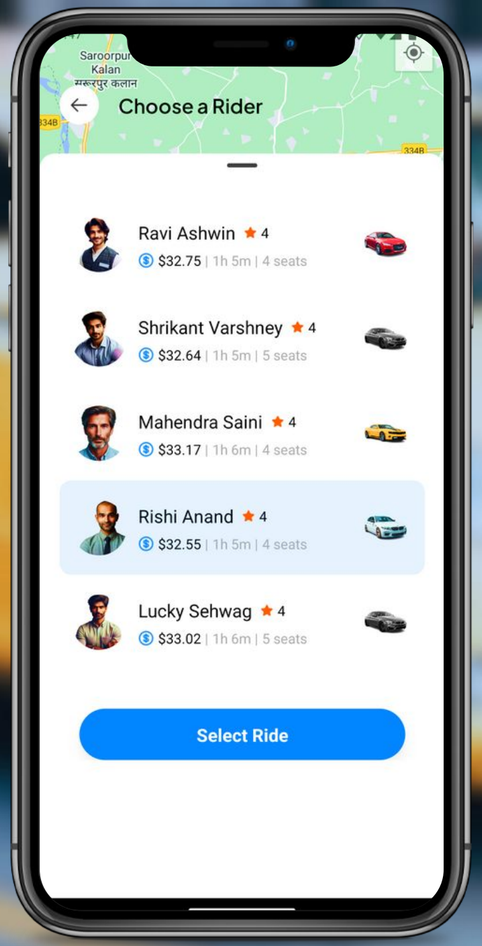
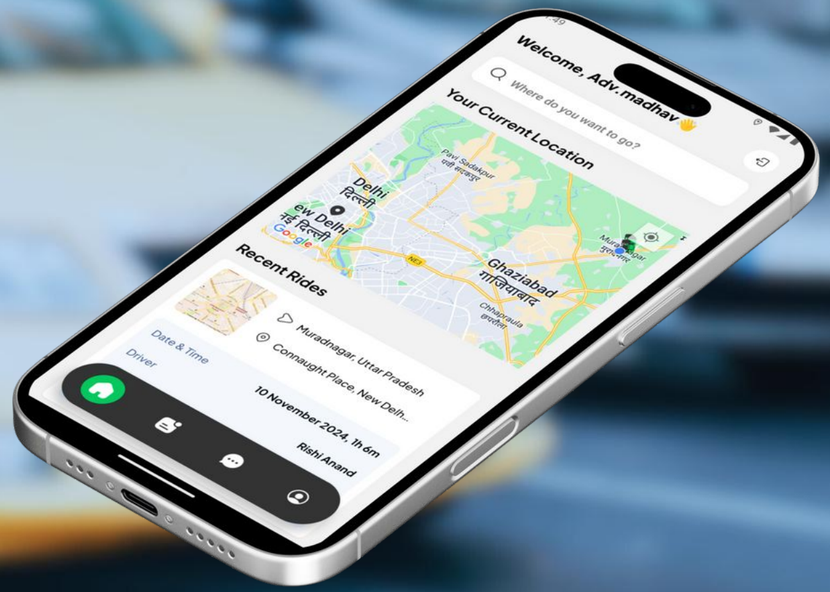
ChaloRidePe

Seamless Rides, Just a Tap Away!





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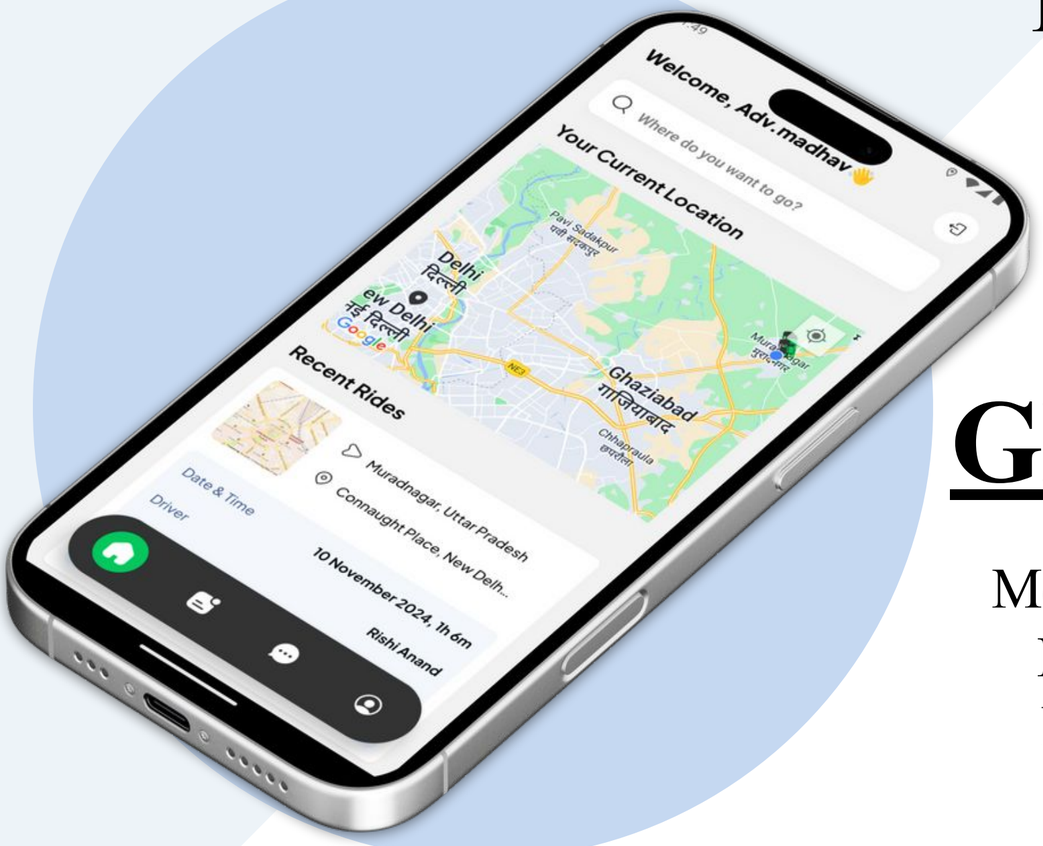


Mini Project (KCA353)
Odd Semester
Session 2024-25

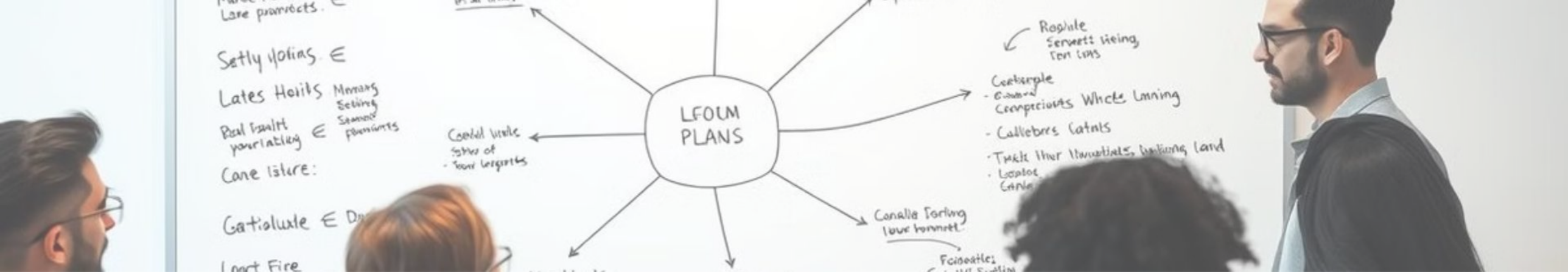
GB09: ChaloRidePe

Meenakshi Bharadwaj (2300290140102)
Murari Kumar Jha (2300290140105)
Nikhil Chaudhary (2300290140107)
Pawan Gangwar (2300290140113)

Project Supervisor:
Ms. Monika Kansal
Assistant Professor

Project Abstract

Today's urban settings demand dependable and effective transportation. As the need for smooth travel options in crowded places grows, ChaloRidePe shows up as a vibrant and easy-to-use ride-hailing service. Whether you're traveling to work, attending an important meeting, or exploring new areas of the city, it enables passengers to communicate in real-time with local drivers, guaranteeing a seamless and stress-free journey. ChaloRidePe offers real-time transportation scheduling, precise fare predictions, and safe cashless payment processing. It provides a smooth and safe experience because of its user-friendly interface, which is improved with safety measures and robust validations to guarantee legitimate users. Without the hassles of conventional transportation alternatives, users may easily book trips and complete transactions. ChaloRidePe is a useful tool for traversing today's hectic cities because of its emphasis on client comfort, safety, and efficiency. It offers a dependable, easily available alternative to urban commuting, perfect for both impromptu travel and routine commutes.



Project Objectives and Goals

The primary goal of ChaloRidePe is to cater to its audience, including passengers.

- **Convenience:** Easy to use and understand
- **Affordability:** To provide **affordable rides** to users
- **Accessibility** to all users
- **Safety:** Legitimate Users
- **Reliability:** Available whenever the user requires it and reliable to them.

Alignment with UN Sustainable Development Goals (SDGs)

SDG 8: Decent Work and Economic Growth

The app creates economic opportunities for local drivers, enabling them to earn income through flexible work. It also promotes local economic activity by making travel and commuting more accessible and efficient.

SDG 9: Industry, Innovation, and Infrastructure

ChaloRidePe leverages technology to improve transportation infrastructure, addressing urban mobility issues through innovative, tech-driven solutions.

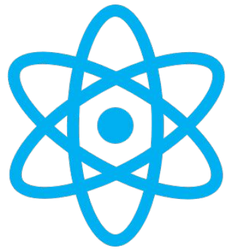
Technology (Hardware and Software Requirements)

Hardware Requirements

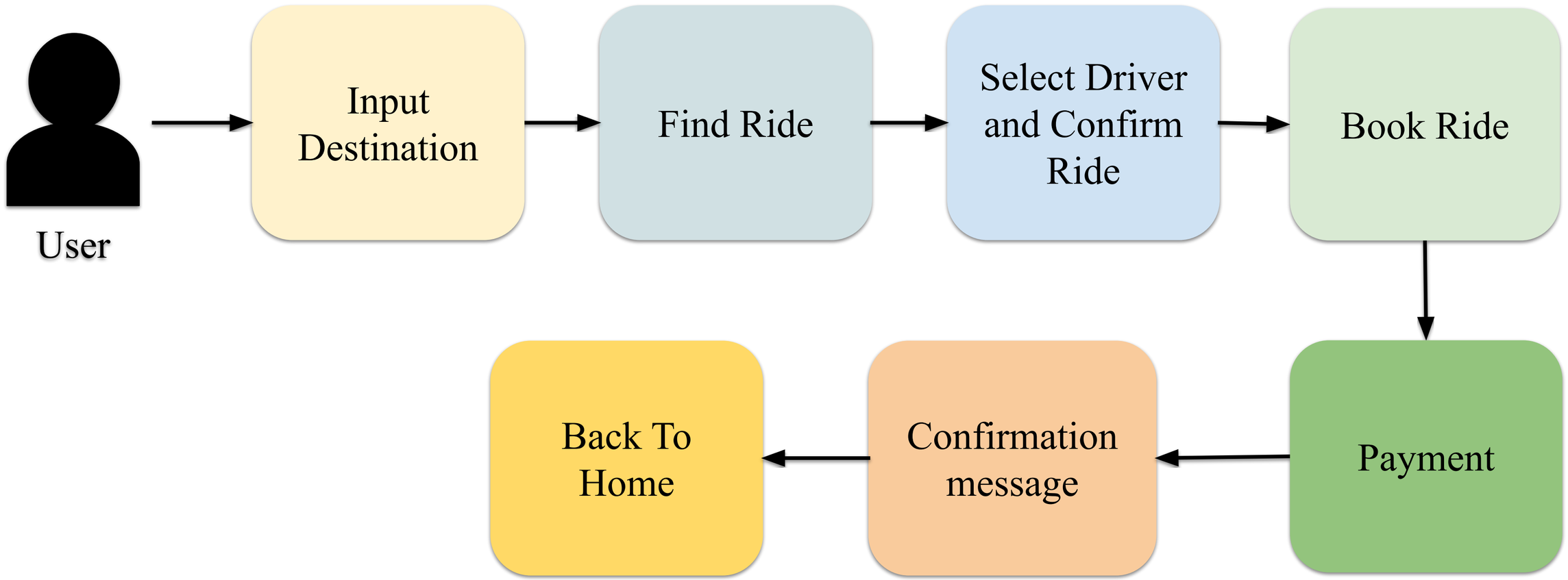
- **Processor:** Intel(R) Core(TM) i5-9300H CPU @ 2.40 GHz
- **RAM:** 8.00 GB
- **System Type:** 64-bit operating system, x64-based processor
- **Storage Required:** Maximum Up to 16 GB

Software Requirements

- **Operating System:** Windows 11, Version 23H2
- **Code Editor:** Visual Studio Code, v1.93.1
- **Frontend:** React Native Expo, Typescript, Tailwind CSS
- **Backend:** Neon DB, PostgreSQL
- **Authentication:** Clerk Authentication Services
- **APIs:** Here Maps Geocoding and Search API; Here Maps Routing API
- **Payment Integration:** Stripe Payment Services



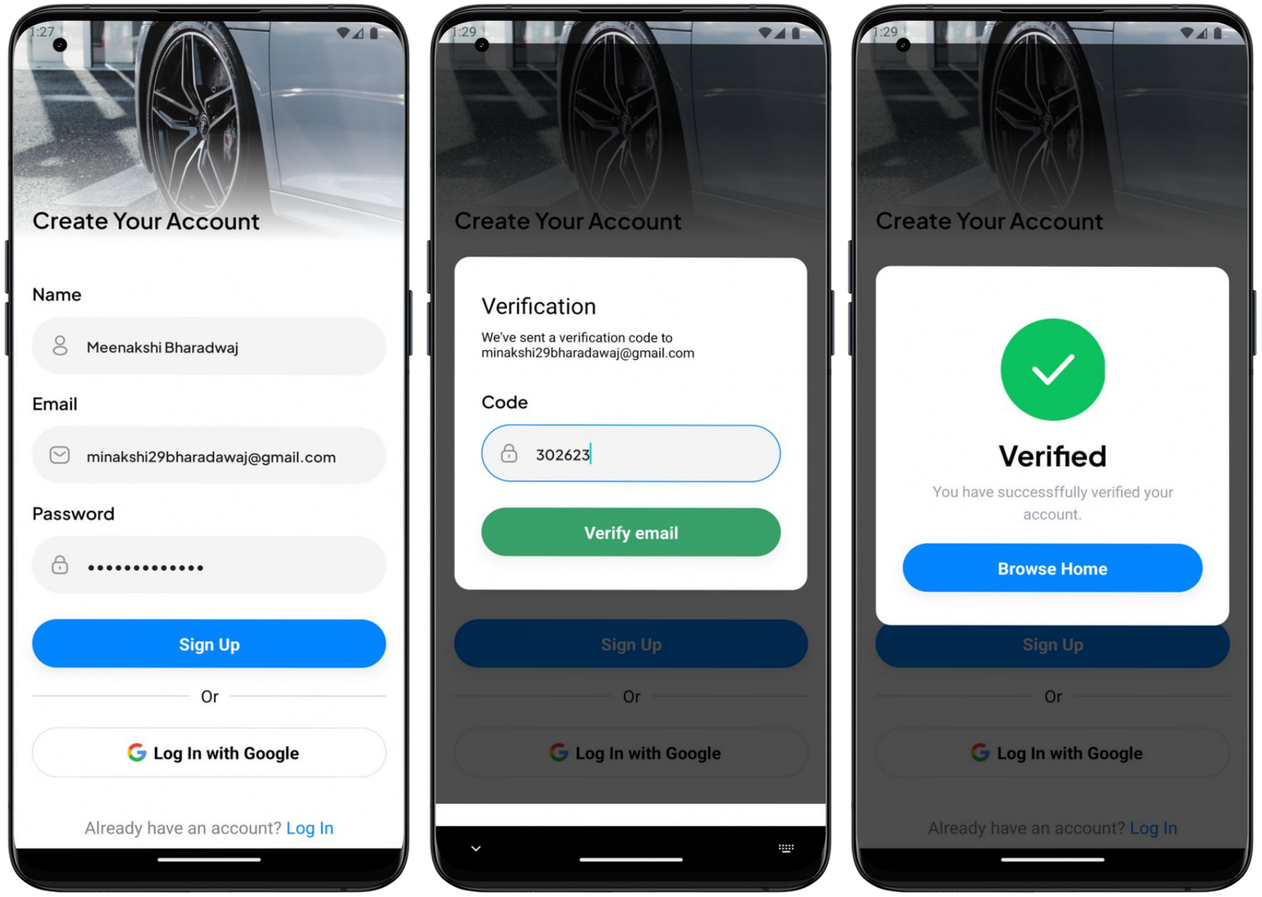
Workflow


User
Input Destination
Find Ride
Select Driver and Confirm Ride
Book Ride
Payment
Confirmation message
Back To Home

Methodology and Approach

Module 1: Authentication

- **Sign Up:** User signup using email and password
- **Login:** User login using email ID and password.
- **Login with Google:** User login with Google Accounts
- **Authentication Services:** Clerk Authentication Services such as email OTP, Google OAuth, etc.



Methodology and Approach

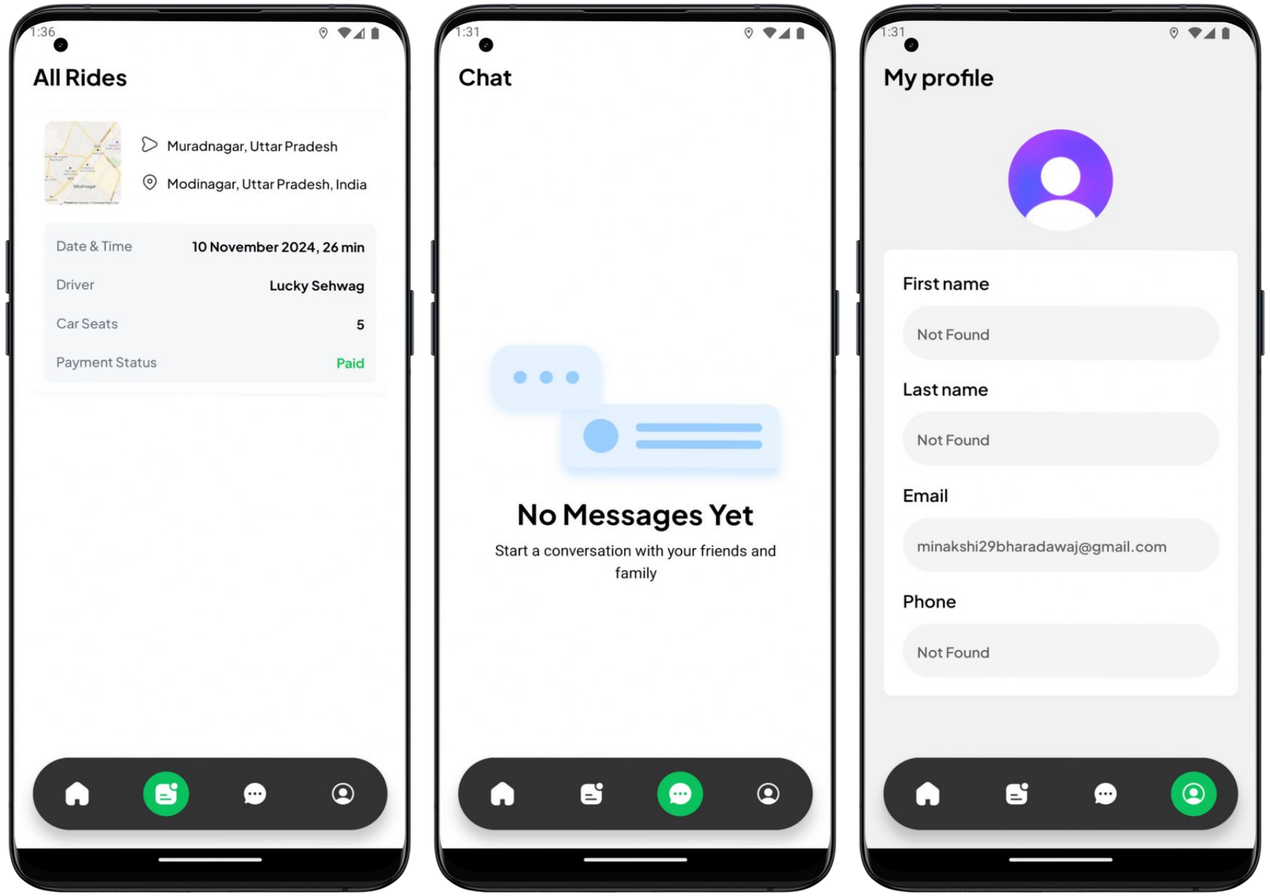
Module 2: User Profile

➔**User information:**

- Profile picture, first name, last name.
- email, phone number.

➔**Ride History:** Past rides information.

➔**Chat Tab:** For communication functionality.



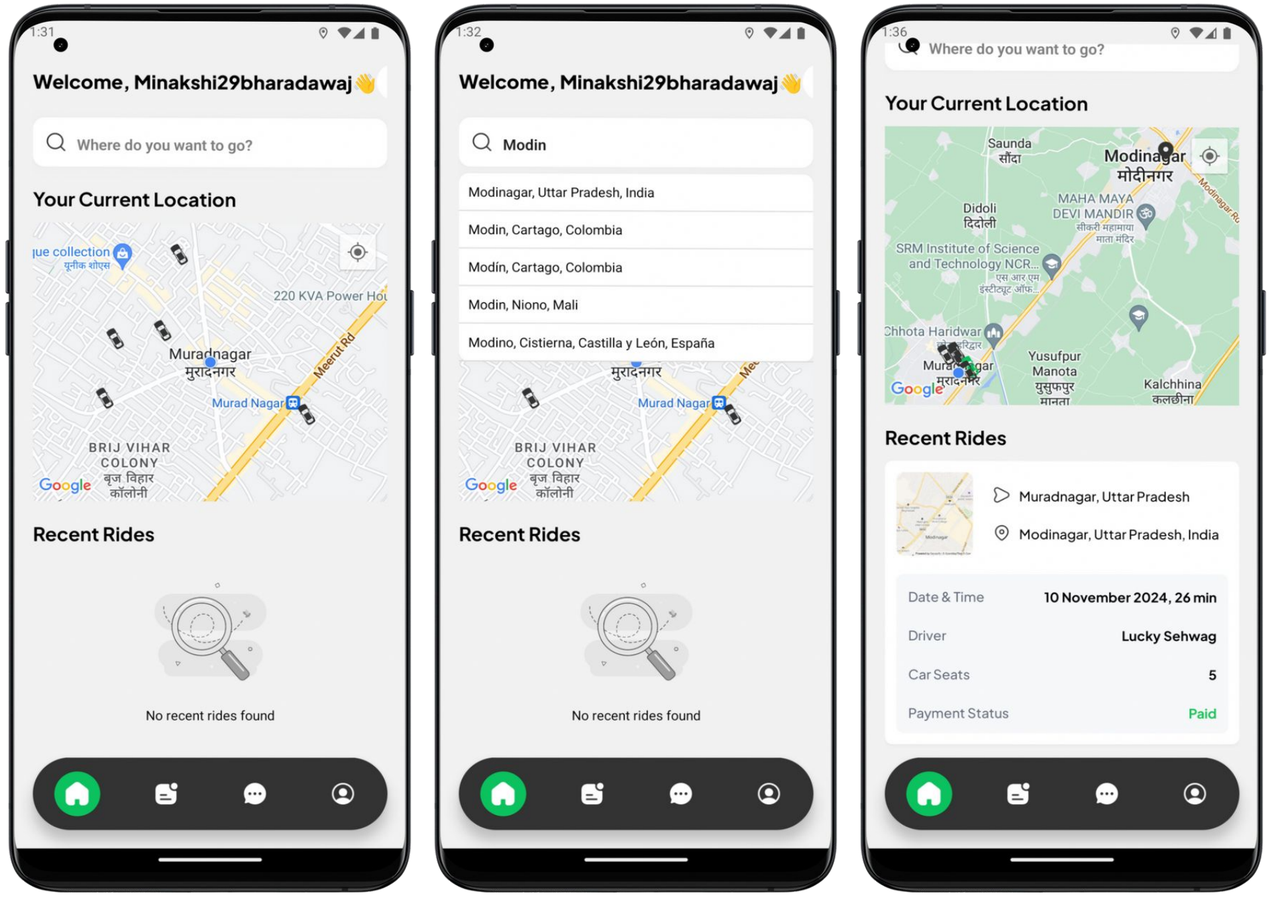
Methodology and Approach

Module 3: Map and Location Services

➔**Location services:** Integration with a mapping API (Here Maps API).

➔**Location Permissions:** Real-time location tracking, such as current live user location.

➔Geocoding and reverse geocoding.



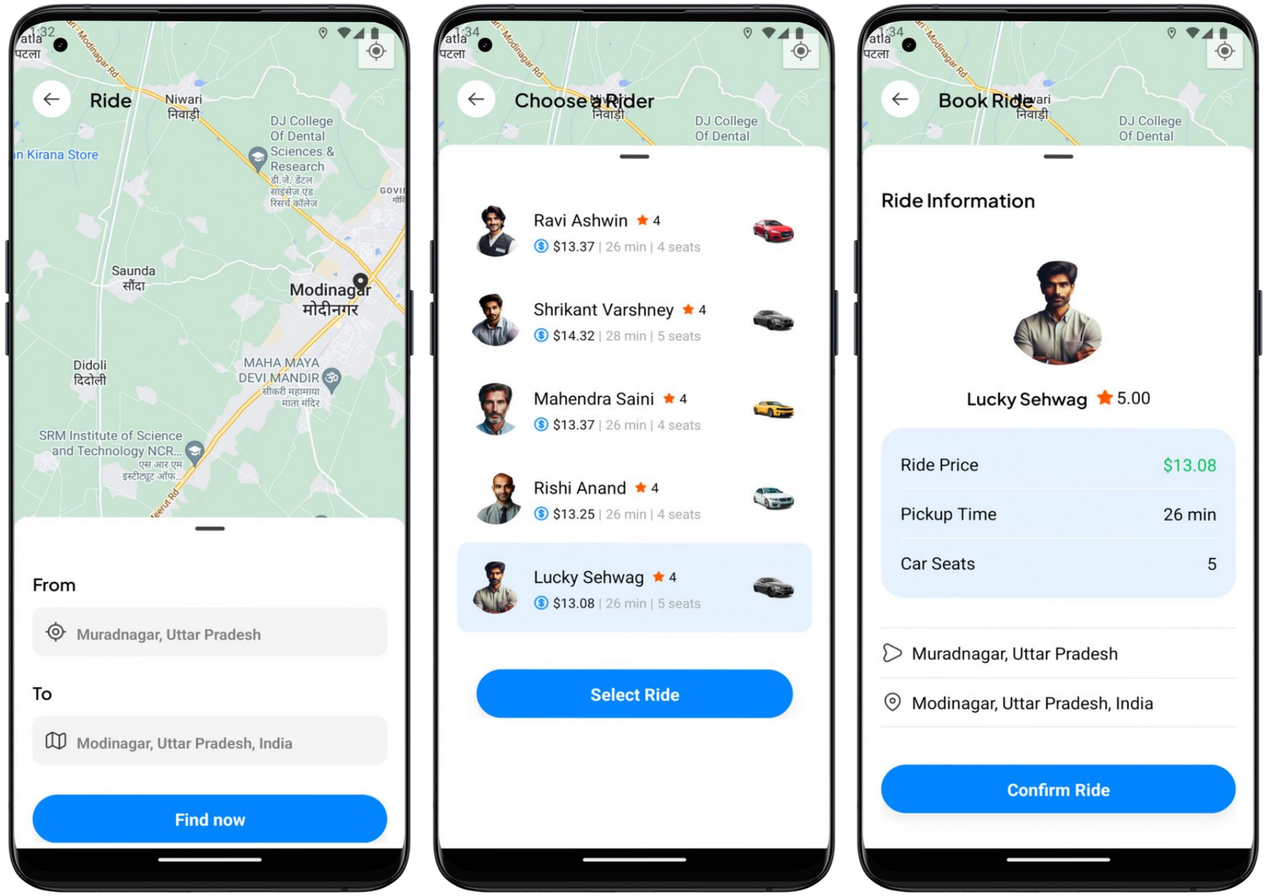
Methodology and Approach

Module 4: Find and Confirm Ride

➔**Find Ride:** Search rides for pickup and destination locations.

➔**Driver Selection:** Select driver with best ride.

➔**Confirm Ride:** Review ride details.



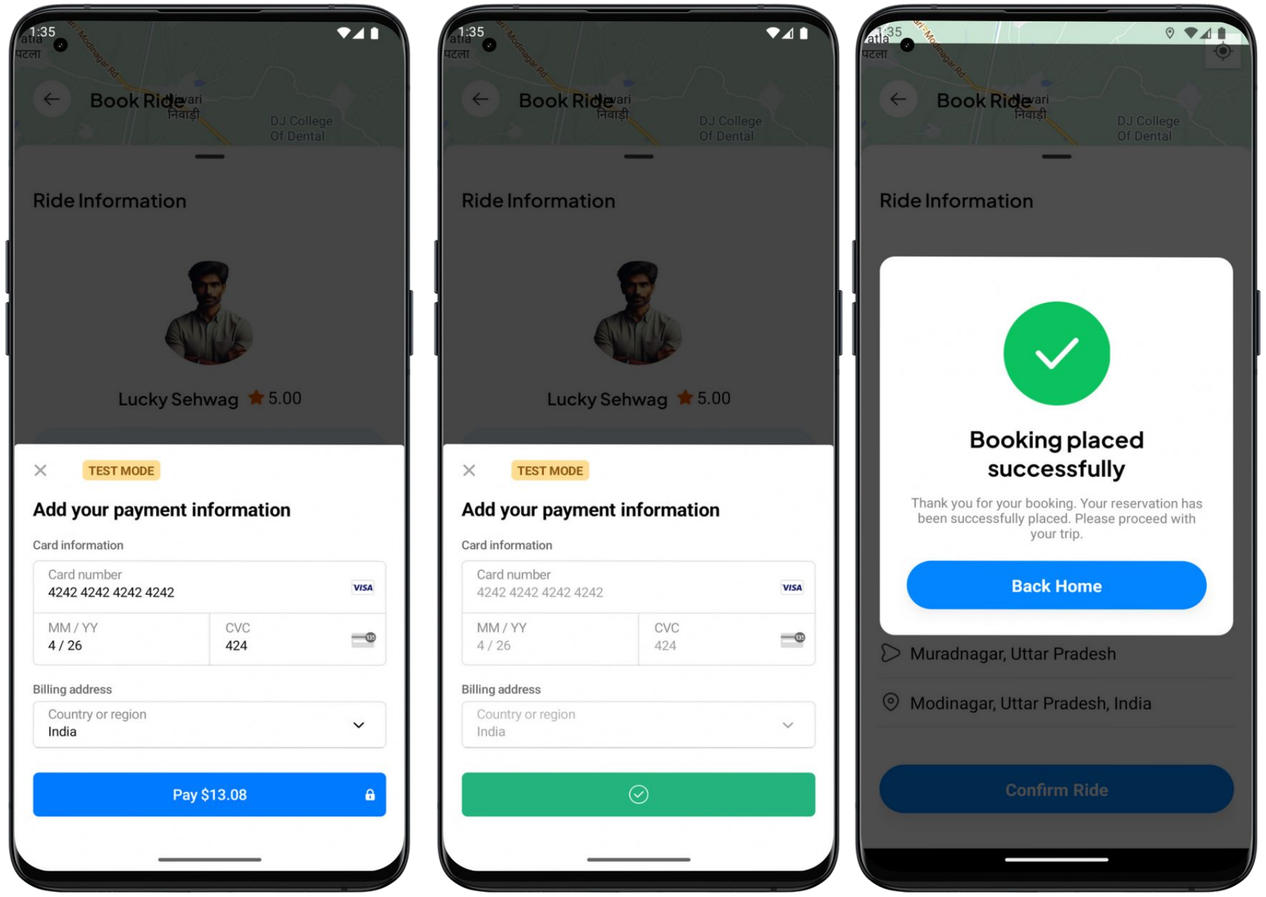
Methodology and Approach

Module 5: Payments

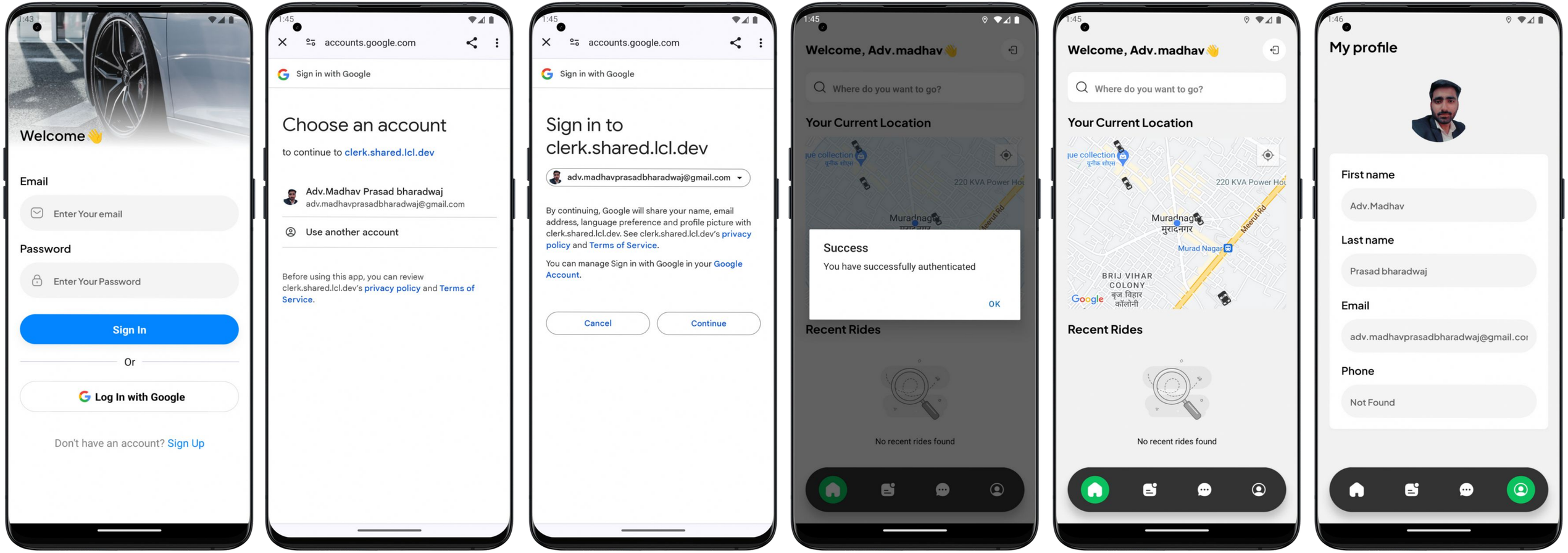
➔**Payment Services:** Payment integration using services such as Stripe Payment Service.

➔**Payment methods:** Payment options such as debit/credit card payment, etc.

➔**Payment Success:** Payment confirmation message informing about successful transaction.



Google OAuth Authentication



Project Outcomes

Convenience and Accessibility

Flexibility

Safety

References

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Thank you!