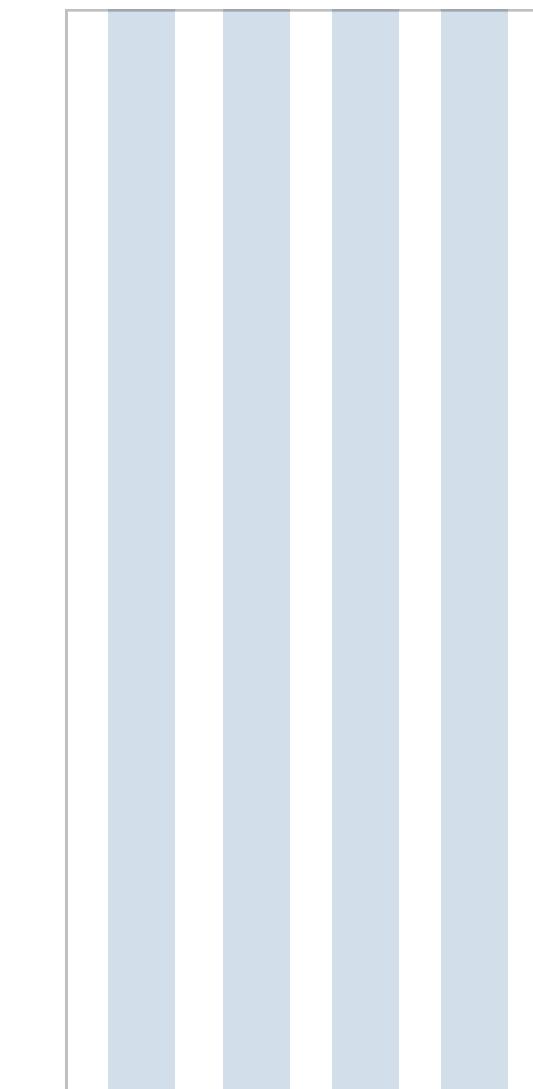


Active



< Payment

## Layout grid



## Typography

Headline/ Robotto/ Regular/ 20/32

Title/ Robotto/ Regular/ 22/28

Title/ Robotto/ Medium/ 14/20

Label/ Robotto/ Medium/ 14/20

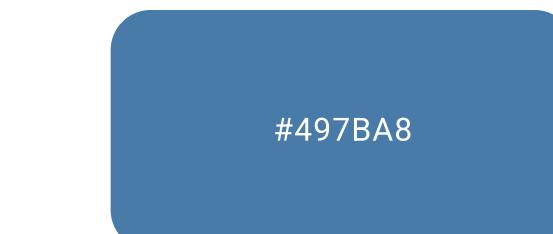
Label/ Robotto/ Medium/ 12/16

Body/ Robotto/ Regular/ 12/16

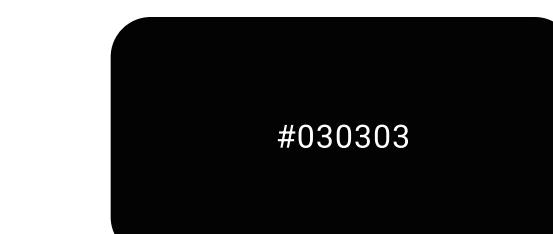
Label/ Robotto/ Medium/ 11/16

Label/ Robotto/ Light/ 8/16

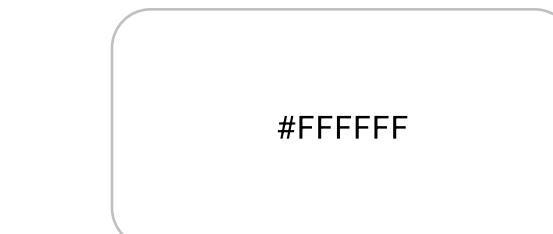
## Colour palette



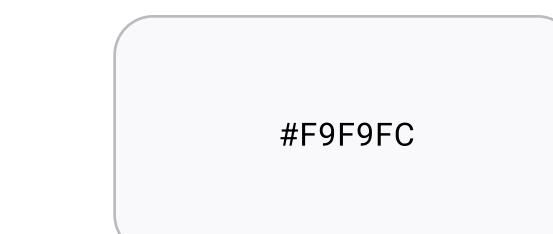
#497BA8



#030303



#FFFFFF



#F9F9FC

## Cards



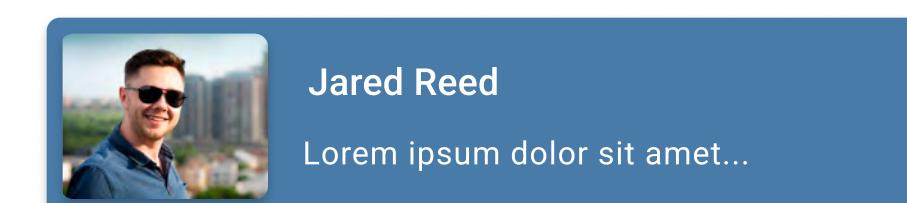
Villa in Cape Town

Lore ipsum dolor sit amet, consectetur adipiscing elit

8 Reviews

758 ZAR/night

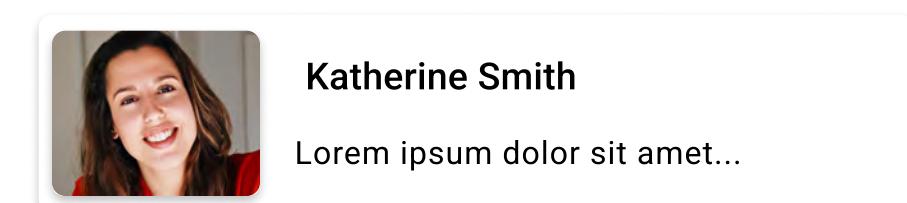
Unread message



Jared Reed

Lore ipsum dolor sit amet...

Read message



Katherine Smith

Lore ipsum dolor sit amet...

# UI Mockups

TravelChap

Sign up

Username

Email

Password

Confirm Password

Have an account? [Login](#)

or

By signing up you agree to our [Terms of Use](#) and [Privacy Policy](#)

TravelChap

Login

Username

Password

Remember password

[Forgot password?](#)

Don't have an account? [Create account](#)

or

Complete Profile

1 7

Upload profile picture



Enter personal details

Title

Fullname

Country

City

Complete Profile

1 2

Enter payment details

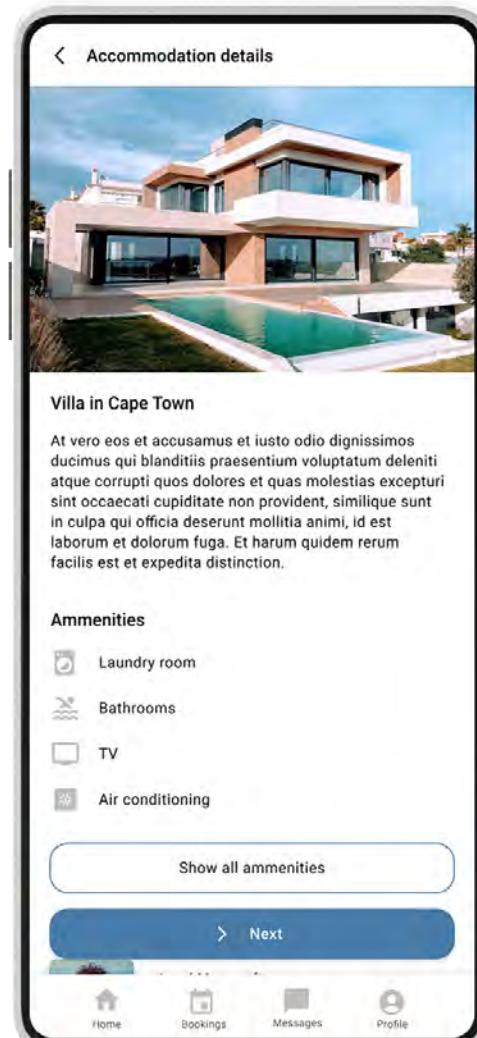
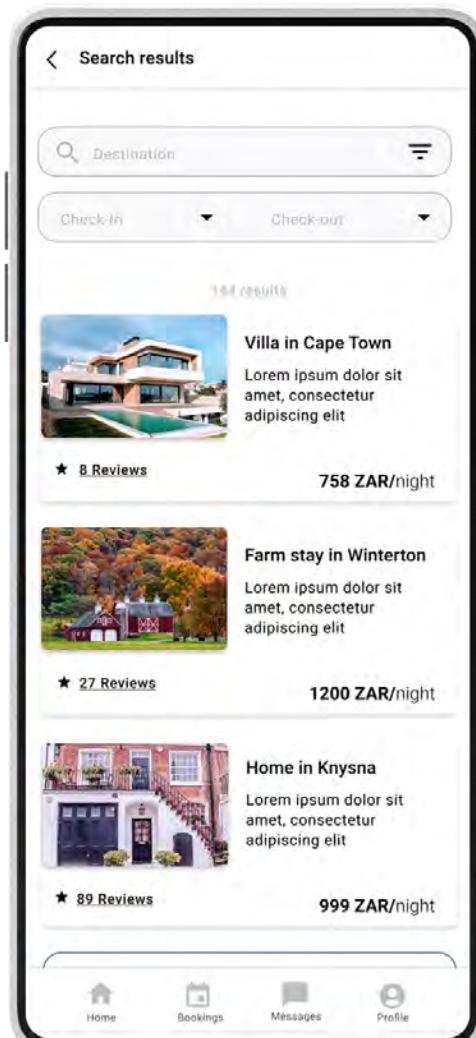
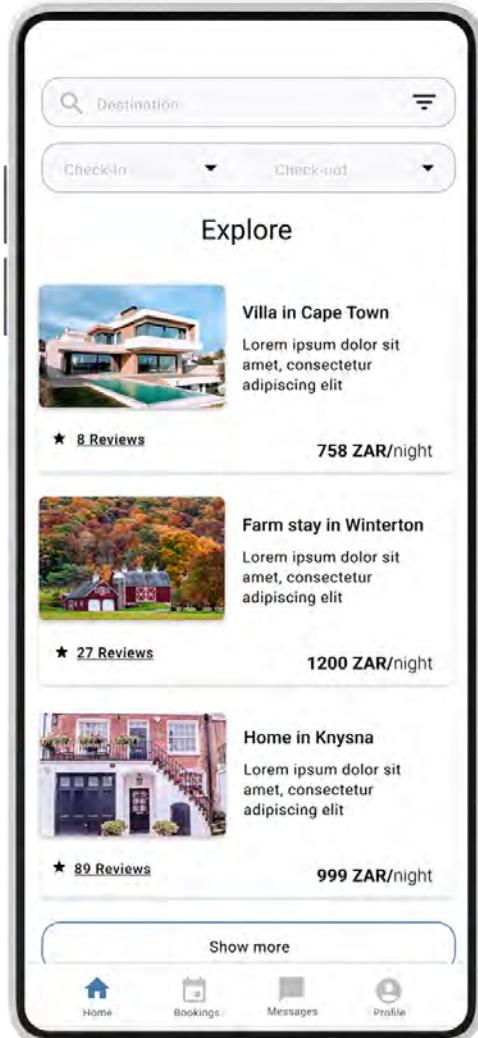
Payment Method

Cardholder Name

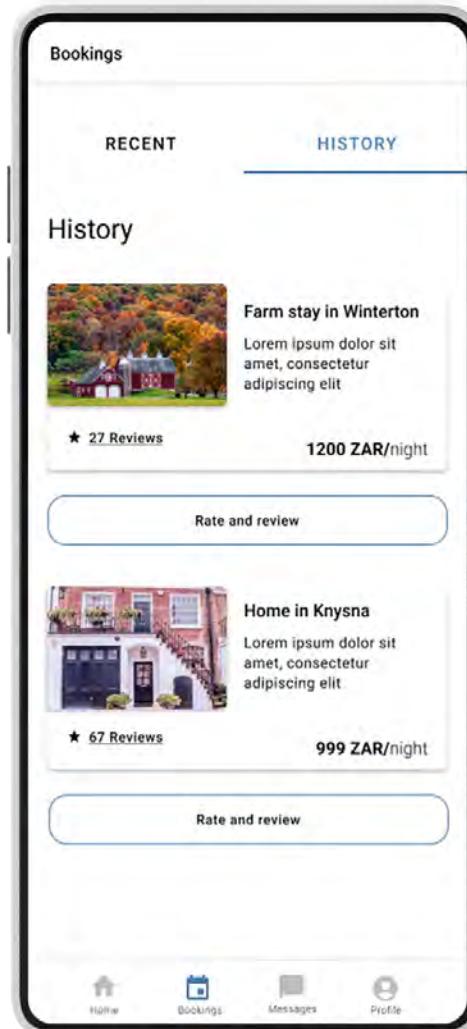
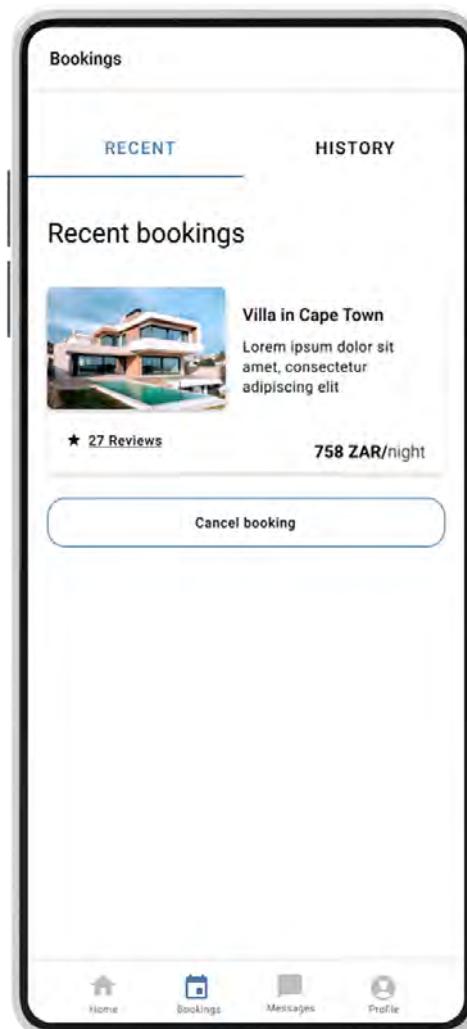
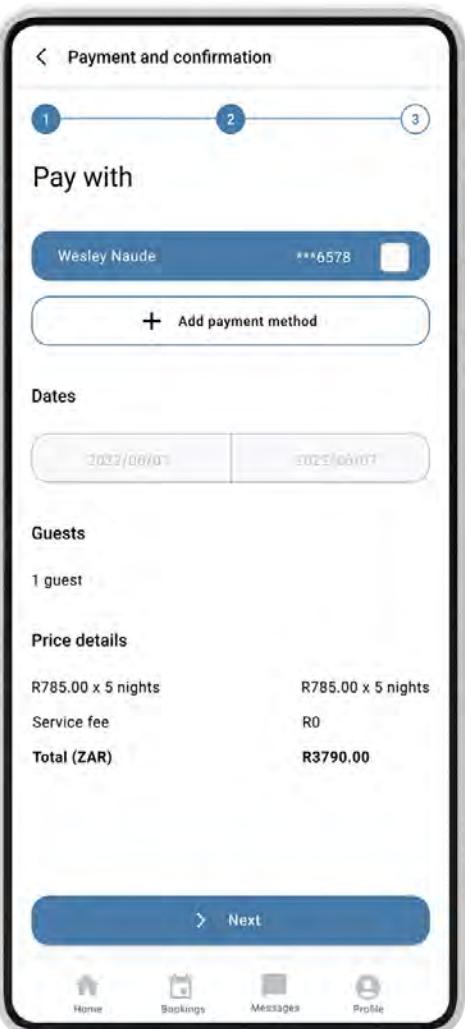
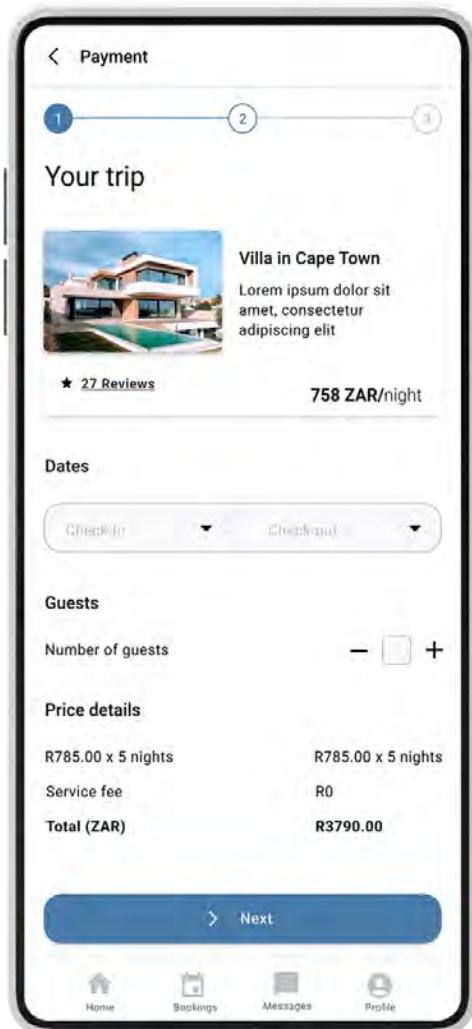
Card Number

Expiration date CVV

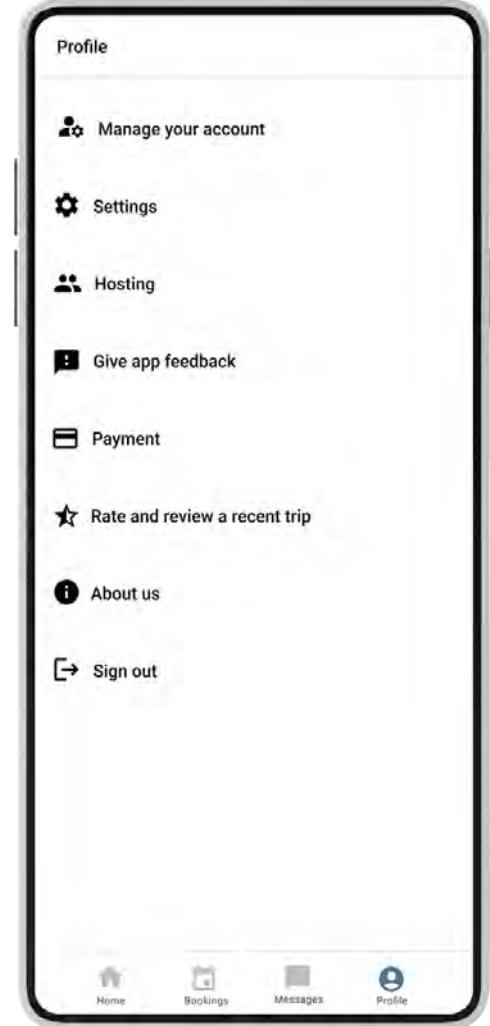
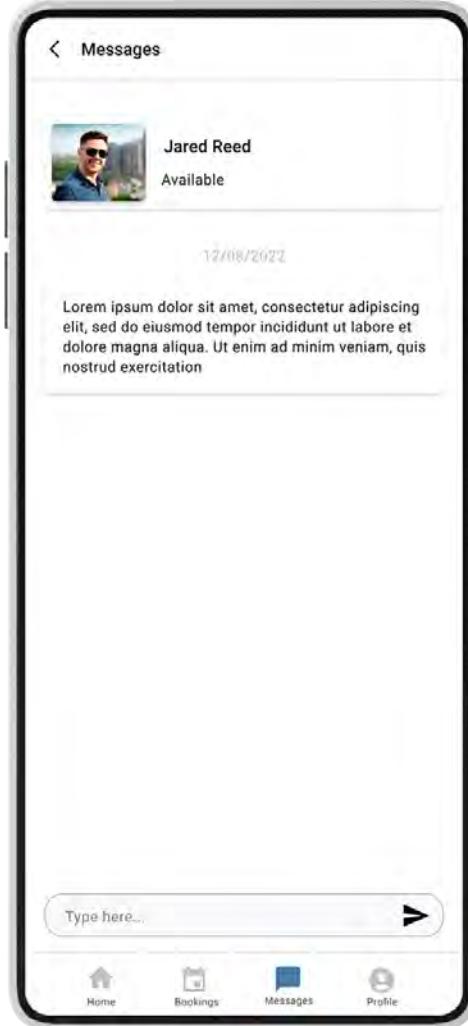
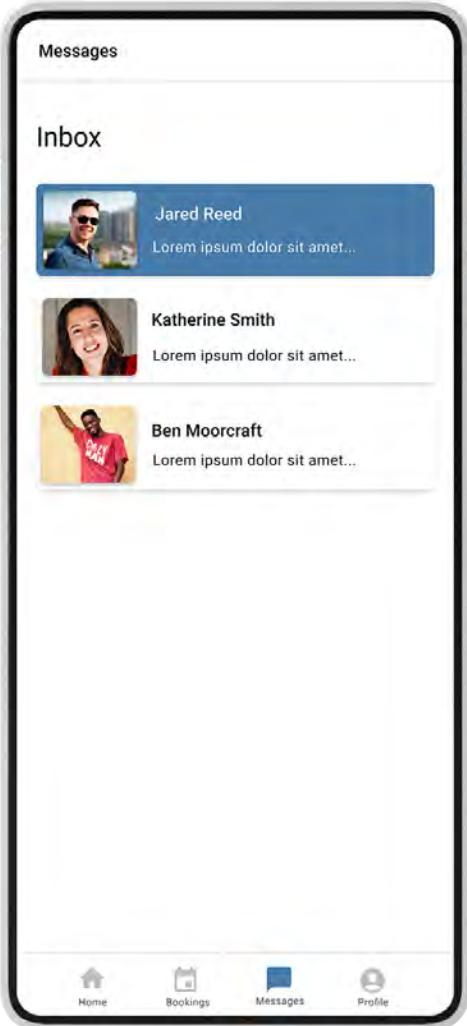
# UI Mockups



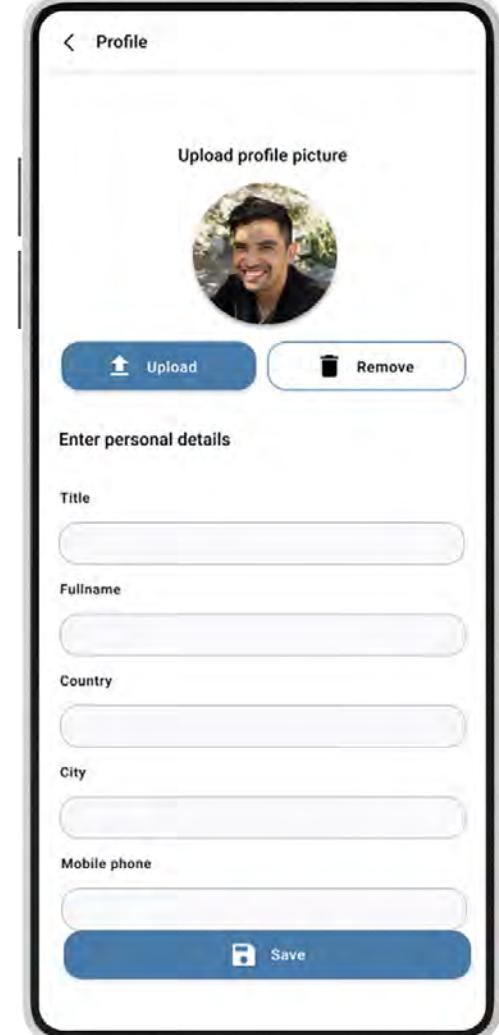
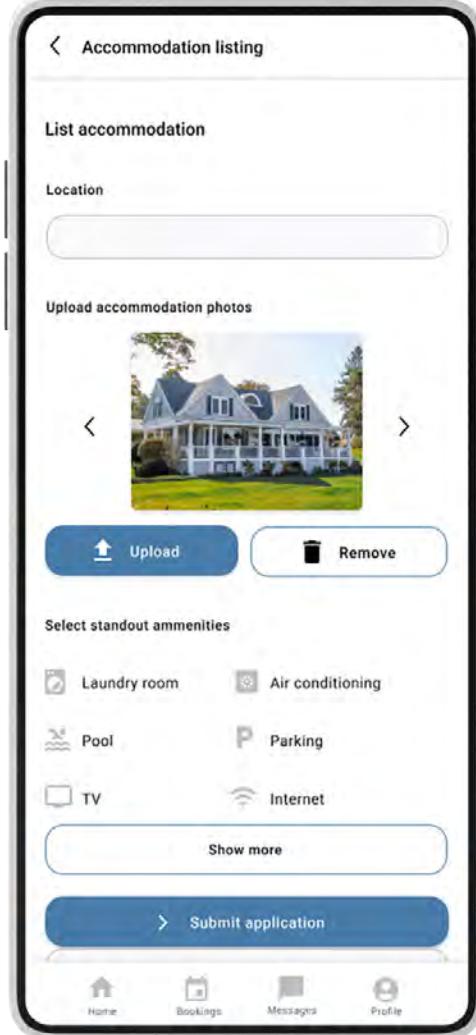
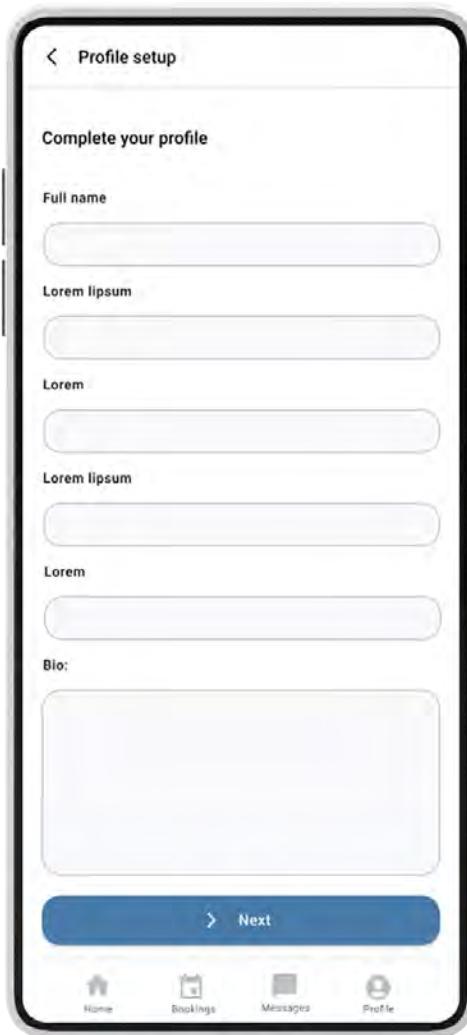
# UI Mockups



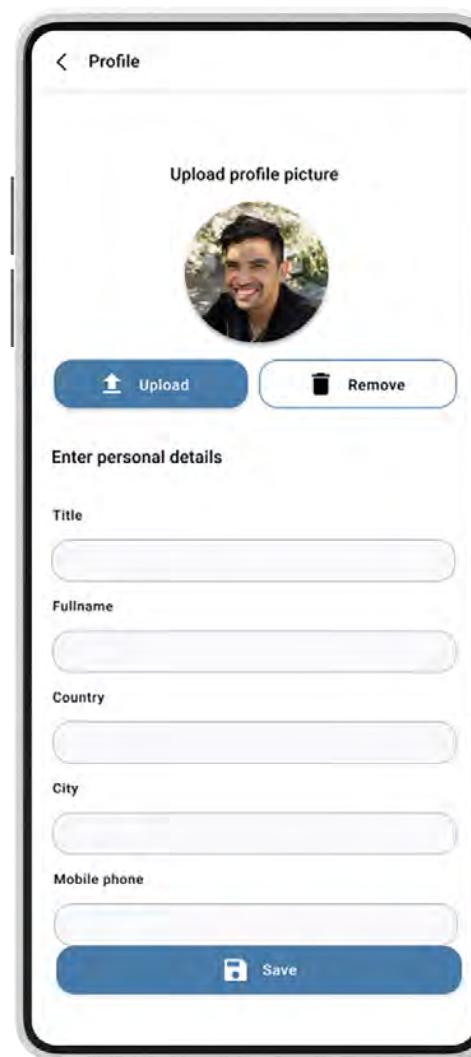
# UI Mockups



# UI Mockups

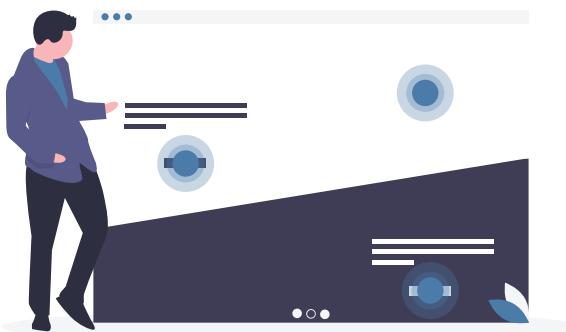


# UI Mockups



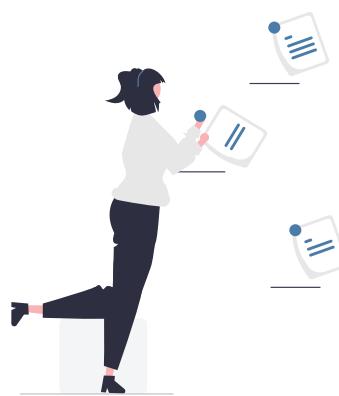
# Next Steps

1



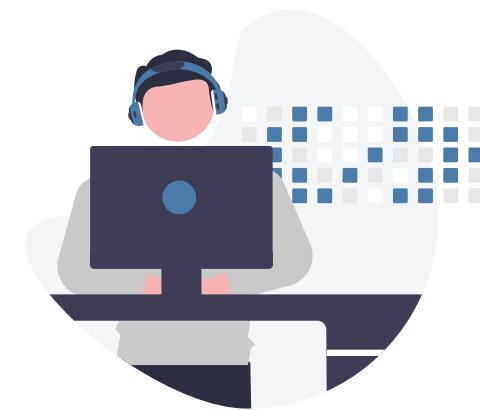
Conduct a second round of usability studies in order to identify more elements that might contribute towards a negative user experience and implement the feedback

2



Improve visual design and consistency

3



Develop the app using HTML,CSS and Javascript