

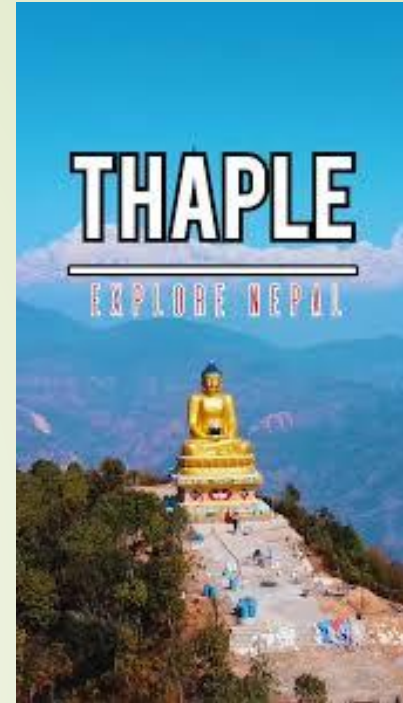
# "ThapleJeep: Kaligandaki Corridor Transport Coordination System (KCTCS)"

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**Exam Roll No : 8225012014**



# Introduction

## Background

### Thaple Dada

- Top Hill in Gulmi district, 1,679 metres (5,509 feet), 28.064420880289493, 83.47163598905681

### KCTCS Overview:

- Connects rural municipalities across eastern Gulmi.
- Ruru Gaupalika, Kaligandaki Gaupalika, Satywati Gaupalika, Chandrikot Gaupalika over Gulmi district.
- Java Swing-based app for Nepal's Kaligandaki Corridor Highway.

## Purpose

- To streamlines chaotic jeep services.
- To links passengers, drivers, and admins for reliable travel.
- It is critical for daily communications, agriculture, and tourism in hilly regions.







# KCTCS Overview:

- Key Features:
  - Passenger seat booking
  - Driver availability tracking
  - Admin dashboard for route/user management



# Functional Requirements

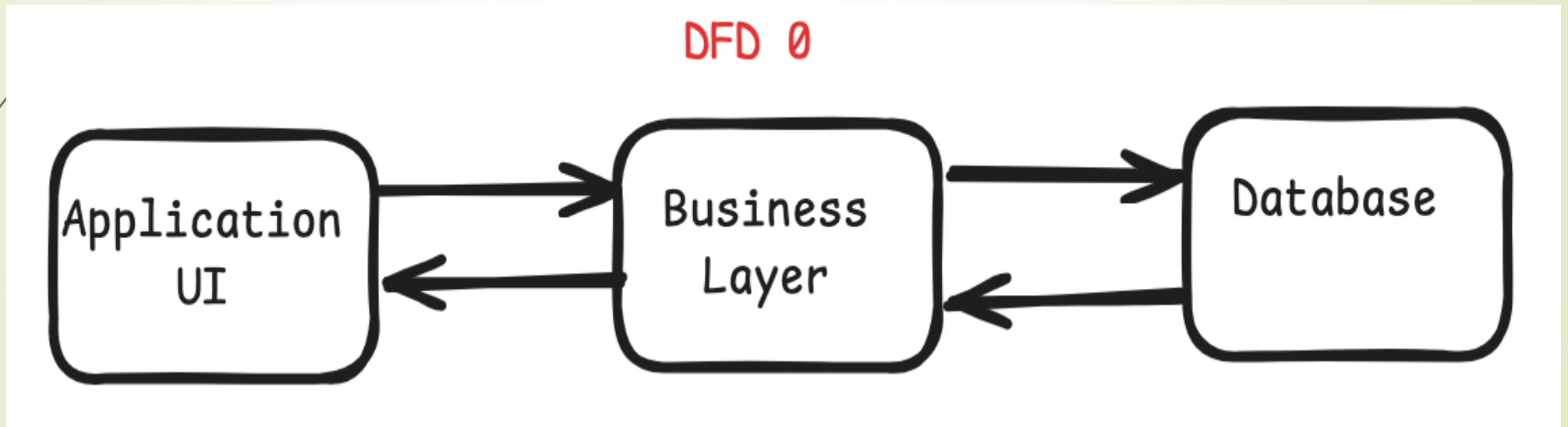
- Passenger:
  - Search/book jeeps, view confirmations.
- Driver:
  - Update availability, confirm pickups.
- Admin:
  - Manage users, drivers and generate reports.

# Tools & Technologies

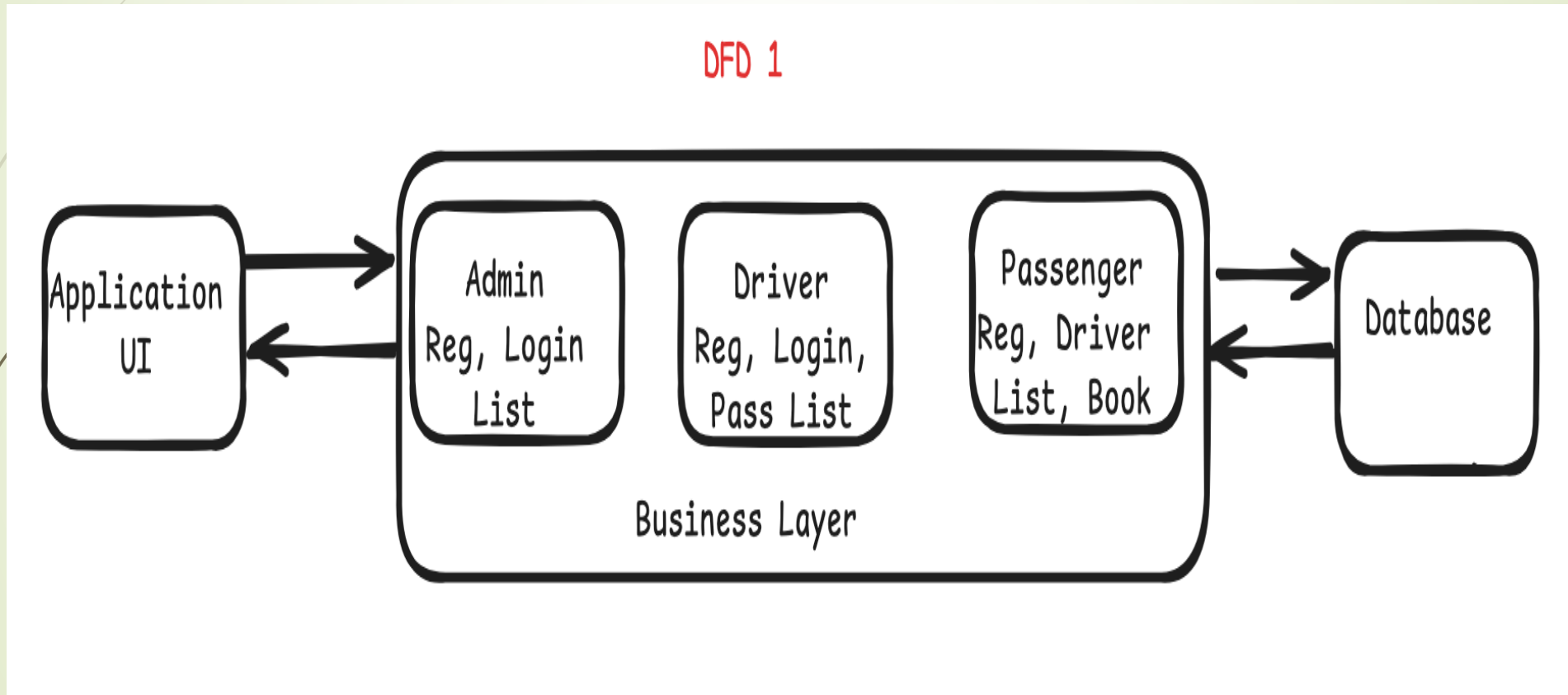
- Frontend: Java Swing (GUI)
- Backend: JDBC and MySQL (Database)
- Tools: Eclipse IDE, Linux

# System Architecture

- UI Layer: Java Swing forms
- Application Layer: Booking logic
- Database Layer: MySQL via JDBC



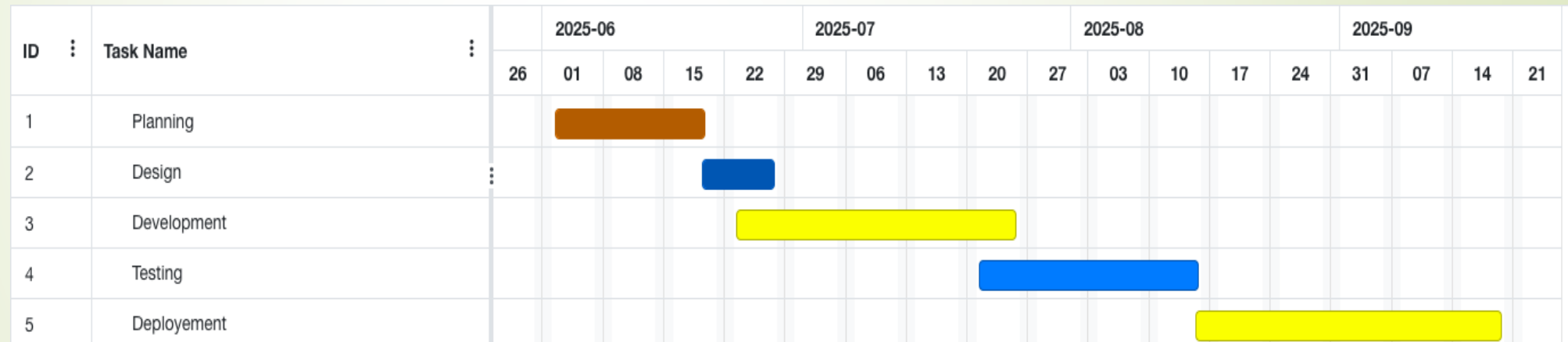
## System Architecture-2





# Project Planning

- Timeline: 3 months , June 2025
- Phases:
  - Planning, Design, Development, Testing, Deployment.

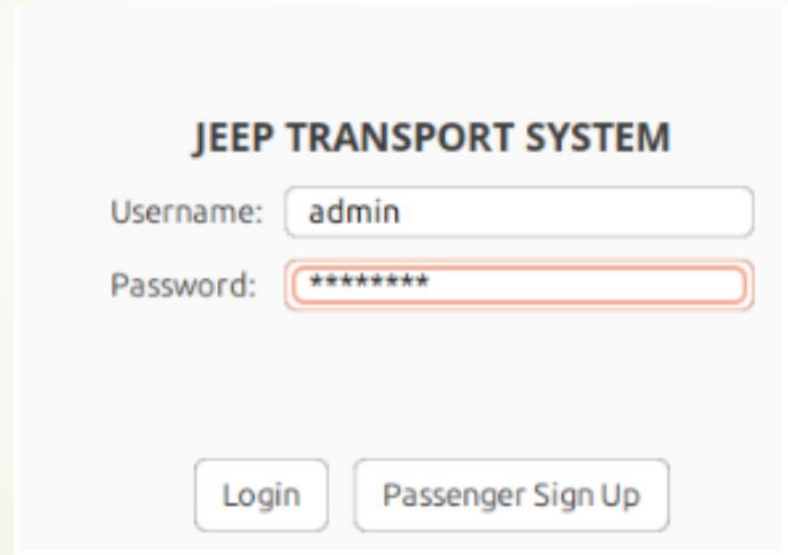


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# UI Design Prototype-1

## ➤ Screenshots:

- Admin dashboard (driver/passenger management).
- Passenger booking interface.



The screenshot displays a login form for the 'JEEP TRANSPORT SYSTEM'. The form is centered on a light gray background. It features a title 'JEEP TRANSPORT SYSTEM' in bold, uppercase letters. Below the title, there are two input fields: 'Username:' with the text 'admin' and 'Password:' with a masked password '\*\*\*\*\*'. The password field is highlighted with a red border. At the bottom of the form, there are two buttons: 'Login' and 'Passenger Sign Up'.

**JEEP TRANSPORT SYSTEM**

Username:

Password:

# UI Design Prototype-2

## ➤ Screenshots: Admin dashboard

Admin Dashboard - Jeep Transport System

Manage Drivers Manage Passengers Manage Bookings Manage Locations

Refresh Add Driver Delete Driver Sign Out

| id | name        | vehicle_no | contact    | current_location | available_seats |
|----|-------------|------------|------------|------------------|-----------------|
| 3  | Hira Gurung | Lu12Pa     | 9817458795 |                  | 14              |
| 4  | Govind BK   | Lu1349     | 984567848  |                  | 13              |

Admin Dashboard - Jeep Transport System

Manage Drivers Manage Passengers Manage Bookings Manage Locations

Refresh Delete Passenger Filter by Location: All Locations ▼

| id | name          | contact    | pickup_location |
|----|---------------|------------|-----------------|
| 1  | Jane Smith    | 9847654321 |                 |
| 2  | Sanjeev Thapa | 9815489555 | Horizon Chowck  |
| 3  | Mina Thapa    | 9815487888 | Plapa Buspark   |
| 4  | Ashok Gurung  | 9857089124 | Palpa           |

Admin Dashboard - Jeep Transport System

Manage Drivers Manage Passengers Manage Bookings Manage Locations

Refresh Bookings

| id | passenger     | driver      | pickup_location | booking_time        | status    |
|----|---------------|-------------|-----------------|---------------------|-----------|
| 2  | Jane Smith    | Hira Gurung | Shantipur       | 2025-04-08T11:53:45 | completed |
| 4  | Sanjeev Thapa | Hira Gurung | Kalikanagar     | 2025-04-08T13:26:01 | completed |
| 5  | Ashok Gurung  | Govind BK   | Palpa           | 2025-04-08T15:03:35 | confirmed |

# UI Design Prototype-3

## ➤ Screenshots: Driver dashboard

Driver Dashboard - hira

My Information | My Passengers | Manage Bookings

Available Seats: 14

Vehicle Number: Lu12Pa

Current Location:

Update Location:

Update Location

Sign Out

Driver Dashboard - hira

My Information | My Passengers | Manage Bookings

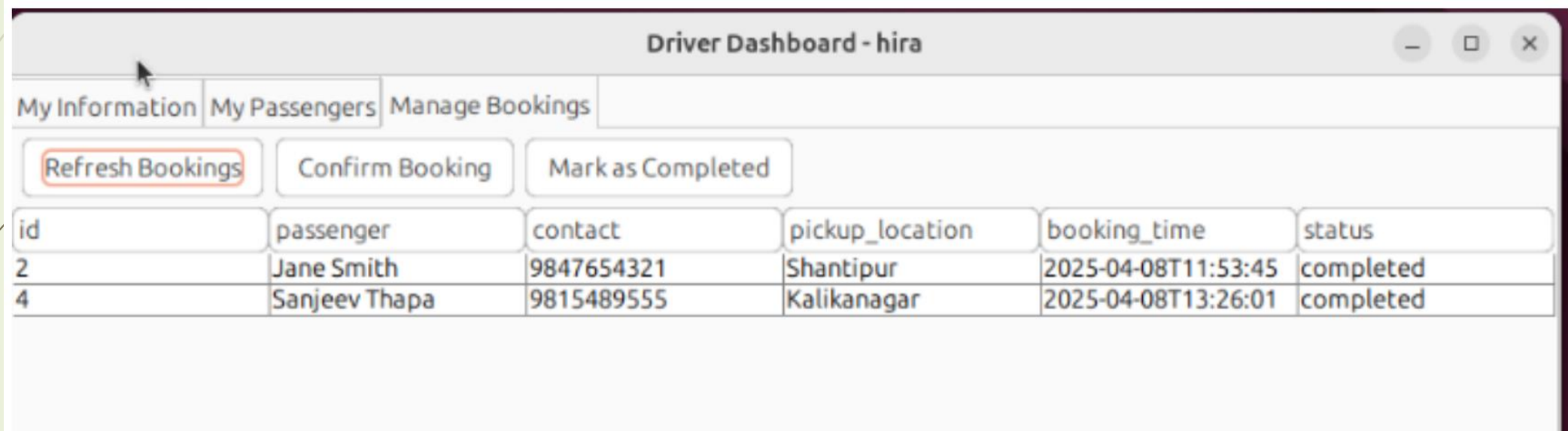
Refresh Passengers

| name          | contact    | pickup_location | booking_time        | status    |
|---------------|------------|-----------------|---------------------|-----------|
| Jane Smith    | 9847654321 |                 | 2025-04-08T11:53:45 | completed |
| Sanjeev Thapa | 9815489555 | Horizon Chowck  | 2025-04-08T13:26:01 | completed |



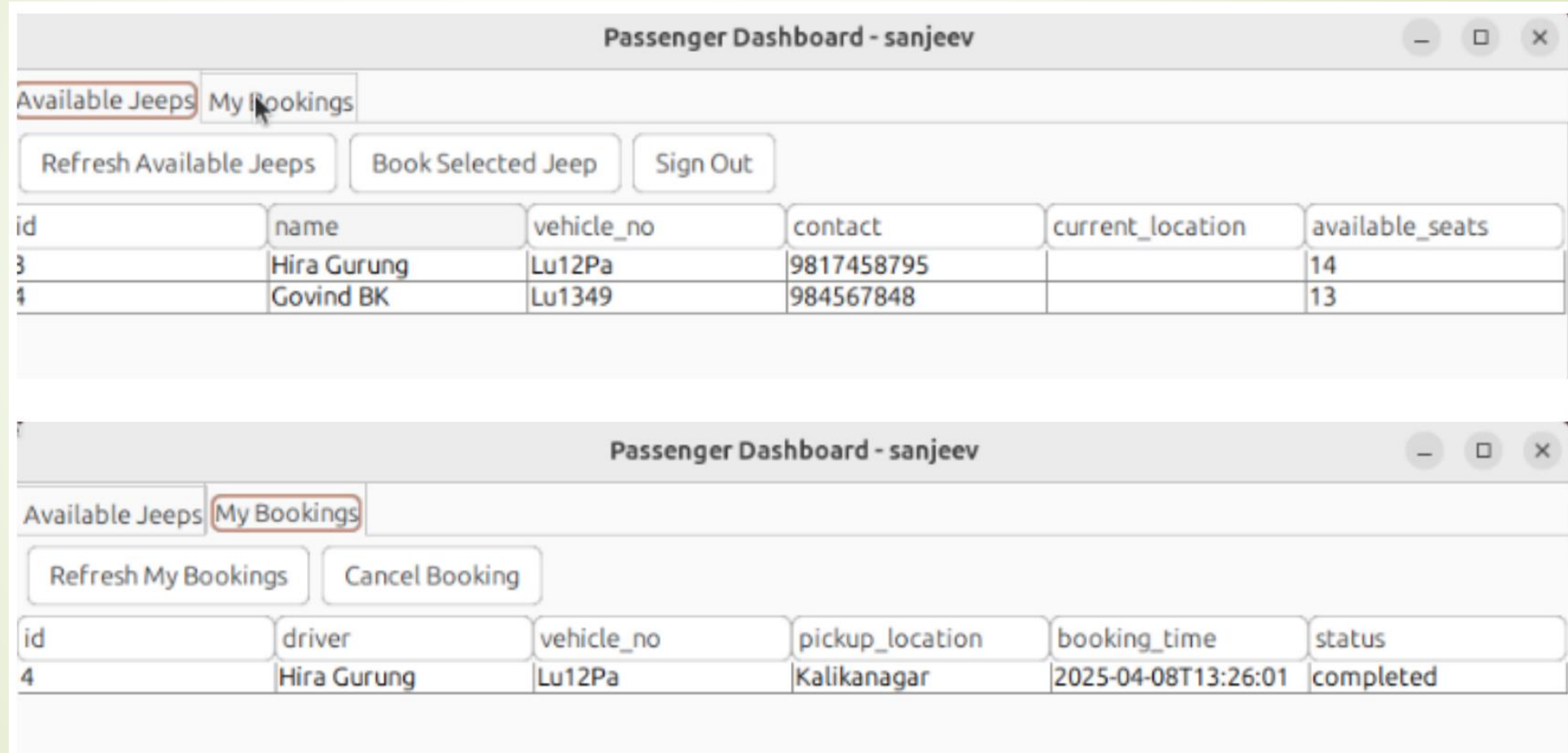
# UI Design Prototype-4

## ➤ Screenshots: Driver dashboard



# UI Design Prototype-5

## ➤ Screenshots: Passenger dashboard



# Expected Outcomes

- Reduced wait times
- Optimized jeep occupancy
- Transparent operations

## ➤ Future Suggestions

- For real time the system can be migrated to web based UI using Apache Tomcat Server.
- And it can be implemented as mobile app.

# Thank You

► <https://github.com/sanjeevlcc/ThapleJeep>