# Title:

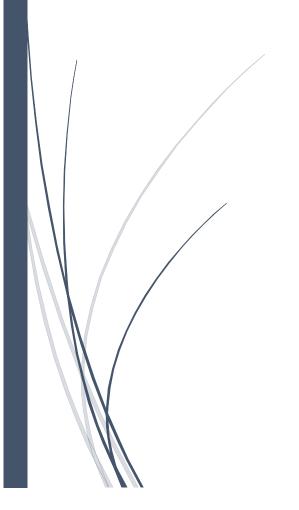
Car Rental Website

# **Group Members:**

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## Introduction:

Our project aims to develop a comprehensive car rental website that allows users and companies in Karachi, Pakistan, to rent and list cars for rent. This web application will facilitate seamless transactions between car owners and renters, offering a user-friendly interface and robust database management.

## **System Functions:**

Our car rental website will encompass a wide range of functions to ensure a smooth experience for both users and car owners. The key functions include:

### 1. User Profiles:

 Allow users and companies to create detailed profiles with personal information, contact details, and information about their cars.

## 2. Car Listings:

• Provide a platform for users and companies to list their cars with comprehensive details, including images, descriptions, rental rates, and availability dates.

#### 3. Search and Filters:

• Implement a powerful search functionality with filters based on location, price range, car type, features, and more to help users find the ideal rental.

## 4. Booking and Payment:

• Enable secure online bookings with integrated payment processing, allowing users to reserve cars effortlessly.

## 5. Reviews and Ratings:

• Allow users to leave reviews and ratings for cars and the overall service, promoting transparency and trust within the platform.

## 6. Notifications:

• Implement a notification system to keep users informed about booking requests, approvals, updates, and other relevant activities.

#### 7. Car Verification:

Ensure the authenticity of listed cars by implementing a robust car verification process.
Car owners can submit documents to prove ownership and the condition of their vehicles.

## 8. **Dynamic Pricing:**

• Implement dynamic pricing algorithms that consider factors such as demand, season, location, and car popularity to adjust rental rates in real-time.

## 9. Calendar Availability:

• Develop a calendar feature that allows car owners to set their car's availability dates, providing users with visibility into when cars are available for rent.

### 10. User Verification:

• Allow users to verify their identity through document submission, enhancing trust and security within the platform.

## 11. Advanced Search and Sorting:

• Enhance the search experience with advanced filters like fuel type, transmission, and car features. Implement sorting options by price, rating, and other relevant criteria.

## **Front-End and Back-End Technologies:**

Our project will utilize the following technologies to build and deploy the car rental website:

## • Front-End Technologies:

• **React:** To create a responsive and user-friendly front-end interface that delivers a seamless user experience.

## • Back-End Technologies:

- **Node.js:** To build a robust back-end server that handles user authentication, API requests, database interactions, and business logic.
- **SQL:** To design and manage the relational database, store user data, car listings, bookings, reviews, payments, and other critical information.