



PIXELS

| IX-046

# ECO CITY

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# Problem Definition and Analysis

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Vehicle emissions are a major contributor to environmental pollution, leading to poor air quality, adverse health effects, and contributing to global climate change. According to the World Health Organization, air pollution caused by vehicle emissions is linked to respiratory diseases, cardiovascular problems, and premature death . The widespread use of private vehicles exacerbates these problems, as they emit significant amounts of harmful pollutants like nitrogen oxides (NOx) and particulate matter (PM) into the atmosphere . Despite the availability of more sustainable transportation options, the reliance on private vehicles continues to rise, intensifying the negative impact on the environment . Addressing the challenges posed by vehicle emissions is crucial for improving public health and mitigating environmental damage.

# Problem Definition and Analysis

The environmental impact of vehicle emissions extends beyond air pollution, contributing significantly to global warming and climate change. The transportation sector is responsible for nearly one-quarter of global carbon dioxide (CO<sub>2</sub>) emissions, with road vehicles accounting for the majority of this output. The Intergovernmental Panel on Climate Change (IPCC) highlights that reducing emissions from the transportation sector is essential to limiting global temperature rise. However, the current trend towards increased private vehicle ownership and usage, particularly in urban areas, poses a significant barrier to achieving these emission reduction goals. This underscores the urgent need for effective strategies to reduce vehicle emissions by promoting alternative transportation methods and encouraging behavioral changes among the public.

# Proposed Solution

We propose a mobile application designed to encourage and reward the use of public transport. The app will require users to scan their public transport travel card during the registration process. Each time the user utilizes their card for travel, the app will automatically collect transportation details, tracking their public transport usage. Based on the frequency and distance of their travels, users will accumulate points within the app. These points can then be redeemed for various rewards, such as StarLink packages and other exclusive coupons. This system not only incentivizes the use of public transport but also fosters a more sustainable lifestyle by reducing reliance on private vehicles, thereby contributing to lower vehicle emissions and a cleaner environment.

# User Personas

## Public Transport Commuters

- Individuals who regularly use public transportation for their daily commutes and are interested in earning rewards for their travel habits.

## Public Transport Authorities

- Entities responsible for managing public transport systems, interested in promoting the use of public transportation and supporting the app to encourage more ridership.

## Businesses and Partners

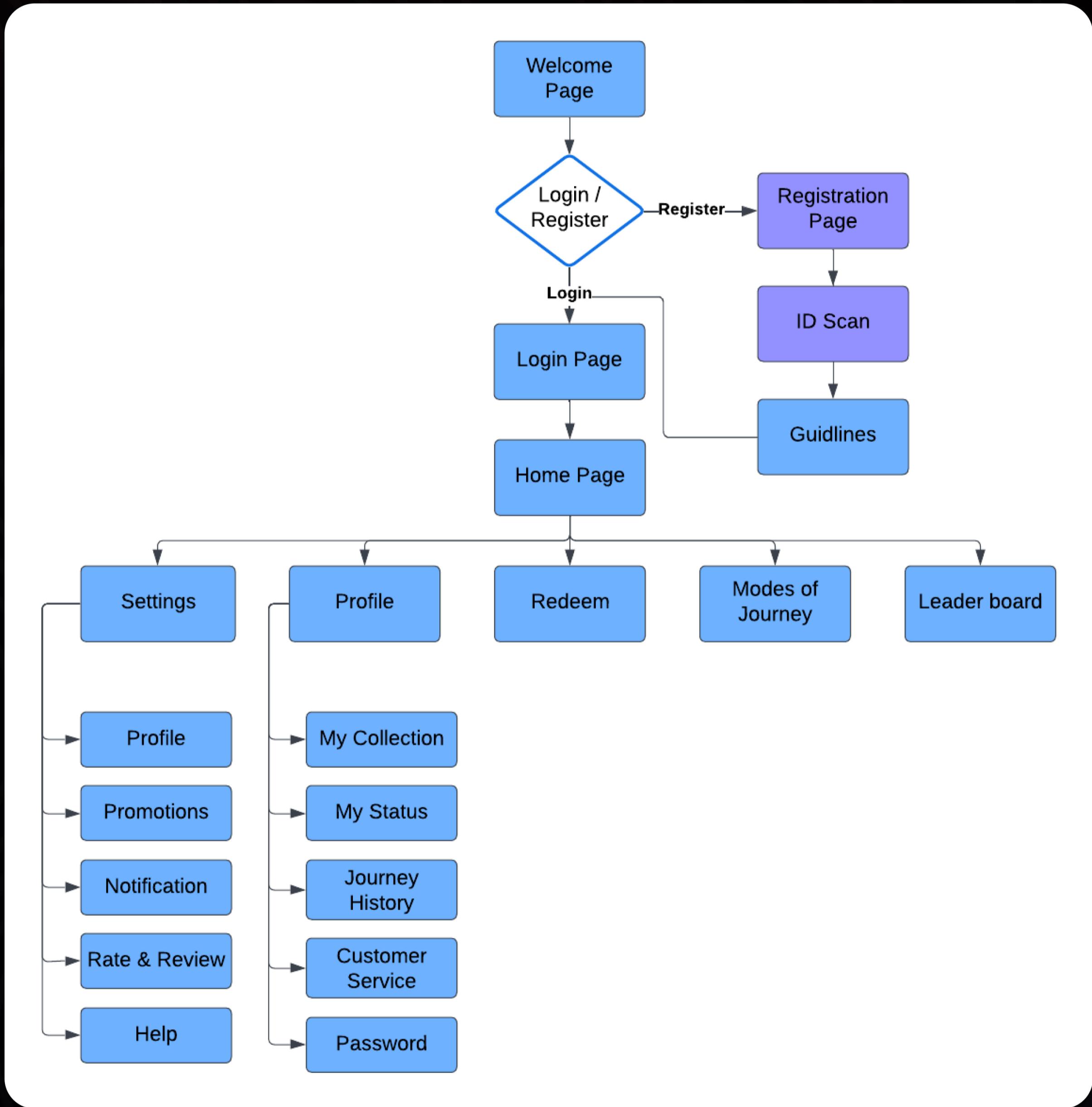
- Companies and organizations that partner with the app to offer rewards, discounts, or promotions to users who accumulate points through public transport usage.

# User Journey Map

## JOURNEY MAP

	AWARENESS	CONSIDERATION	PURCHASE	SERVICE	LOYALTY
CUSTOMER ACTIONS	Discovering the app from Social media ads, App store, Play Store recommendations	downloading and using the app, researching its benefits and features.	The user downloads the app, registers, and links their travel card.	Using the App Regularly	Continued Usage
TOUCH POINTS	App Store Play Store Social Medias	App Store Listing Play Store Listing	App download App Launch Registration and app launch Interactions with key features of the app	In-App Notifications Reward Redemption User Feedback	Personalized Offers Community Engagement
CUSTOMER EXPERIENCE					
PAIN POINTS	Difficulty in finding relevant information about the app.	Concerns about the app's benefit comparing to other similar apps in the market	lengthy or unengaging tutorial can lead to user disinterest.	Notifications may become overwhelming or irrelevant.	Offers may feel irrelevant or not valuable to the user.
SOLUTIONS	Providing clear informations about the app functionalities prior to installation	Provide a demo version of the app or a trial period where users can experience the benefits without fully committing.	Design a brief, interactive tutorial with essential information and the option to skip.	Customize notification settings to be relevant and non-intrusive.	Use data-driven insights to personalize offers and make them relevant.

# User Flows



# The Wireframes

Welcome Back!

Email

Password

**Sign in**

or continue with

F G A

New to our app? Signup

Logo

Login

Register

Premium Membership

**Account**

- Profile >
- Password >
- Notifications >

**More**

- Rate & Review >
- Help >

Premium Membership

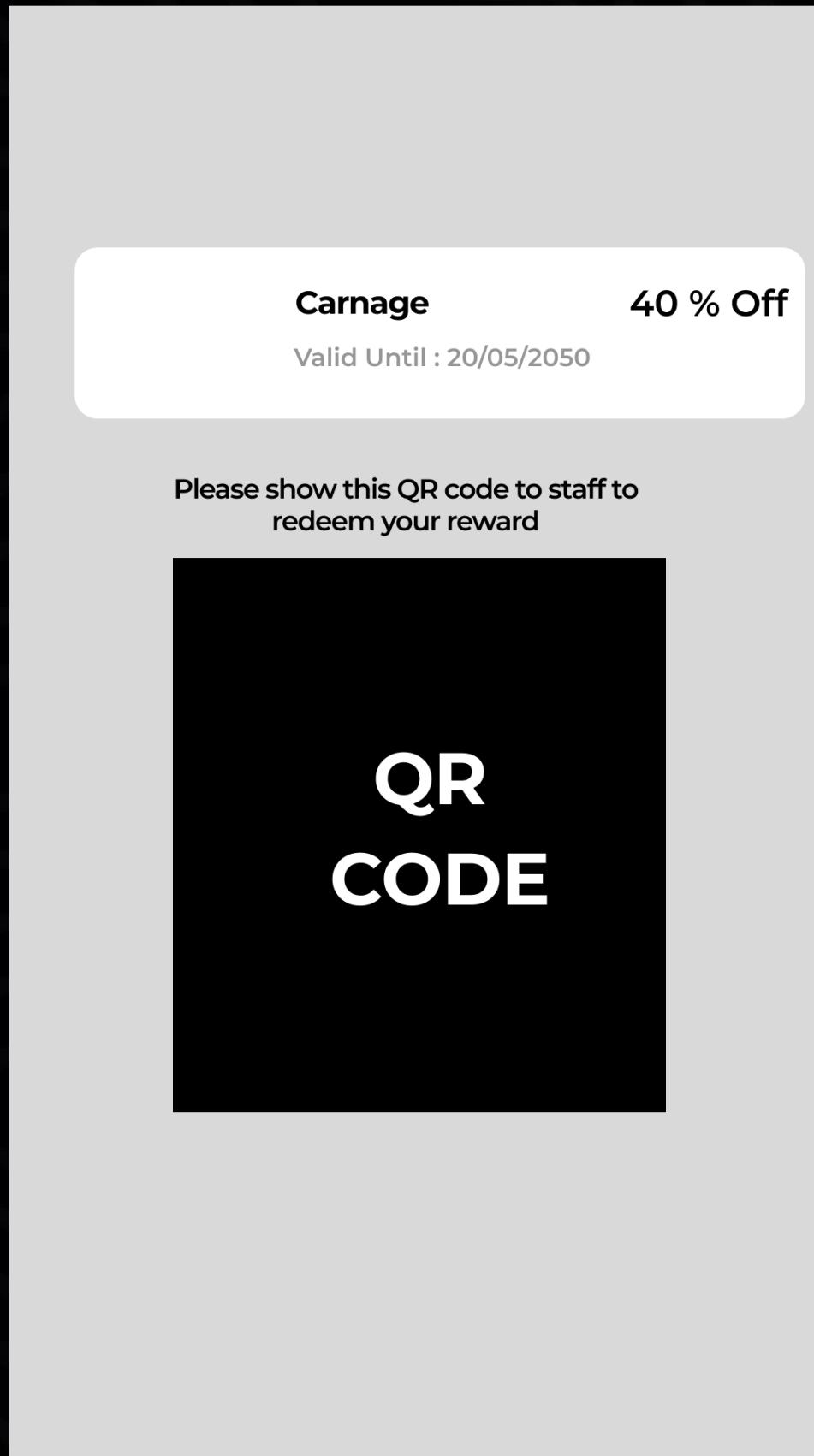
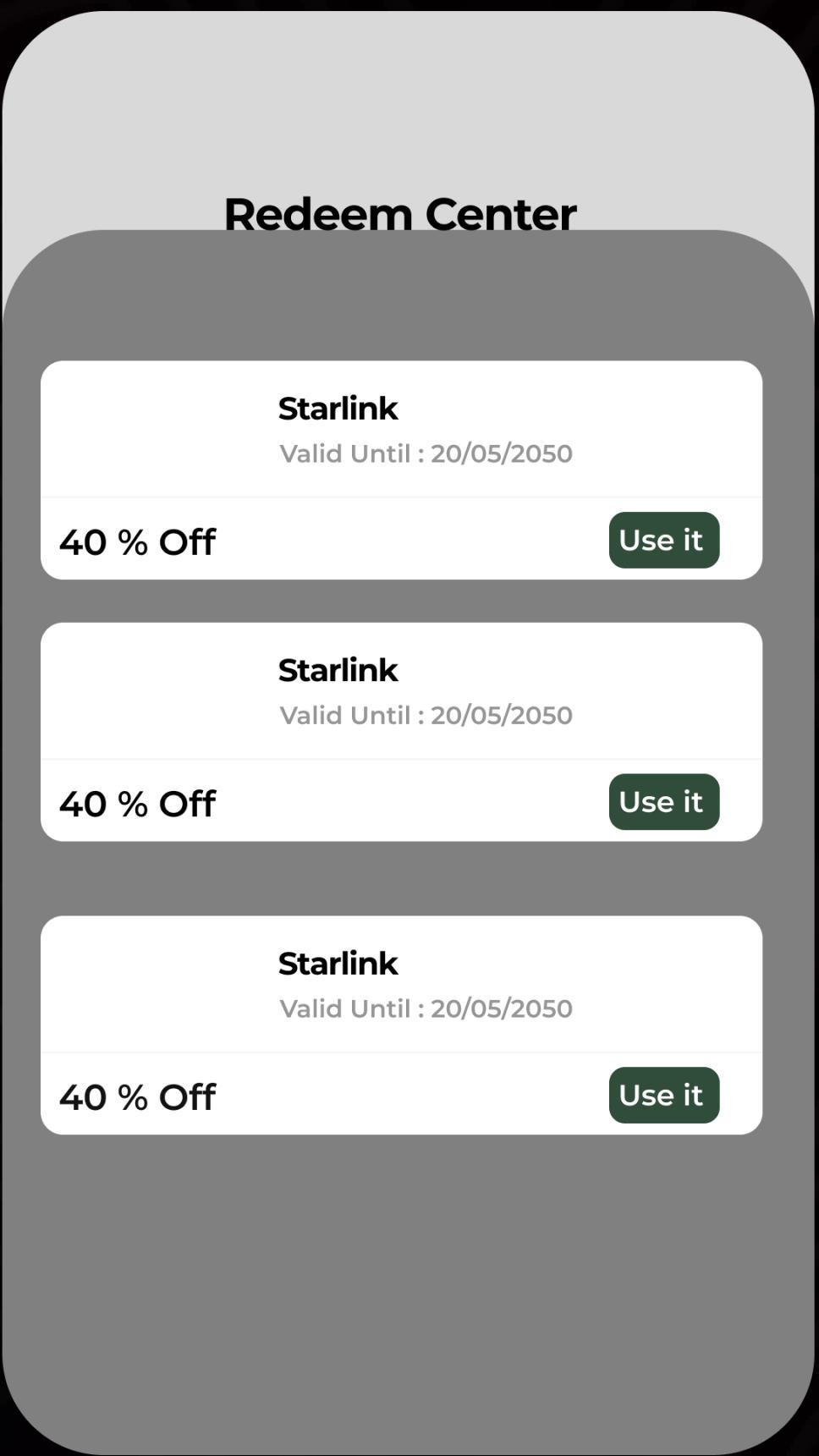
**Account**

- Profile >
- Password >
- Notifications >

**More**

- Rate & Review >
- Help >

# The Wireframes Cont...



# Hi-Fidelity Designs

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## Overall Design

The design of team PIXELS [IX 046\_] is modern, clean, and focused on simplicity. The used colors are mainly neutral to keep things visually appealing without being distracting.

The fonts are easy to read, making the content clear and professional.

There is also a lot of intentional space between elements, which makes the design feel open and comfortable rather than feeling crowded.

## User Experience

The user experience (UX) is designed to be straightforward and easy to navigate. Here are some key aspects,

1. **Simple Navigation** - Menus are clear and easy to understand, so users can quickly find what they need.
2. **Consistent Layout** - The design is the same across all pages, so once users get the hang of it, they don't have to relearn where things are.
3. **Interactive Elements** - Buttons and links are easy to spot and click, making the app more user-friendly.
4. **Responsive Design** - The app works well on any screen size, from desktops to smartphones, ensuring a smooth experience everywhere

## Design Principles or Guidelines that were followed

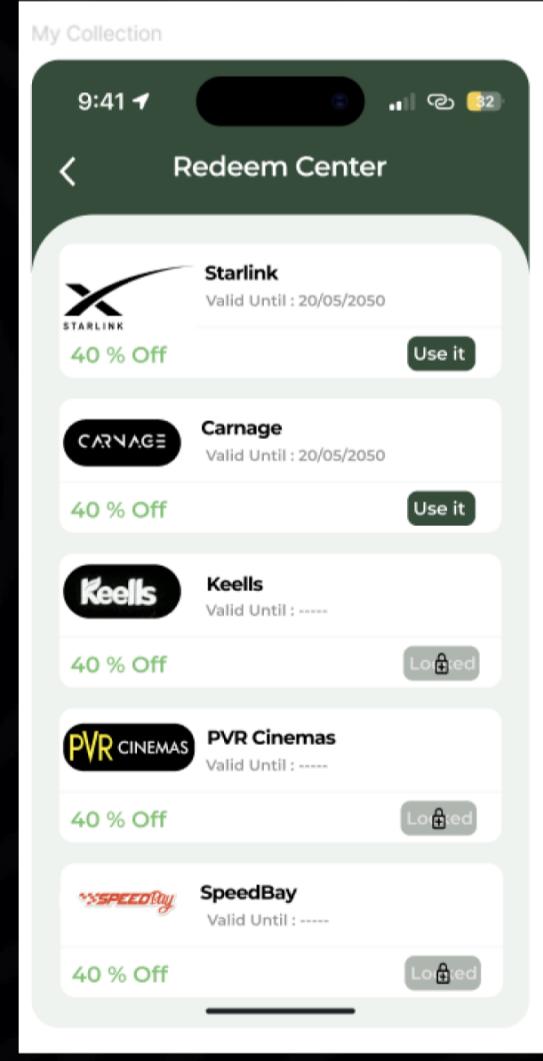
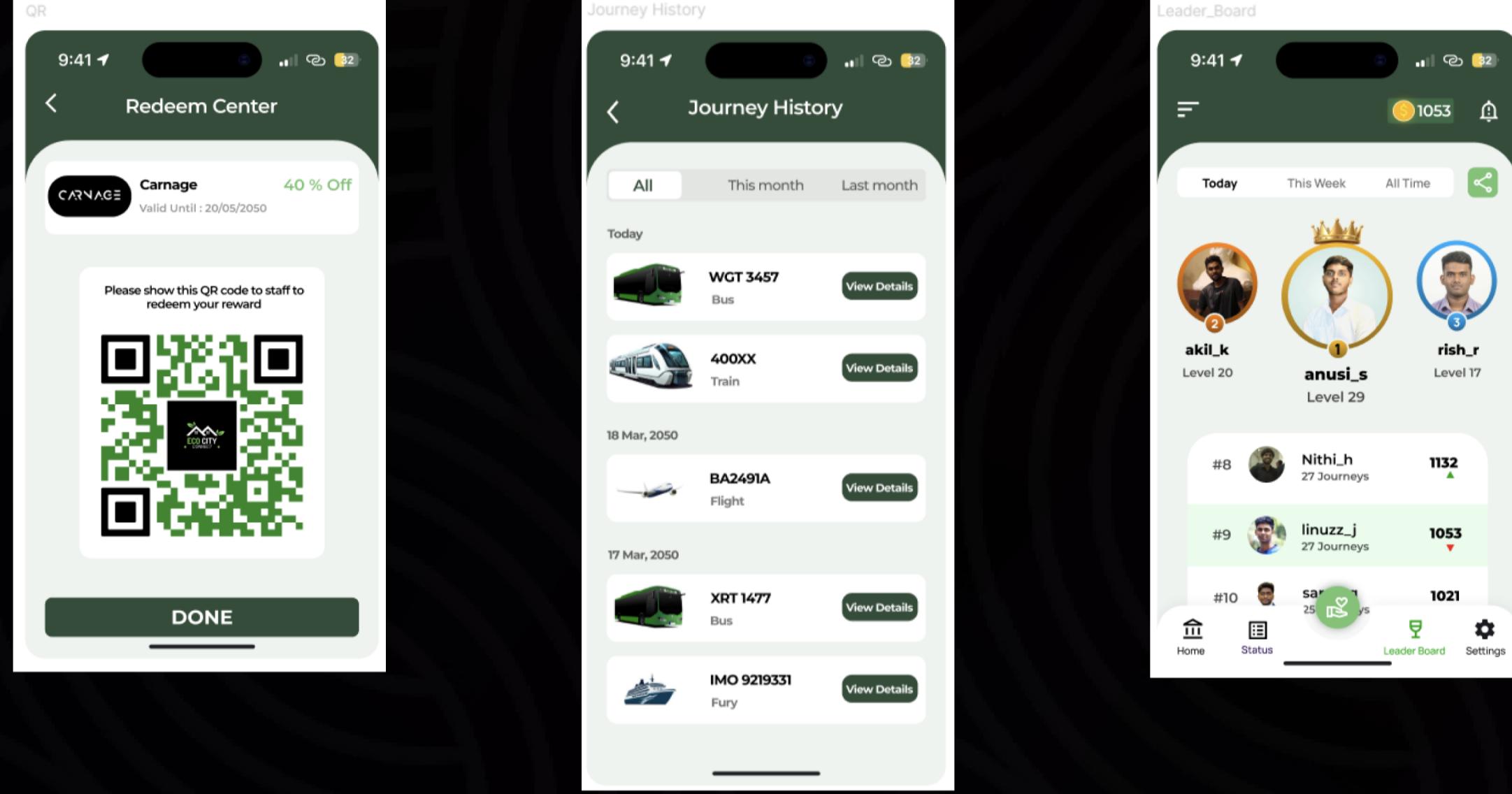
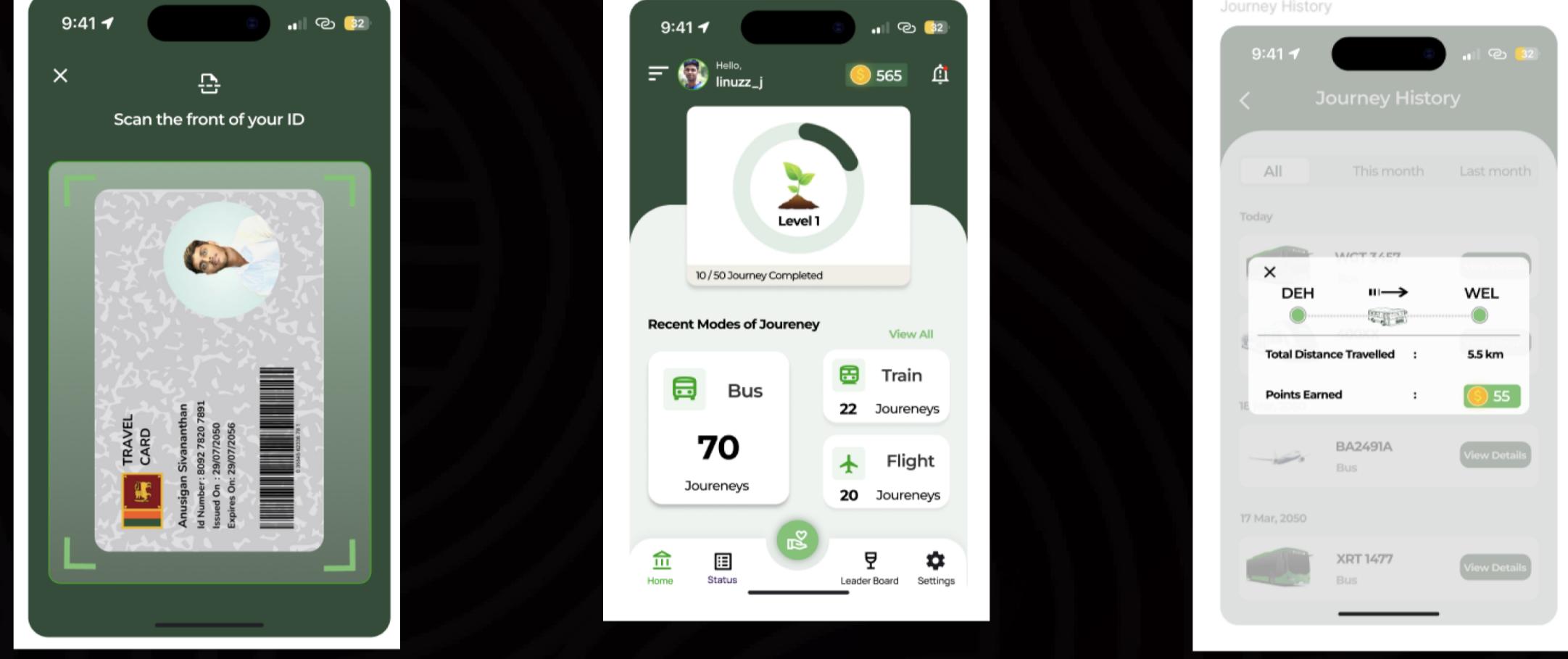
1. **Simplicity** - The design is straightforward, skipping unnecessary parts and highlighting the key elements.
2. **Consistency** - To give the app an attractive appearance, fonts, colors, and spacing are all utilized consistently.
3. **Accessibility** - To make the design user-friendly for everybody, it follows with accessibility standards by providing sufficient contrast between the text and the background.
4. **Response** - When a button is clicked or hovered over, interactive components like buttons react graphically, giving the user an instant response.

## Key Functionality of your solutions

1. **Homepage** - A simple design with a menu that is easy to use and focuses on the key concepts or information.
2. **Interactive Dashboard** - Features that users may interact with to present important information visually appealingly.
3. **Form Interface** - Well organized fields with prompts to assist users in entering data correctly and easily.
4. **Scanning Features** - A customized feature that scans the Travel ID when registering user details

# Hi-Fidelity Designs Cont...

## Examples of Design



# Design Language elements

Style Guide

> Typography

# Aa

Montserrat

Font Weight : Regular / Medium / Bold

> Colour palette

#2F4D38

#72C371

#EDF3EF

#000000

> Links to the Community Resources used

[Https://Www.Figma.Com/Design/DRs7Sw8DwDg3ljjQmHMe8A/Material-Design-Icons-\(Community\)?Node-Id=425-154307&T=XSYgKit0FfDAT2aD-0](https://www.figma.com/design/DRs7Sw8DwDg3ljjQmHMe8A/Material-Design-Icons-(Community)?Node-Id=425-154307&T=XSYgKit0FfDAT2aD-0)

# The Final Prototype

Link for the Prototype attached below:



# Video Submission

[https://drive.google.com/file/d/1\\_Yv\\_DzB\\_bW5B4wKSfRzhg0syuXMkLXaP/view?usp=drive\\_link](https://drive.google.com/file/d/1_Yv_DzB_bW5B4wKSfRzhg0syuXMkLXaP/view?usp=drive_link)



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# Design Beyond Boundaries