Karachi Car Rentals Platform Hackathon Documentation

Overview

The Karachi Car Rentals Platform is a user-friendly online marketplace connecting residents of Karachi to rent cars conveniently and affordably. Designed with a hyper-local focus, it provides a seamless interface for car rentals, catering to daily commutes, family trips, and more.

Day 1: Laying the Foundation

Key Highlights from the Platform:

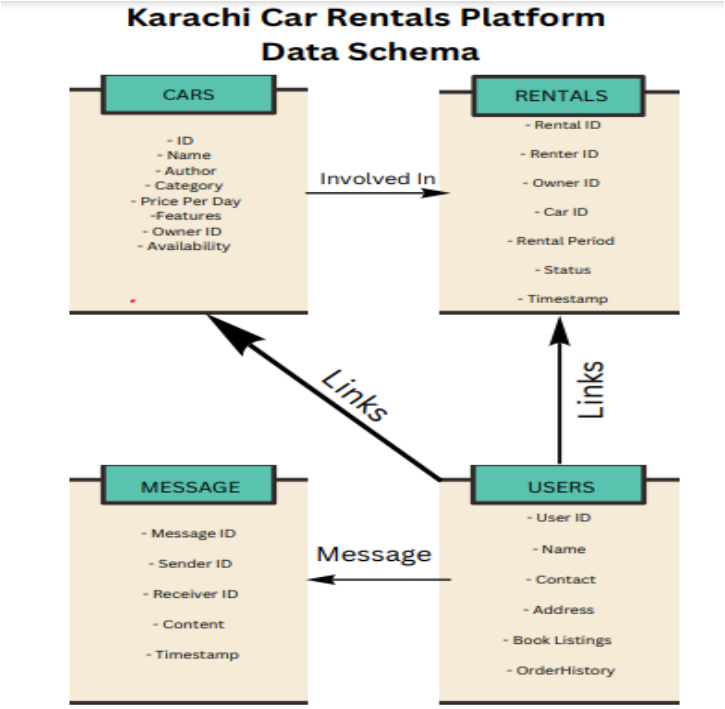
- Target Audience: Karachi residents needing short-term car rentals.
- Business Goals:
    - Provide an affordable and reliable rental platform for diverse needs.
    - Achieve a user base of 1,000 active renters and owners within the first six months.
- Problem Statement: Karachi lacks a centralized, affordable platform for hassle-free car rentals, leading to inconvenience and high costs for residents.
- Unique Value Proposition:
    - Hyper-local focus connecting renters and car owners exclusively in Karachi.
    - Flexible rental durations and a range of vehicles from economy to luxury.

Day 2: Planning the Technical Foundation

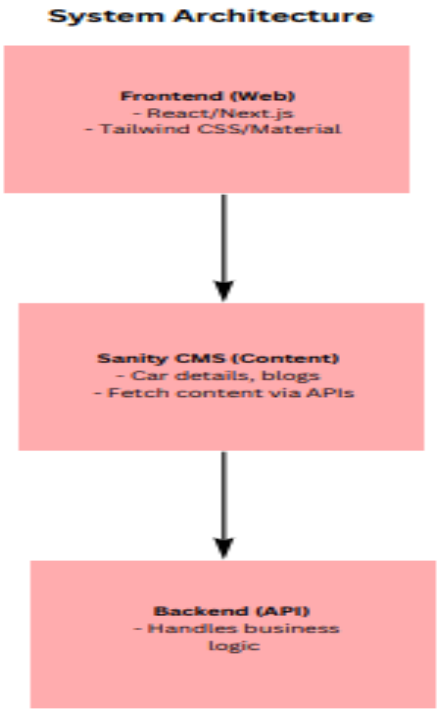
System Architecture: The platform's system architecture includes the following components:

- Frontend: Built with React.js for a responsive user interface.
- Backend: Uses Node.js and Express for API handling and server logic.
- Database: MongoDB to store car listings, user profiles, and bookings.
- Integration:
    - Sanity CMS: Manages content like car categories and FAQs.
    - APIs: Custom endpoints for user authentication, car rentals, and booking management.

Karachi Car Rentals Platform Data Schema:



System Architecture



Day 3: API Integration and Data Migration

API Endpoints:

- GET /cars: Fetch all available cars.
- POST /booking: Create a new booking.
- GET /users/:id: Retrieve user details.

Data Migration:

- Uploaded initial car listings and user profiles into Sanity studio.

Day 4: Building Dynamic Frontend Components

Key Components:

1. Product Listing: Displays cars with features and rental price.

Best Practices Followed:

- Reusable Components: Modularized components for flexibility.
- Styling: Tailwind CSS for responsiveness.
- State Management: React's useState and useContext for smooth data handling**.**

Day 6: Deployment Preparation and Staging Setup

Staging Environment Setup:

- Hosting: Deployed on Vercel securely configured.

Tests in Staging:

- Verified responsive design on multiple devices.
- Conducted API tests for data retrieval**.**

Business Pitch Deck Highlights:

1. Introduction: Karachi Car Rentals – “Connecting Karachi, One Drive at a Time.”
2. Problem: Lack of affordable, centralized car rental options.
3. Solution: A hyper-local, user-friendly marketplace.
4. Revenue Model: Commission-based earnings from rentals.

Conclusion

The Karachi Car Rentals Platform meets most hackathon documentation requirements and showcases a clear progression from ideation to live deployment. With detailed planning, testing, and branding strategies, the platform is positioned for both business and career-oriented growth.