Car Rental Portal

Submitted By:

Navneet Singh (12312790)

Deepak Yadav (12322400)

Submitted to:

Hashim Zahoor (30723)

Synopsis

Title: Car Rental Portal

Introduction:

The **Car Rental Portal** is a fully functional web-based application designed to provide users with an efficient and user-friendly platform for renting vehicles online. Built using HTML, CSS for Front-end, PHP for the backend and MySQL as the database, this project automates the manual process of renting cars and managing customer interactions. The system allows **guest users** to explore rental options, while **registered users** can make bookings, view their booking history, manage their profiles, and share feedback. The portal also provides **administrators** with the tools to oversee operations, including managing vehicles, processing bookings, and handling user inquiries.

Objective:

The main objective of the project is to provide a convenient platform for users to book rental cars online and for the admin to manage bookings, vehicles, and user data efficiently. The portal offers functionalities such as car bookings, profile management, testimonials, and administrative control, ensuring a user-friendly and functional experience.

Modules Overview:

1. Guest Users:

- Can browse the website and access basic information about available rental cars.

- Can inquire through the "Contact Us" page to request more information.

2. Registered Users:

- Users can register and log in using their email and password.
- Features for registered users include:
  - **Car Booking:** Ability to select and book a rental car.
  - **Booking History:** View past car bookings.
  - **Profile Management:** Update personal information and reset passwords.
  - **Post Testimonials:** Share feedback on services.
  - **Logout:** End their session securely.

3. Admin:

- The admin is the superuser with complete control over the website.
- Admin features include:
  - **Vehicle Brands Management:** Add, edit, and delete vehicle brands.
  - **Vehicle Management:** Post, edit, and delete vehicle listings.
  - **Booking Management:** Confirm or cancel car bookings.
  - **Testimonial Management:** Activate or deactivate user testimonials.
  - **User Management:** View registered user details and activity.
  - **Contact Us Queries:** Manage and respond to inquiries.
  - **Subscriber Management:** View and manage newsletter subscriptions.

- o **Dashboard Overview:** Admin can see counts of registered users, bookings, subscribers, and queries.

- o **Content Management:** Update general page content and contact details.

- o **Password Management:** Admin can change their password for security.

- o **Logout:** Securely log out of the admin interface.

4. Technology Stack:

- **Frontend:** HTML, CSS, JavaScript

- **Backend:** PHP

- **Database:** MySQL

5. Key Features:

- **User Authentication & Authorization:** Provides secure login, registration, and password recovery functionalities.

- **Booking System:** Allows registered users to book cars, with admin approval for confirmation or cancellation.

- **Profile Management:** Users can maintain and update their profiles and passwords.

- **Admin Control:** Full control over the portal's content, bookings, testimonials, and user information through the admin dashboard.

Expected Outcome:

By the end of this project, a fully functional, secure, and scalable dynamic website will be hosted on a cloud platform. The website will be accessible globally, with enhanced performance due to the cloud's ability to scale

resources according to demand. Additionally, cloud-native tools will provide easy management and monitoring of the website.

Future Enhancements:

- Implementing CDNs will improve page load times by delivering cached static content from servers closer to users, enhancing overall performance.
- Cloud-based backup solutions will ensure continuous data protection with automatic backups and quick recovery in case of failures.
- Serverless architecture can optimize backend task handling by reducing resource management, enabling efficient scalability, and improving system reliability.

Conclusion:

The **Car Rental Portal** is an innovative solution that successfully bridges the gap between car rental service providers and customers by offering an intuitive, feature-rich online platform. It enhances the user experience by making car booking a seamless and straightforward process, providing access to essential functionalities such as browsing available cars, booking, managing personal profiles, and sharing feedback. For administrators, the portal offers comprehensive control over the entire system through an easy-to-navigate dashboard, allowing them to manage vehicles, bookings, users, and inquiries efficiently.