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LIND Railways

User Interface for Railway Reservation System

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STUDY REQUIREMENTS

UNDERSTANDING THE PROBLEM

The problem is focused on the absence of efficiency of the railway reservation system. The LIND Railways lack the result of challenges such as the delayed communication of updates in train timings to passengers, hindering the ability to make informed travel decisions. Furthermore, the existing system does not effectively address the different requirements or needs of the passenger, including reservation, billing, and cancellation for various types of bookings. As a result of this fragmentation and the delayed availability of information, railway customers experience inconvenience and express dissatisfaction.

OBJECTIVES

The LIND Railways aims to design, develop, and implement a strong railway reservation system with a centralized railway ticker feature. The system will ensure the communication of train timing updates to passengers enhancing the travel experience. Furthermore, it aims to provide comprehensive reservation, billing and cancellation services to meet the needs or expectation of the passengers across various reservation types. Eventually, improving customer satisfaction and efficiency in railway operation.

2.0 UI Requirements

2.1 Module 1: Ticket Booking

Ticket booking is handful nowadays for most users since it helps most consumers to avail it online, instead of going to ticket booth. Furthermore, some users also reserve for a ticket ahead of date, hence LIND Railways ticket booking user interface consists of:

Ticket Booking page

- Type of Trip

- Type of Class
- Location
- Destination
- Departure Date

2.2 Module 2: Reservation Module

Reservation in ticketing systems is one of the most important features. Every individual's availability is planned especially on these times. Hence, reservation module was provided for our LIND Railways Reservation System. Reservation page consists of:

Reservation page:

- Train Schedules
- Tickets availed
- Pending Tickets
- Train Selection
- Customer Details

2.3 Module 3: Reservation against Cancellation Module

Cancellation in ticketing systems plays an important role in reservation systems since some individual's plan early, although usually there will be last-second conflicts. Hence, cancellation of ticket module was provided for our LIND Railways Reservation System. Cancellation page consists of:

Cancellation page:

- Cancel Ticket option
- Confirmation of Cancellation

2.4 Module 4: Cancellation of Reserved Ticket Module

In part of cancellation in ticketing systems, the option to cancel a reserved ticket is also included in the group's railway reservation system.

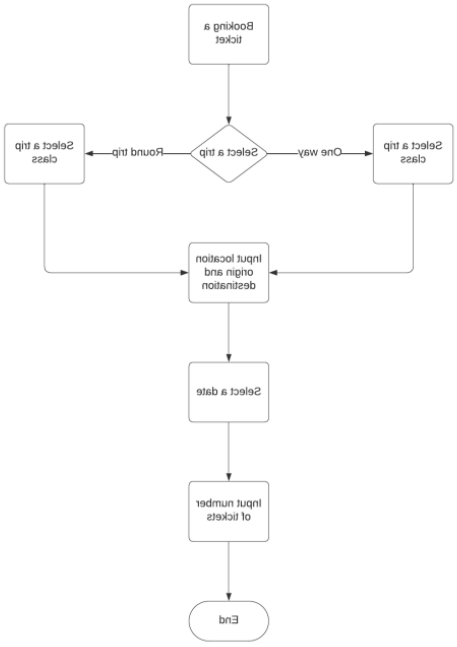
Reserved Ticket Page:

- Cancel Reservation

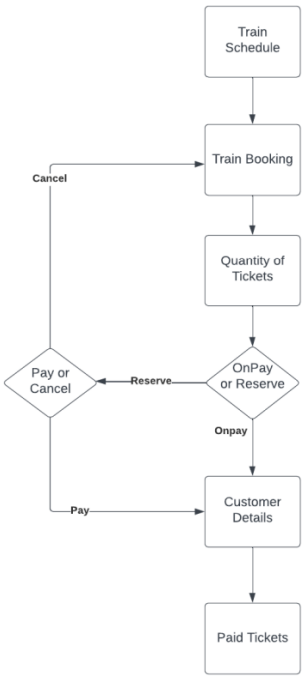
3.0 ANALYSIS DIAGRAM

3.1 Flowchart:

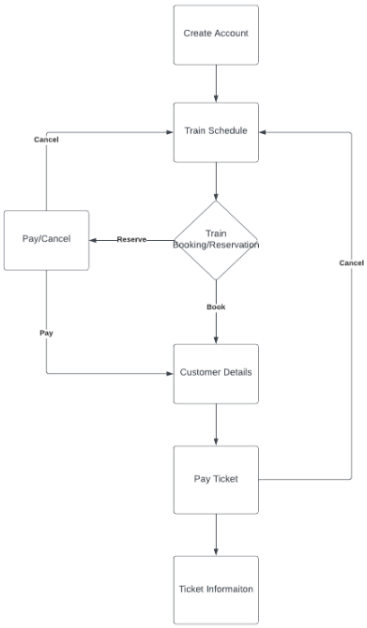
Module 1



Module 2

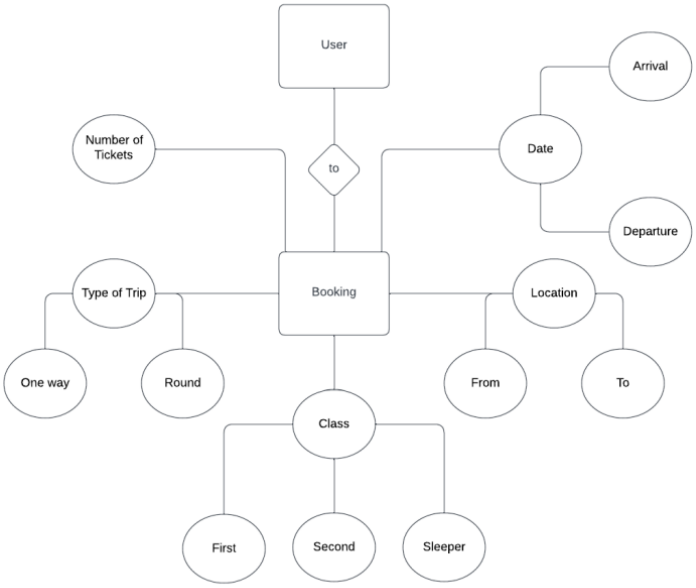


Module 3 & 4

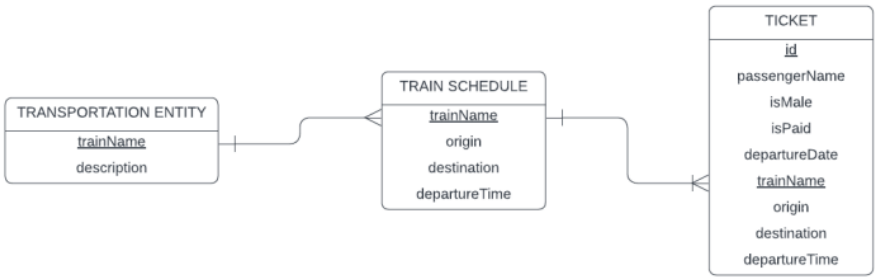


3.2 ERD:

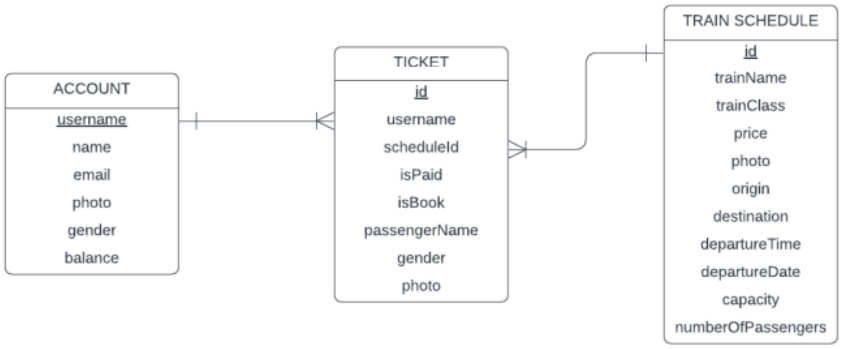
Module 1



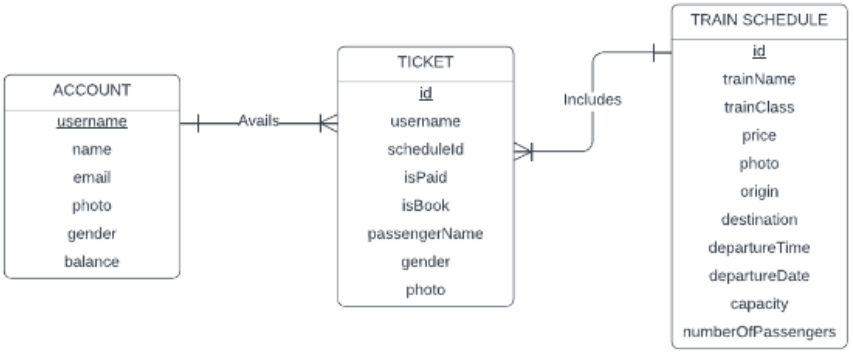
Module 2



Module 3

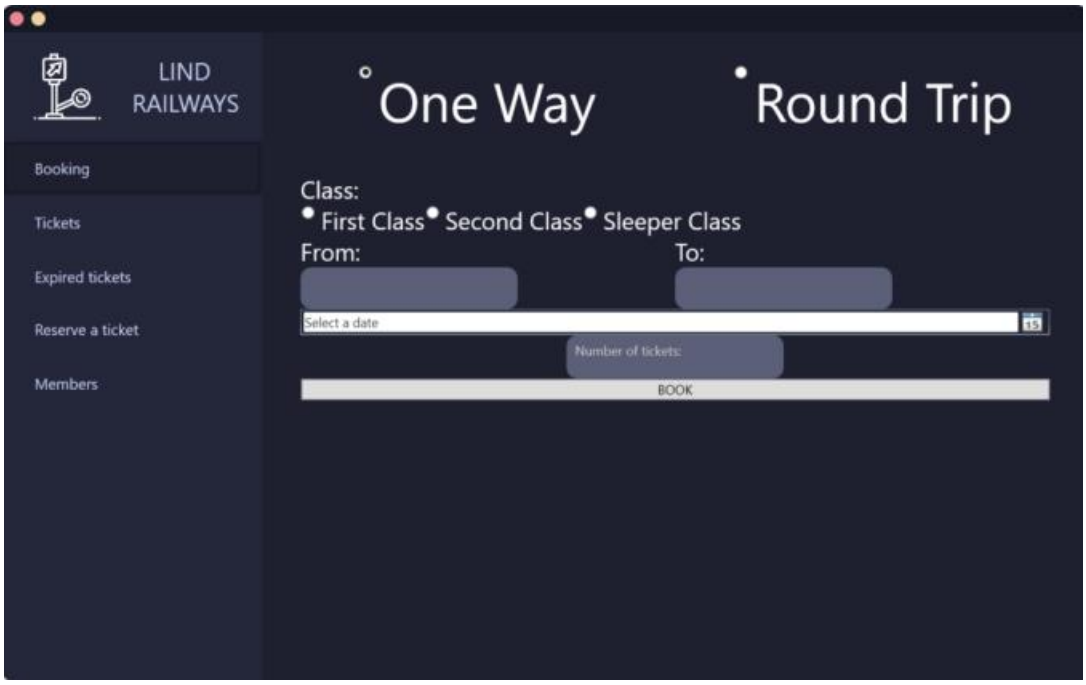


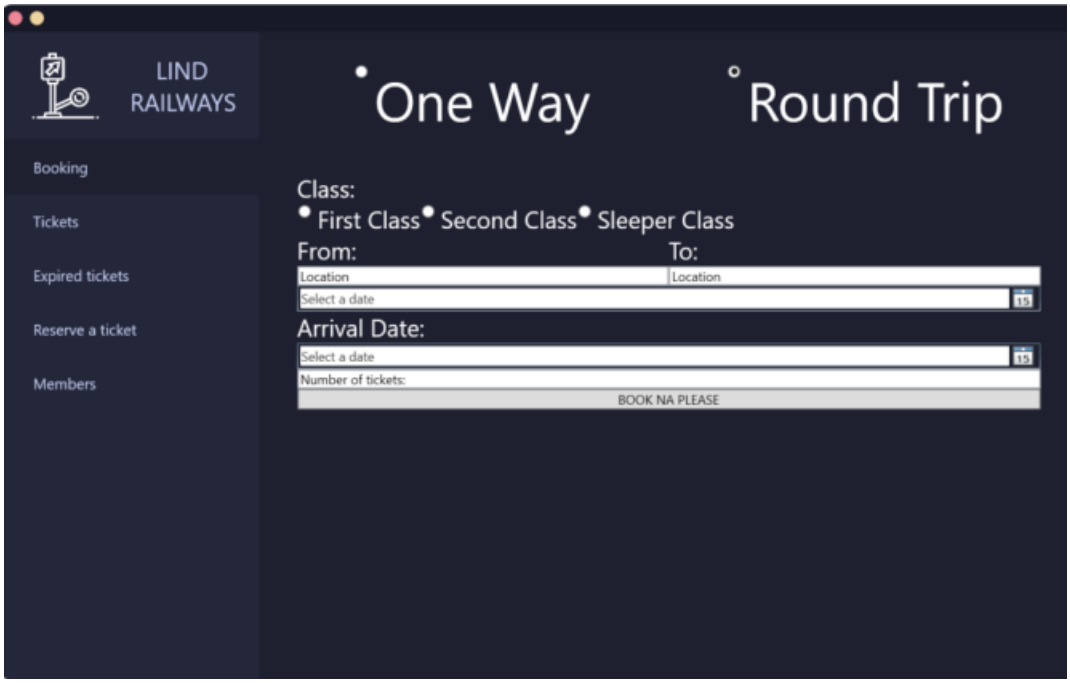
Module 4



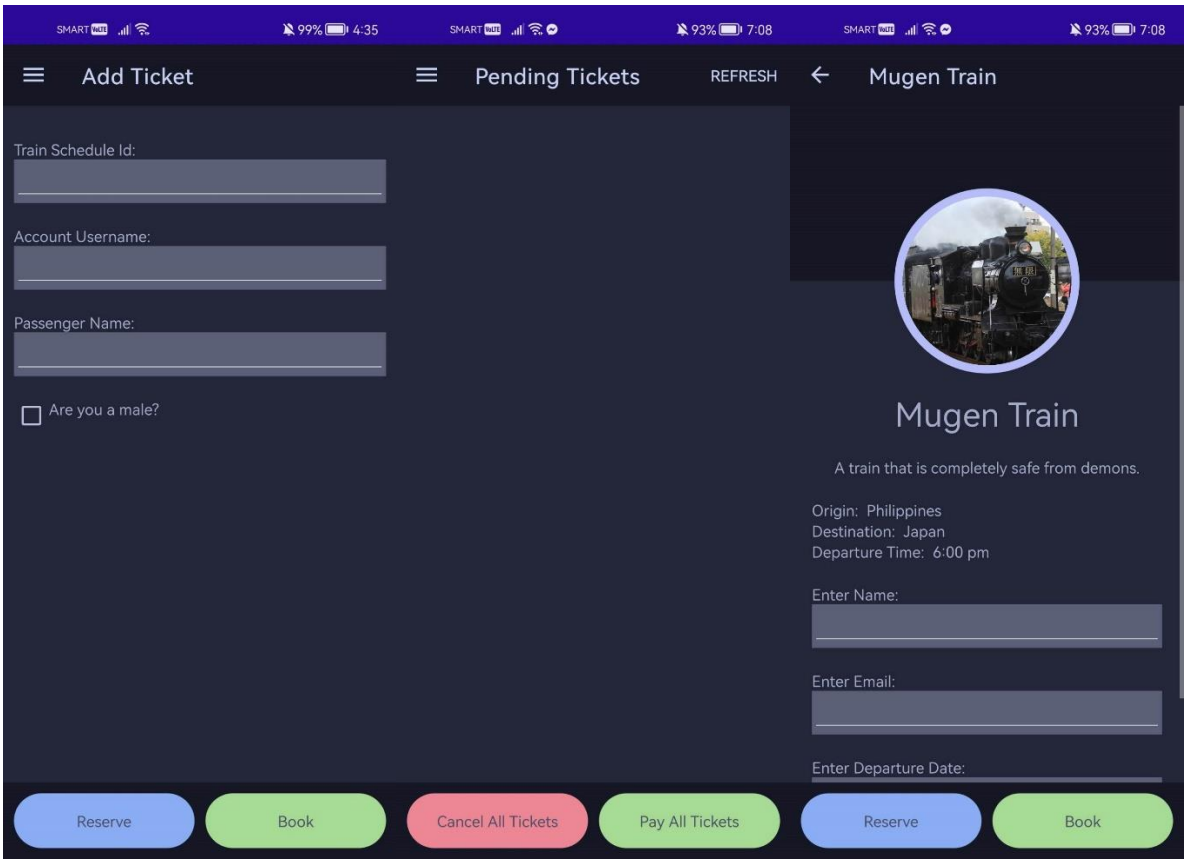
4.0 DESIGN DIAGRAM

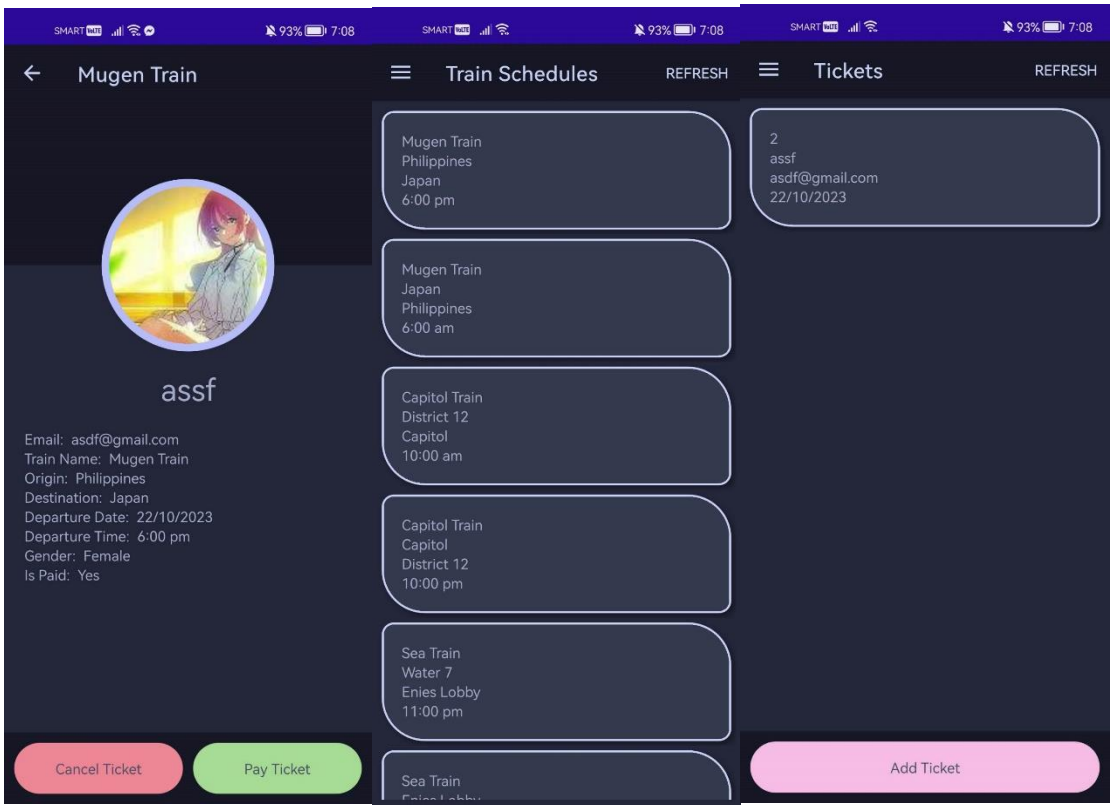
Module 1



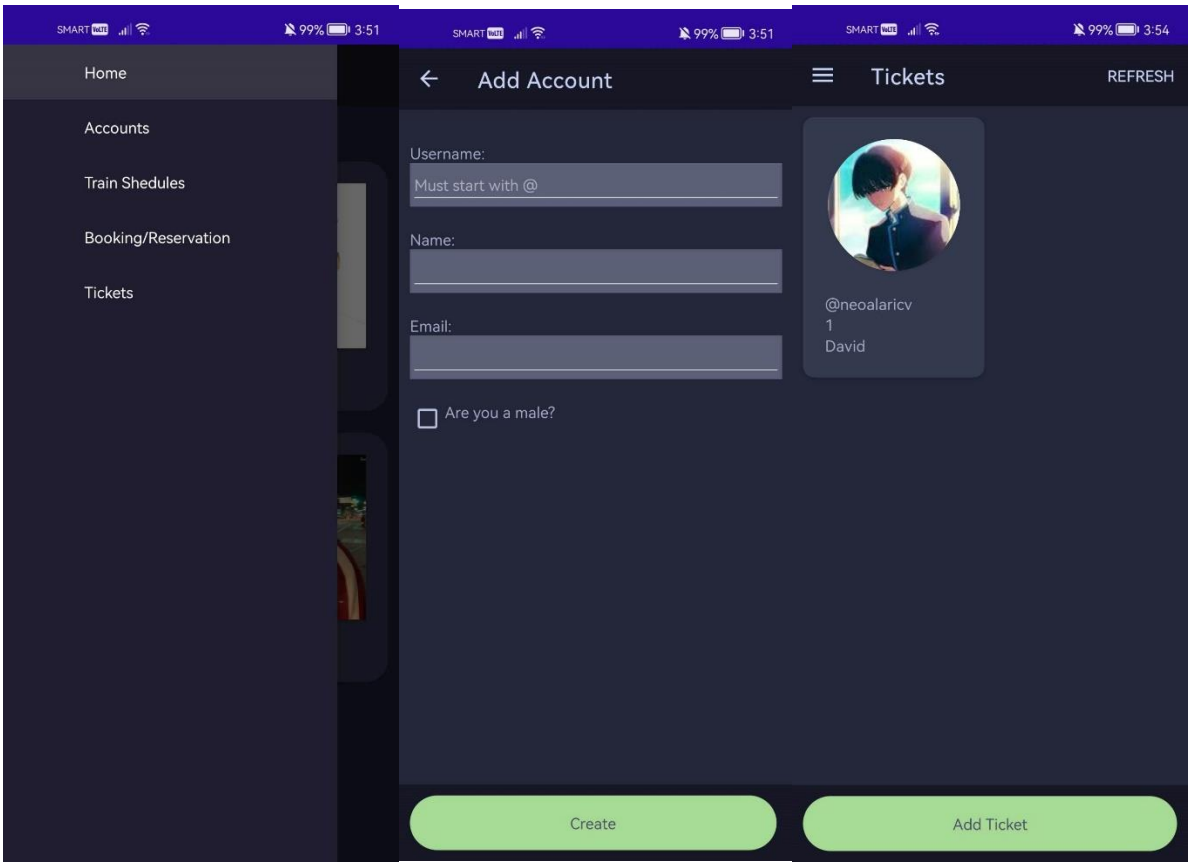


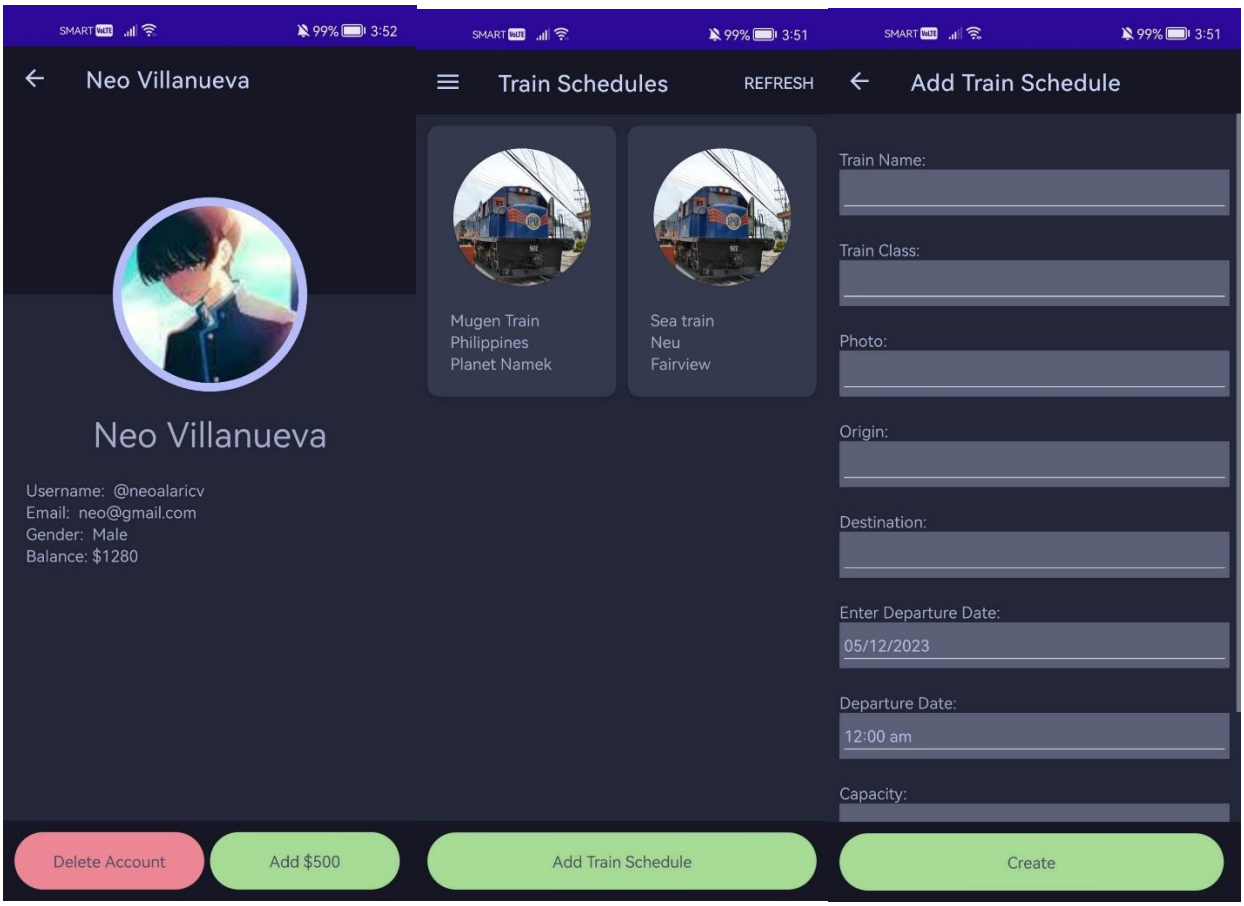
Module 2

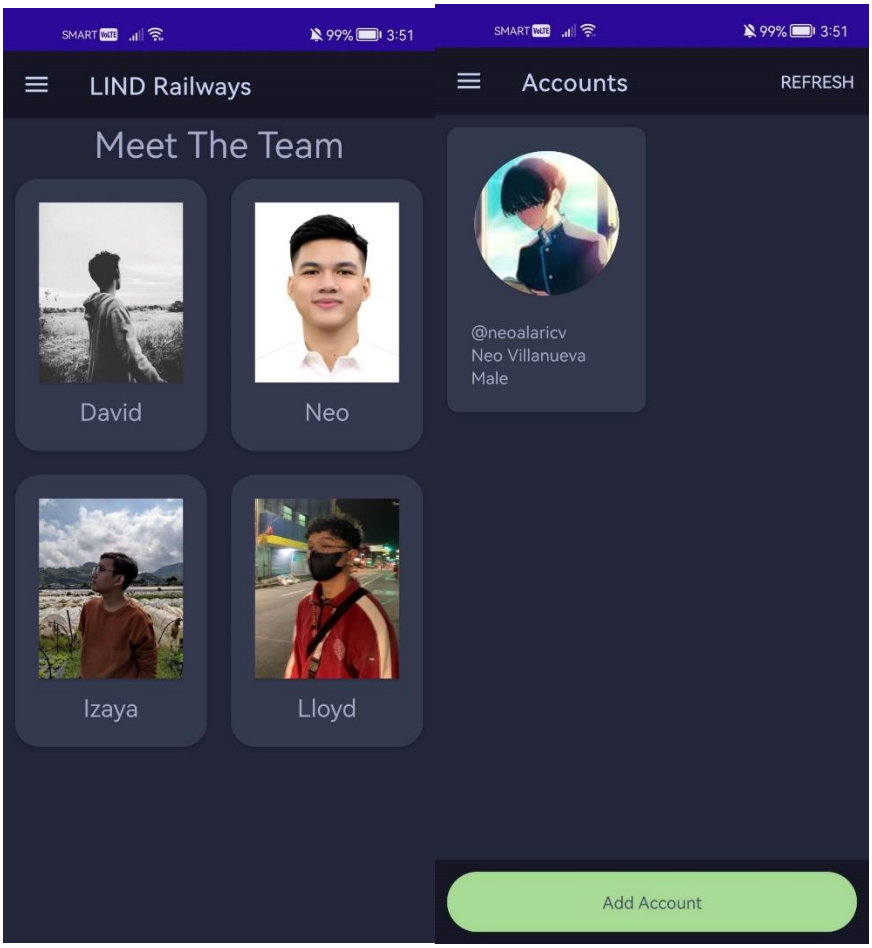

Add Ticket
Train Schedule Id:
Account Username:
Passenger Name:
Are you a male?
Reserve
Book
Pending Tickets
REFRESH
Cancel All Tickets
Pay All Tickets
Mugen Train
Mugen Train
A train that is completely safe from demons.
Origin: Philippines
Destination: Japan
Departure Time: 6:00 pm
Enter Name:
Enter Email:
Enter Departure Date:
Reserve
Book


Mugen Train
assf
Email: asdf@gmail.com
Train Name: Mugen Train
Origin: Philippines
Destination: Japan
Departure Date: 22/10/2023
Departure Time: 6:00 pm
Gender: Female
Is Paid: Yes
Cancel Ticket
Pay Ticket
Train Schedules
REFRESH
Mugen Train
Philippines
Japan
6:00 pm
Mugen Train
Japan
Philippines
6:00 am
Capitol Train
District 12
Capitol
10:00 am
Capitol Train
Capitol
District 12
10:00 pm
Sea Train
Water 7
Enies Lobby
11:00 pm
Sea Train
Tickets
REFRESH
2
assf
asdf@gmail.com
22/10/2023
Add Ticket

Module 3 & 4

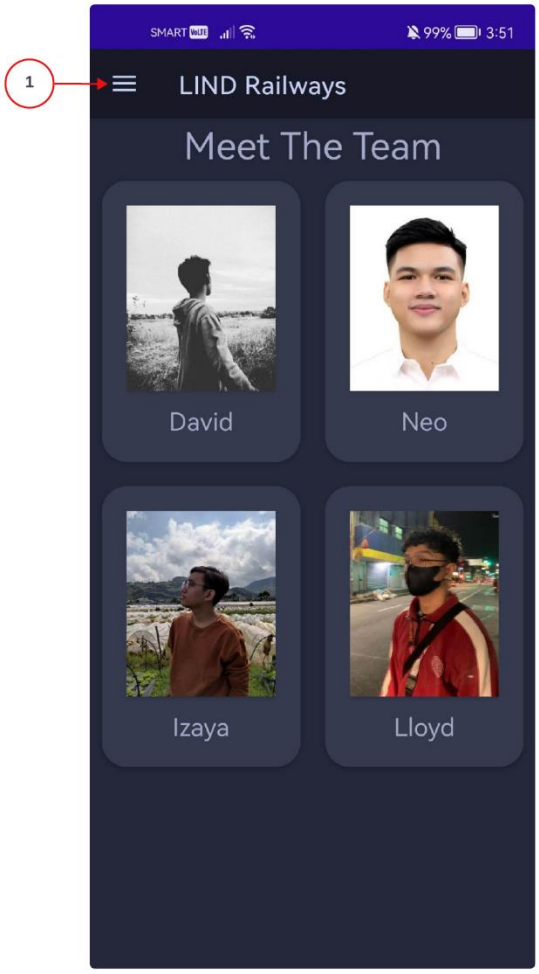

Home
Accounts
Train Shedules
Booking/Reservation
Tickets
Add Account
Username:
Must start with @
Name:
Email:
Are you a male?
Create
Tickets
REFRESH
@neoalaricv
1
David
Add Ticket


Neo Villanueva
Neo Villanueva
Username: @neoalaricv
Email: neo@gmail.com
Gender: Male
Balance: $1280
Delete Account
Add $500
Train Schedules
REFRESH
Mugen Train
Philippines
Planet Namek
Sea train
Neu
Fairview
Add Train Schedule
Add Train Schedule
Train Name:
Train Class:
Photo:
Origin:
Destination:
Enter Departure Date:
05/12/2023
Departure Date:
12:00 am
Capacity:
Create


LIND Railways
Meet The Team
David
Neo
Izaya
Lloyd
Accounts
REFRESH
@neoalaricv
Neo Villanueva
Male
Add Account

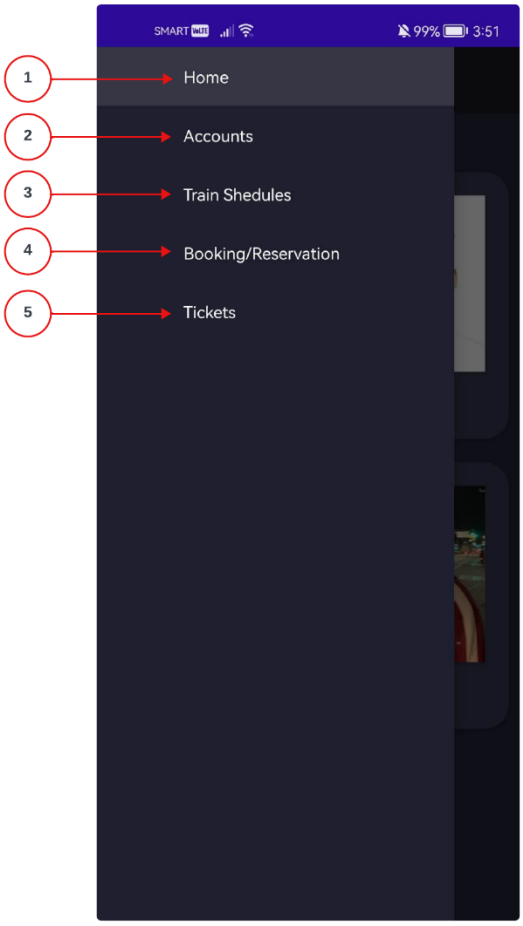
5.0 User Manual

5.1 Home Page



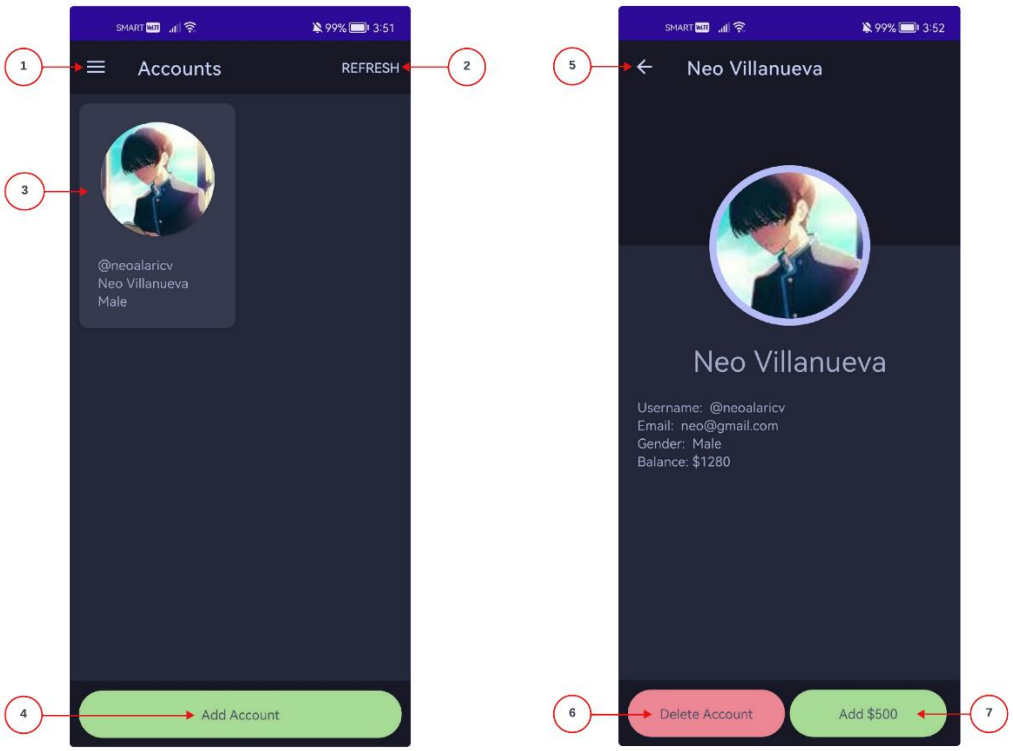
1. Hamburger Icon: Shows the user the main menu.

5.2 Main Menu



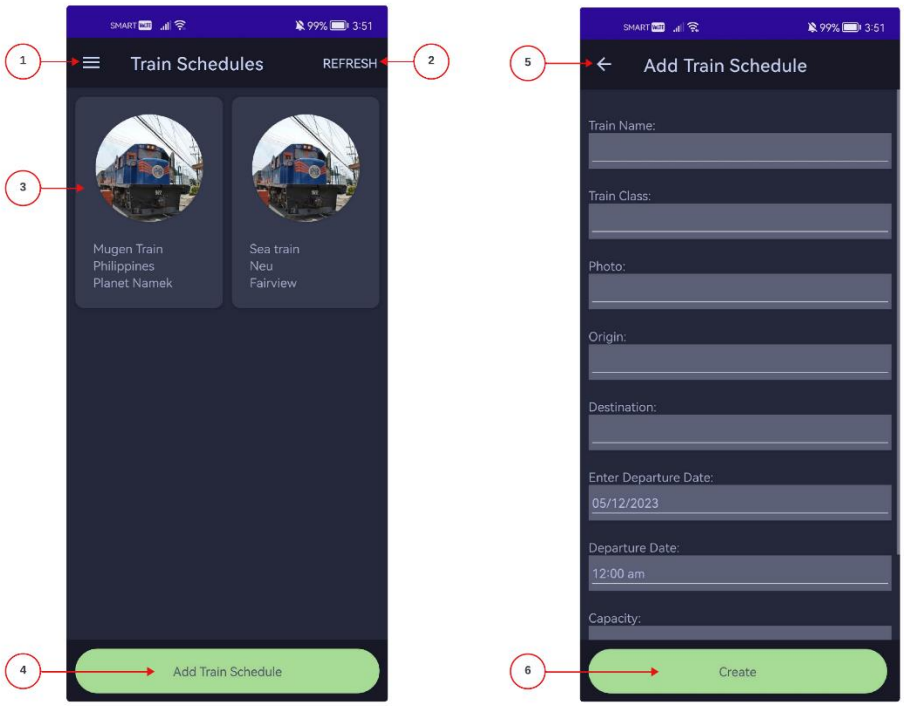
1. Home: Directs the user to the home page.
2. Account: Directs the user to the account page.
3. Train Schedule: Directs the user to the train schedule page.
4. Booking/Reservation: Directs the user to the booking/reservation page.
5. Tickets: Directs the user to the tickets page.

5.3 Accounts Page



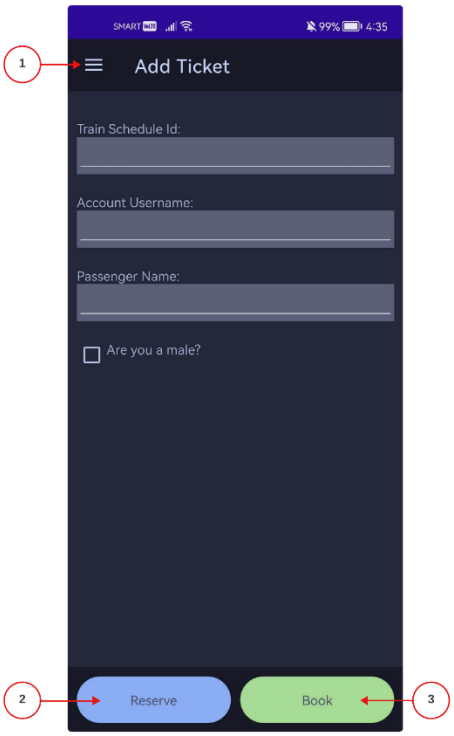
1. Hamburger Icon: Shows the user the main menu.
2. Refresh Button: Allows the user to refresh the current page.
3. Profile: Shows the account details.
4. Add Account Button: Directs the user to the account creation page.
5. Back Button: Directs the user back to the previous page.
6. Delete Account: Allows the user to delete the selected account.
7. Add Money Button: Allows the user to add money to account's balance.
8. Back Button: Directs the user back to the previous page.
9. Create Account Button: Allows the user to create an account.

5.4 Train Schedule Page



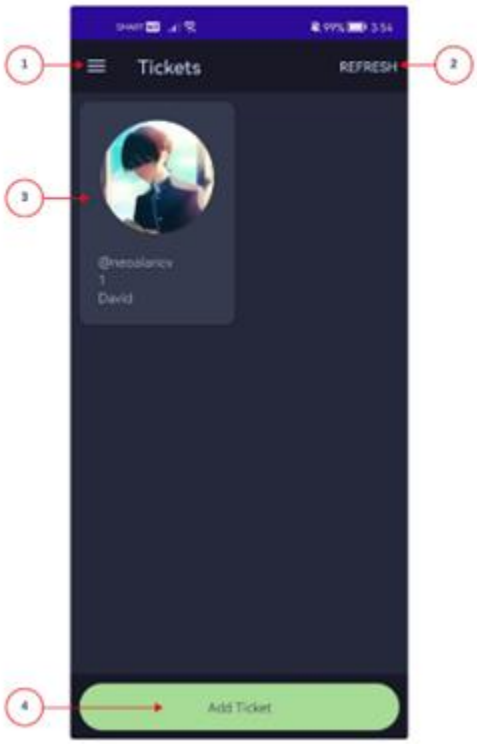
1. Hamburger Icon: Shows the user the main menu.
2. Refresh Button: Allows the user to refresh the current page.
3. Available Trains: Allows the user to view the available train schedules.
4. Add Train Schedule Button (Admins only): Directs the admin to the train schedule creation page.
5. Back Button (Admins only): Directs the user back to the previous page.
6. Create Train Schedule Button (Admins only): Allows the admin to add train schedule.

5.5 Booking/Reservation Page



1. Hamburger Icon: Shows the user the main menu
2. Reserve Ticket Button: Allows the user to reserve a ticket.
3. Book Button: Allows the user to book a ticket.

5.6 Tickets Page



1. Hamburger Icon: Shows the user the main menu
2. Refresh Button: Allows the user to refresh the current page.
3. Ticket Details: Shows the ticket details.
4. Add Ticket Button: Directs the user to the add ticket page.