

A

Project Report

On...

Car Rental Management

Developed By...

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Submitted To...

**Geetanjali Colleges Of Computer
Science And Commerce(BBA)**

Saurashtra University

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Prof. Kishorsinh Vala

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- I Am Also Greatly Grateful To Our Geetanjali Group Of Colleges. We Would Like To Thanks Prof. Brijesh Shah (HOD) For Providing Us Opportunity To Prepare This Project.
- To Complete This Project Many Persons Help Me. But I Am Specially Thanked To Prof. KishorSingh Vala For Guiding My Project Analysis And Development. They Help Me Conceptualized The Idea Of The Project And Also Helped Me In Streamline My Work By Providing Me Every Facility Required.
- Not Only College And Guide Help Me But All The Well Wisher Who Gives Me Excellent Support In During Project.
- Thanks To All.

Your Faith Full,

Arab Aaftab Kadarbhai

And

Makwana Varun Mayakbhai

Preface

- **Welcome to the Car Rental Management System!** This comprehensive system is designed to streamline the processes involved in managing car rentals, reservations, and fleet operations within a car rental agency or rental service center.
- **Car rental services play a crucial role in providing flexible mobility solutions for individuals and businesses alike. Efficient management of rental vehicles, bookings, and customer interactions is essential for the success of any car rental agency.** Proper management ensures that customers receive the vehicles they need, at the right time, while maintaining an optimized fleet and enhancing overall service quality.
- **This system aims to address the various challenges faced by car rental agencies, including managing reservations, maintaining accurate records of vehicles and customers, coordinating fleet maintenance, and ensuring smooth rental and return processes.** By automating these processes and providing robust features and reporting, the Car Rental Management System facilitates the efficient operation of rental agencies, ultimately improving customer satisfaction and operational efficiency.
- The Car Rental Management System provides numerous features, including the ability to add and update vehicle details, manage customer records, process bookings, and track rental.
- **Thank you for choosing our Car Rental Management System.** We are committed to providing you with a reliable and efficient solution to support your critical work in delivering exceptional car rental services.

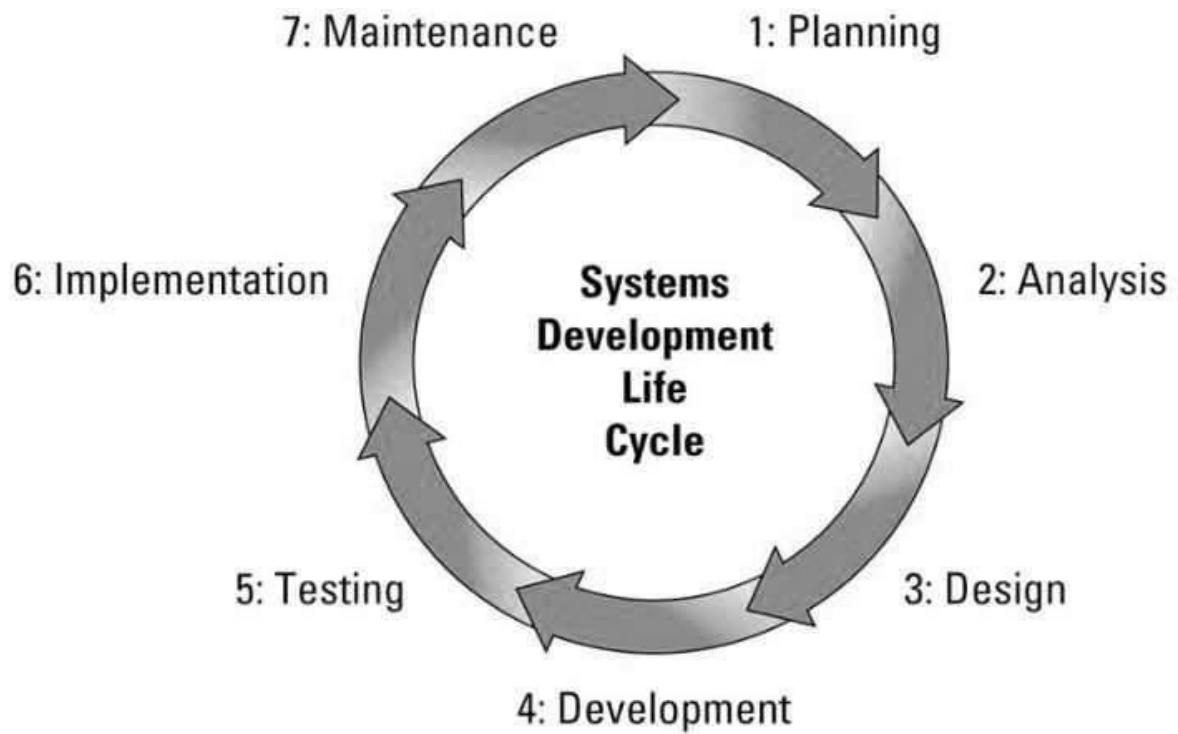
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Project Profile

| About Project | Project Details |
|--------------------|--------------------------------|
| Project Title | Car Rental Management |
| Editor | Microsoft Visual Studio – 2022 |
| Front End | HTML,CSS,BOOTSTRAP,JS |
| Backend | PHP |
| Year | 2023-2024 |
| Project Guide | Prof. KishorSinh Vala |
| Submitted By | Arab Aaftab And Varun Makwana |
| Documentation Tool | Microsoft Word |
| Operating System | Windows |
| Project Type | Website |

System Development Life Cycle



➤ Planning

- Gather requirements from stakeholders (e.g., car rental agencies, customers).
- Identify key features such as booking management, vehicle inventory, customer profiles, payment processing, and reporting.

➤ Analysis

- Conduct detailed interviews and workshops with stakeholders to refine requirements.
- Create use cases and user stories.

➤ Design

- Design the system architecture, including database schema, server infrastructure, and application layers.
- Create wireframes and mockups for the user interface.

➤ **Development**

- Set up the development environment.
- Write code for different modules (e.g., booking system, customer management, payment gateway).
- Develop the front-end and back-end components.

➤ **Testing**

- Conduct various types of testing (e.g., functional, integration, system, acceptance).
- Perform automated and manual tests to identify and fix bugs.

➤ **Implementation**

- Prepare deployment plans and ensure all prerequisites are met.
- Deploy the system to a staging environment for final testing.

➤ **Maintenance**

- Monitor system performance and address any issues that arise.
- Provide support for users and fix any bugs or defects discovered post-deployment.
- Perform regular backups and system maintenance.

Technology Requirement

➤ Software

- Any windows operating system windows 7 to windows 11
- Web Browser (Google Chrome, Internet Explorer, etc...)
- Front-End -> HTML, CSS, JAVASCRIPT, BOOTSTRAP
- Back-End -> PHP, MY SQL
- Microsoft Visual Studio – 2022 Editor

➤ Hardware

- Processor : Intel core 2 duo and after all
- RAM 4 GB or Higher
- HDD with 256GB or Higher

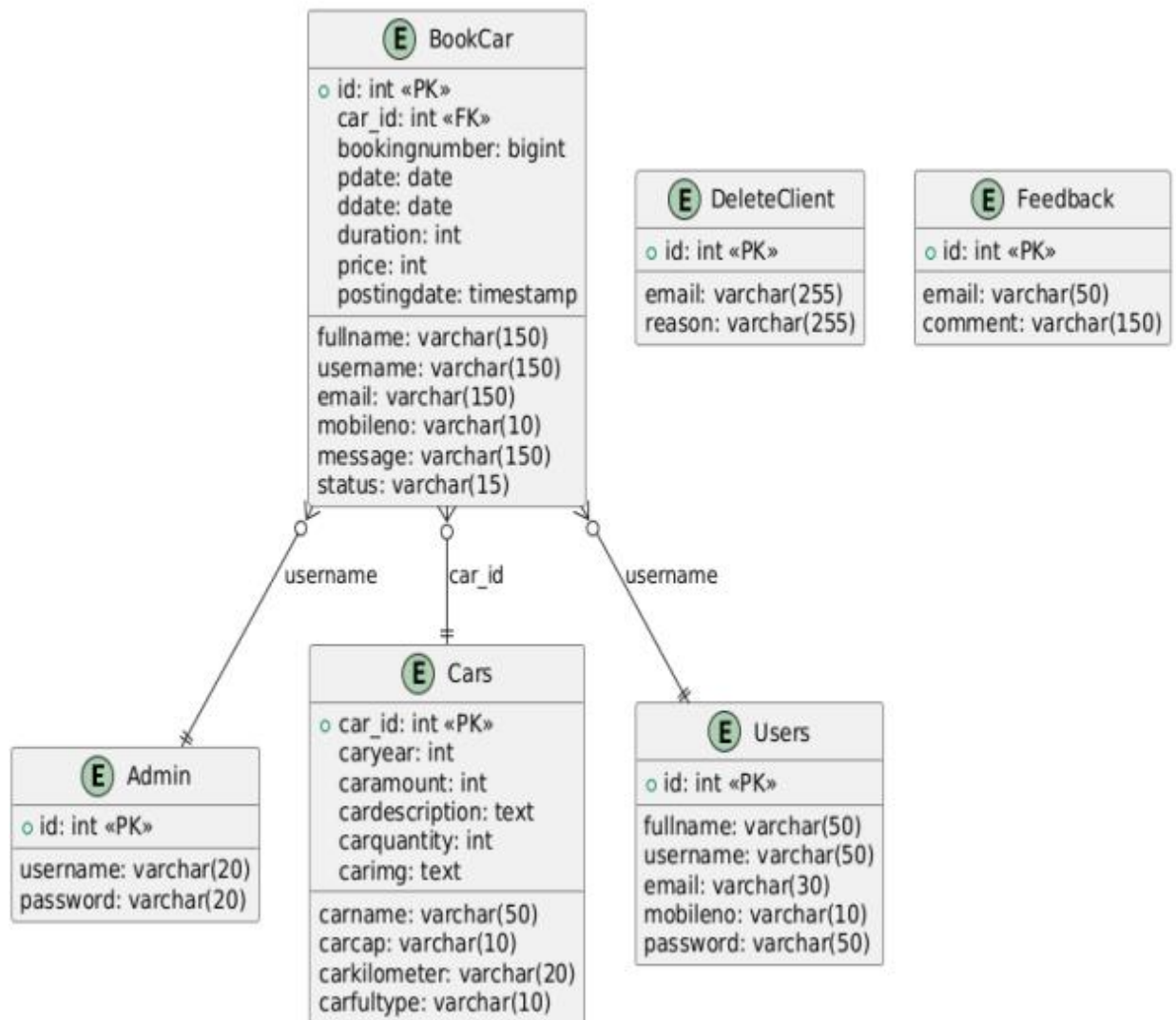
गीतांजली कोलेज

System Design Tools

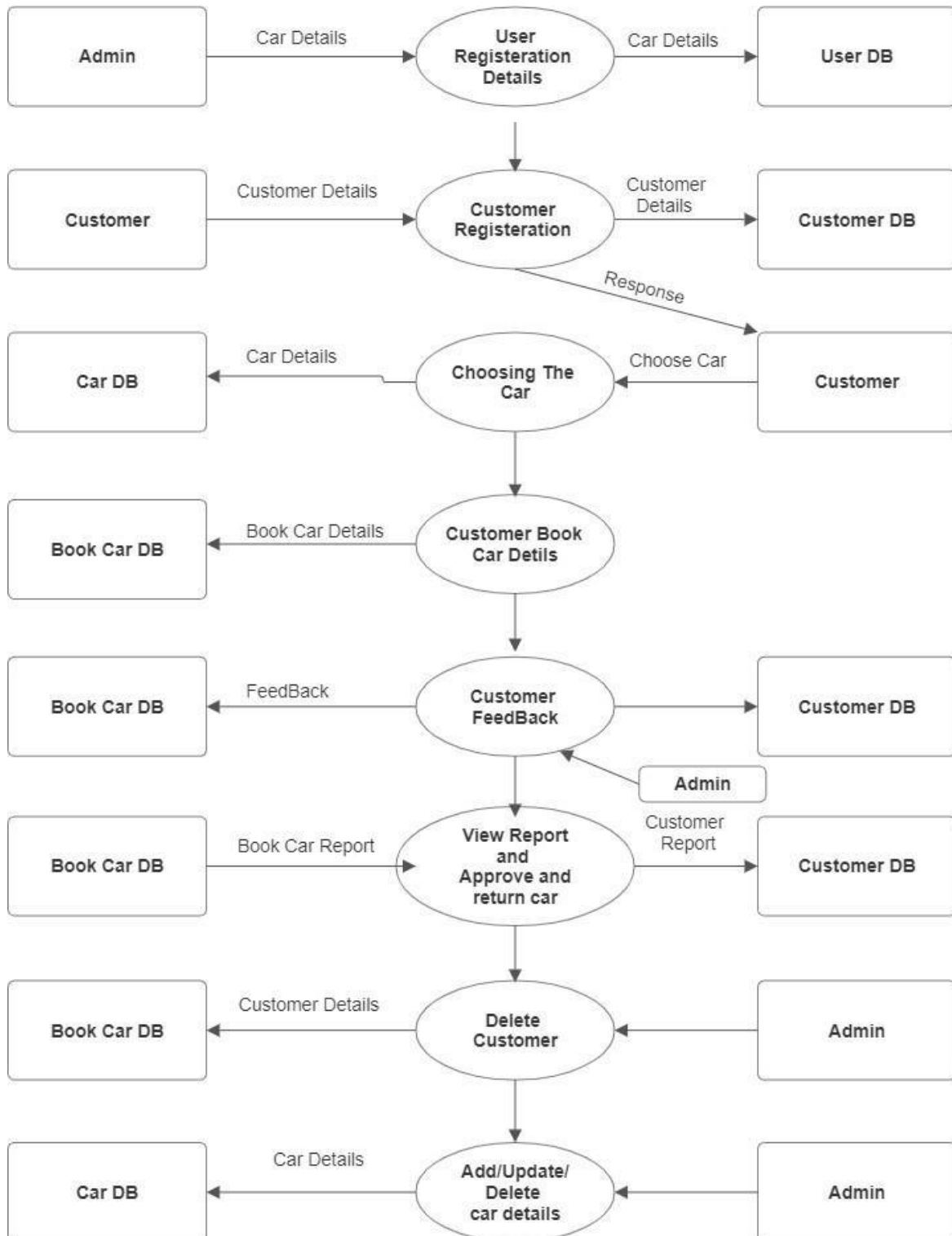
[ER Diagrams]

[DFD's]

➤ ER Diagrams



➤ DFD(Data Flow Diagram)



Data Dictionarys

1. Admin

| Field Name | Data Type | Description | Constraints |
|------------|-------------|-------------------|-----------------------------|
| id | Integer(11) | Unique identifier | Primary Key, Auto-increment |
| username | Varchar(20) | Admin Username | Not Null |
| password | Varchar(20) | Admin Password | Not Null |

2. Users

| Field Name | Data Type | Description | Constraints |
|------------|-------------|---------------------------------|-----------------------------|
| id | Integer(11) | Unique identifier for each User | Primary Key, Auto-increment |
| fullname | Varchar(50) | User Full Name | Not null |
| username | Varchar(50) | User Name | Not null |
| email | Varchar(30) | User Email | Not null |
| mobilenno | Varchar(10) | User Mobile No | Not null |
| password | Varchar(50) | User Password | Not null |

3. Cars

| Field Name | Data Type | Description | Constraints |
|----------------|-------------|---------------------------------|-----------------------------|
| car_id | Integer(11) | Unique identifier for each Cars | Primary Key, Auto-increment |
| carname | Varchar(50) | Car Name | Not null |
| caryear | Integer(10) | Car Launch Year | Not null |
| carcap | varchar(10) | Car Seats | Not null |
| carkilometer | varchar(20) | Car Kilometer | Not null |
| caramount | Integer(11) | Car PerDay Amount | Not null |
| carquantity | Integer(50) | Car Quantity | Not null |
| cardescription | Text | Car Description | Not null |
| carfueltype | Varchar(10) | Car Fuel Type | Not null |
| carimg | text | Car Image | Not null |

4. User Booking Cars

| Field Name | Data Type | Description | Constraints |
|---------------|---------------|---|-----------------------------|
| id | Integer(11) | Unique identifier for each User Book Car | Primary Key, Auto-increment |
| car_id | Integer (11) | Identifier for the booked car. | foreign key |
| bookingnumber | Bigint(12) | Unique booking number. | Not null |
| fullname | varchar(150) | Fullname of the person who booked the car. | Not null |
| username | Varchar(150) | Username of the person who booked the car. | Not null |
| email | Varchar(150) | email of the person who booked the car. | Not null |
| mobilenno | Integer (10) | email of the person who booked the car. | Not null |
| pdate | date | Pickup date of the car. | Not null |
| ddate | date | Drop date of the car. | Not null |
| message | Varchar(150) | Additional message or notes. | Not null |
| duration | Integer (150) | Duration of the booking in days. | Not null |
| price | Integer (150) | Total price for the booking. | Not null |
| status | Varchar(15) | Current status of the booking (e.g., RETURNED, pending). | Not null |
| postingdate | timestamp | Date and time when the booking was created or last updated. | Not null |

5. Feedback

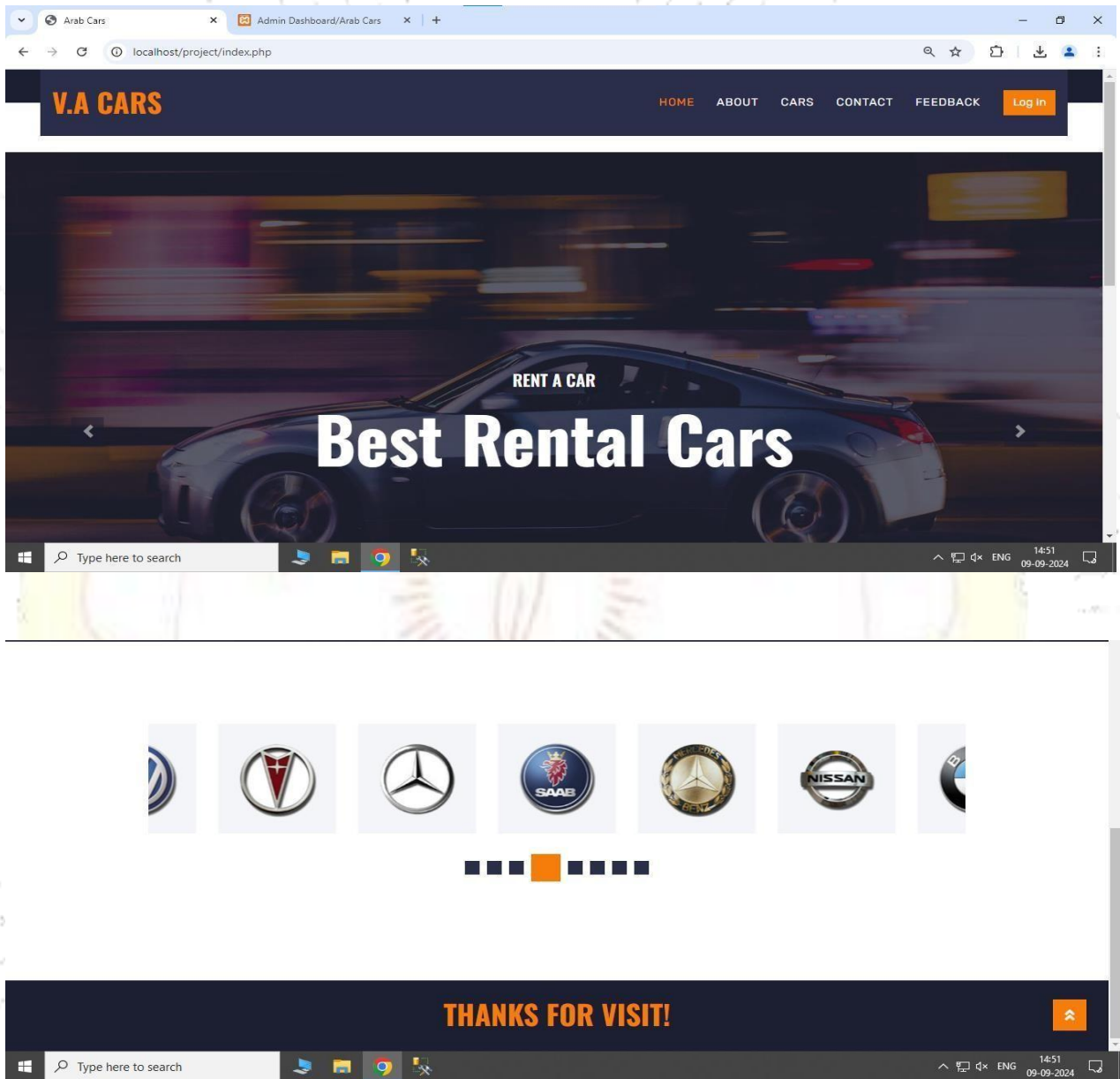
| Field Name | Data Type | Description | Constraints |
|-------------------|------------------|--|-----------------------------|
| id | Integer (11) | Unique identifier for the feedback entry | Primary Key, Auto-increment |
| email | Varchar(50) | Email address of the user providing feedback | Not null |
| comment | Varchar(150) | Feedback or comment provided by the user. | Not null |

6. Delete Client

| Field Name | Data Type | Description | Constraints |
|-------------------|------------------|---|-----------------------------|
| Id | Integer (11) | Unique identifier for the deletion record | Primary Key, Auto-increment |
| email | Varchar(255) | Email address of the deleted client. | Not null |
| reason | Varchar(255) | Reason for the client's deletion. | Not null |

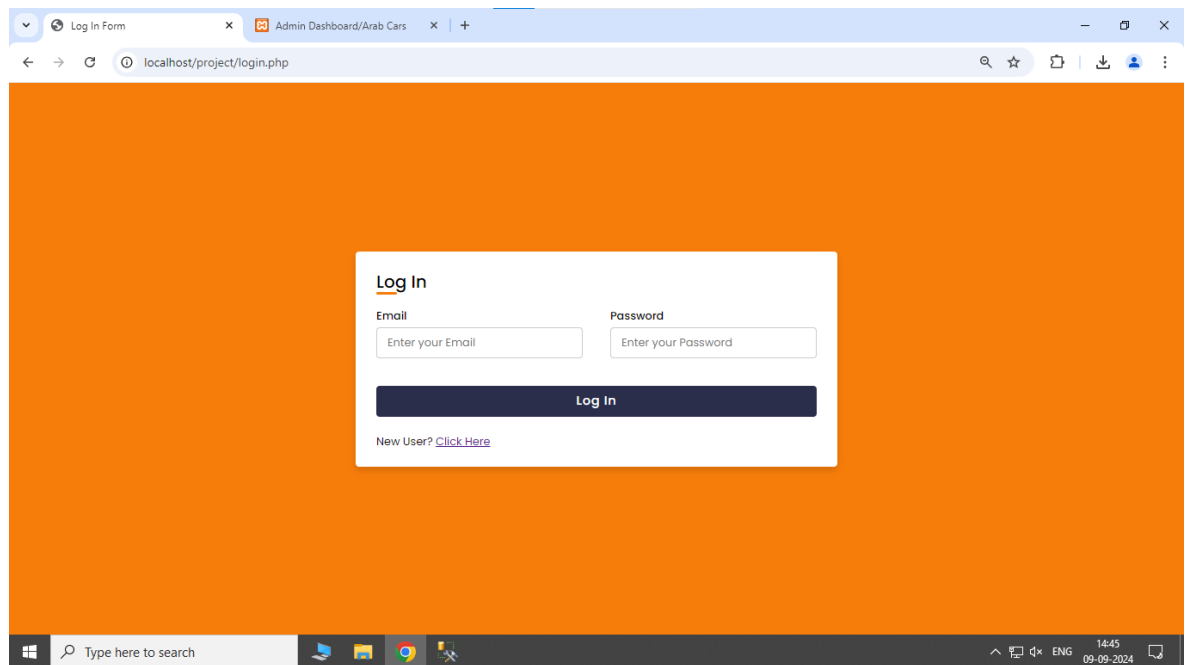
Screen Shorts

➤ Index Page



➤ This Is a Main Page.

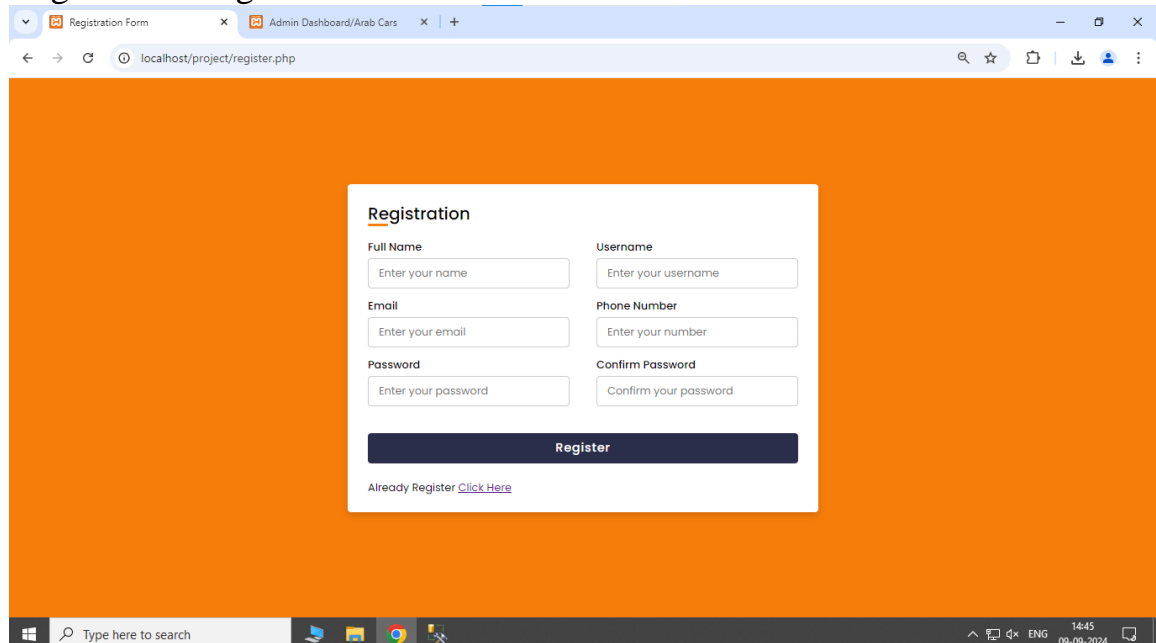
➤ Login Page



A screenshot of a web browser displaying the login page. The browser has two tabs: 'Log In Form' and 'Admin Dashboard/Arab Cars'. The address bar shows 'localhost/project/login.php'. The page has an orange background. In the center is a white 'Log In' form with fields for 'Email' (placeholder: 'Enter your Email') and 'Password' (placeholder: 'Enter your Password'). Below these is a dark blue 'Log In' button. At the bottom of the form, it says 'New User? [Click Here](#)'. The Windows taskbar is visible at the bottom with the search bar and system clock showing 14:45 on 09-09-2024.

➤ Here User Login For Book A Car.

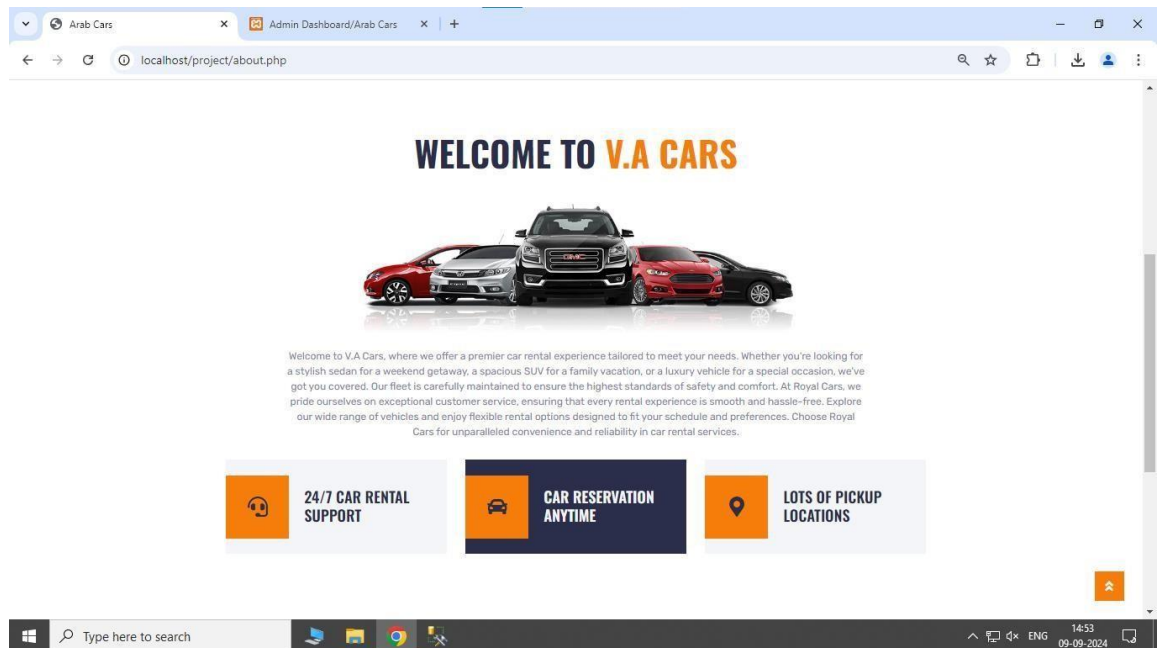
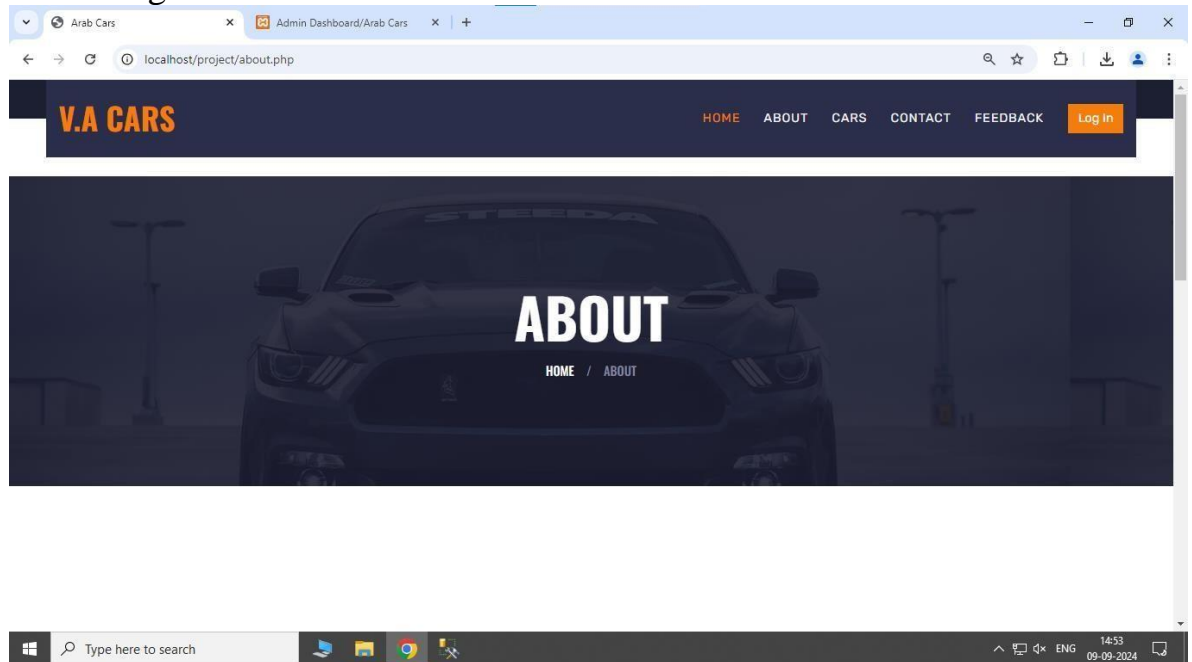
➤ Registration Page



A screenshot of a web browser displaying the registration page. The browser has two tabs: 'Registration Form' and 'Admin Dashboard/Arab Cars'. The address bar shows 'localhost/project/register.php'. The page has an orange background. In the center is a white 'Registration' form with fields for 'Full Name' (placeholder: 'Enter your name'), 'Username' (placeholder: 'Enter your username'), 'Email' (placeholder: 'Enter your email'), 'Phone Number' (placeholder: 'Enter your number'), 'Password' (placeholder: 'Enter your password'), and 'Confirm Password' (placeholder: 'Confirm your password'). Below these is a dark blue 'Register' button. At the bottom of the form, it says 'Already Register [Click Here](#)'. The Windows taskbar is visible at the bottom with the search bar and system clock showing 14:45 on 09-09-2024.

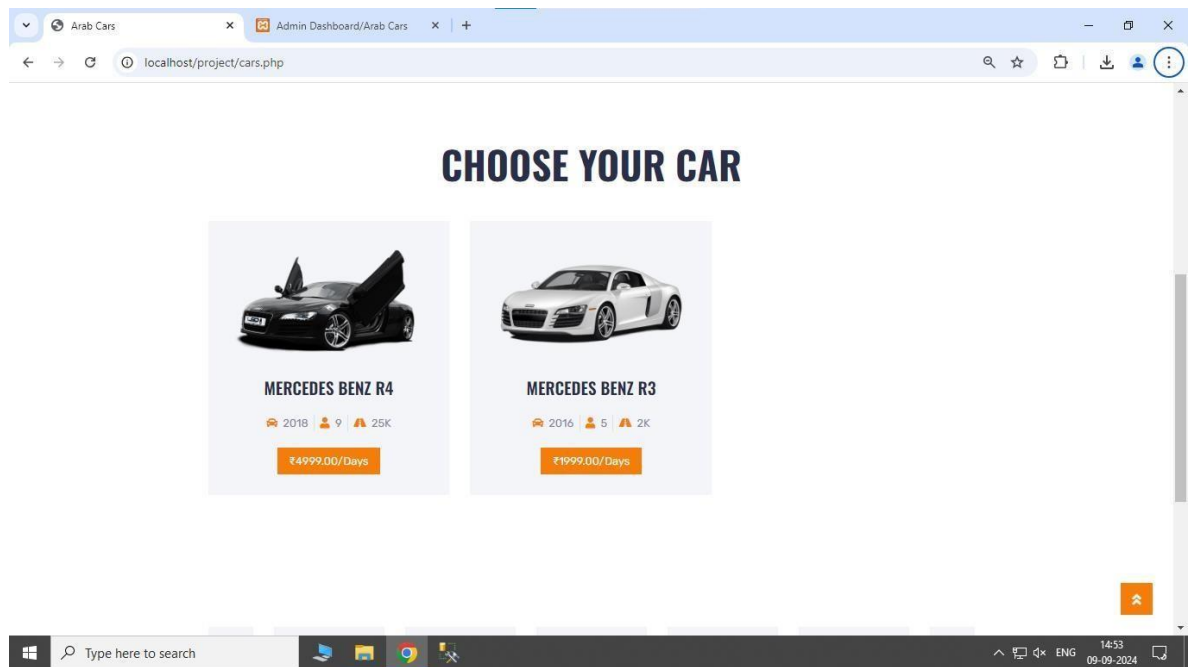
➤ Here User Can Create His/Her Account.

➤ About Page



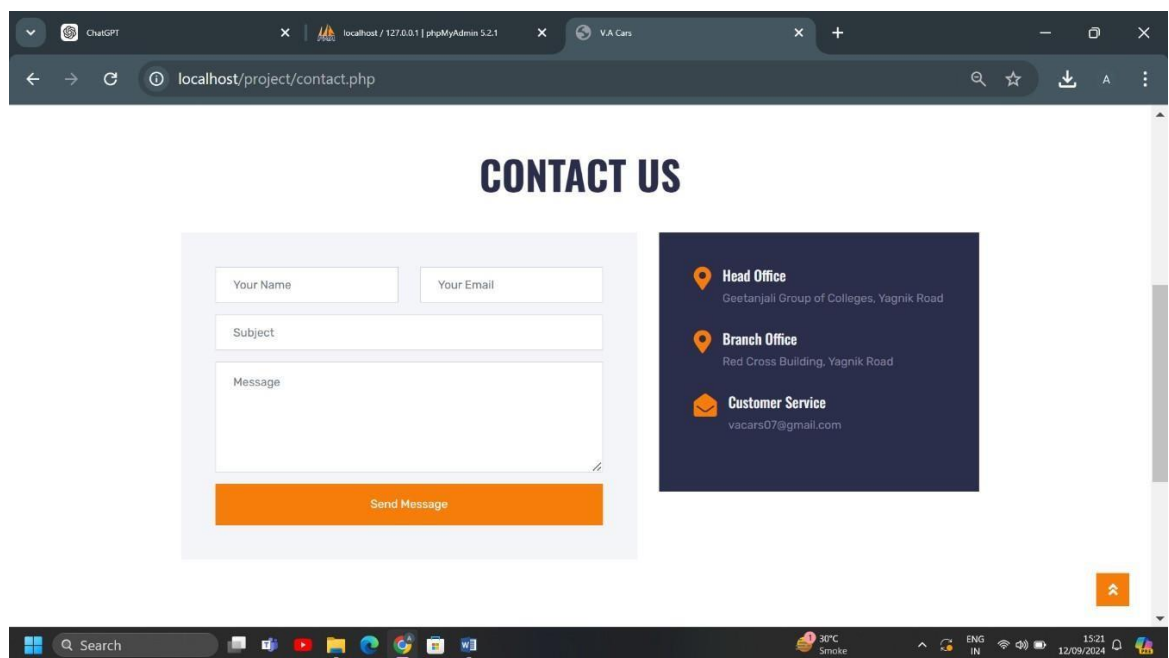
➤ This Is A About Page.

➤ Car Page



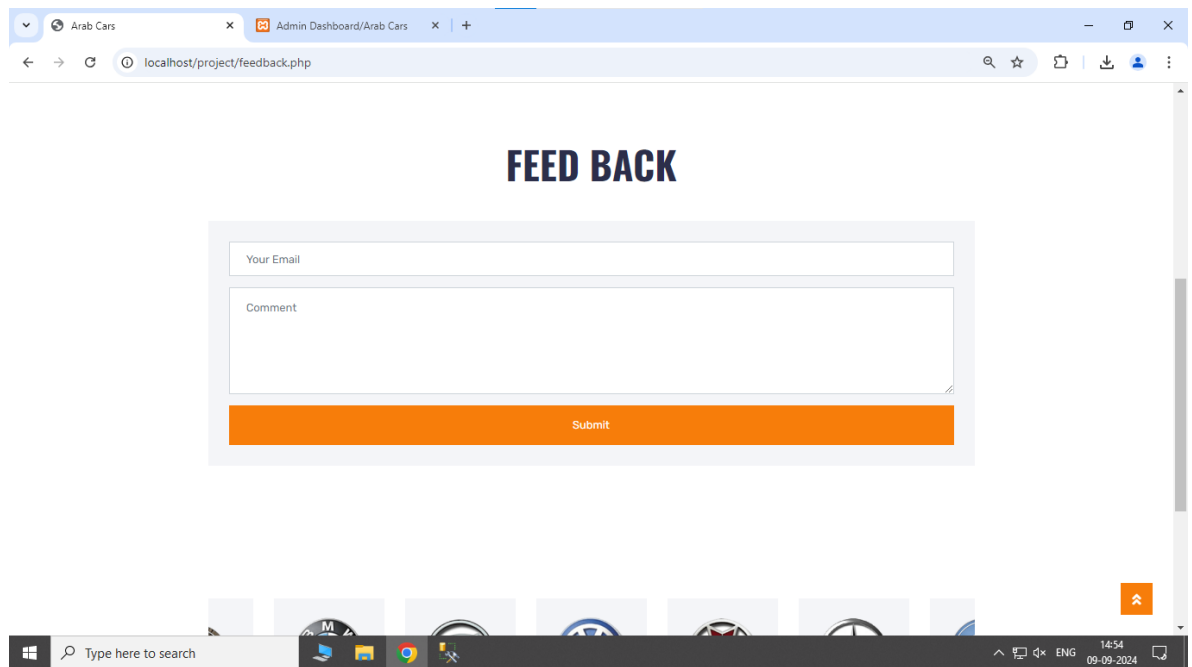
➤ In This Page Display All Available Cars For Booking

➤ Contact Page



➤ Here User Contact To Admin

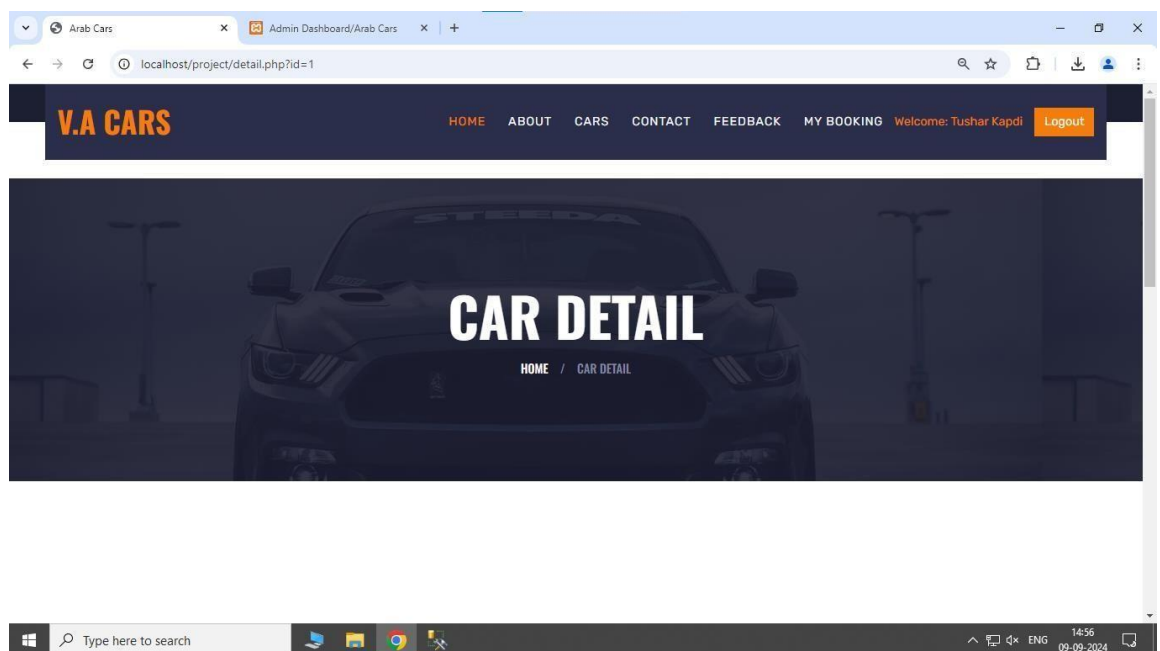
➤ Feed Back Page

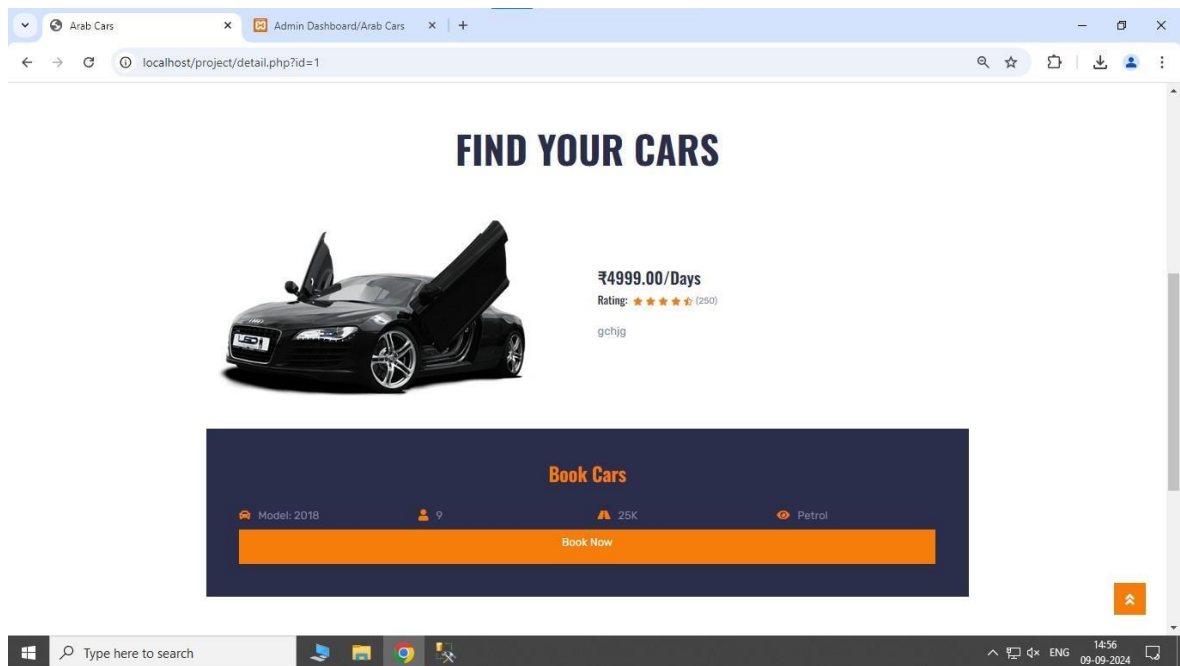


A screenshot of a web browser displaying the 'FEED BACK' page. The browser's address bar shows 'localhost/project/feedback.php'. The page has a light blue header with the title 'FEED BACK' in bold, dark blue letters. Below the header is a form with two input fields: 'Your Email' and 'Comment'. The 'Comment' field is a larger text area. At the bottom of the form is an orange 'Submit' button. The browser's taskbar at the bottom shows the Windows logo, a search bar, and several application icons. The system tray on the right shows the date and time as '14:54 09-09-2024'.

➤ Here User Can Provide Feedback about Service

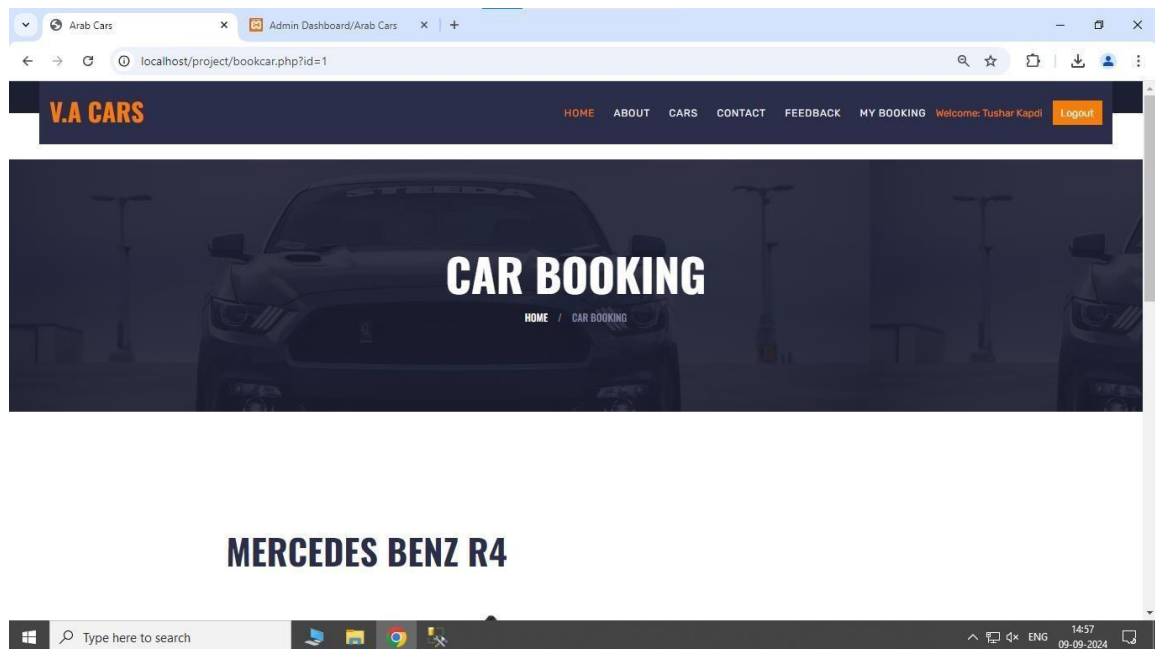
➤ Car Details Page

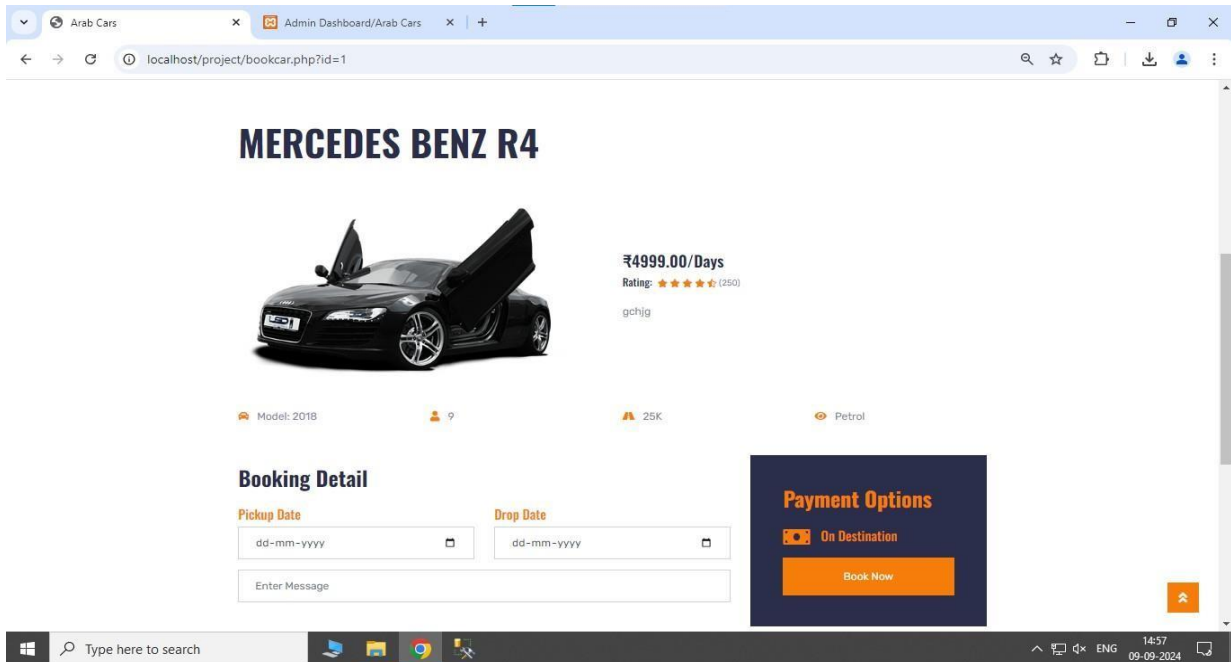




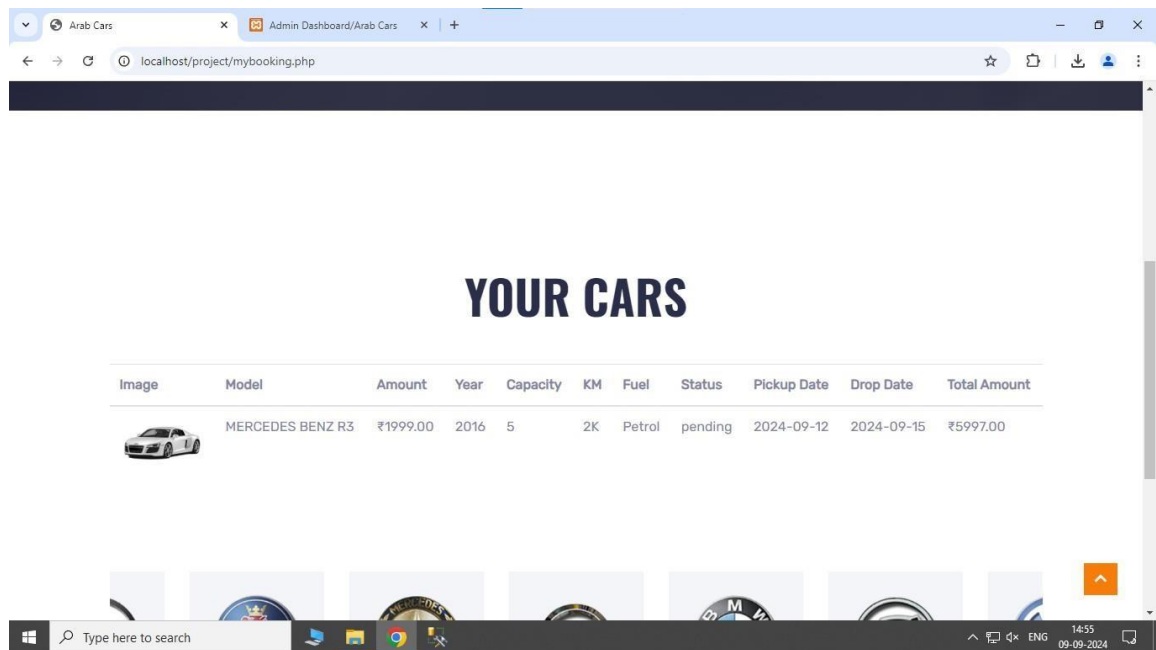
➤ This Page Display Selected Car Details

➤ Car Booking Page



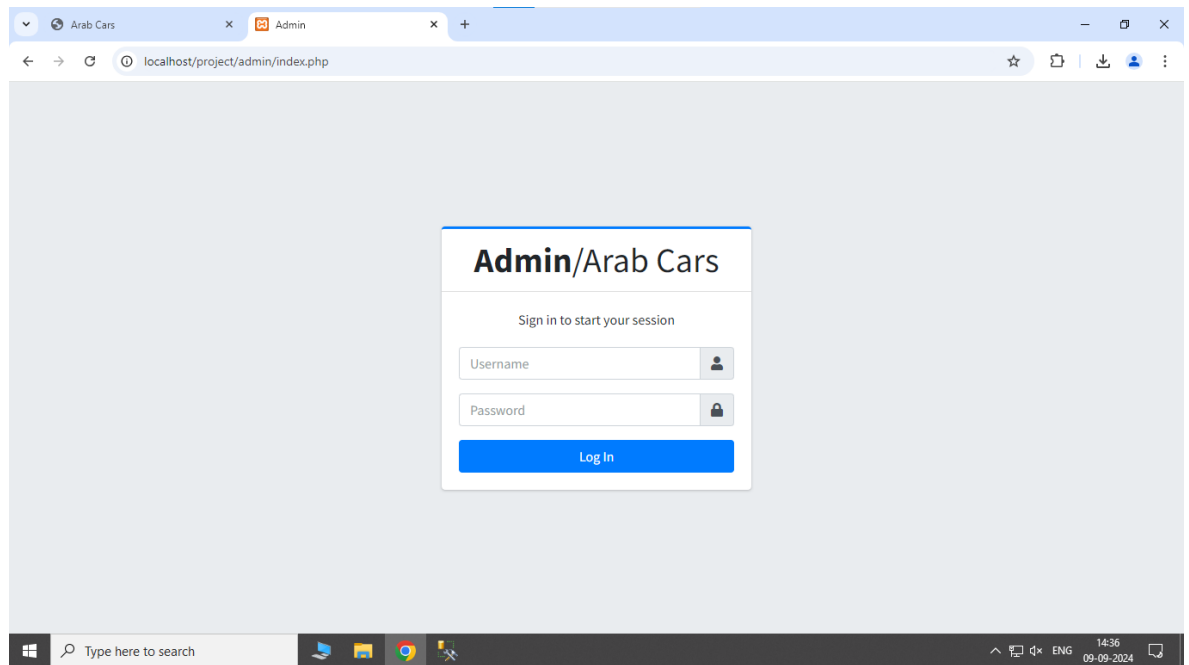


- Here User Select Car Pickup Date And Drop Date
- My Booking Page



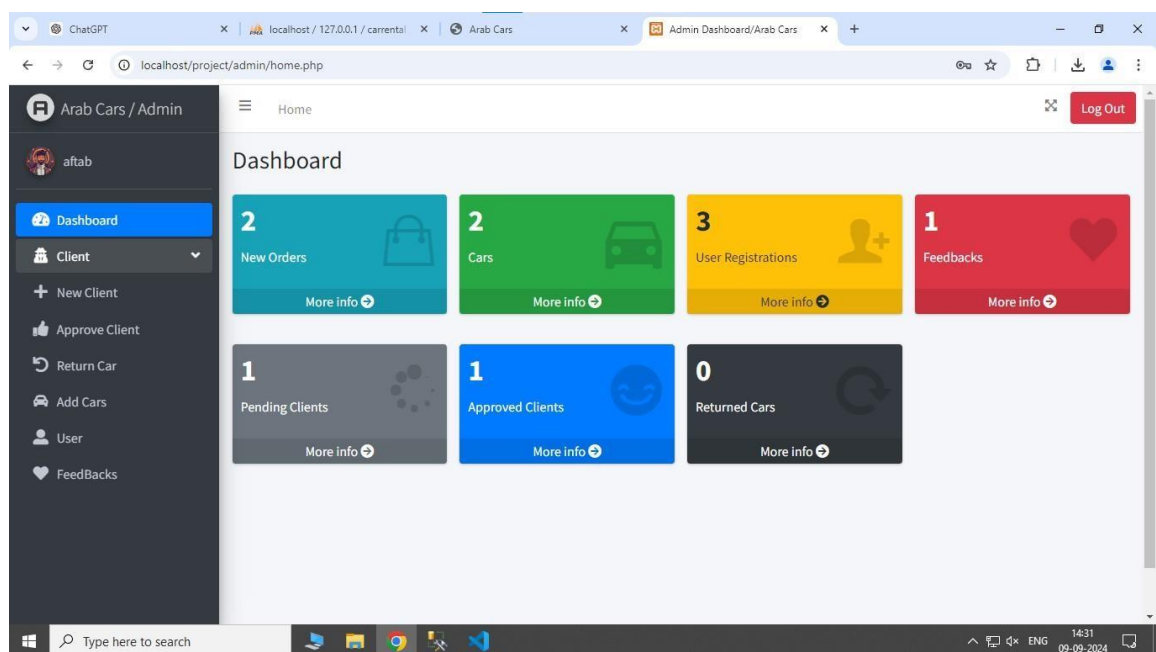
- This Page Display Which Car User Booked

➤ Admin Login



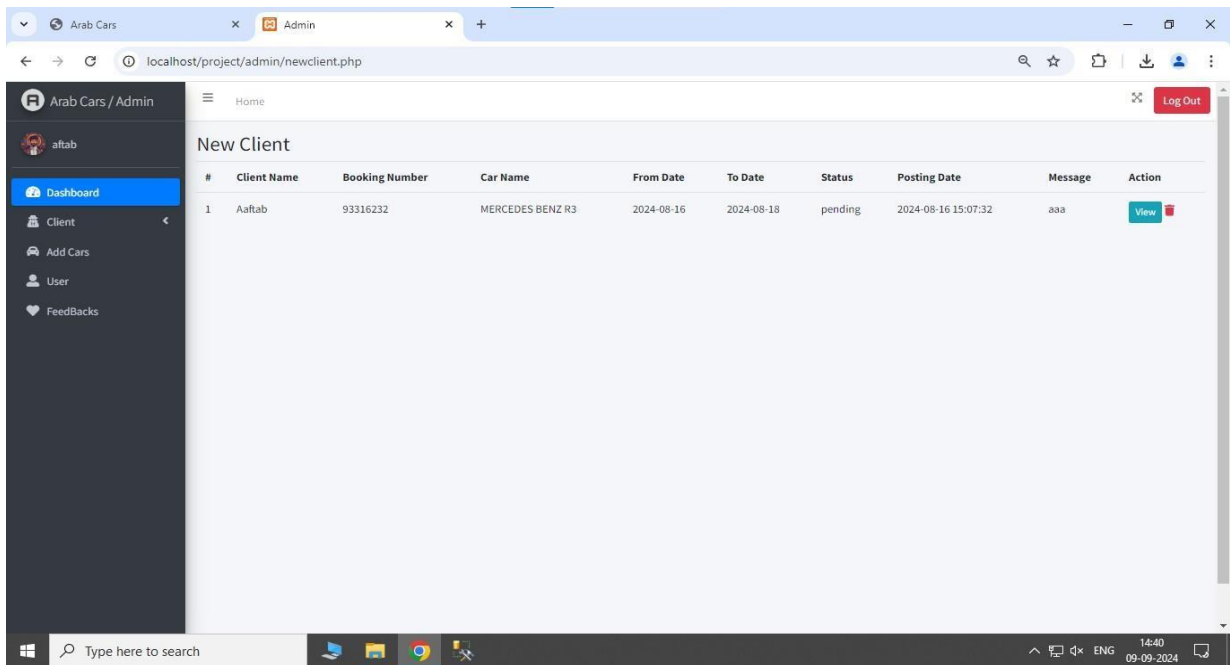
➤ This Is A Admin Login Page

➤ Admin Home Page



➤ This is Dashboard Page

➤ New Client Details



Arab Cars / Admin

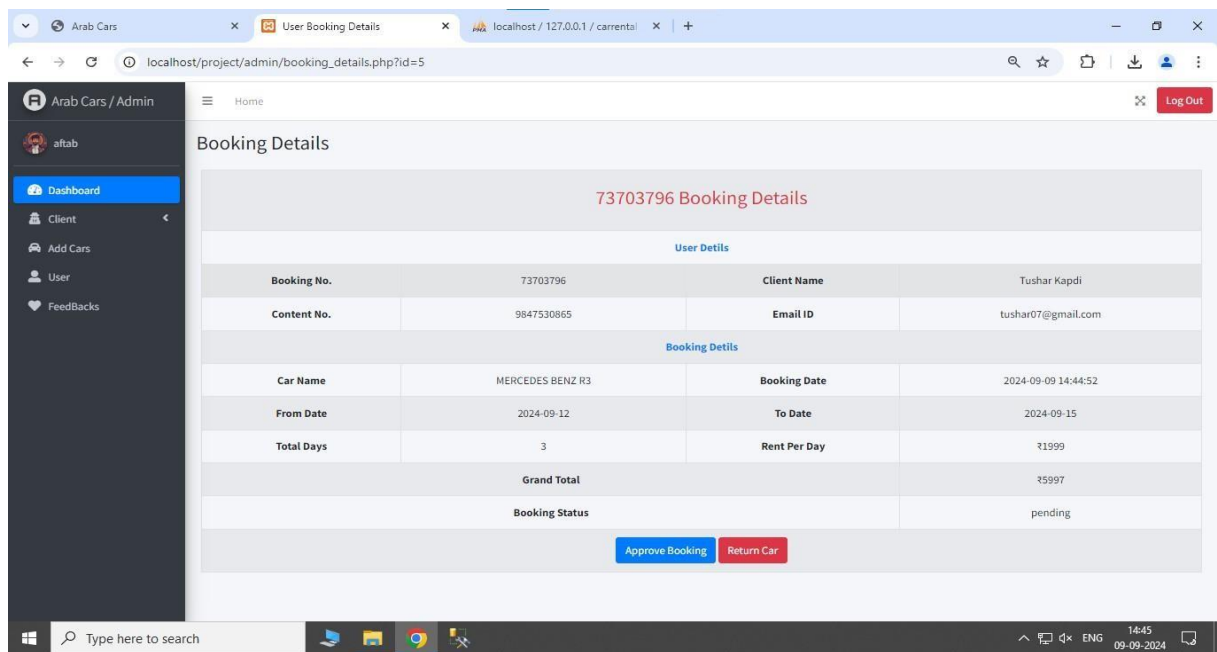
Home

New Client

| # | Client Name | Booking Number | Car Name | From Date | To Date | Status | Posting Date | Message | Action |
|---|-------------|----------------|------------------|------------|------------|---------|---------------------|---------|----------------------|
| 1 | Aaftab | 93316232 | MERCEDES BENZ R3 | 2024-08-16 | 2024-08-18 | pending | 2024-08-16 15:07:32 | aaa | View |

Log Out

➤ This Page Display New Client Details



Arab Cars / Admin

Home

Booking Details

73703796 Booking Details

User Details

| | | | |
|-------------|------------|-------------|--------------------|
| Booking No. | 73703796 | Client Name | Tushar Kapdi |
| Content No. | 9847530865 | Email ID | tushar07@gmail.com |

Booking Details

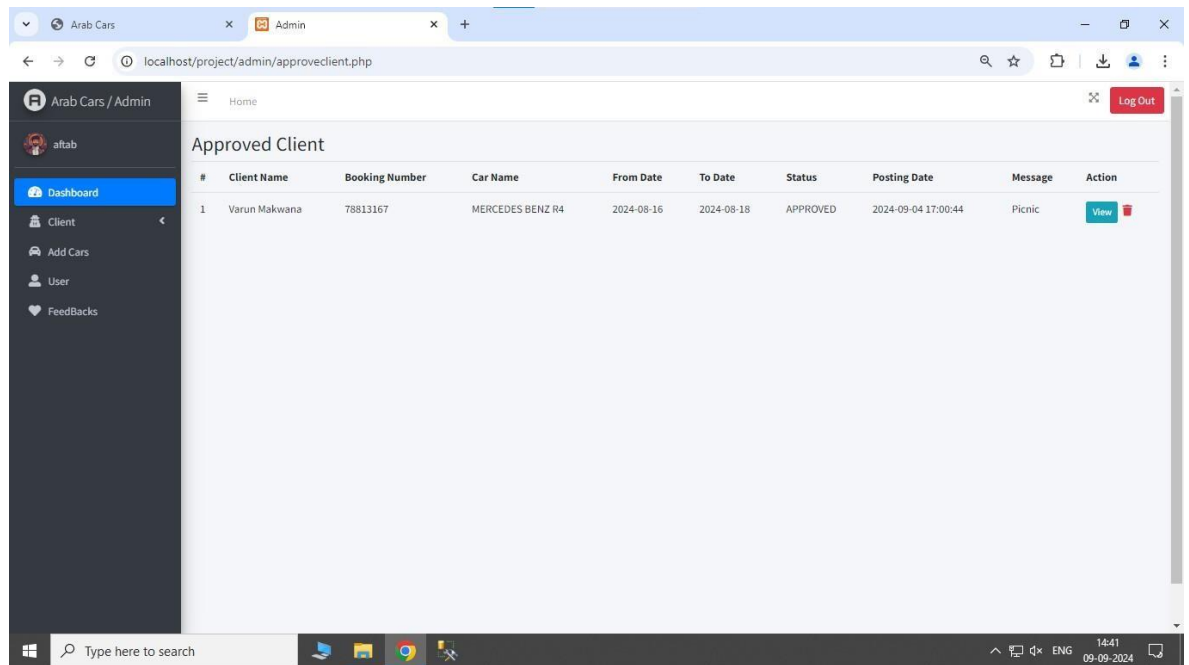
| | | | |
|----------------|------------------|--------------|---------------------|
| Car Name | MERCEDES BENZ R3 | Booking Date | 2024-09-09 14:44:52 |
| From Date | 2024-09-12 | To Date | 2024-09-15 |
| Total Days | 3 | Rent Per Day | ₹1999 |
| Grand Total | | ₹5997 | |
| Booking Status | | pending | |

[Approve Booking](#) [Return Car](#)

Log Out

➤ Admin Can Approve And Return Car In This Page

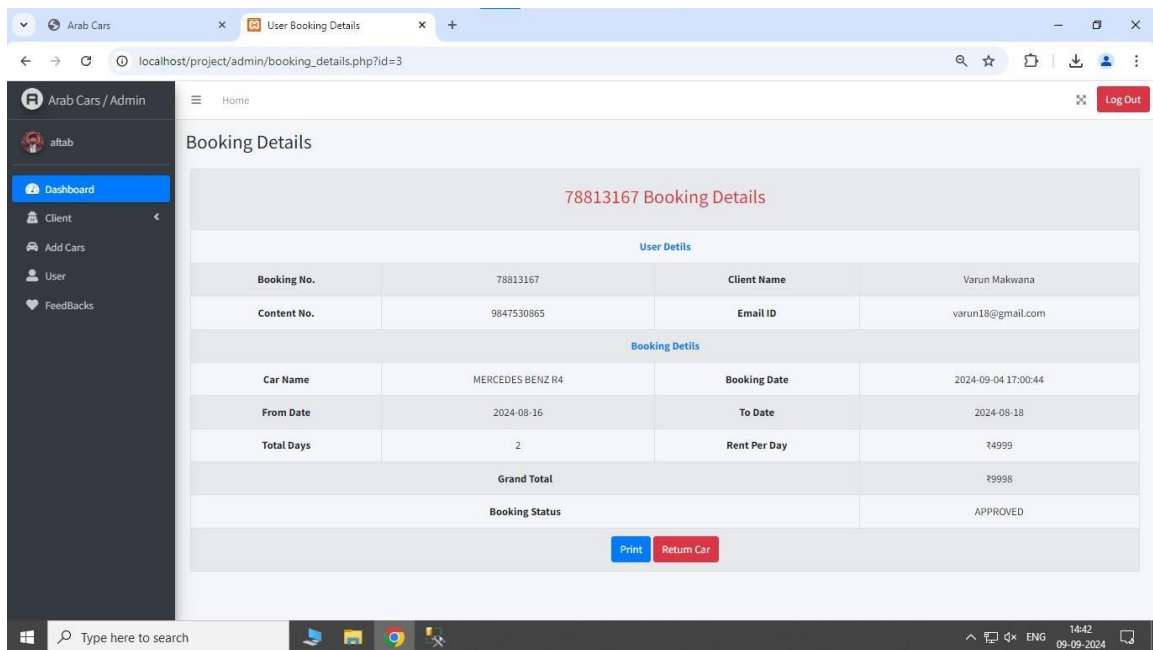
➤ Approve Client Booking Details



The screenshot shows the 'Approved Client' page in the Arab Cars Admin interface. The page has a sidebar with navigation links: Dashboard, Client, Add Cars, User, and FeedBacks. The main content area displays a table of approved bookings.

| # | Client Name | Booking Number | Car Name | From Date | To Date | Status | Posting Date | Message | Action |
|---|---------------|----------------|------------------|------------|------------|----------|---------------------|---------|----------------------|
| 1 | Varun Makwana | 78813167 | MERCEDES BENZ R4 | 2024-08-16 | 2024-08-18 | APPROVED | 2024-09-04 17:00:44 | Picnic | View |

➤ This Page Display Approve Client Details



The screenshot shows the 'Booking Details' page in the Arab Cars Admin interface. The page displays the details for booking 78813167, including user details, booking details, and booking status.

| 78813167 Booking Details | | | |
|--|------------------|--------------|---------------------|
| User Details | | | |
| Booking No. | 78813167 | Client Name | Varun Makwana |
| Content No. | 9847530865 | Email ID | varun18@gmail.com |
| Booking Details | | | |
| Car Name | MERCEDES BENZ R4 | Booking Date | 2024-09-04 17:00:44 |
| From Date | 2024-08-16 | To Date | 2024-08-18 |
| Total Days | 2 | Rent Per Day | ₹4999 |
| Grand Total | | ₹9998 | |
| Booking Status | | APPROVED | |
| Print Return Car | | | |

➤ Admin Can Print Approve User Details And Return Car In This Page

➤ Return Car Client Details

Returned Cars

| # | Client Name | Booking Number | Car Name | From Date | To Date | Status | Posting Date | Message | Action |
|---|-------------|----------------|------------------|------------|------------|----------|---------------------|---------|----------------------|
| 1 | Aaftab | 93316232 | MERCEDES BENZ R3 | 2024-08-16 | 2024-08-18 | RETURNED | 2024-09-09 14:40:50 | aaa | View |

➤ This Page Display Returned Client Details

Booking Details

93316232 Booking Details

| User Details | | | |
|--------------|------------|-------------|--------------|
| Booking No. | 93316232 | Client Name | Aaftab |
| Content No. | 9647530865 | Email ID | aa@gmail.com |

| Booking Details | | | |
|-----------------|------------------|--------------|---------------------|
| Car Name | MERCEDES BENZ R3 | Booking Date | 2024-09-09 14:40:50 |
| From Date | 2024-08-16 | To Date | 2024-08-18 |
| Total Days | 2 | Rent Per Day | ₹1999 |
| Grand Total | | | ₹3998 |
| Booking Status | | | RETURNED |

[Print](#)

➤ Admin Can Print Return User Details In This Page

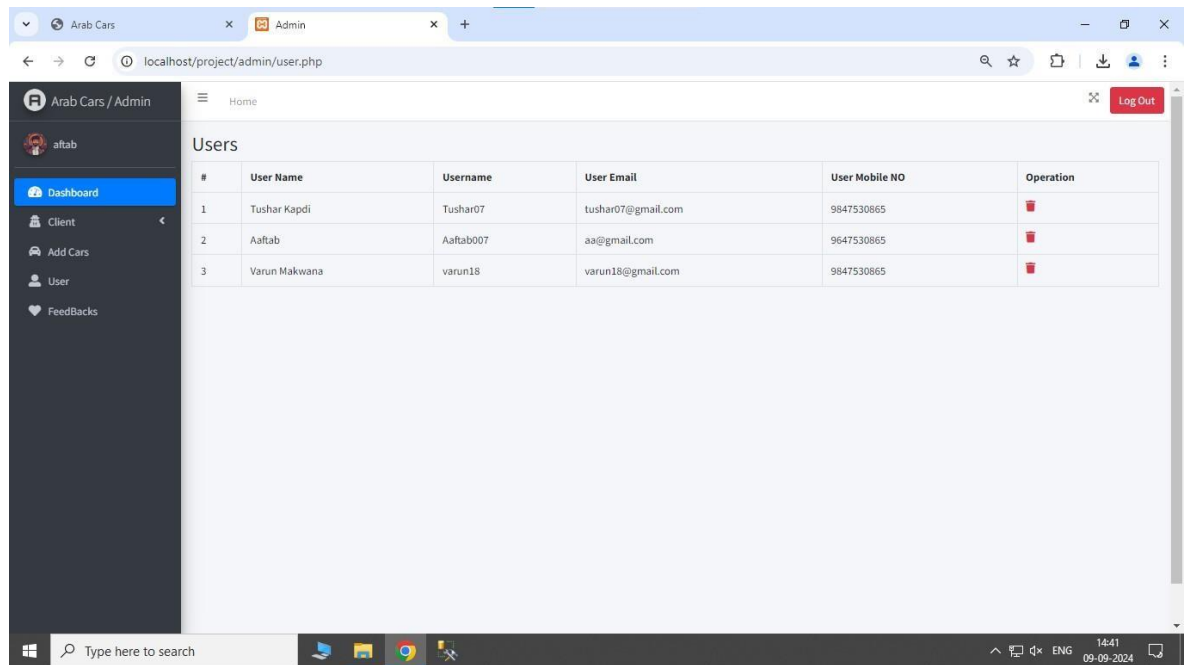
➤ Add And Update Car Page




[illegible]

➤ Here Only Admin Add Car Details In This Page

➤ Here Only Admin Update Car In This Page

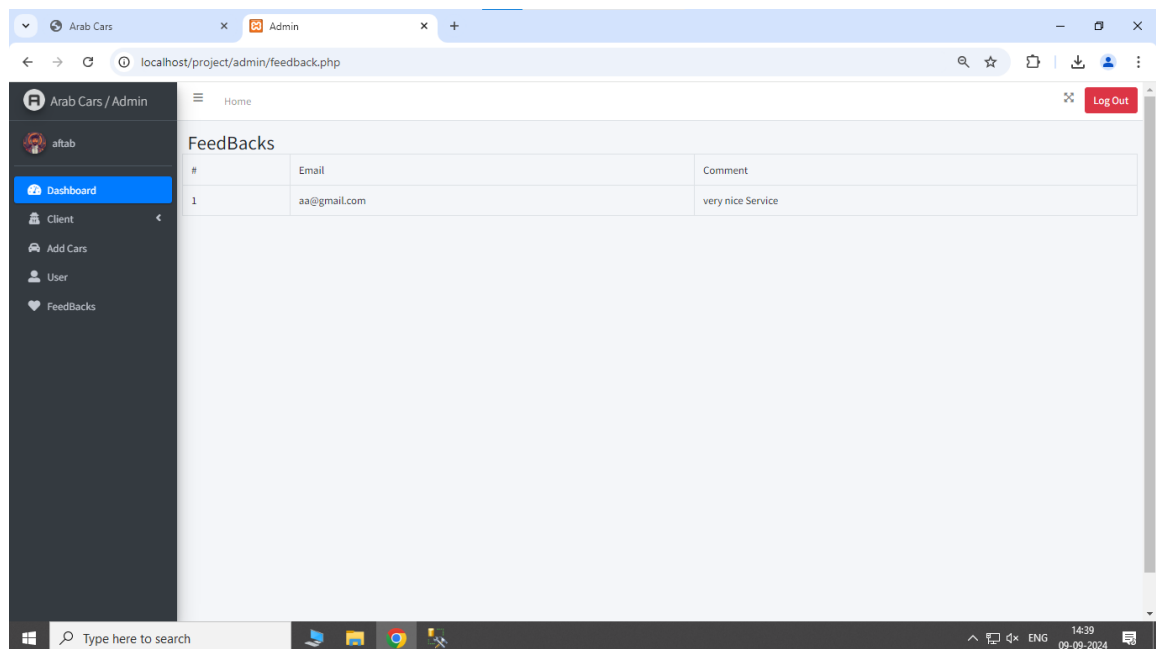
➤ User Detail Page



| # | User Name | Username | User Email | User Mobile NO | Operation |
|---|---------------|-----------|--------------------|----------------|---|
| 1 | Tushar Kapdi | Tushar07 | tushar07@gmail.com | 9847530865 |  |
| 2 | Aaftab | Aaftab007 | aa@gmail.com | 9647530865 |  |
| 3 | Varun Makwana | varun18 | varun18@gmail.com | 9847530865 |  |

➤ This Page Display Login User Details

➤ Feed Back Detail Page



| # | Email | Comment |
|---|--------------|-------------------|
| 1 | aa@gmail.com | very nice Service |

➤ This Page Display Feedback From Users

Future Requirements Of Projects

1. Upgraded Vehicle Options

- **Goal:** Add cool new features and more diverse cars to our fleet.

2. Better User Experience

- **Goal:** Make using our service super easy and fun with the latest tech.

3. AI and Machine Learning

- **Goal:** Use smart technology to make our service better and more personalized.

4. Seamless Integration

- **Goal:** Make everything work smoothly together for users.

5. Sustainability Features

- **Goal:** Be environmentally friendly and let users do their part.

Limitations of Project

- User Side Application
- UI Improvements



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Webliography

- <https://stackoverflow.com/>
- <https://www.javatpoint.com/>
- <https://W3schools.com/>

