



# Case Study

Travel application for mobility impaired individuals

# Project Overview

# About

MobilityMate is an app who finds you the trendiest accessible places according to your exclusive needs, your smart travel guide, and your worry-free pass to elusive destinations. All brilliantly brought together in an app of uncompromising ease, comfort & utility. This is the beginning of a journey on wheels to a world with no limits.

## Problem Statement

## Issues Faced

The most common issue faced by people in wheelchairs is the lack of accessible infrastructure and services at public places and tourist destinations. Addressing this issue, efforts have been made in the past few years to build wheelchair-friendly washrooms and install elevators at public places.

However, this information is often inadequately communicated. This lack of information can result in wheelchair users and their caregivers being unaware of accessible options available to them, hindering their ability to plan their outings or make informed choices about where to go. They may not know whether a location has wheelchair, ramps, elevators, accessible restrooms, or other features essential for their comfort and independence. Many accommodations lack wheelchair-friendly features such as accessible rooms with roll-in showers, appropriate bathroom facilities, and comfortable bedding arrangements, making it difficult for wheelchair users to find suitable places to stay.

Addressing these issues and finding solutions is crucial to ensure that people in wheelchairs can enjoy hassle-free and fulfilling travel experiences, promoting inclusivity and equal opportunities.

Lack of information

Confusion

Uncertainty

Gap between expectations & availability

Restrooms

# My Goals

# Purpose

MobilityMate is an inclusive and accessible platform that will not only simplify the travel experience for individuals in wheelchair but also empower them to regain a profound sense of self-assurance and independence. Our mission revolves around breaking down barriers and overcoming obstacles, ensuring that every person, regardless of their physical limitations, can navigate the world with ease and confidence.

Our commitment is to address every aspect of your trip, leaving you free to savor every moment and make the most of your travel experience.

Inclusion

Sense of independance

Overcoming physical limitations

Community building

Freedom

# My Role

# as a designer

User Research

Market Research

Survey

User Interviews

User Persona

User Persona

Empathy Map

Journey Map

User Flow

Cards Sorting

Information Architecture

Low-fidelity Wireframes

Digital Wireframes

Prototyping

Visual Design

UX Design

## Design Thinking

Design thinking is a non-linear, iterative process that is used to understand users, challenges, assumptions, redefine problems and create innovative solutions to prototype & test the application before implementation.



## Design Strategy

## My Approach

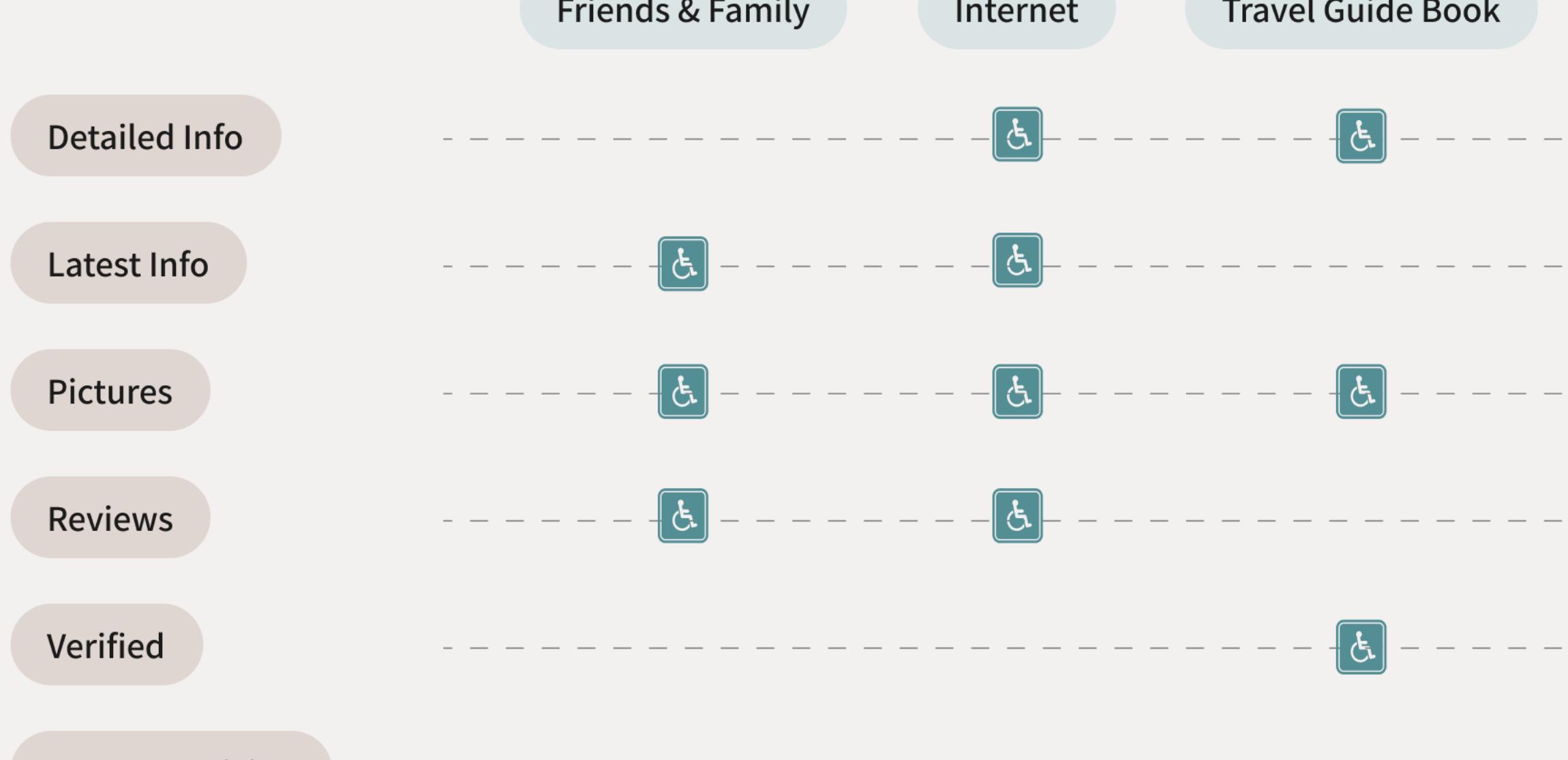


## Market Research

# The Competitors

MobilityMate is an inclusive and accessible platform that will not only simplify the travel experience for individuals in wheelchair but also empower them to regain a profound sense of self-assurance and independence. Our mission revolves around breaking down barriers and overcoming obstacles, ensuring that every person, regardless of their physical limitations, can navigate the world with ease and confidence.

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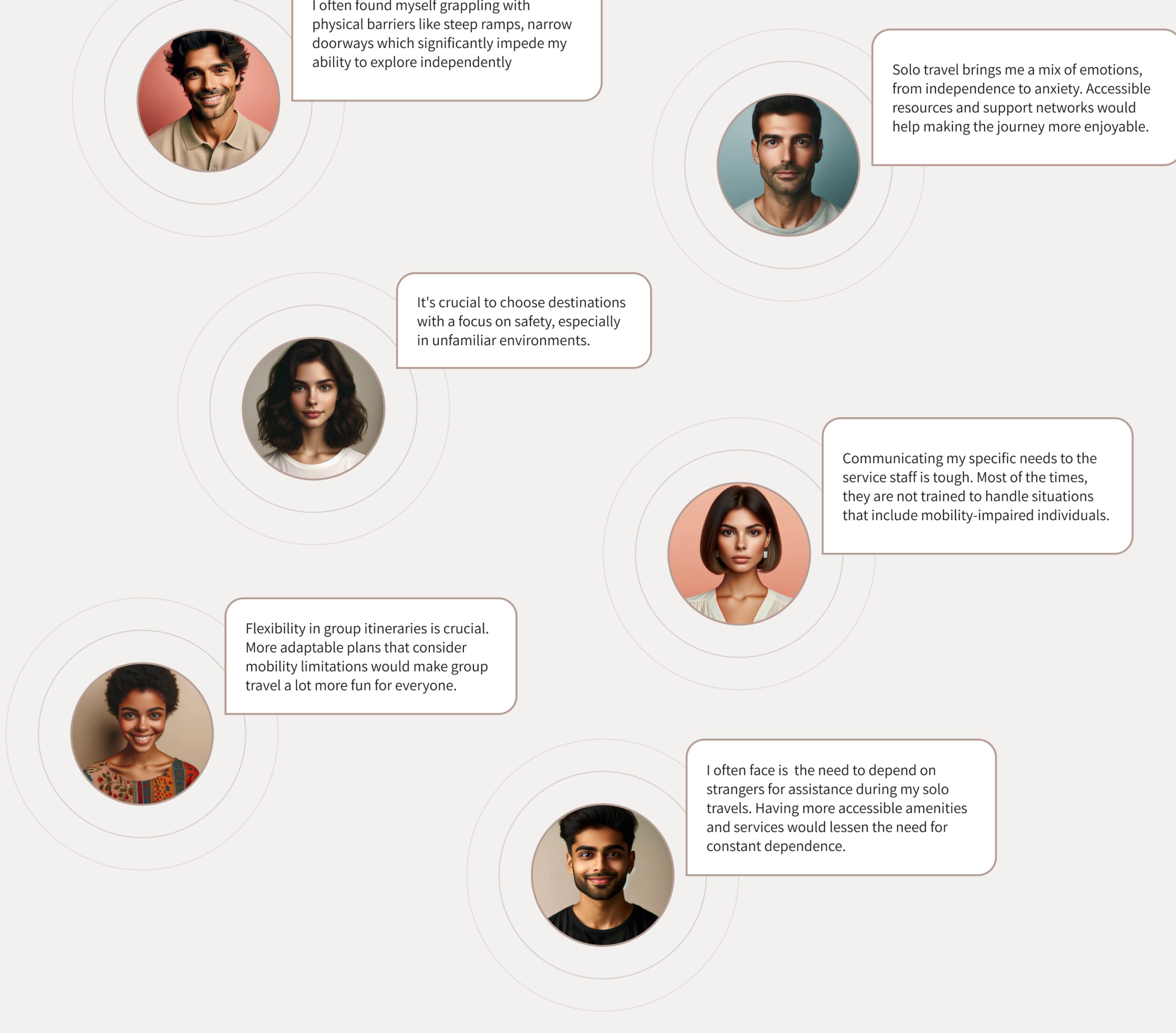


## Qualitative Research User Interviews

Accessibility stands as a distinctive category, and merely putting ourselves in the shoes of users and attempting to design the application won't suffice. Abled individuals cannot truly comprehend the first-hand experiences of those with different abilities.

In order to gain a deep understanding of the challenges and cultivate empathy for our prospective users, we visited several non-government organizations (NGOs) to have a talk with mobility-impaired individuals of varied age groups who are either studying or working at these organizations.

These interviews yielded valuable insights that played a pivotal role in shaping my design choices during the design process.

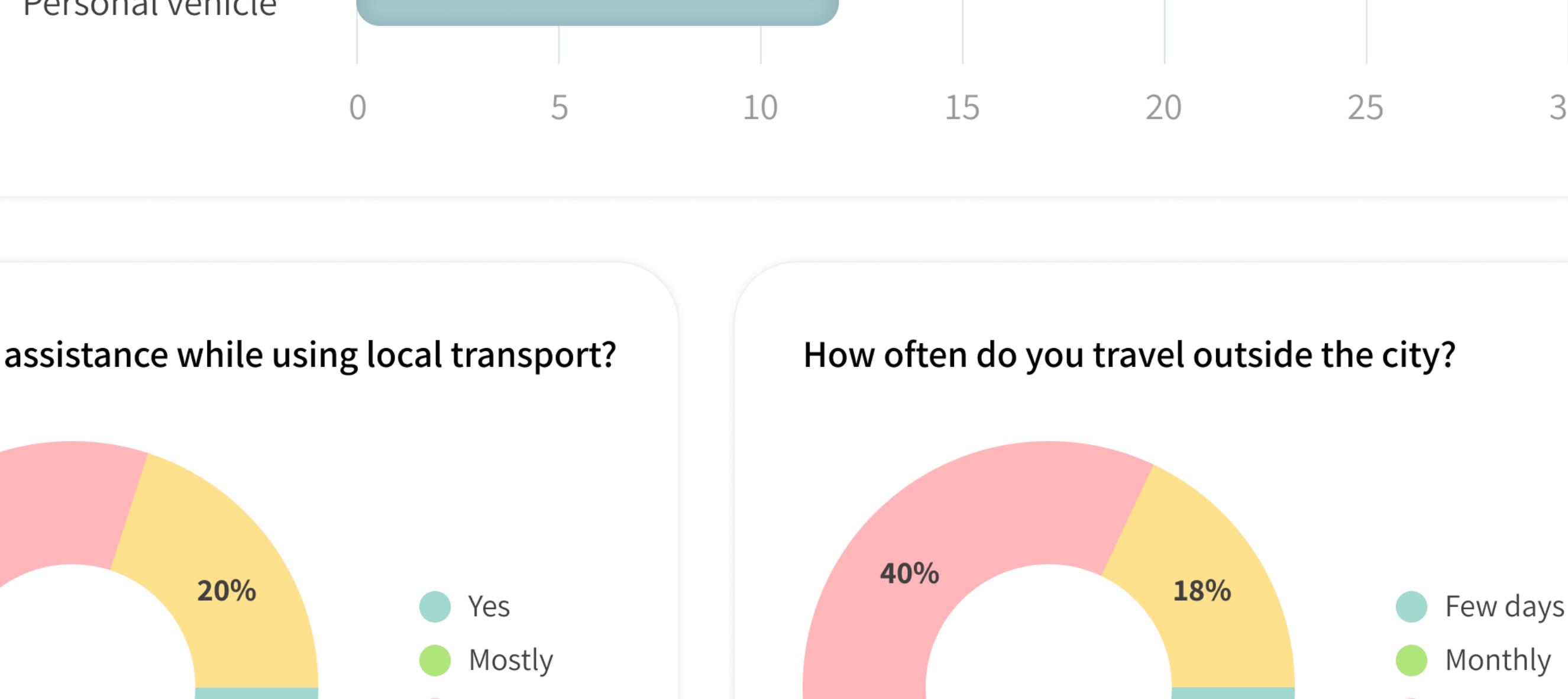


# Quantitative Research

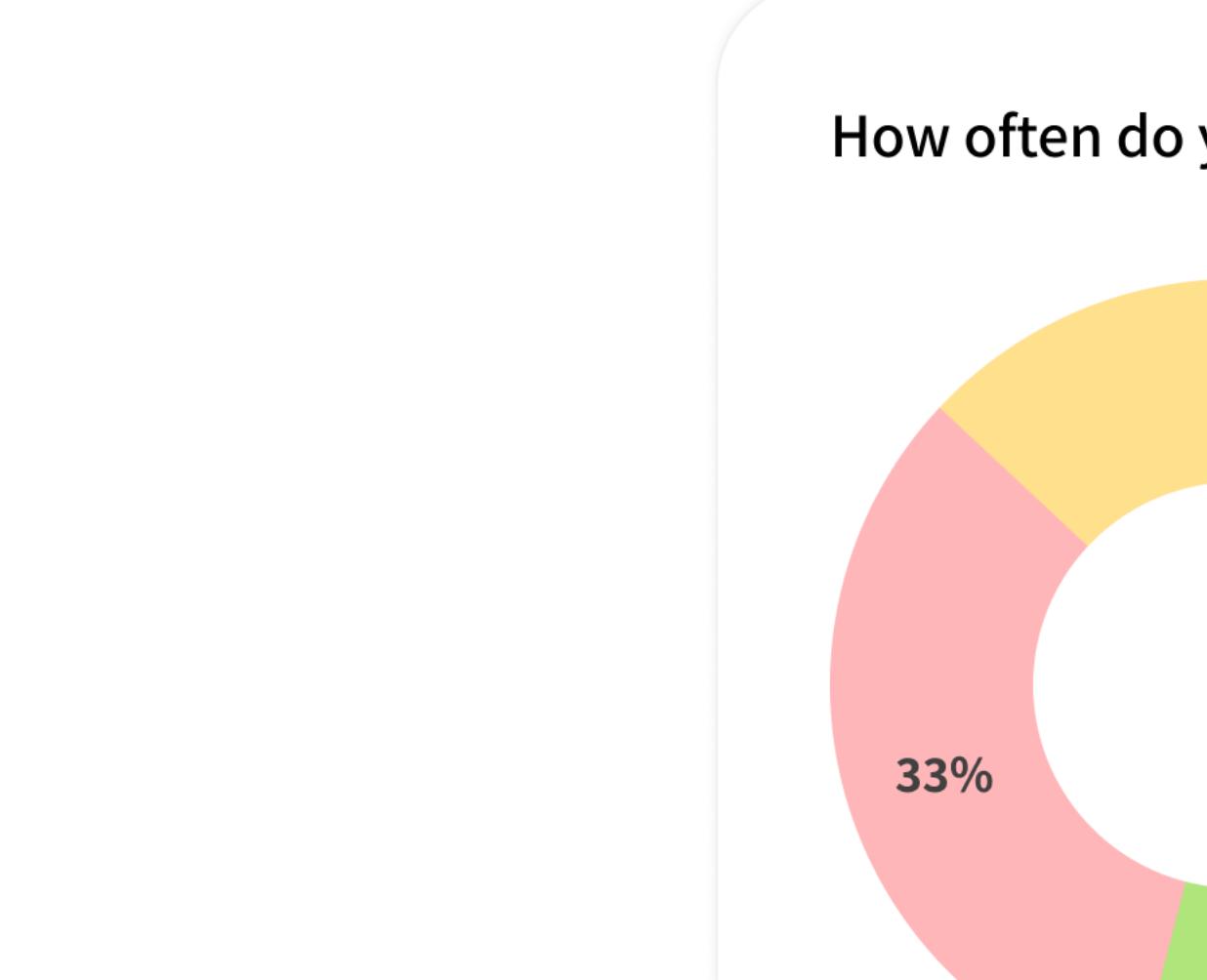
# User Survey

Leveraging insights gathered from our user interviews, we crafted a set of questions and distributed survey forms to a selected group of individuals. This strategic approach enabled us to maintain our focus on the defined problem statement, eliminating potential distractions. In total, we collected **30 responses**, further enriching our understanding of the user perspective.

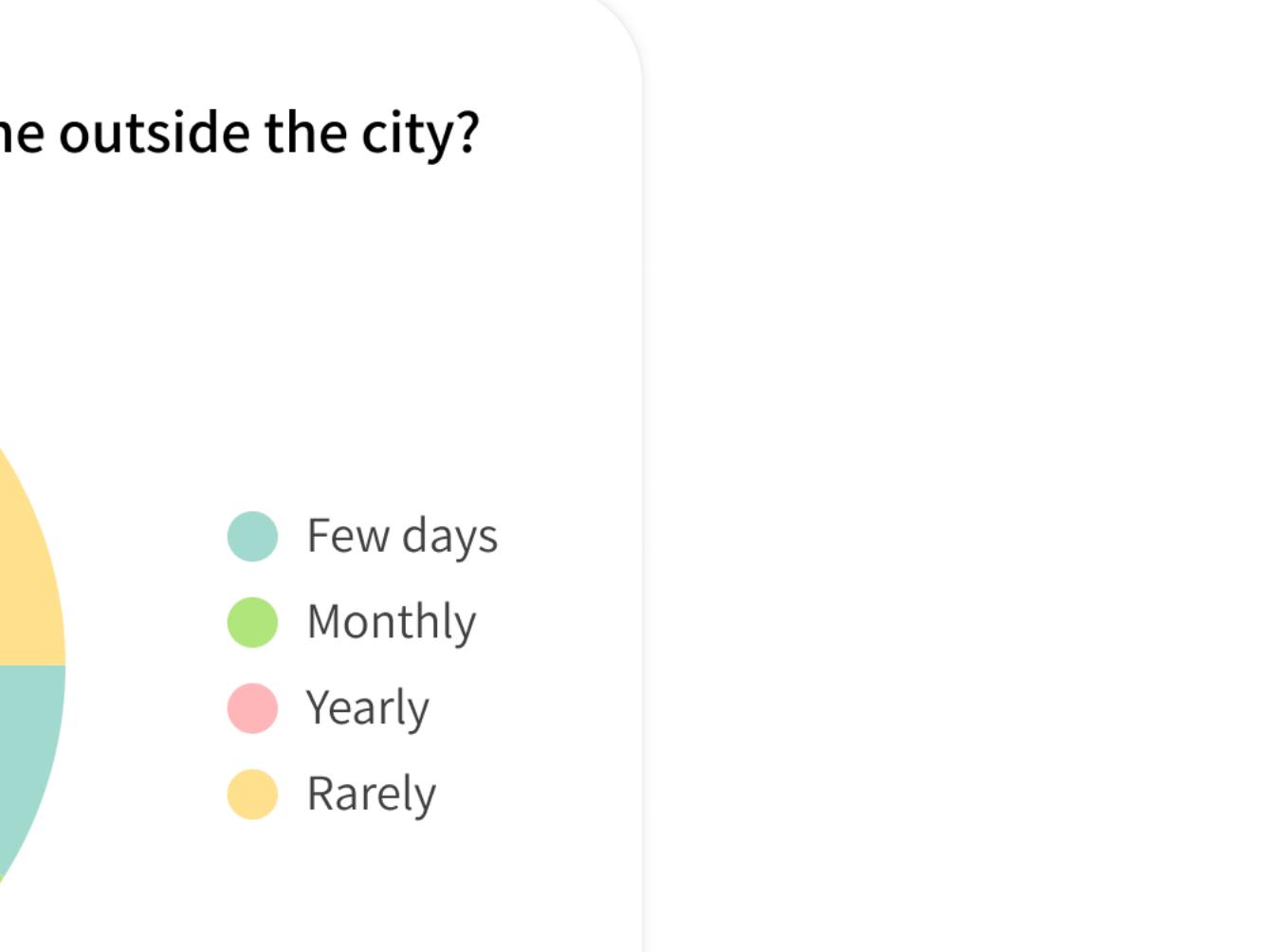
## Local mode of transport?



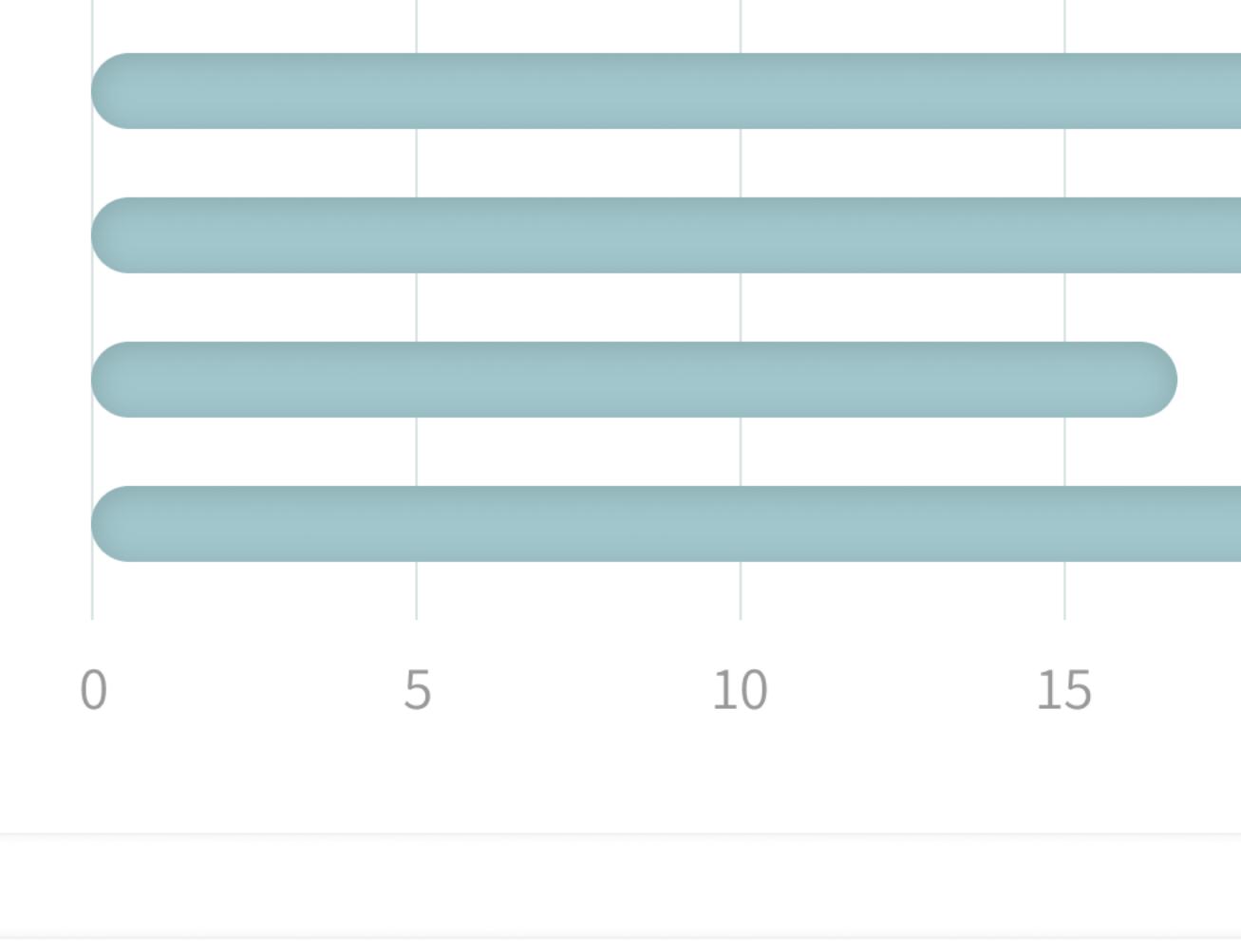
## Do you get assistance while using local transport?



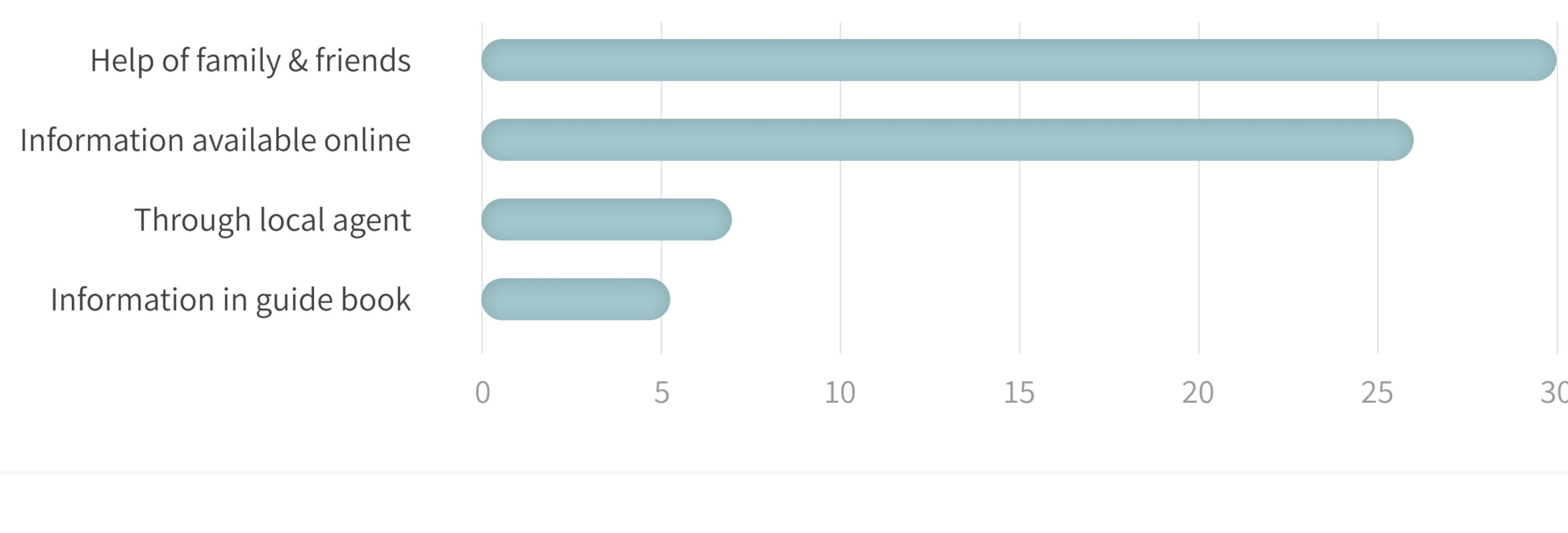
## How often do you travel outside the city?



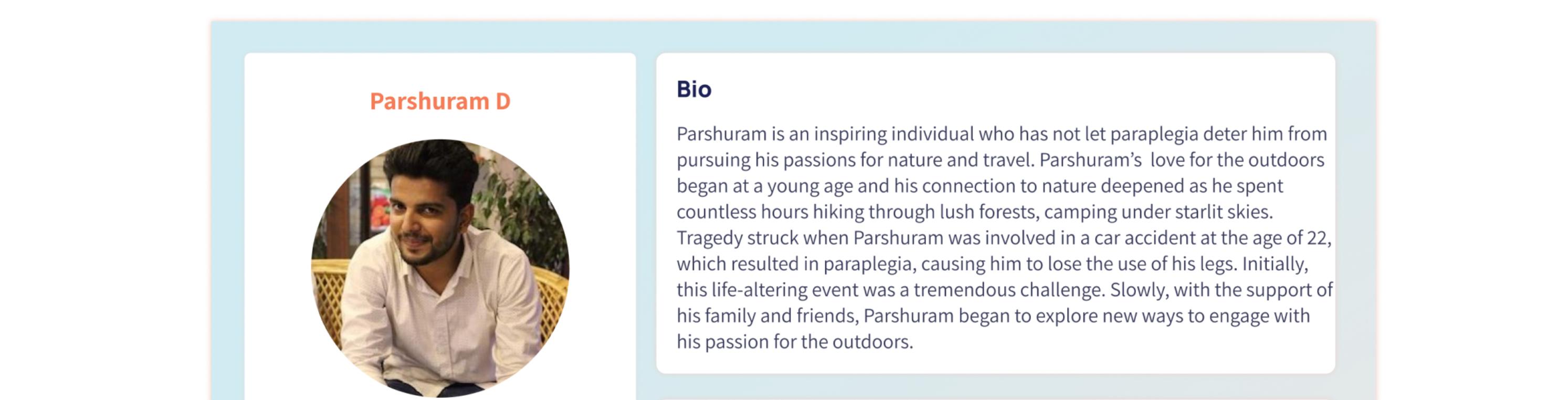
## How often do you travel alone outside the city?



## What issues do you usually face while travelling?



## How do you plan your travel & accommodation?



# Persona

# User Persona

The user persona is a fictional representation of my ideal customer. Creating user persona helped me understand my users' needs, experiences, behaviors and goals. It helped me step out of myself and recognize that different people have different needs and expectations according to their abilities.

Personas made the design task at hand less complex, guided my ideation processes, and helped me to achieve the goal of creating a good user experience for my target user group.

**Parshuram D**

**Bio**  
Parshuram is an inspiring individual who has not let paraplegia deter him from pursuing his passions for nature and travel. Parshuram's love for the outdoors began at a young age and his connection to nature deepened as he spent countless hours hiking through lush forests, camping under starlit skies. Tragedy struck when Parshuram was involved in a car accident at the age of 22, which resulted in paraplegia, causing him to lose the use of his legs. Initially, this life-altering event was a tremendous challenge. Slowly, with the support of his family and friends, Parshuram began to explore new ways to engage with his passion for the outdoors.

**Goals**

- Regaining independent mobility
- Finding wheelchair-friendly destinations
- Getting proper assistance while travelling

**Frustrations**

- Small & inaccessible washrooms
- Inadequate information about ramps and elevators
- Lack of assistance while boarding-deboarding train/bus

**Motivations**

- Getting out of routine & change of environment
- Joy of exploring new places & meeting like-minded people
- Regaining self-confidence

**What I can do**

- Can cook and do household chores
- Can complete daily self-care tasks
- Can use accessible washroom by myself
- Can move around home, neighborhood & accessible locations

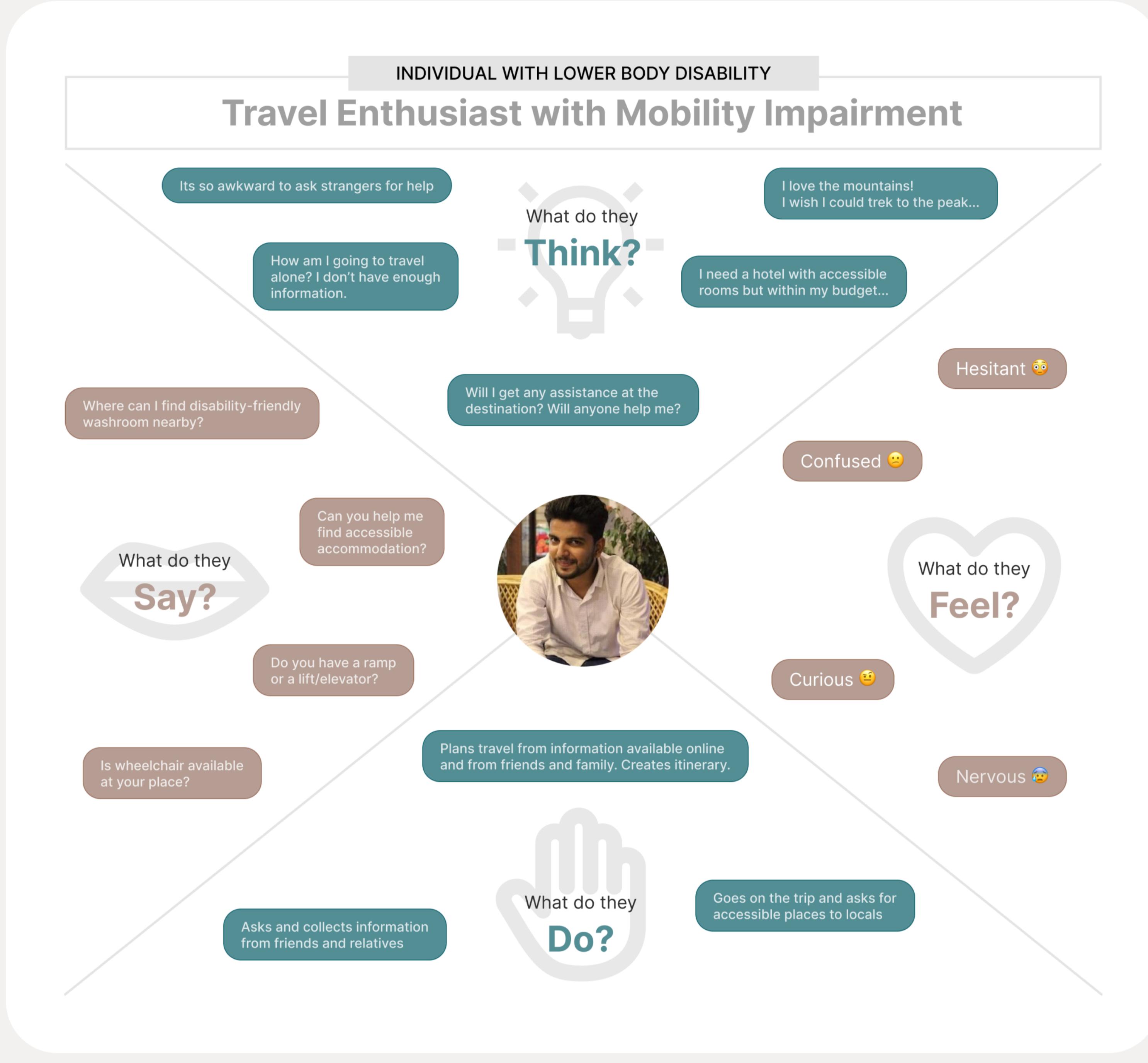
**What I can NOT do**

- Can not drive a vehicle
- Can not board & de-board auto, car, train
- Can not carry heavy objects; specially luggage
- Can not climb or reach out to high cabinets

## Empathy Map

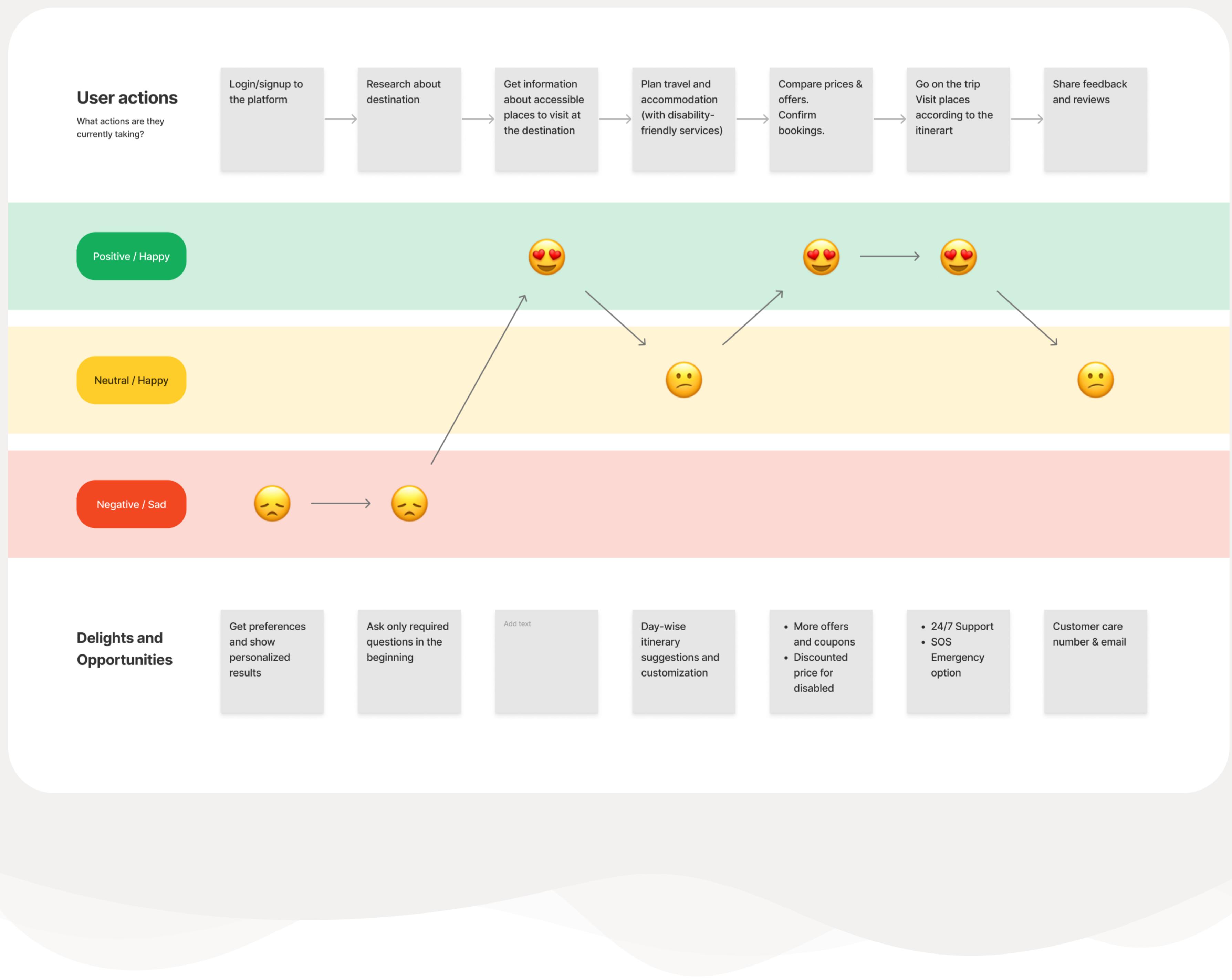
# Affinity Mapping

Empathy mapping helps in UX research by allowing designers to gain a deeper understanding of users' thoughts, feelings, and needs. Empathy mapping encouraged me to see the world from the user's perspective, fostering empathy for their experiences. It drives user-centered design by focusing on user emotions and motivations, resulting in more effective and satisfying user experiences.



## Customer Journey

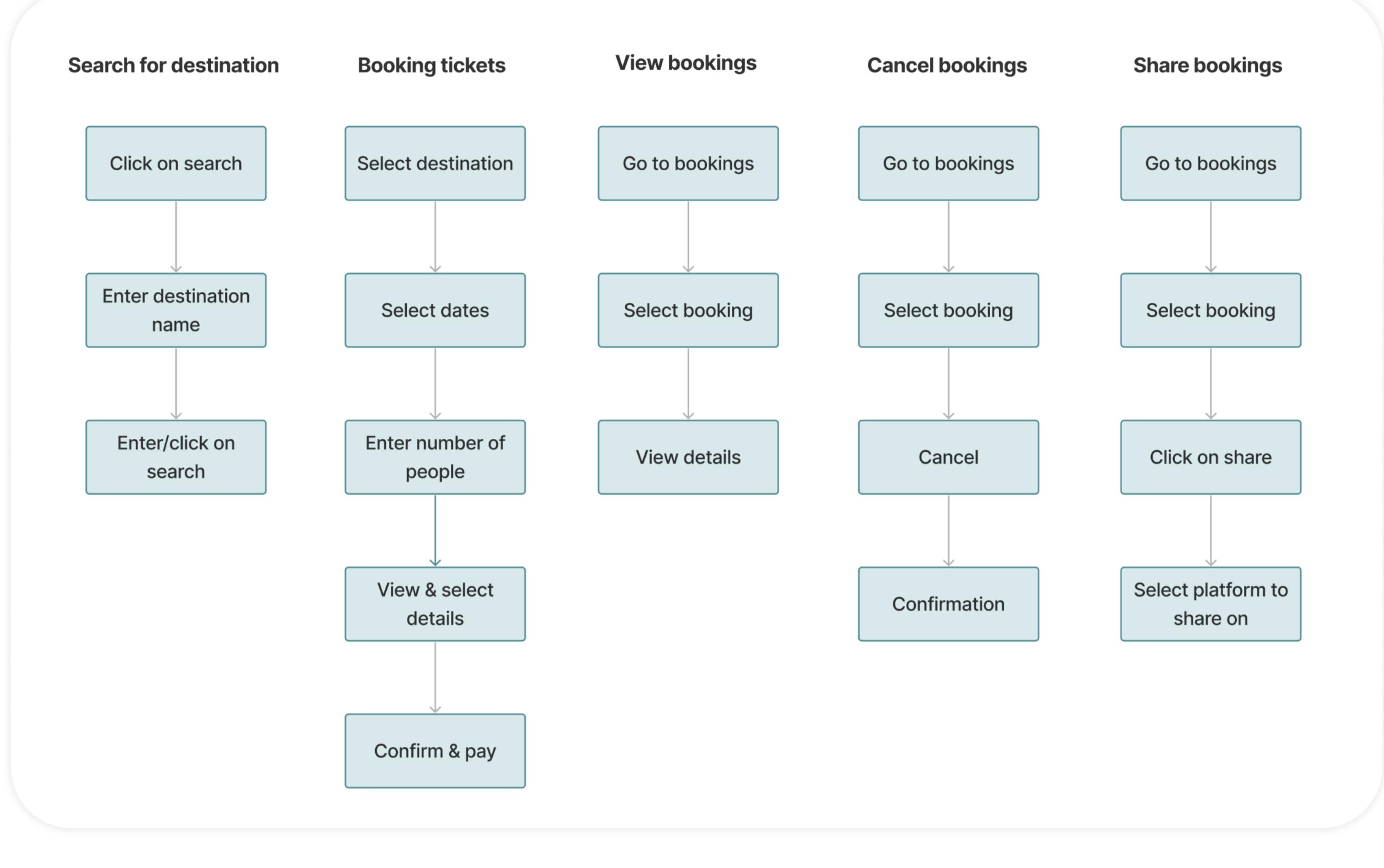
Journey map provides a visual representation of the user's entire experience, from their initial touchpoints with a product or service to the end of their interaction. Creating a journey map made me put myself in the user's shoes and think from their perspective. These pain points guided my research and design efforts to address and resolve issues effectively. Moreover, journey map helped me identify opportunities for enhancing the user experience, such as adding new features or streamlining processes.



# Task Flow

# Task Flow

Task flows aid in UX research by providing a structured view of the steps users take to complete specific tasks within MobiMate application. By mapping out the tasks, I streamlined processes, which helped me reduce friction and improve the overall user experience.



# User Flow

# User Flow

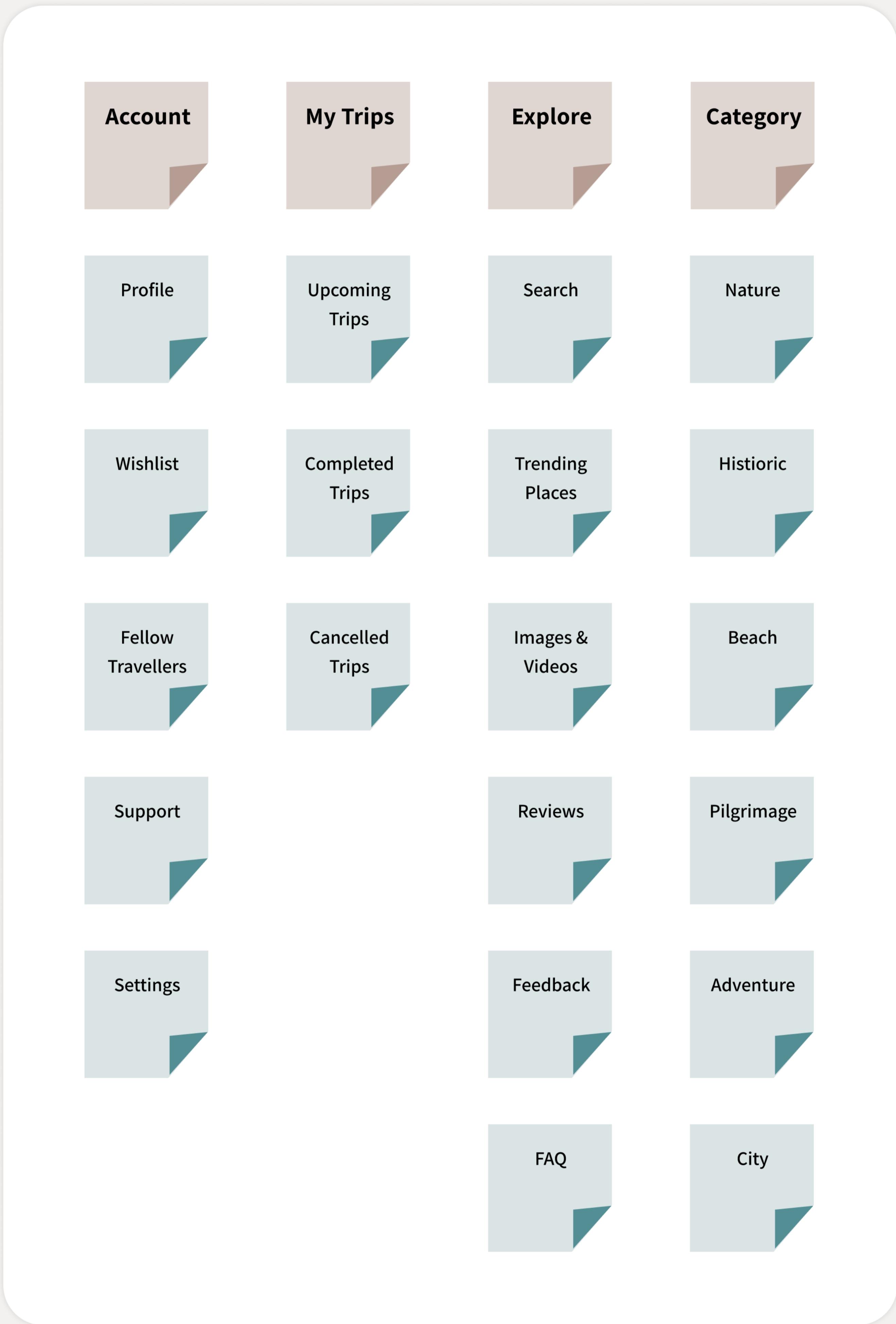
User flows provide a visual representation of how users navigate through a product, showing paths and interactions. User flows serve as a framework for usability testing and iterative design, allowing you to refine the user experience based on real user feedback and behavior.



## Cards Sorting

# Cards Sorting

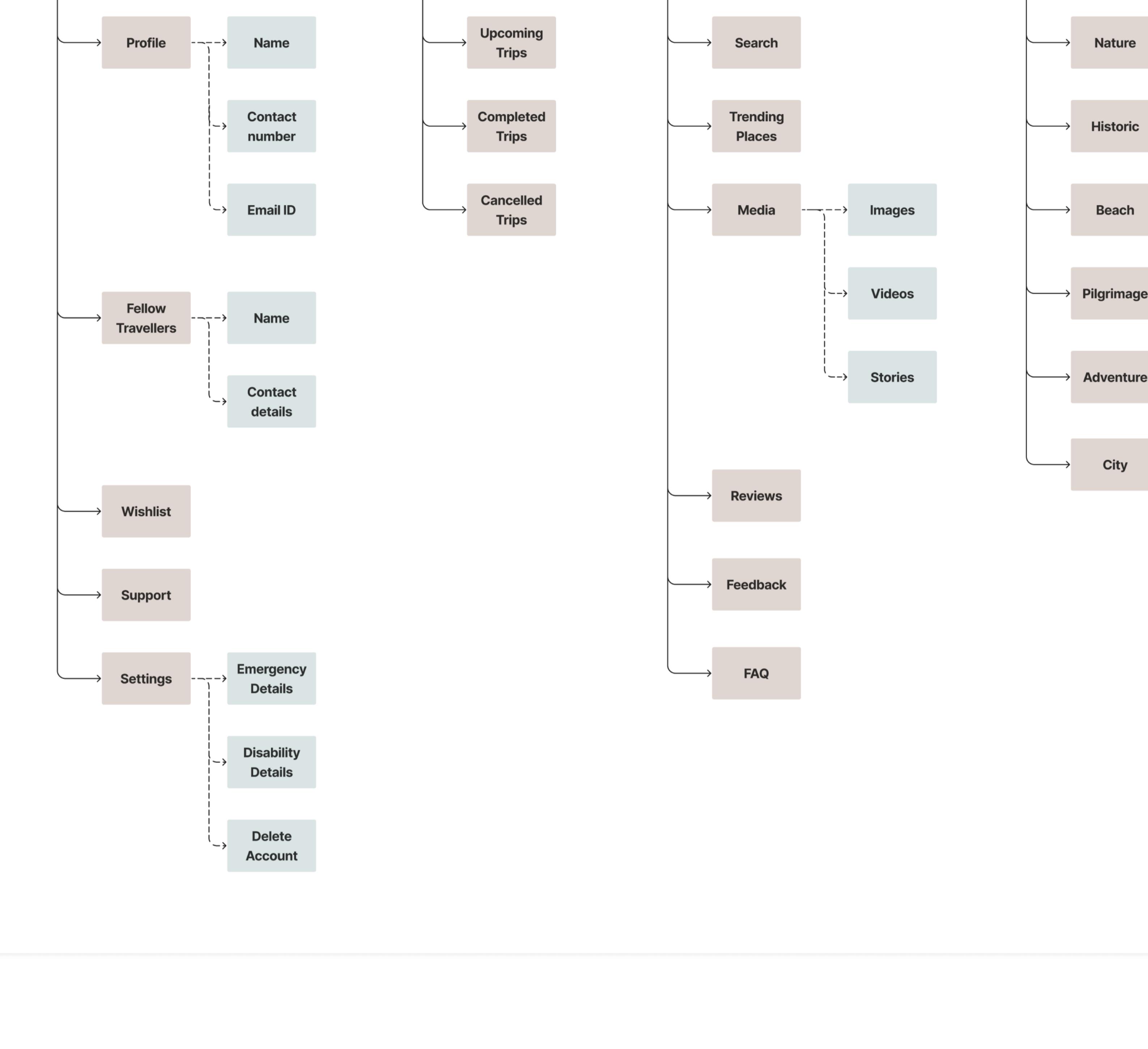
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# Information Architecture

# UX Blueprint

Information architecture (IA) plays a crucial role in UX design by organizing and structuring information in a way that enhances the user experience. IA creates a clear and organized structure for information. It ensures that users can easily find what they're looking for, reducing confusion and frustration. By organizing information logically, IA reduces the cognitive load on users, making it easier for them to understand the system and find what they need.



# Sketched Wireframe

Sketched wireframes aid in UX research by providing quick, low-fidelity visual representations of design concepts. Sketched wireframes are easy to modify, facilitating iterative design and continuous improvement based on user feedback and research findings. They enable early testing and feedback, allowing you to identify and address potential issues before investing heavily in development.



# High-fidelity Wireframes

Digital wireframes assist in UX research by providing a structured, digital representation of a user interface. Digital wireframes offer a clearer and more detailed representation of the interface's layout, structure, and content.



I've designed UI screens for iOS and Android platforms along with the marketing website. Take a look!

*Thank you*

for scrolling till here!

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