

RideGoo Hiring system

Project Analysis Report



ADVANCED TECHNOLOGICAL INSTITUTE OF VAVUNIYA

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SUBMITTED BY : GROUP 06

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1. Executive Summary

RideGoo is a web-based ride-hailing and transportation management system similar to Uber or PickMe. The project enables passengers to book rides, drivers to accept and complete trips, and administrators to monitor and manage the entire platform. The application includes ride booking, fare calculation, GPS-based tracking, driver management, payment processing, chat, notifications, reviews, wallet management, and reporting. The source code is primarily developed using PHP and MySQL with a modular API structure.

2. Problem Statement & Objectives

Problem Statement

Traditional transportation services often face several challenges:

- Difficulty finding nearby drivers.
- Long passenger waiting times.
- Lack of real-time tracking.
- Inefficient communication between passengers and drivers.
- Manual booking processes.
- Limited payment options.
- Poor ride history and reporting.
- Lack of driver performance monitoring.

RideGoo addresses these issues by providing an automated ride-booking platform with location tracking and digital payment integration.

Objectives

- Develop an online ride-booking platform.
- Connect passengers with nearby drivers.
- Provide automatic fare calculation.
- Enable real-time trip tracking.
- Support secure online payments.
- Maintain ride history.
- Improve communication through in-app messaging.
- Provide an admin dashboard for system management.
- Manage drivers, users, bookings, and financial records.

3. System Architecture & Modules

Overall Architecture

Users

Drivers

Admins



Frontend (PHP / HTML / CSS / JavaScript)



API Layer



— Booking API

— Payment API

— Chat API

— Notification API

— GPS API

— Driver Dispatch API

— Wallet API



MySQL Database

Major Modules

User Module

- Registration
- Login
- Book Ride
- Ride History
- Saved Places
- Wallet
- Reviews

Driver Module

- Driver Registration
- Driver Documents
- Online/Offline Status
- Accept/Reject Ride
- Live Location
- Trip Management
- Earnings

Admin Module

- Dashboard
- Manage Users
- Manage Drivers
- Booking Management
- Reports
- Notifications
- Driver Reviews
- Driver Documents
- Payout Management
- Settings

Booking Module

- Book Ride
- Cancel Ride6
- Track Ride
- Trip Status

Payment Module

- Fare Calculation
- Payment Processing
- Refund Management
- Wallet Transactions

Communication Module

- Driver Chat
- Booking Chat
- Notifications
- SOS Alert

GPS Module

- Driver Location
- User Location
- Trip Route
- Live Map

4. Technology Stack

Component	Technology
Programming Language	PHP
Frontend	HTML5, CSS3, JavaScript
Database	MySQL
Server	Apache (XAMPP)
APIs	Custom PHP REST APIs
Authentication	Session-based Login
Maps	GPS/Location APIs
Payment	Payment Integration APIs
Version Control	Project structure supports Git

5. Database Design (Key Entities)

The SQL database contains **29 tables**, indicating a well-structured relational design.

Main Entities

Entity	Purpose
Users	Passenger information
Drivers	Driver profiles
Admins	Administrator accounts

Entity	Purpose
Bookings	Ride booking records
Payments	Payment transactions
Wallets	User wallet balances
Wallet Transactions	Wallet history
Reviews	Ratings and feedback
Notifications	System notifications
Driver Locations	Live driver GPS
User Locations	Passenger locations
Trip Locations	Route information
Trip Status Logs	Ride status history
Saved Places	Favourite locations
Driver Documents	License and verification
Driver Payouts	Driver earnings
Driver Expenses	Expense tracking
Fuel Logs	Fuel management
Maintenance Logs	Vehicle maintenance
Refunds	Refund processing
Surge Pricing Rules	Dynamic pricing
Ride Dispatch Queue	Ride assignment
Booking Chats	Passenger-driver chat
Admin Driver Chats	Admin communication
System Settings	Configuration
Financial Audit Logs	Financial records
Vehicle Types	Vehicle categories
Booking Cancellations	Cancellation records
Driver Dispatch Rejections	Ride rejection tracking

6. Non-Functional Requirements

Performance

- Fast ride booking response
- Efficient database operations
- Low API response time

Reliability

- Accurate ride status updates
- Consistent database transactions
- Reliable payment processing

Security

- User authentication
- Session management
- Driver verification
- Secure payment handling
- Role-based access control

Scalability

- Support many users and drivers
- Expandable database structure
- Modular APIs

Availability

- 24/7 ride booking capability
- Continuous driver tracking
- High system uptime

Usability

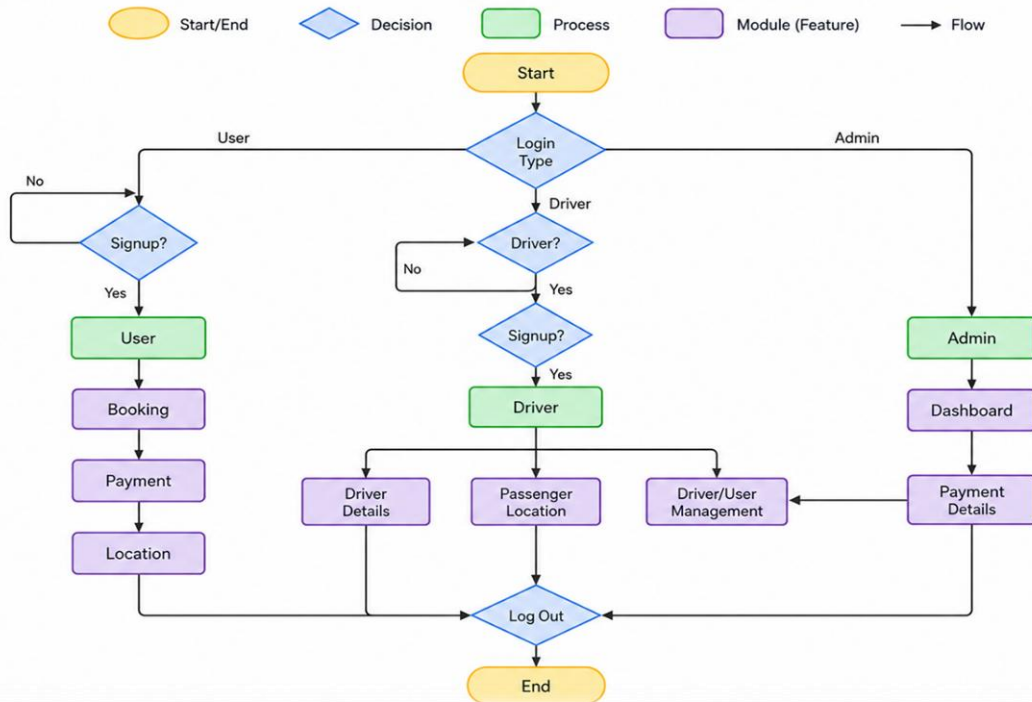
- User-friendly interface
- Easy booking workflow
- Responsive design

Maintainability

- Modular folder structure
- Separate API files
- Organized admin modules

FLOAT CHART

Ride Bee Group Number 06 – Flowchart

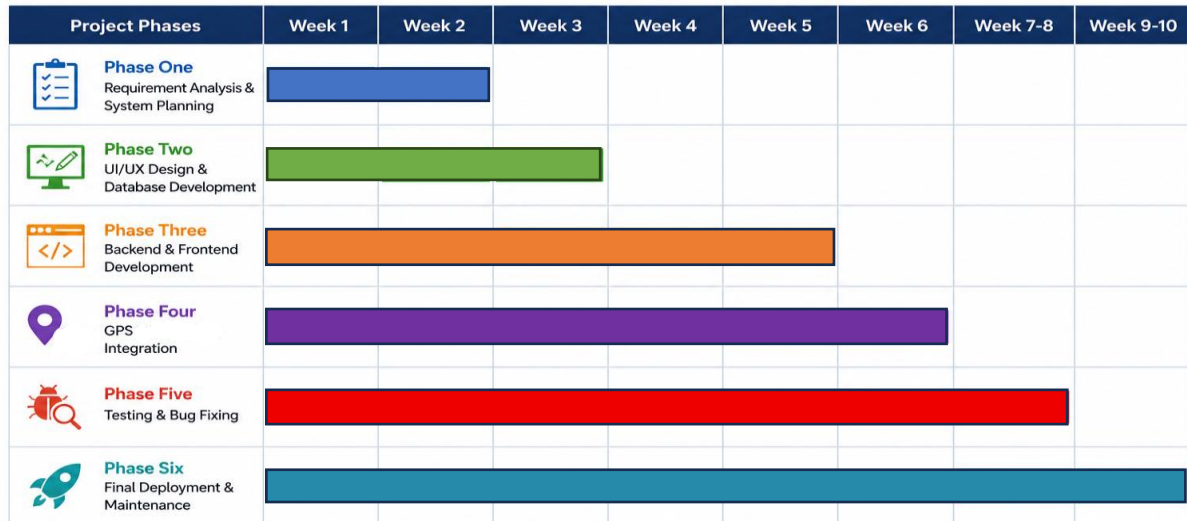


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GANTT CHART

Project Timeline – Gantt Chart

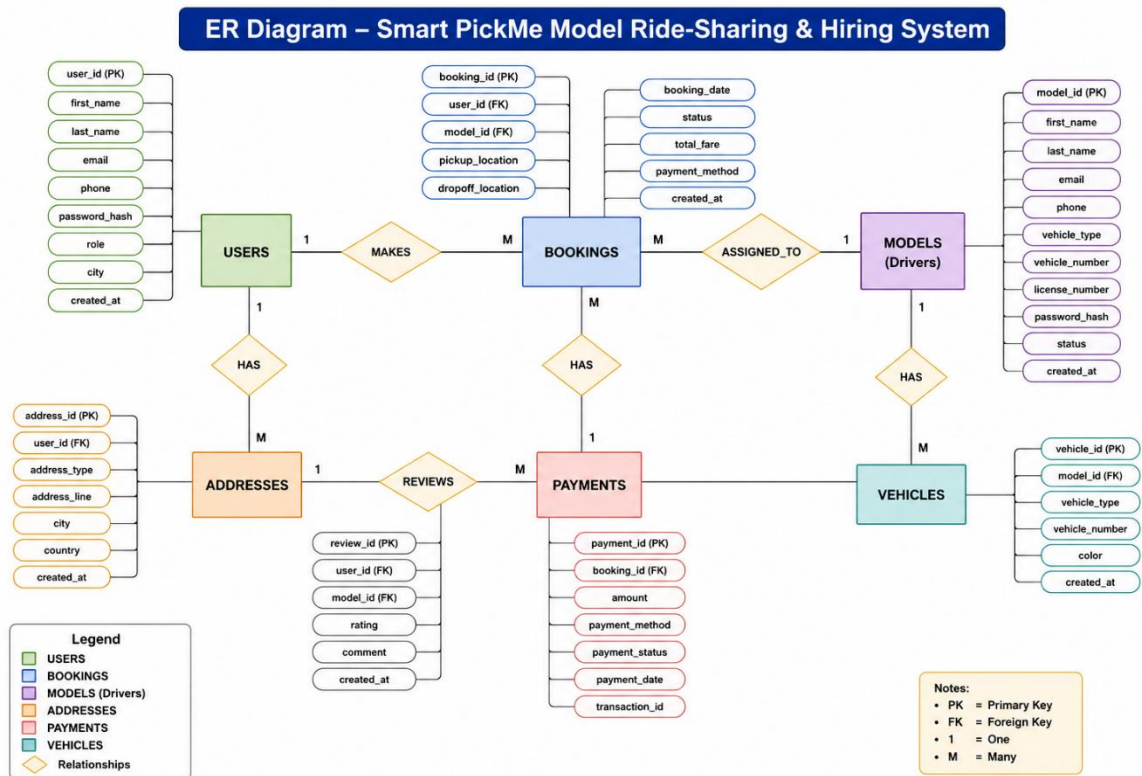
PickMe Model Ride-Sharing & Hiring System



Created by : canva

	All Members
	A.Gobika , K.Kobika
	Insath , Viharsan
	Brintha , Kajanika
	All Members
	Insath , viharsan , Gobika

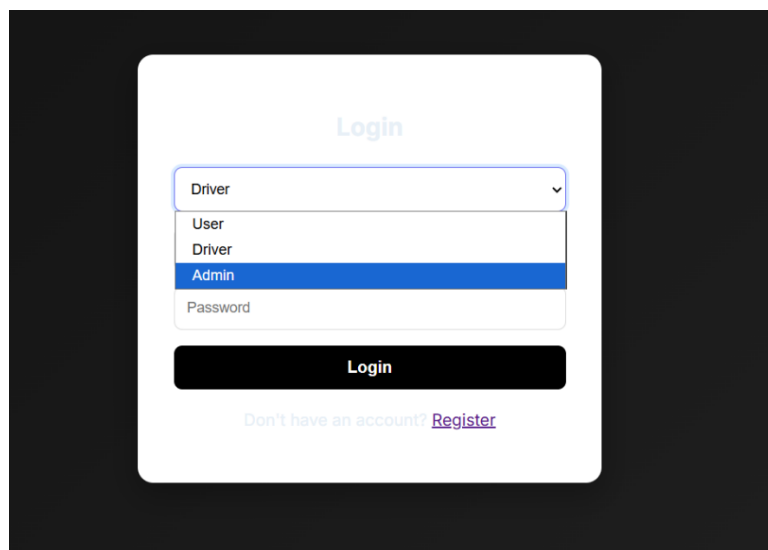
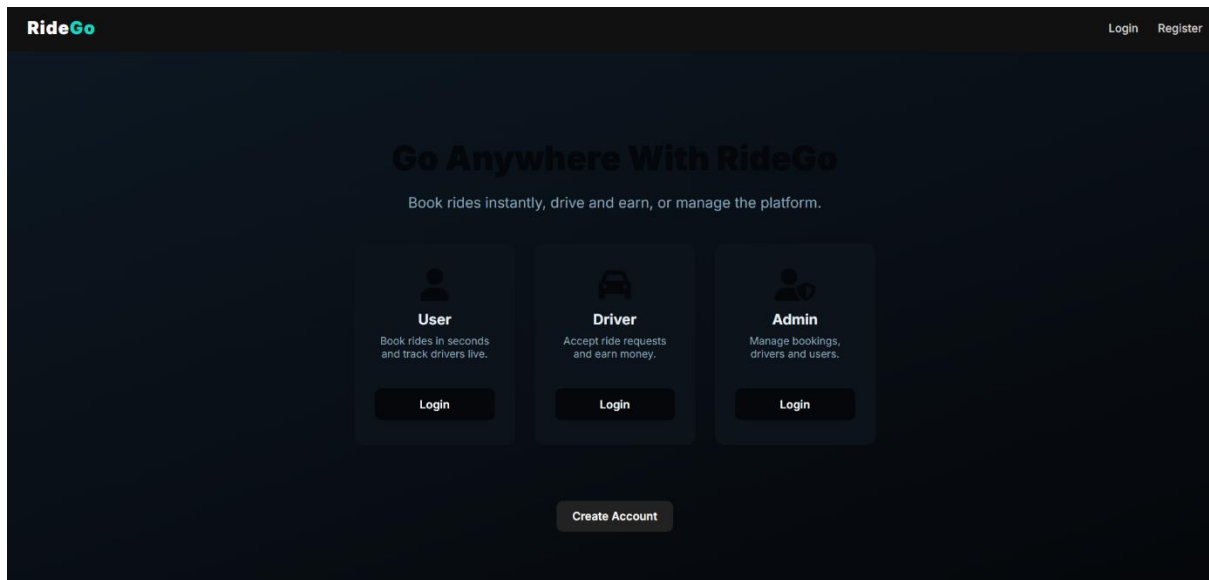
ER DIAGRAM



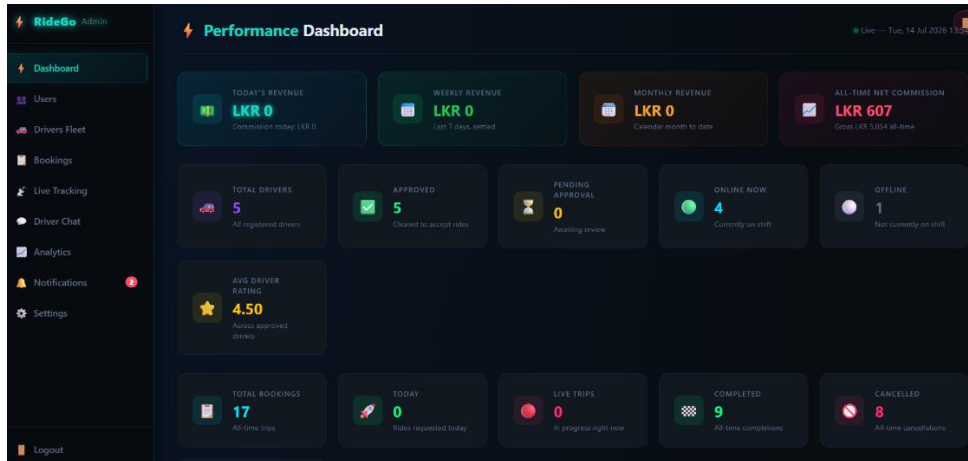
Created by : EdrawMax and chat GPT

Project screen shots

Login page



Admin page



Auto-Assign Nearest Driver

Driver Request Timeout (sec)

Free Cancellation Window (min)

Maximum Booking Radius (km)

Minimum Booking Radius (km)

Nearest Driver Search Radius (km)

1

30

5

25

0.5

10

DOCUMENTS PARAMETERS MATRIX

Allowed Document File Types

Max Document File Size (KB)

jpg,jpeg,png,webp,pdf

5120

FARE PARAMETERS MATRIX

Airport Pickup Charge (LKR)	Booking Fee (LKR)	Default Toll Charge (LKR)	Driver No-Show Fee (LKR)	Extra Stop Charge (LKR)	Fare Rounding Rule (nearest, 1 / nearest, 5 / nearest, 10 / none)
0	0	0	150	50	nearest, 1

Free Waiting Time Before Waiting Charges Apply (min)	Minutes to Wait Before Driver May Mark No-Show (min)	Night Charge (%)	Night Charge Ends (24h)	Night Charge Starts (24h)	Peak Hour Charge (%)
5	5	15	5	22	20

System Property Key

Label Title Identifier

Initial Value Metric

Category Space Grouping

Fare & Fees Metrics

Inject Matrix Property Attribute

e.g. airport_surcharge

e.g. Airport Drop-off Surcharge (LKR)

e.g. 250.00

Fare & Fees Metrics

Uber Admin Panel	Driver Profile	Vehicle Meta Parameters	Validation Verification Token	Account Security	Documents	Action Directives
Dashboard	0775299906 brianha2507@gmail.com	CAR 2507	APPROVED	ACTIVE	No docs uploaded Upload...	SUSPEND
Riders (Users)	0771234567 1234567@gmail.com	CAR abw2160	APPROVED	ACTIVE	No docs uploaded Upload...	SUSPEND
Drivers Fleet	0774503064 gobikasmmathurai@gmail.com	CAR RGL - 2160	APPROVED	ACTIVE	No docs uploaded Upload...	SUSPEND
Driver Documents	076528440 vihar@gmail.com	CAR KTM	APPROVED	ACTIVE	No docs uploaded Upload...	SUSPEND
Bookings Ledger	765284122 insothd@gmail.com	CAR bb33	APPROVED	ACTIVE	No docs uploaded Upload...	SUSPEND
Live Tracking Center	765284433 kujeth@gmail.com	BIKE jbbk65	APPROVED	ACTIVE	No docs uploaded Upload...	SUSPEND
Driver Communications	765284402 riva2007@gmail.com	CAR BTS5000	APPROVED	ACTIVE	No docs uploaded Upload...	SUSPEND
Analytics Reports						
System Settings						
Logout						

RideGo Admin

Dashboard
Users
Drivers Fleet
Bookings
Live Tracking
Driver Chat
Analytics
Notifications 28
Settings
Logout

Notifications

EMERGENCY SOS — kobi

kobi (765284444) triggered an emergency SOS. Location: location unavailable

Jul 9, 10:05 PM

Mark read

EMERGENCY SOS — kobi

kobi (765284444) triggered an emergency SOS. Location: location unavailable

Jul 9, 10:05 PM

Mark read

EMERGENCY SOS — Deamon

Deamon (0765284322) triggered an emergency SOS. Location: location unavailable

Jul 9, 9:55 PM

SYSTEM PERFORMANCE ANALYTICS MATRIX

DashboardStream CSV Ledger Export

REPORTING RANGE FROM

16/06/2026

REPORTING RANGE TO

16/07/2026

VEHICLE CONFIGURATION CLASS

All Tiers & Fleets

Apply Matrix Context Filters

AGGREGATE GROSS VOLUME

30

1 active operational routes

GROSS BOOKING VALUE

LKR 96,988.68

Platform metrics summary

NET PLATFORM COMMISSION

LKR 96,988.68

Retained operational split value

DISPATCH EFFICIENCY

30%

20 absolute failure terminations

FINANCIAL STREAM & OPERATIONAL VOLUME TRENDS

Gross Earnings (LKR)

Rides Volume

FLEET CAPACITY ALLOCATION

Uber Admin Panel

Dashboard
Riders (Users)
Drivers Fleet
Driver Documents
Bookings Ledger
Live Tracking Center
Driver Communications
Analytics Reports
System Settings
Logout

Live Fleet Tracking

ONLINE DRIVERS

1

ON TRIP

0

AVAILABLE

1

GPS FRESH (<60S)

1

Fleet Tracker

All

Car

Bike

3W

Van

Ammathurai Gobika

Car: BGL-2160

AVAILABLE

2s ago

0 km/h

5.0

Uber Admin Panel

Dashboard

Riders (Users)

Drivers Fleet

Driver Documents

Bookings Ledger

Live Tracking Center

Driver Communications

Analytics Reports

System Settings

Logout

Riders Identity Hub

Registered Customer Database

ID	Full Legal Name	Phone Account String	Email Coordinate	Registration Point	Account Lifecycle Status	Administrative Actions
#6	Suveethan	0742505926	suvee@gmail.com	2026-07-09 22:21	ACTIVE	SUSPEND
#5	Vihar	97763728	vihar@gmail.com	2026-07-09 22:00	ACTIVE	SUSPEND
#2	Deamon	0765284322	deamon@gmail.com	2026-07-09 21:33	ACTIVE	SUSPEND
#1	kobi	765284444	kobi@gmail.com	2026-06-25 21:36	ACTIVE	SUSPEND

Uber Admin Panel

Dashboard

Riders (Users)

Drivers Fleet

Driver Documents

Bookings Ledger

Live Tracking Center

Driver Communications

Analytics Reports

System Settings

Logout

Booking Control Hub

Real-Time Processing Ledger

Booking Identifier	Passenger Entities	Assigned Driver Node	Spatial Geolocation Path Matrix	Calculated Financial Ledger	Lifecycle Stage	Safety Controls
BK2026071684E7EE 2026-07-16 15:51:27	kobi	Ammathurai Gobika	From: Inter Naton Stadium, Jaff... To: Pampaimadu, Vavuniya Distri...	LKR 3,366.00	DRIVER ARRIVED	TERMINATE
BK20260716371043 2026-07-16 15:49:32	kobi	Awaiting Dispatched Handler	From: Inter Naton Stadium, Jaff... To: Vavuniya, Vavuniya District, ...	LKR 1,841.00	CANCELLED	Completed Ledger
BK20260716750007 2026-07-16 15:49:01	kobi	Awaiting Dispatched Handler	From: Inter Naton Stadium, Jaff... To: Vavuniya, Vavuniya District, ...	LKR 1,841.00	CANCELLED	Completed Ledger
BK202607165871CF 2026-07-16 15:48:43	kobi	Awaiting Dispatched Handler	From: Inter Naton Stadium, Jaff... To: Vavuniya, Vavuniya District, ...	LKR 1,841.00	CANCELLED	Completed Ledger
BK2026071610CB02 2026-07-16 15:40:13	kobi	Awaiting Dispatched Handler	From: Inter Naton Stadium, Jaff... To: Vavuniya, Vavuniya District, ...	LKR 1,841.00	CANCELLED	Completed Ledger

Uber Admin Panel

Dashboard

Riders (Users)

Drivers Fleet

Driver Documents

Bookings Ledger

Live Tracking Center

Driver Communications

Analytics Reports

System Settings

Logout

Driver Profile

Vehicle Meta Parameters

Validation Verification Token

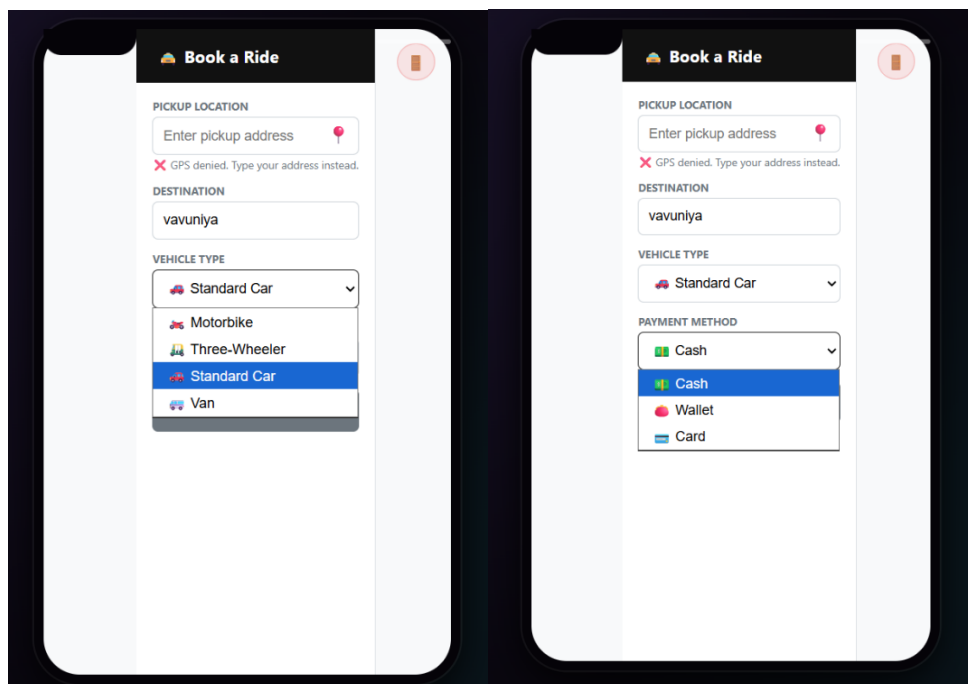
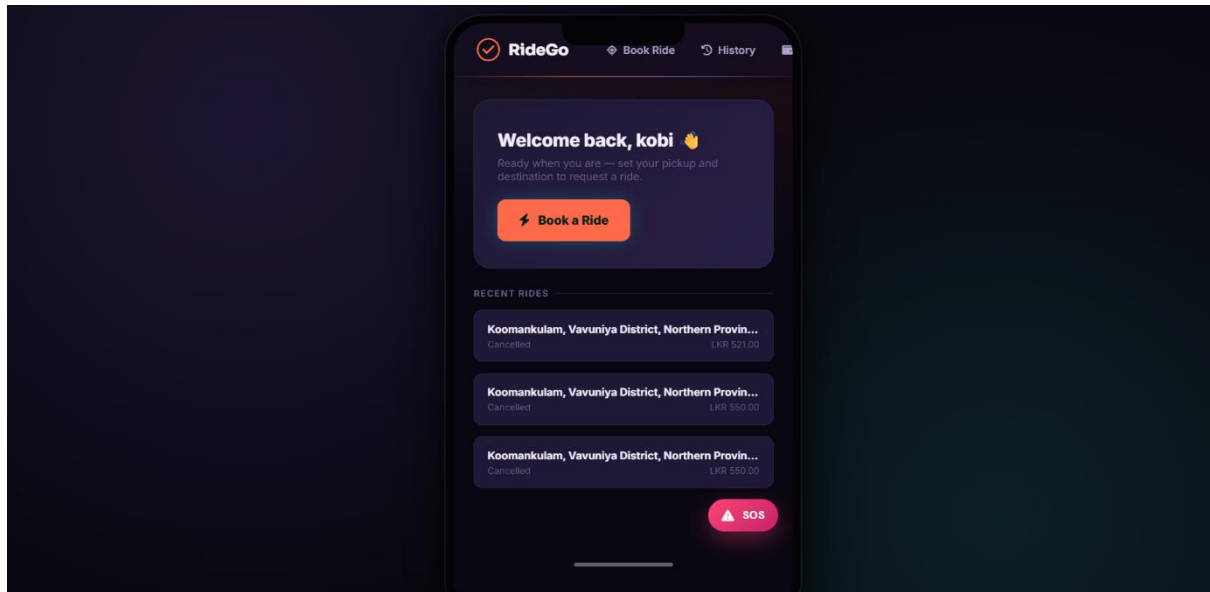
Account Security

Documents

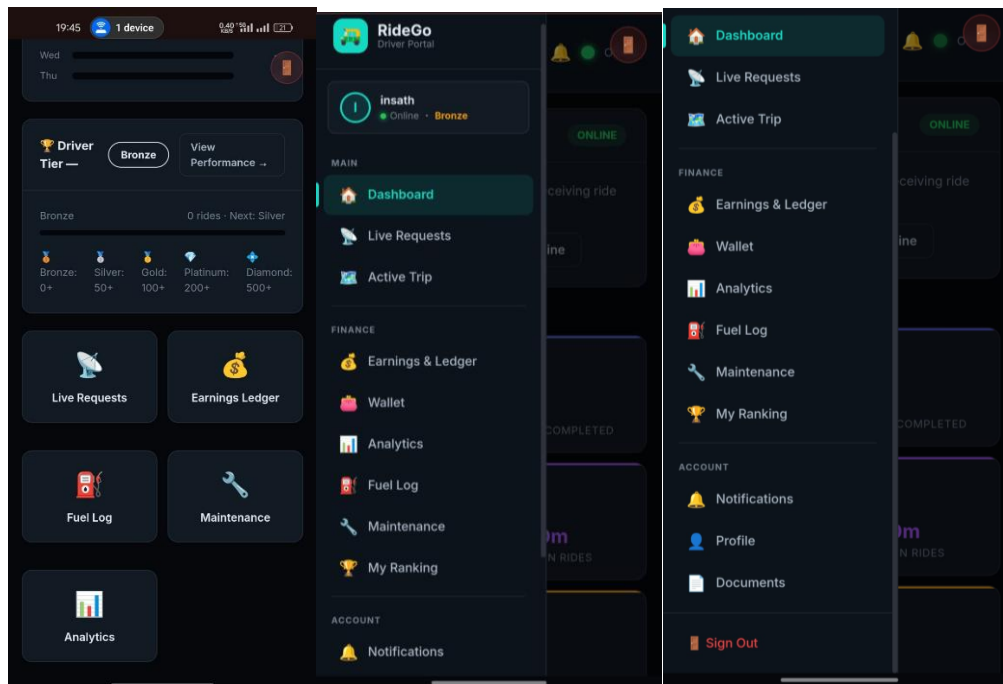
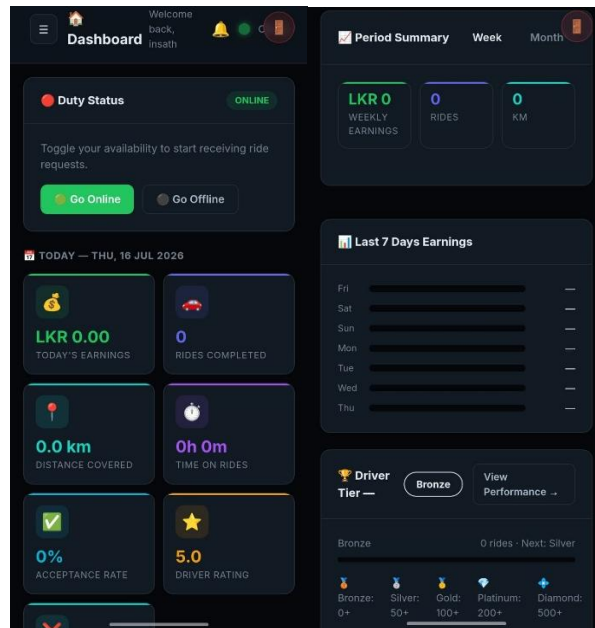
Action Directives

0775299906 brintha2507@gmail.com	CAR 2507	APPROVED	ACTIVE	No docs uploaded Review	SUSPEND
0771234567 1234567@gmail.com	CAR abw2160	APPROVED	ACTIVE	No docs uploaded Review	SUSPEND
0774503064 gobikaammathurai@gmail.com	CAR BGL - 2160	APPROVED	ACTIVE	No docs uploaded Review	SUSPEND
076528440 vihar@gmail.com	CAR KTM	APPROVED	ACTIVE	No docs uploaded Review	SUSPEND
765284322 inshath@gmail.com	CAR bb33	APPROVED	ACTIVE	No docs uploaded Review	SUSPEND
765284433 kaja@gmail.com	BIKE jbbk65	APPROVED	ACTIVE	No docs uploaded Review	SUSPEND
765284402 niva2007@gmail.com	CAR B1SS000	APPROVED	ACTIVE	No docs uploaded Review	SUSPEND

User page



Driver page



7. Feature Enhancements

The following improvements can further strengthen the RideGoo platform:

- Mobile application (Android & iOS)
- AI-based driver dispatch
- Machine learning for demand prediction
- Voice booking assistant
- Multi-language support
- QR code payments
- Digital wallet integration
- Push notifications
- Emergency contact sharing
- Route optimization using AI
- Driver facial verification
- Dynamic surge pricing improvements
- Advanced analytics dashboard
- Carbon emission tracking
- Promotional coupons and referral system
- Two-factor authentication (2FA)
- Biometric login
- Cloud deployment (AWS/Azure)

8. Conclusion

RideGoo is a comprehensive ride-hailing management system that implements the essential features of a modern transportation platform. The project demonstrates a modular architecture with dedicated APIs, a robust MySQL database containing 29 relational tables, and functional modules for users, drivers, administrators, bookings, payments, notifications, GPS tracking, and financial management. Its organized structure makes it suitable for academic purposes and provides a strong foundation for future enhancements such as AI-driven dispatching, cloud deployment, and mobile applications.

9. References

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2. MySQL Documentation – <https://dev.mysql.com/doc/>
3. HTML5 Specification – <https://html.spec.whatwg.org/>
4. CSS Documentation – <https://developer.mozilla.org/docs/Web/CSS>
5. JavaScript Documentation – <https://developer.mozilla.org/docs/Web/JavaScript>
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9. Uber Engineering Blog – <https://www.uber.com/blog/engineering/>
10. PickMe Sri Lanka Platform – <https://pickme.lk>