

IT7613 - INTEGRATED PROGRAMMING LAB

LAB PROJECT

A. Murugan

Project application title : Online Car Rental System

Project description :

In this project, there is two main modules admin module and customer module.

The customer can register himself/herself in the platform by using the registration form. After successful registration the customer can sign in to the website to reserve the car.

The customer password is hashed and stored in database. The hashing technique used is **SHA- 1 hashing algorithm**.

After successful sign-in by the customer, the customer can see the list of cars available.

From that list of cars available the customer can choose the car he wants and he wants to fill the pickup and destination locations and he also wants to fill the pickup and drop off dates of the car and he wants to give his license number and after this he is redirected to the page to send his reservation id to his **mail** by clicking a button.

Now the car is successfully reserved and the customer can go to the admin place to pick the reserved car.

The customer tells the admin the reservation id and admin validates it and collects his credit card details and give the car he reserved.

After the customer returns the car, the admin enters the reservation id and carid in a form and the website updates the info that the car is returned and the credit car details of the customer is removed and the returned car is now available to others.

The **final receipt** is sent to the customer email after he returned the car.

The entire details are stored in history table. It shows the date and time when the customer returned the car and also total rent and other details that we have.

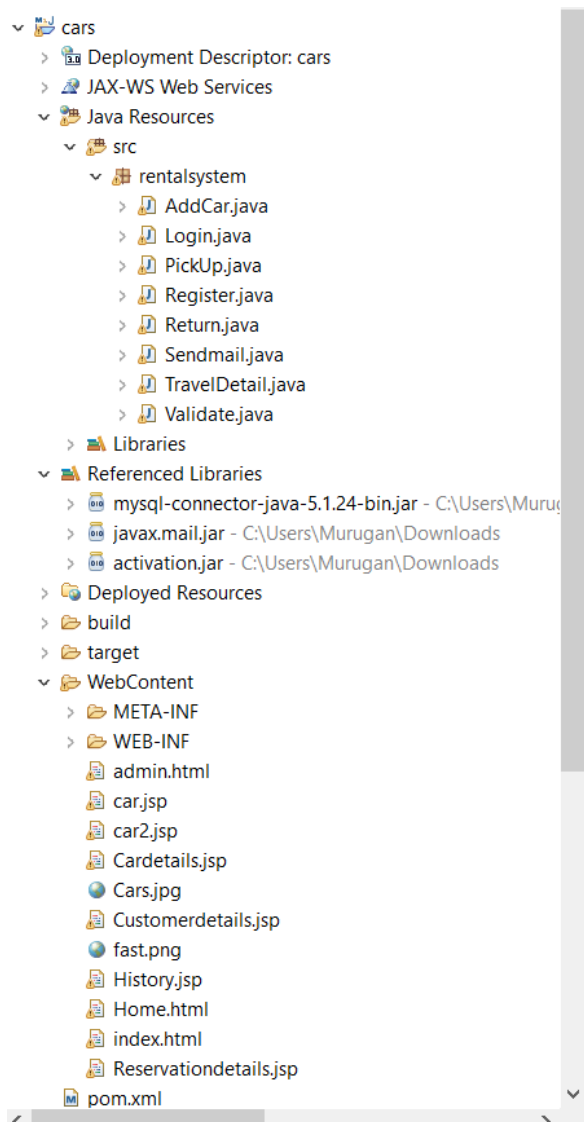
The admin also having the feature to view the customer details , reservation details, car details and history.

IDE used: Eclipse IDE

Server used : Tomcat (XAMPP)

Database used: MySQL (XAMPP)

Project structure :

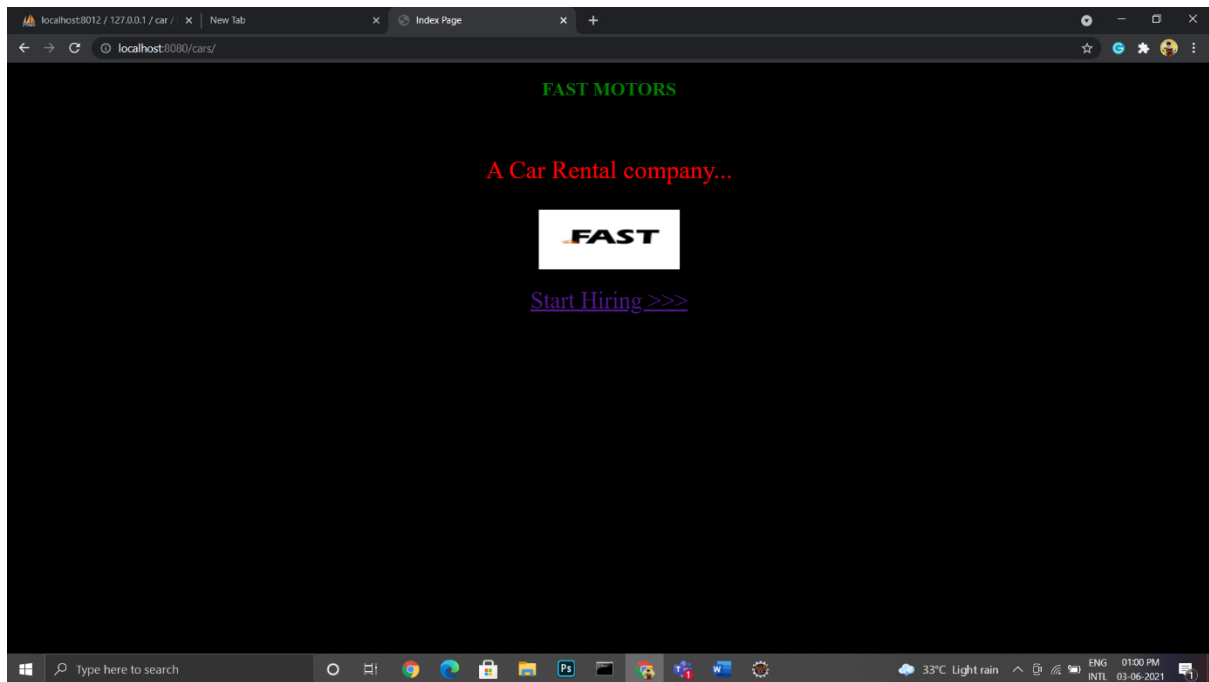


Source code :

The source code is attached in the assignment and the zip code for the source code is named as **2018115059_ Online_Car_Rental_System.zip**

Output Screenshots:

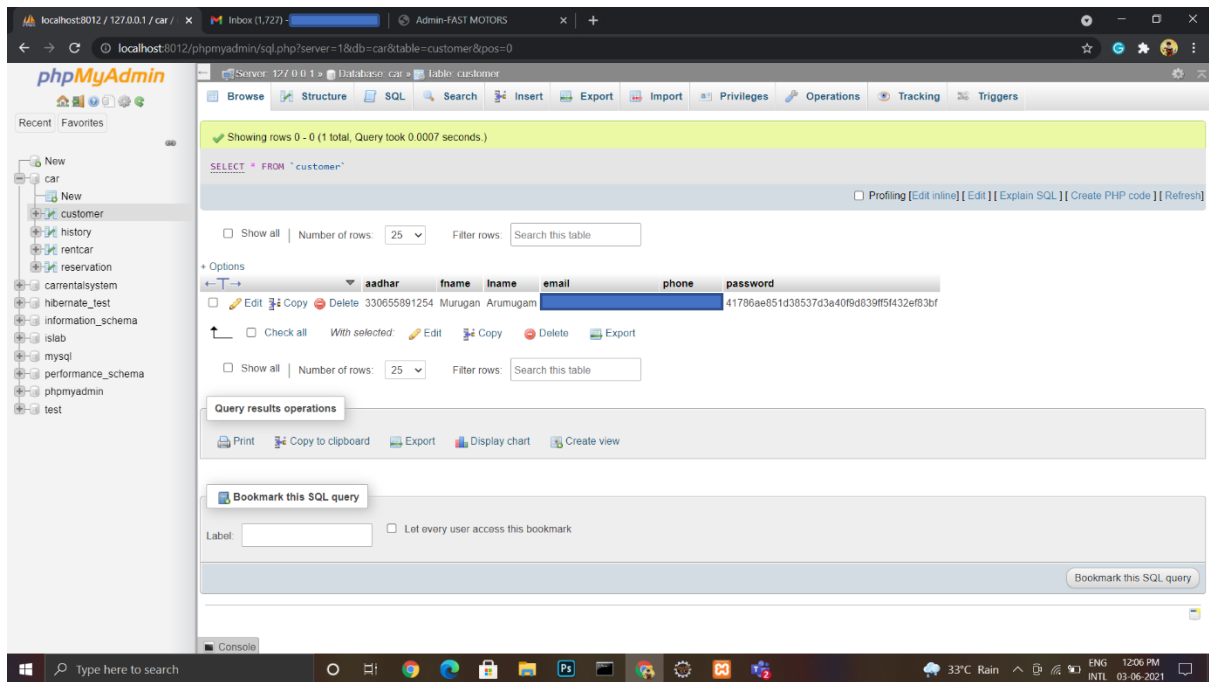
index page



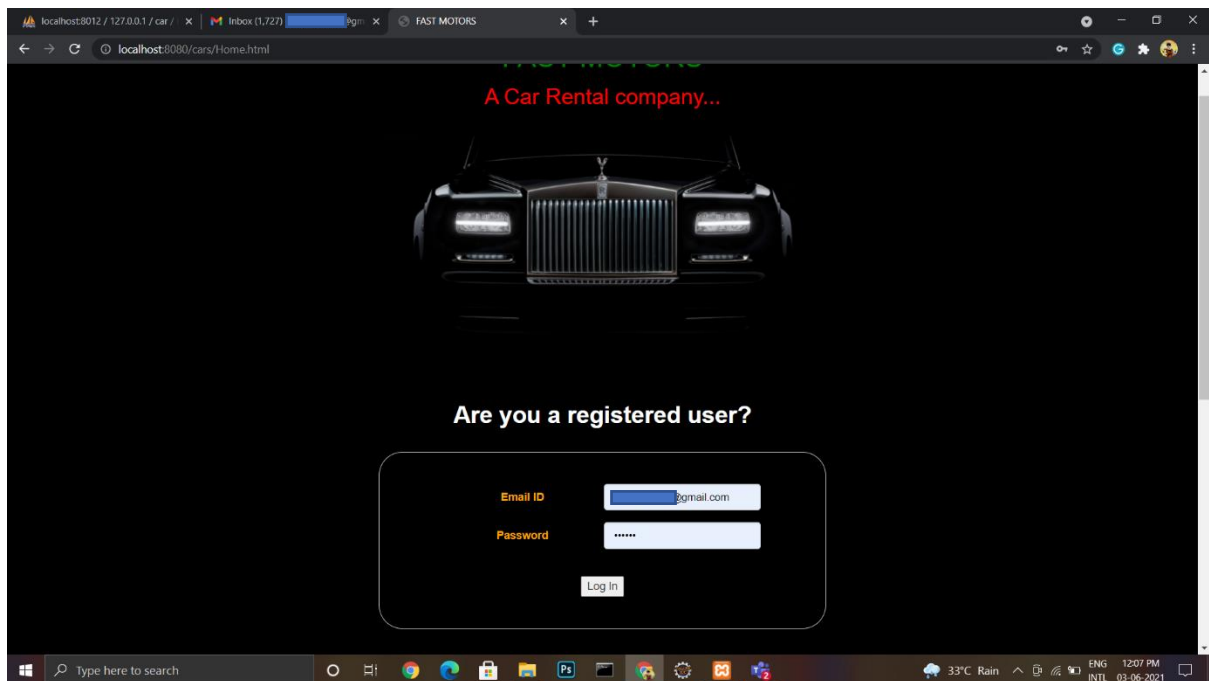
Customer registration form

A screenshot of the customer registration form on the FAST MOTORS website. The browser's address bar shows 'localhost:8080/cars/Home.html'. The form is titled 'Do you want to register?' and is enclosed in a rounded rectangle. It contains several input fields with labels in orange: 'Aadhar number' (with value '330655891254'), 'First Name' (with value 'Murugan'), 'Last Name' (with value 'Arumugam'), 'Phone Number' (empty), 'Email ID' (with value 'gmail.com'), 'Password' (masked with dots), and 'Confirm Password' (masked with dots). A 'Log In' button is located above the form, and a 'Register' button is at the bottom. The Windows taskbar at the bottom shows the search bar, application icons, and system information including '33°C Rain' and the date '03-06-2021'.

The registered customer's password is hashed and stored in database. The hashing technique used is **SHA- 1 hashing algorithm**.



Login form for both admin and customer



Customer side :

This page is shown after sign in and After successful sign-in by the customer, the customer can see the list of cars available. From that list of cars available the customer can choose the car he wants and he wants to fill the pickup and destination locations and he also wants to fill the pickup and drop off dates of

the car and he wants to give his license number and after this he is redirected to the page to send his reservation id to his **mail** by clicking a button.

AVAILABLE CARS

Select anyone car from the table below for reservation

Car ID	Car Type	Rent per day	Vehicle Identification Number
1	SUV	550	TN 72 VJ 0001
2	Sedan	600	TN 72 VJ 0002
3	Truck	1200	TN 72 VJ 0003
4	Wagon	600	TN 72 VJ 0004
5	SUV	600	TN 72 VJ 0005

TRAVEL DETAILS

Pick-up place

Drop-off place

Start Date

TRAVEL DETAILS

Pick-up place

Drop-off place

Start Date

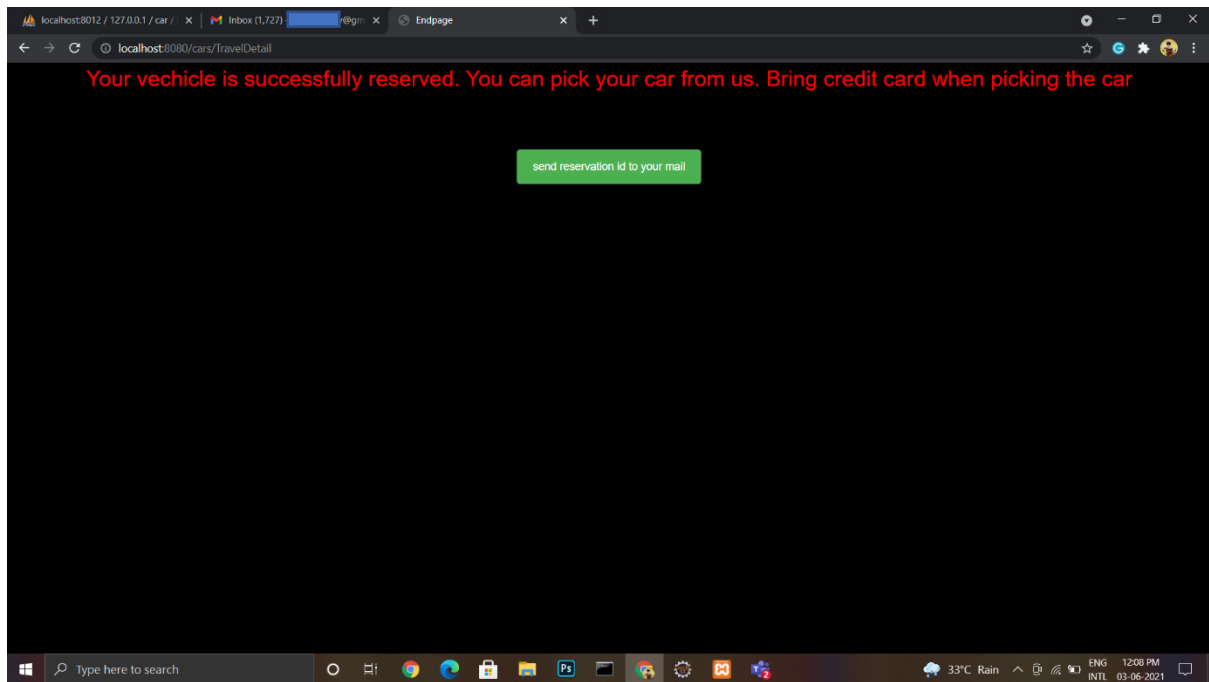
End Date

License No

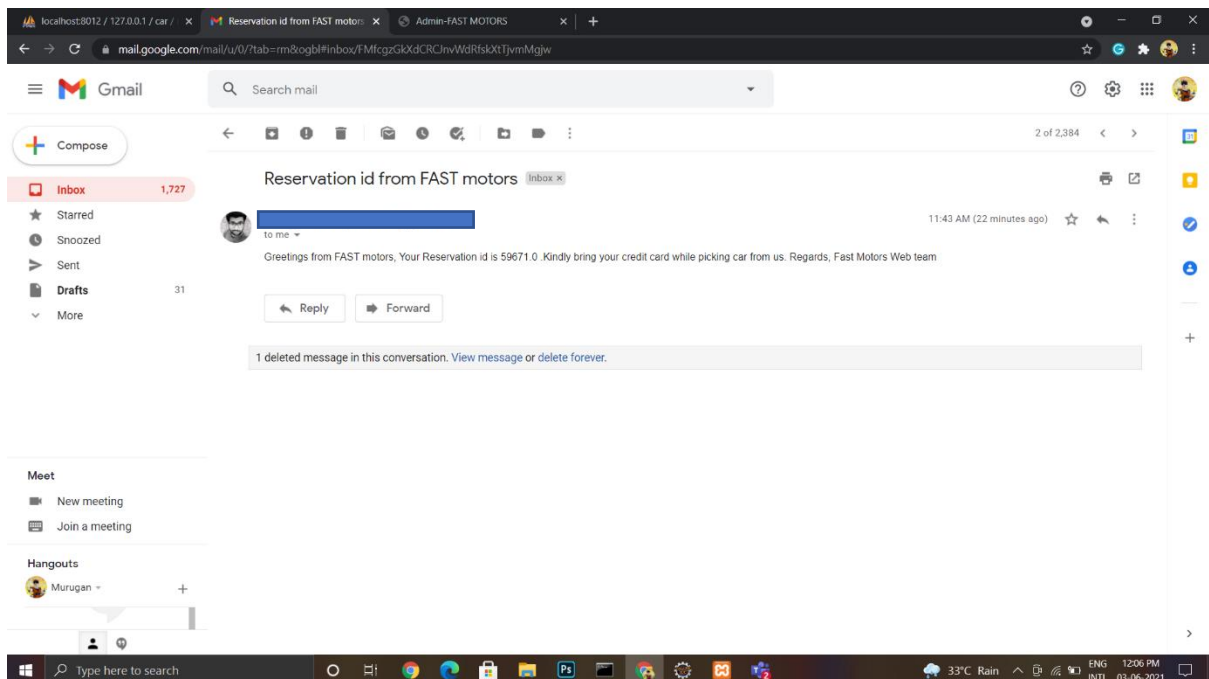
Car ID : (select car id from the above table)

Next

Reservation page and clicking this button sends mail to the customer



Email is sent to the customer with the reservation id



Now the car is successfully reserved and the customer can go to the admin place to pick the reserved car.

Admin side :

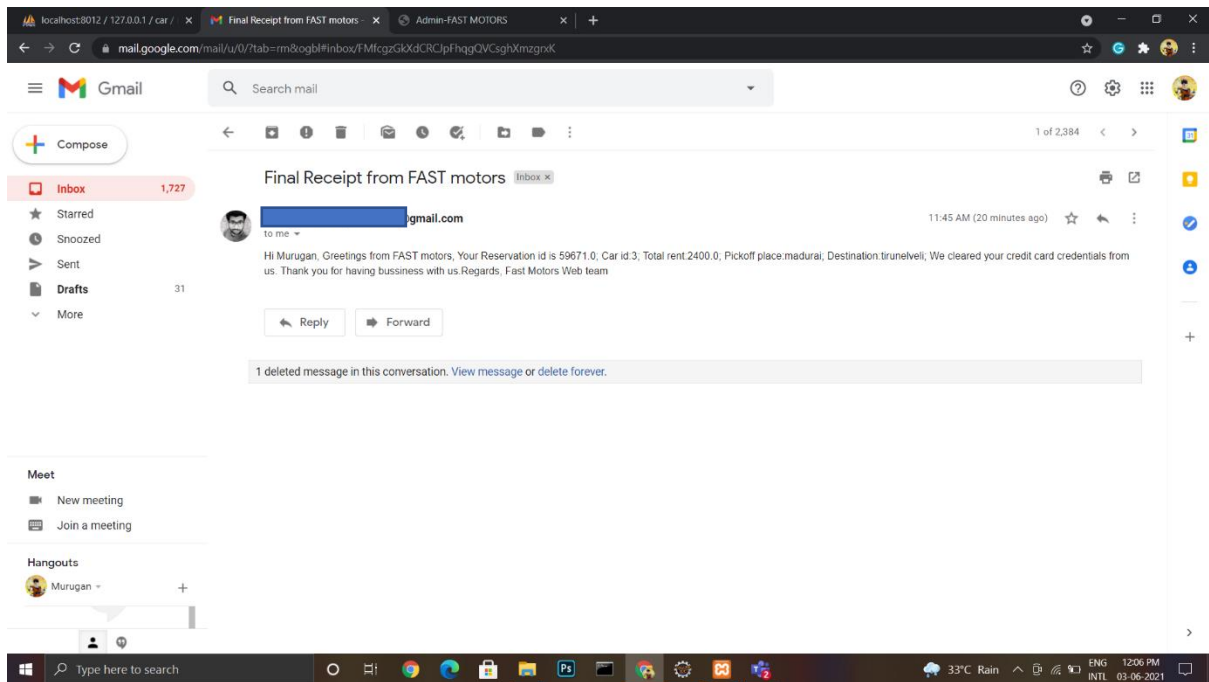
The customer tells the admin the reservation id and admin validates it and collects his credit card details and give the car he reserved.

The screenshot shows a web browser window with the URL `localhost:8080/cars/admin.html`. The page has a dark background with green text. At the top, it says "Welcome Admin" in green. Below that, there's a question: "Do you want to record a Pick-Up for a reservation?". To the right of this question is a yellow "Logout" button. In the center, there's a form with several input fields: "Reservation ID" (containing "59671"), "Driver's License ID" (containing "123456"), "Name as on Credit card" (containing "Murugan"), "Credit Card Number" (containing "123456789"), "Year of Expiry Date" (containing "2023"), "Month of Expiry Date" (containing "11"), and "CVV" (containing "123"). Below these fields is a yellow "Confirm Pick-Up" button. The browser's taskbar at the bottom shows various icons and the system clock indicating 12:10 PM on 03-06-2021.

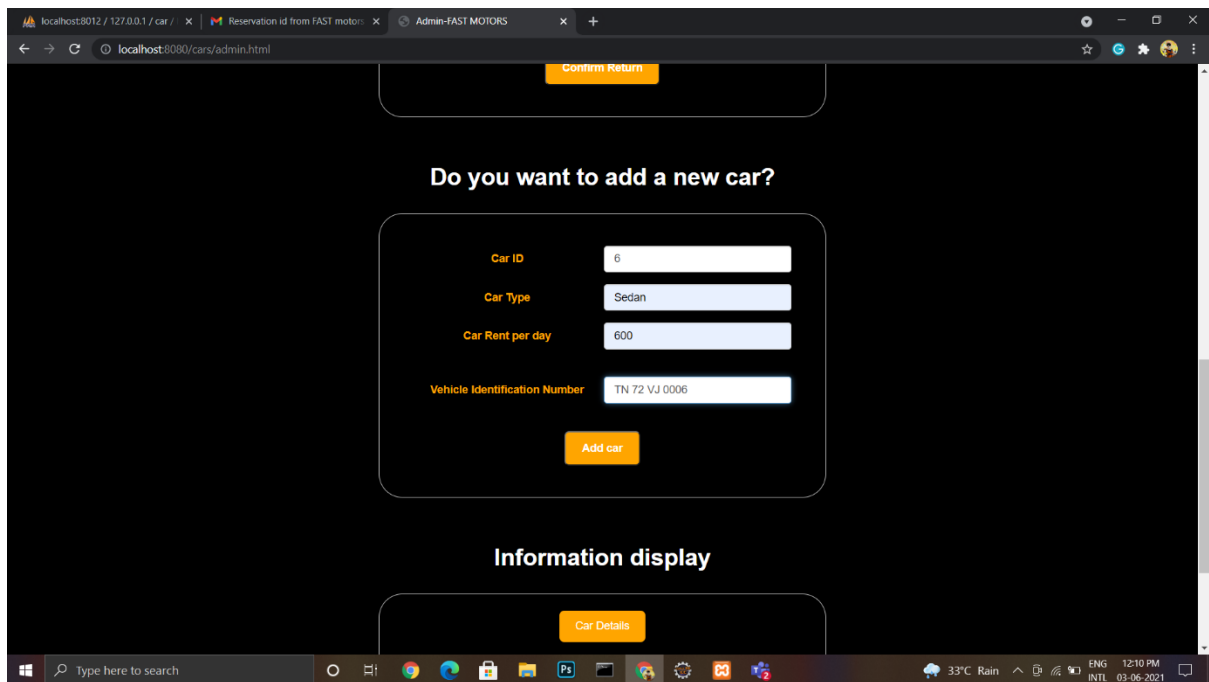
After the customer returns the car, the admin enters the reservation id and carid in a form and the website updates the info that the car is returned and the credit car details of the customer is removed and the returned car is now available to others.

The screenshot shows the same web browser window, but the form has changed. The "Welcome Admin" message is still at the top. Below it, the question is "Do you want to record a Return for a Pick-Up?". The form now has two input fields: "Reservation ID" (containing "59671") and "Car id" (containing "3"). Below these fields is a yellow "Confirm Return" button. Below this form, there's another question: "Do you want to add a new car?". The browser's taskbar at the bottom is the same as in the previous screenshot.

The **final receipt** is sent to the customer email after he returned the car.



The admin has the feature to add the new car in the portal which is available to the customer for booking.



The entire details are stored in history table. It shows the date and time when the customer returned the car and also total rent and other details that we have.

The admin also having the feature to view the customer details , reservation details, car details and history.

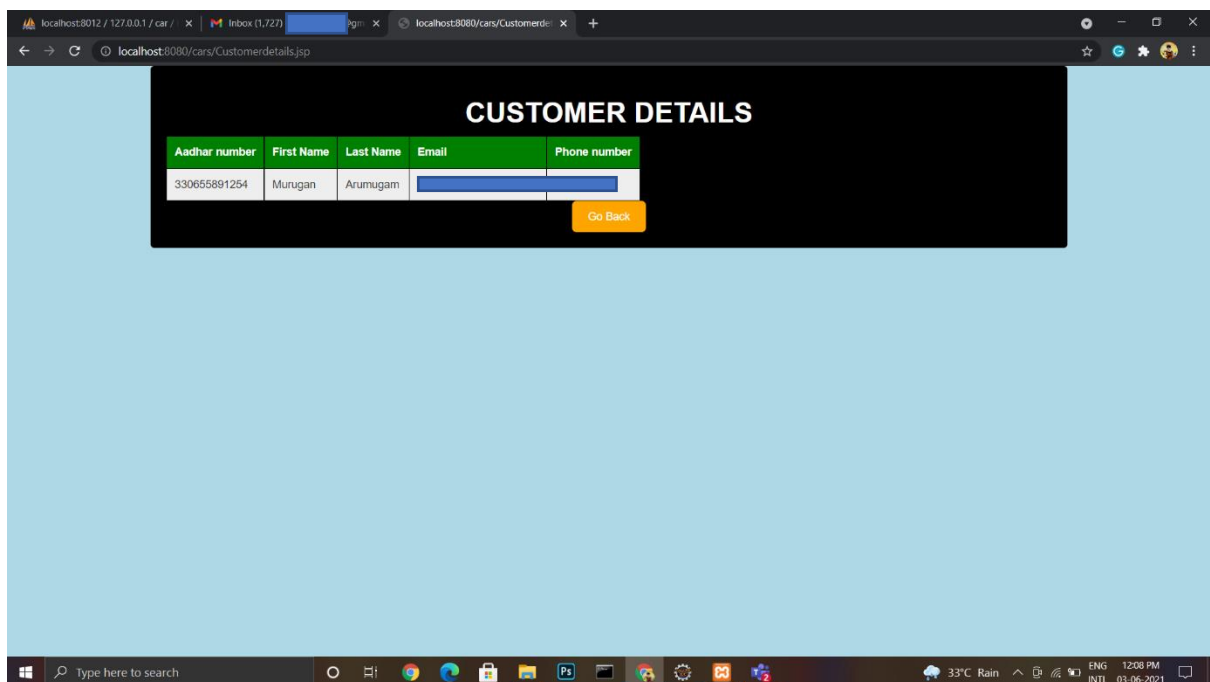
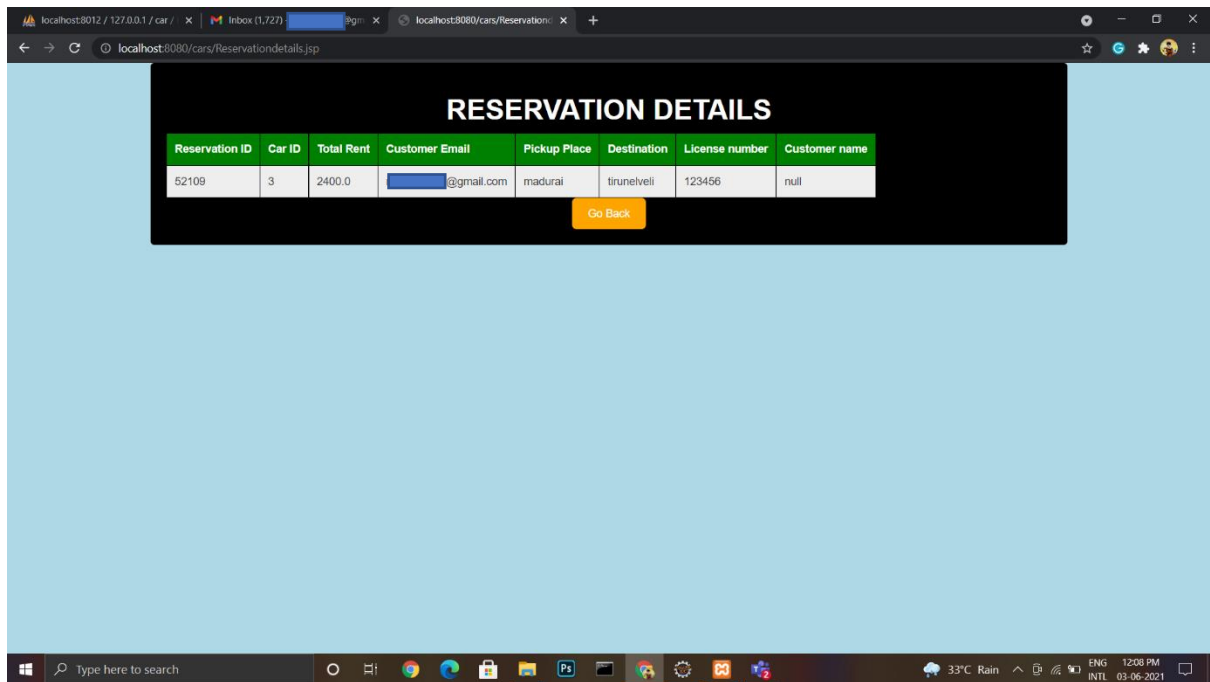
The screenshot shows the 'Admin-Fast MOTORS' interface. At the top, there's a navigation bar with the title 'Admin-Fast MOTORS'. Below it, there's a form to 'Add car' with the following fields:

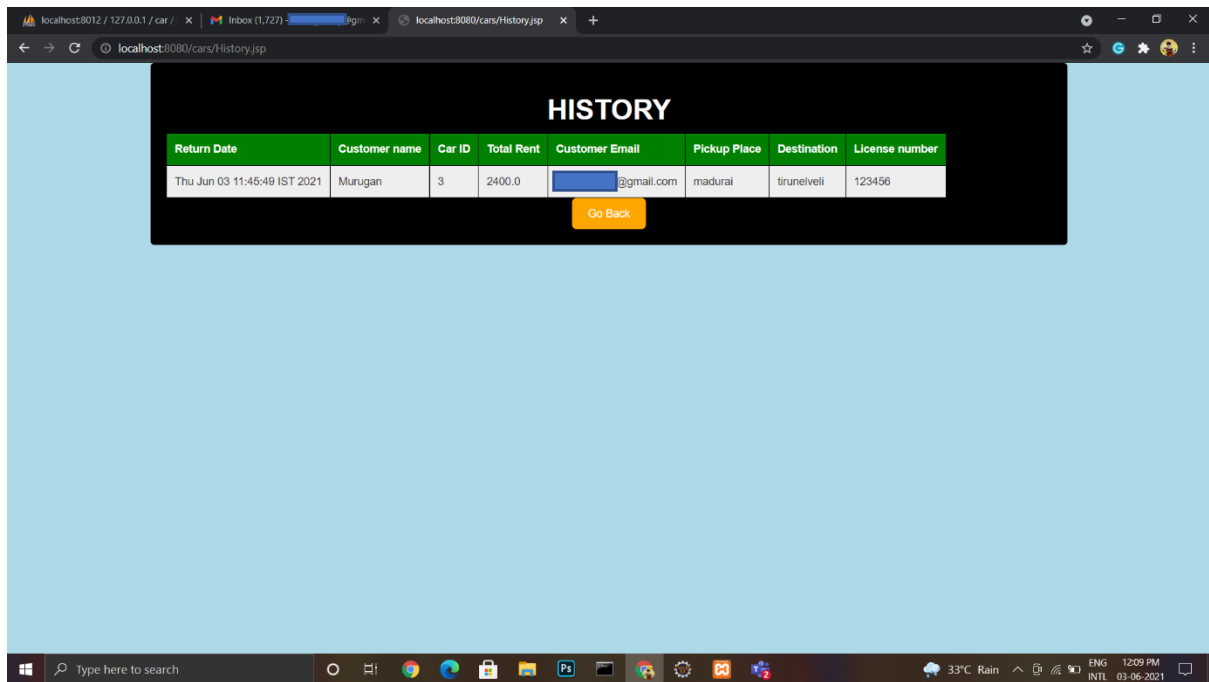
- Car ID: Enter the Car ID here
- Car Type: Enter the Car Type here
- Car Rent per day: Enter the Car Rent per day here
- Vehicle Identification Number: Enter the VIN here

Below the form is an 'Add car' button. Underneath the form is a section titled 'Information display' which contains four buttons: 'Car Details', 'Reservation Details', 'Customer Details', and 'History'.

The screenshot shows the 'CAR DETAILS' page. It features a table with the following columns: Car ID, Car Type, Rent per day, Vehicle Identification Number, Customer Email, Customer Aadhar, and Car Booking status. The table contains 5 rows of data. Below the table is a 'Go Back' button.

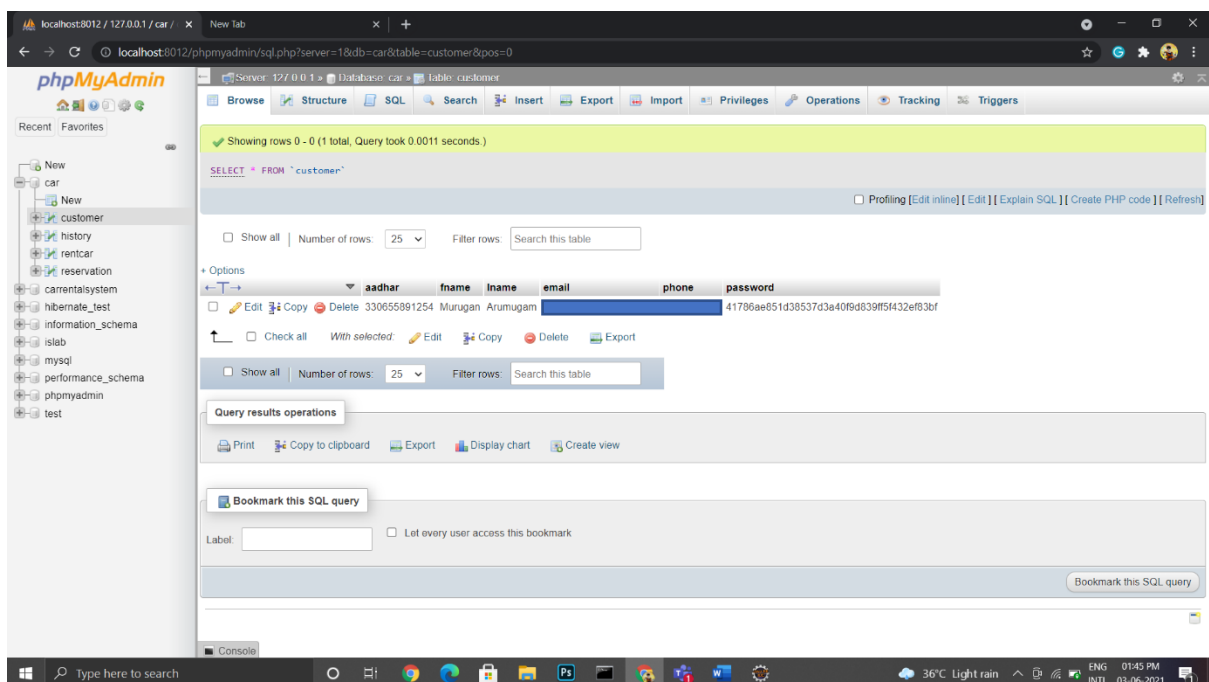
Car ID	Car Type	Rent per day	Vehicle Identification Number	Customer Email	Customer Aadhar	Car Booking status
1	SUV	550	TN 72 VJ 0001	null	null	NOT BOOKED
2	Sedan	600	TN 72 VJ 0002	null	null	NOT BOOKED
3	Truck	1200	TN 72 VJ 0003	@gmail.com	34	BOOKED
4	Wagon	600	TN 72 VJ 0004	null	null	NOT BOOKED
5	SUV	600	TN 72 VJ 0005	null	null	NOT BOOKED





Database structure :

(Customer table, history table, reservation table, rentcar table)



localhost:8012 / 127.0.0.1 / car / x New Tab

localhost:8012/phpmyadmin/sql.php?server=1&db=car&table=history&pos=0

phpMyAdmin

Recent Favorites

- New
- car
- New
- customer
- history
- rentcar
- reservation
- carrentalsystem
- hibernate_test
- information_schema
- islab
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: car » Table: history

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 0 (1 total, Query took 0.0012 seconds.)

SELECT * FROM "history"

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

returndate	name	carid	totalrent	email	pickup	dropoff	licenseno
Thu Jun 03 11:45:49 IST 2021	Murugan	3	2400.0		madurai	trunelveli	123456

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Bookmark this SQL query

Console

localhost:8012 / 127.0.0.1 / car / x New Tab

localhost:8012/phpmyadmin/sql.php?server=1&db=car&table=reservation&pos=0

phpMyAdmin

Recent Favorites

- New
- car
- New
- customer
- history
- rentcar
- reservation
- carrentalsystem
- hibernate_test
- information_schema
- islab
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: car » Table: reservation

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 0 (1 total, Query took 0.0009 seconds.)

SELECT * FROM "reservation"

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

resid	carid	totalrent	email	pickup	dropoff	licenseno	name	cardno	year	month	cvv
52109.0	3	2400.0		madurai	trunelveli	123456	null	null	null	null	null

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Bookmark this SQL query

Console

localhost:8012 / 127.0.0.1 / car / x New Tab

localhost:8012/phpmyadmin/sql.php?server=1&db=car&table=rentcar&pos=0

phpMyAdmin

Recent Favorites

- New
- car
- New
- customer
- history
- rentcar
- reservation
- currentsystem
- hibernate_test
- information_schema
- islab
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: car » Table: rentcar

Showing rows 0 - 4 (5 total, Query took 0.0009 seconds)

SELECT * FROM "rentcar"

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

		carid	cartype	rent	vin	cust_email	cust_aadhar	status	
<input type="checkbox"/>	Edit	Copy	Delete	1	SUV	550	TN 72 VJ 0001	null	NOT BOOKED
<input type="checkbox"/>	Edit	Copy	Delete	2	Sedan	600	TN 72 VJ 0002	null	NOT BOOKED
<input type="checkbox"/>	Edit	Copy	Delete	3	Truck	1200	TN 72 VJ 0003	@gmail.com 330655891254	BOOKED
<input type="checkbox"/>	Edit	Copy	Delete	4	Wagon	600	TN 72 VJ 0004	null	NOT BOOKED
<input type="checkbox"/>	Edit	Copy	Delete	5	SUV	600	TN 72 VJ 0005	null	NOT BOOKED

☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

[Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Bookmark this SQL query

Label:

☐ Let every user access this bookmark

Console

Type here to search

36°C Light rain

ENG 01:45 PM

INTL 03-06-2021