A PROJECT PRESENTATION ON

RENTAL CARS

Submitted to:

Department of Computer Science and Engineering,
Faculty of Technology and Engineering,
Maharaja Sayajirao University, Baroda

Submitted By:

Dhiren P. Tejwani - 704063

Tithi J. Patel - 704040

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PROJECT PROFILE

INTRODUCTION

Project Name: Rental Cars

Objective: It is a system design especially for car rental

business.

The system provides the facility to view cars, view

the centres and book the cars.

Platform: Website

Front End: Asp.net with C#

Back End: Microsoft Sql Server

Project

Duration: 90 Days

Project

Guide: Dr. Viral V. Kapadia

The Existing System

The existing system of booking cars is done manually. This has so many disadvantages and also lacks many other features and functionalities. To list out a few of the disadvantages:

- The existing system includes a lot of manual work which includes maintaining a lot of paperwork.
- The user cannot book a car remotely. He has to go to the office for the booking and see the car there (if available) and then can he book the car.
- There is no way the customer can get the feedback from the previous customers about the selected car.
- The user has to return the car at the same office when he is done with his travelling.

The Proposed System

Owning a car in your own city gives you the freedom to travel anywhere at any time. But the problem arises in different areas where you have to rely on public transports.

The better way is to rent a car of your choice, at the prices that you prefer and travel in it like it's your own.

Making this system online gives a wider perspective to the customer about the car. The customer can choose to leave the car in his/her own city or can even select any other location from other city.

Listing out a few advantages of the proposed system:

- The system that is being implemented is totally computerized.
- The customer can just open the website and search of a car according to his requirements.
- There will be many centres in different cities, so if the customers wishes to travel into another city and then wants to leave the car there, then he can choose to drop it at the centre located in that city.
- Every record about the cars and the customers will be computerized, and hence eliminating the monotonous paperwork.
- The customer can give the feedback about the services. This in turn will help the other customers while they try to book the car.
- The customer can view the car online and look at the pictures and ratings and its availability. Hence there is no need for him to specially go to the office.
- A database will be maintained of the cars, employees and the customers. The customer data about the booking will also be stored in a database. This will make it possible to derive many other statistics and make analysis that will help the company.

About the Project

Functional Specifications

User Specifications

Admin:

- Admin can login to the system using the login and password provided to him.
- He can add or update any manager from the system.
- He can add any centre in the system.

Manager:

- Manager can login to the system using the login and password provided to him.
- Managers are appointed to one unique centre.
- Manager can add or update any employee from his centre.
- Manager can view the data of the activities of his centre.

Employee:

- Employee can login to the system using the login and password provided to him.
- Every centre has several employees appointed under the manager.
- Employee makes the entry when the customer leaves the car at his centre.
- Employee can fill in any personal remarks about the delivery of the car made by the customer.

Registered User:

- User can login to the system using the login and password provided by him at the time of registration.
- User can view the details of the car and the centres.
- The user can book the car.
- User can view all the orders made by him.
- The user can give feedbacks for the cars booked by him.

Guest User:

- A guest can access the website.
- Guest can view the cars and the centre details.
- Guest can register himself to become a registered user.

Modules Specifications

Login: The registered users can access the Login page to enter their account.

The Admins, Managers and Employees have a different Login page to access their accounts and carry out their functions.

Registration: Any guest can access the website. To book a car, the guests can register themselves and then have the access to full functionalities of the system.

View Car Information: The users as well as the guests can click on the image of the cars and view the information regarding the car.

The information includes Seating Capacity, Transmission mode, Price per day, Fuel Type, and the like.

Booking: A registered user has the authority to book a car from the car information page.

The user can also access the booking page from the tabs.

At booking, the user, mentions the car, starting centre, ending centre, starting date and the ending date of the booking.

The user gets the calculated price of the total booking.

Payment: A user, after booking the car is redirected to the payment page.

The user fills in the payment information, like the name on the card, card number, CVV number, and so on.

After the verification from the portal, the user gets the booking details.

Give Feedbacks: The user can give feedbacks for the cars that he has booked.

The system asks the user for the order id, and then the system verifies if the user has booked that car, then the feedback is stored.

Show Feedbacks: At the information page of the car, feedbacks from previous customers are displayed.

When the info page is loaded, the feedbacks for that car are fetched from the database.

View Orders: The user can view all the orders made by him in the past by clicking the 'My Orders' tab.

The system fetches the database for the orders made by the particular user by the user id.

Make Car Entry: This is the functionality of every employee to make the entry of the car that the customer has come to drop.

The employee fills the data, like number of scratches, delay, remarks and so on.

Add/ Update Employee: The manager can add a new employee to the centre under him.

The manager can also update the employee information provided that the employee works under him.

View Data: The manager can view the activities, like which cars left the centre and which cars arrived for the date selected by him.

Add/ Update Manager: The admin can add a new manager to a centre under him.

The admin can also update the manager information provided that the manager works under him.

Add Centre: The admin can add a new centre in the city.

HARDWARE REQUIREMENTS

Client Side:

RAM: 512 MB

Hard disk: 10 GB

Processor: 1.0 GHZ

Server Side:

RAM: 1 GB

Hard disk: 20 GB

Processor: 2.0 GHZ

SOFTWARE REQUIREMENTS

Client Side:

Web Browser: Internet Explorer 6 or above, or any equivalent

compatible browser

Operating

System: Windows 7 or above, or any equivalent OS

Server Side:

Web Server: IIS 7.5

Framework: .NET 4.0 with C#

Database

Server: MS SQL Server

Web Browser: Internet Explorer 6 or above, or any equivalent

compatible browser

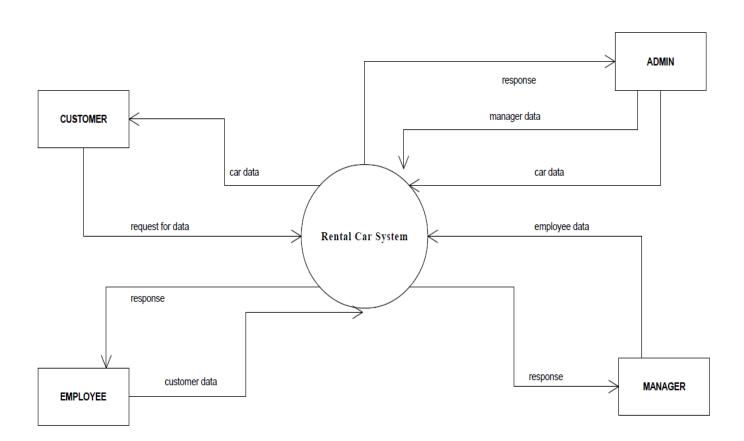
Operating

System: Windows 7 or above, or any equivalent OS

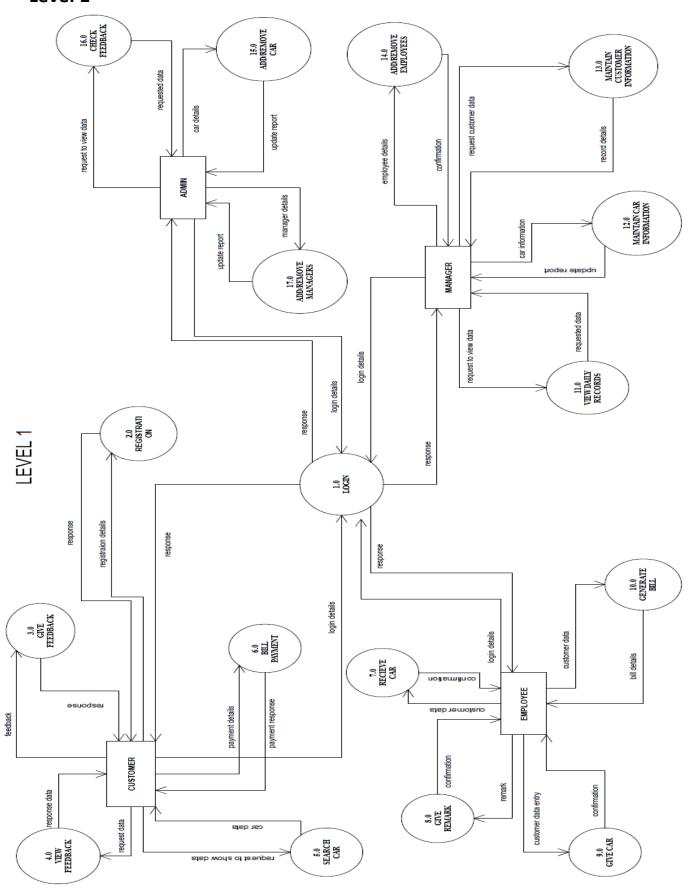
System Design

Data Flow Diagram

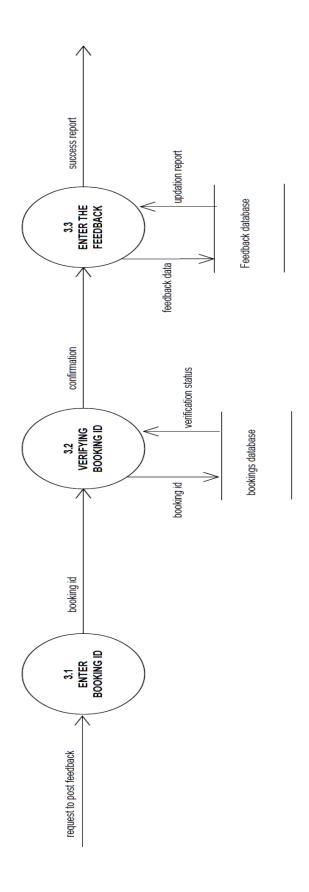
Context Level



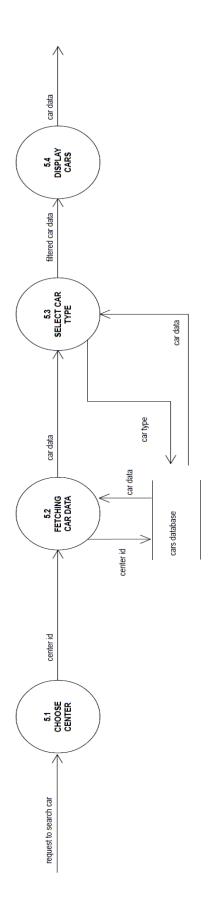
Level 1



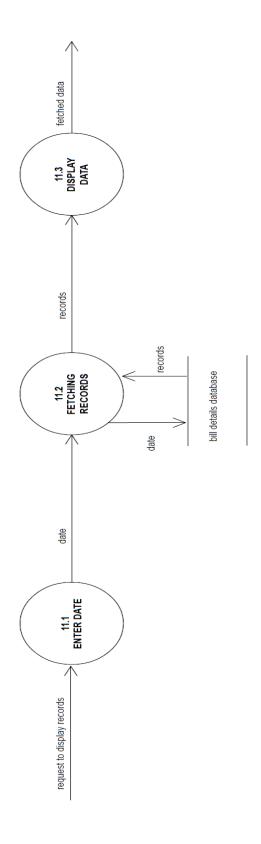
Level 2 Give Feedback



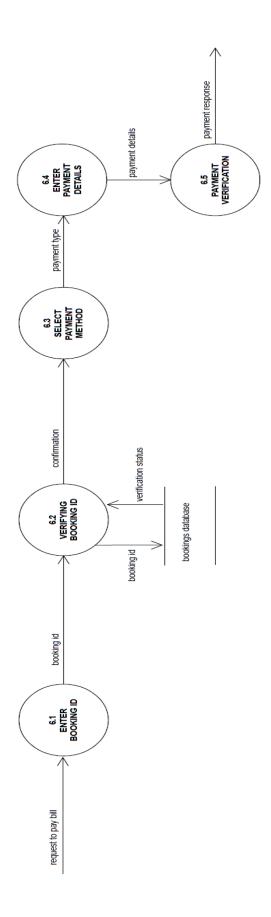
Level 2 Search Car



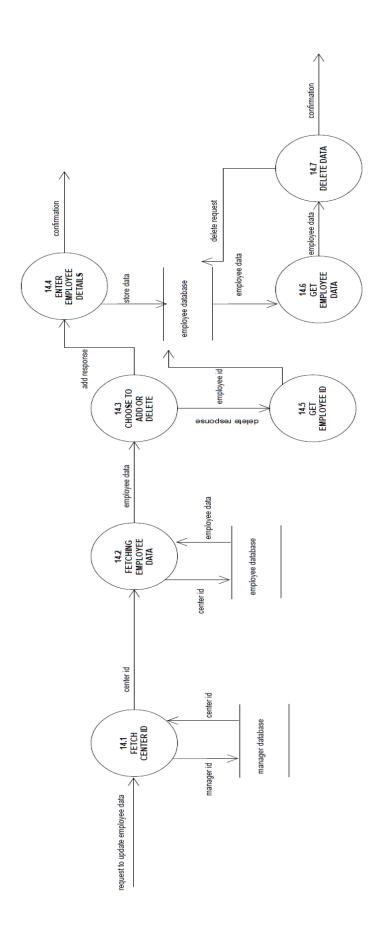
Level 2 View Records



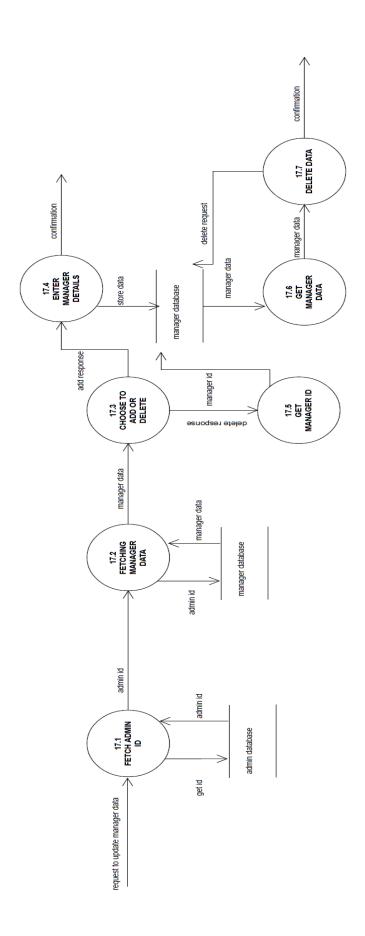
Level 2 Bill Payment



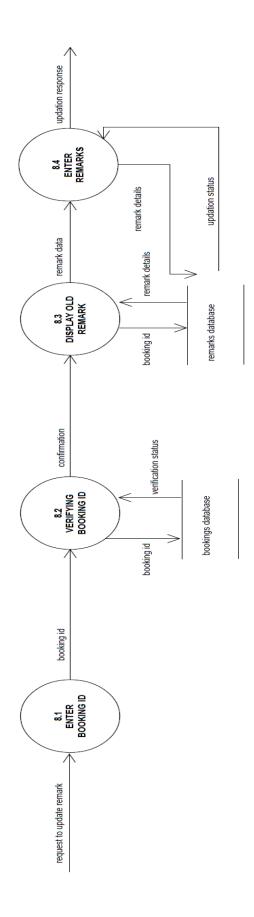
Level 2 Add/ Remove employee



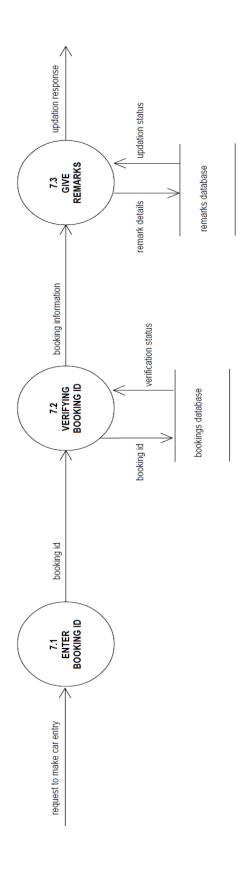
Level 2 Add/ Remove Manager



Level 2 Give Remark

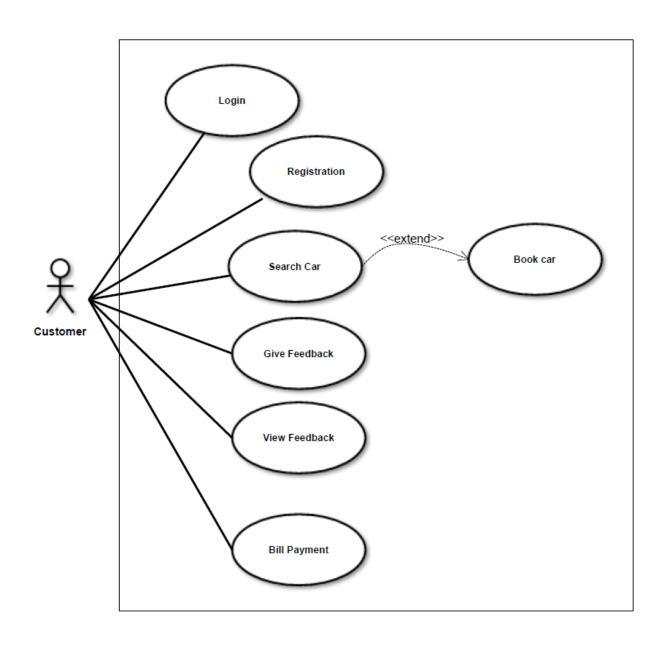


Level 2 Receive Car

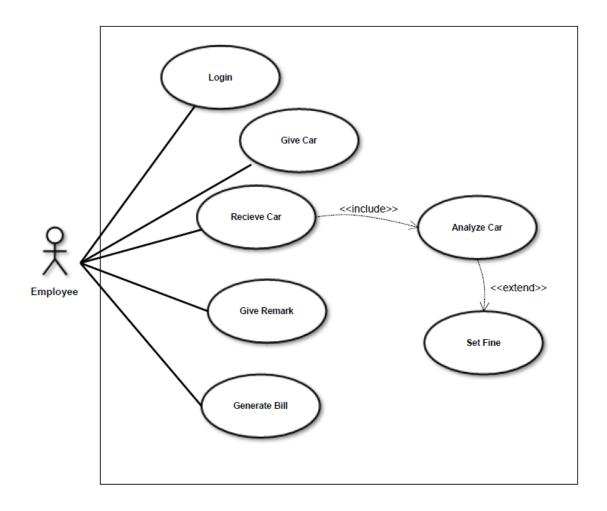


USE CASE DIAGRAM

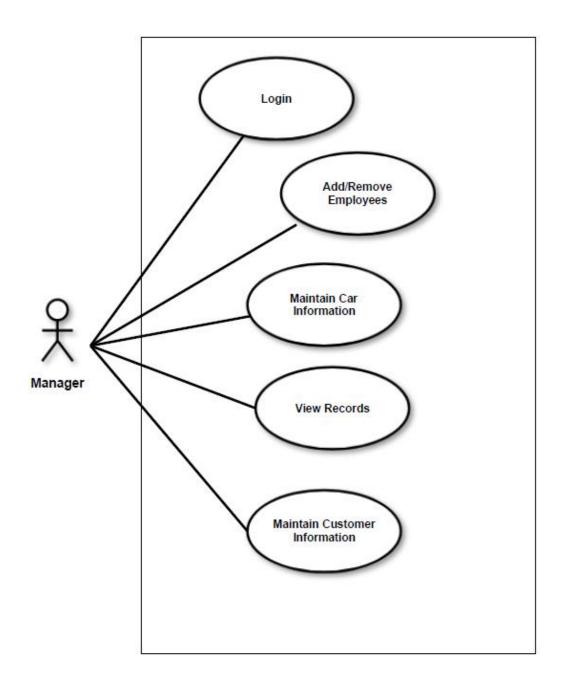
CUSTOMER



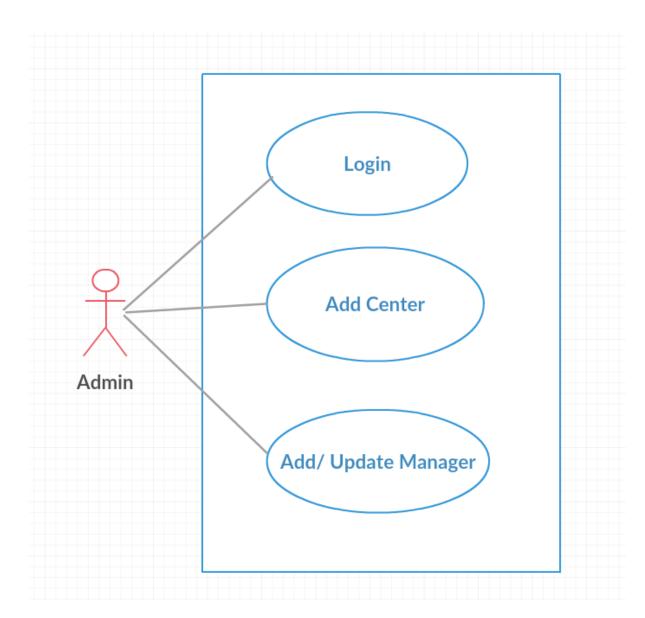
EMPLOYEE



MANAGER



ADMIN

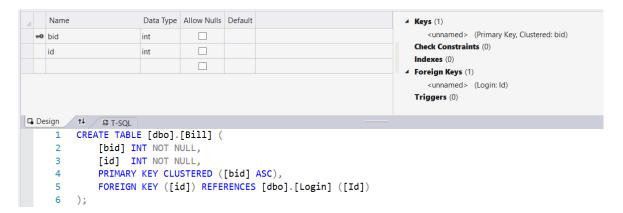


DATA DICTIONARY

Admin

```
Name
                         Data Type Allow Nulls Default
                                                                                   ▲ Keys (1)
                                                                                       <unnamed> (Primary Key, Clustered: aid)
  ⊸ aid
                         nchar(10)
                                                                                     Check Constraints (0)
                         nchar(20)
     apass
                         nchar(10)
                                                                                     Foreign Keys (0)
     auser
                         nchar(10)
                                                                                     Triggers (0)
☐ Design 14 ☐ T-SQL
           CREATE TABLE [dbo].[Admin] (
                [aid] NCHAR (10) NOT NULL,
                [aname] NCHAR (20) NOT NULL,
      4
                [apass] NCHAR (10) NOT NULL,
                [auser] NCHAR (10) NOT NULL,
      5
               PRIMARY KEY CLUSTERED ([aid] ASC)
```

Bill



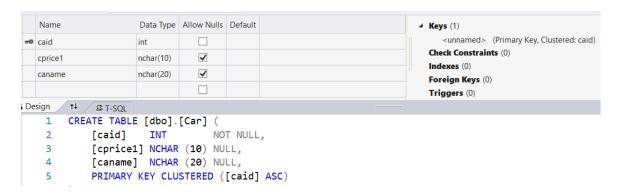
Bill_details



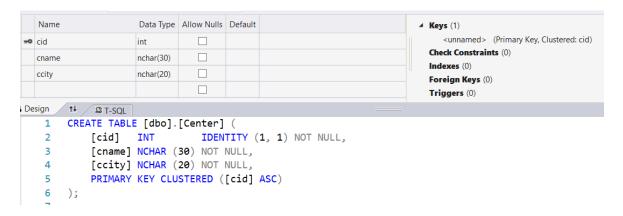
Booking

	Name	Data Type	Allow Nulls	Default	▲ Keys (1)
тО	bid	int			<unnamed> (Primary Key, Clustered: bid)</unnamed>
	st_date	date			Check Constraints (0)
	en_date	date	П		Indexes (0)
					▲ Foreign Keys (5)
	bodate	date			<unnamed> (Login: ld)</unnamed>
	total_no	int	✓		<unnamed> (Hatchback: hid)</unnamed>
	id	int			<unnamed> (Sedan: sid)</unnamed>
	hid	nchar(10)	✓		<unnamed> (Suv: suid)</unnamed>
			~		<unnamed> (Car: caid)</unnamed>
	sia	nchar(10)			Triggers (0)
	suid	nchar(10)	✓		
	st_center	nchar(20)			
	en_center	nchar(20)			
	cuname	nchar(20)	✓		
	caid	int	✓		

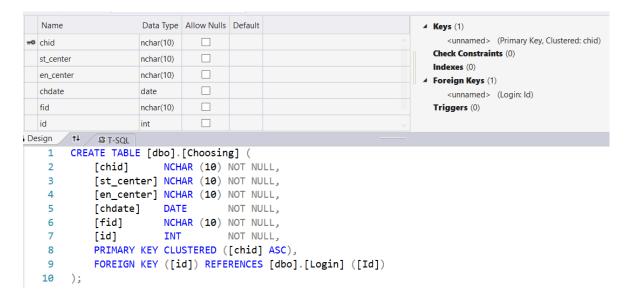
Car



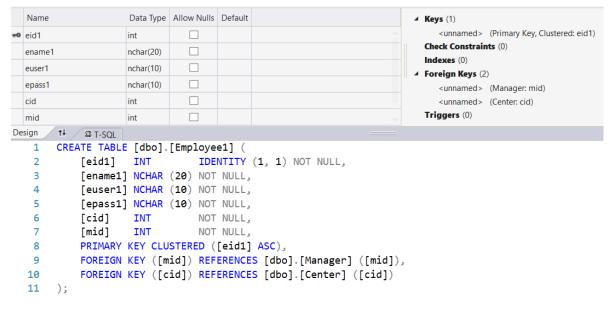
Center



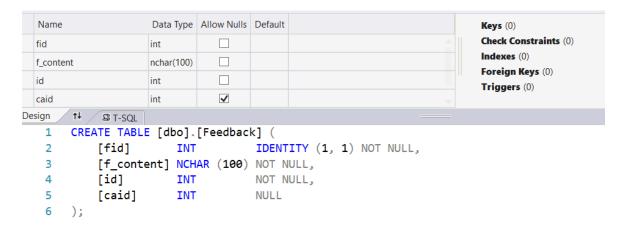
Choosing



Employee



Feedback



Hatchback

	Name	Data Type	Allow Nulls	Default	▲ Keys (1)
 0	hid	nchar(10)			<unnamed> (Primary Key, Clustered: hid)</unnamed>
	hname	nchar(10)			Check Constraints (0)
	htype	nchar(10)			Indexes (0) 4 Foreign Keys (1)
	hprice	nchar(10)			<unnamed> (Car: caid)</unnamed>
	caid	int	✓		Triggers (0)
	htransmission	nchar(20)	✓		
	hfueltype	nchar(20)	✓		
	hseatingcap	nchar(10)	✓		

Login

4	Name	Data Type	Allow Nulls	Default	₄ Keys (1)
π0	ld	int			<unnamed> (Primary Key, Clustered: Id)</unnamed>
	name	nchar(10)			Check Constraints (0)
	password	char(10)			Indexes (0) Foreign Keys (0)
	email	nchar(50)			Triggers (0)

Manager

	Name	Data Type	Allow Nulls	Default	▲ Keys (1)
πО	mid	int			<unnamed> (Primary Key, Clustered: mid)</unnamed>
	mname	nchar(20)			Check Constraints (0) Indexes (0)
	mpass	nchar(10)			Foreign Keys (2)
	cid	int			<unnamed> (Admin: aid)</unnamed>
	aid	nchar(10)			<unnamed> (Center: cid)</unnamed>
	muser	nchar(10)			Triggers (0)

Remark

	Name	Data Type	Allow Nulls	Default	₄ Keys (1)
πο	rid	int			<unnamed> (Primary Key, Clustered: rid)</unnamed>
	r_content	nchar(100)	✓		Check Constraints (0) Indexes (0)
	eid1	int			▲ Foreign Keys (2)
	id	int	✓		<unnamed> (Login: Id)</unnamed>
	biid	int	✓		<unnamed> (Bill_details: biid)</unnamed>
	nodays	int			Triggers (0)
	nos	int			
	intd	nchar(10)			

Sedan

	Name	Data Type	Allow Nulls	Default	▲ Keys (1)
,, 0	sid	nchar(10)			<unnamed> (Primary Key, Clustered: sid)</unnamed>
	sname	nchar(10)			Check Constraints (0) Indexes (0)
	stype	nchar(10)			Foreign Keys (1)
	sprice	nchar(10)			<unnamed> (Car: caid)</unnamed>
	caid	int	✓		Triggers (0)
	stransmission	nchar(20)	✓		
	sfueltype	nchar(20)	✓		
	sseatingcap	nchar(10)	✓		

Suv

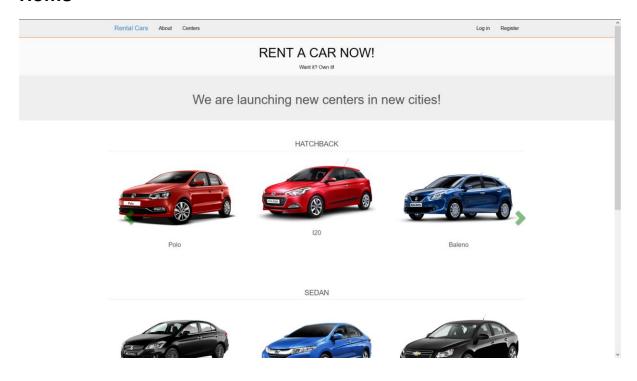
Name	Data Type	Allow Nulls	Default	▲ Keys (1)
• suid	nchar(10)			<unnamed> (Primary Key, Clustered: suid</unnamed>
suname	nchar(10)			Check Constraints (0)
sutype	nchar(10)			Indexes (0)
				▲ Foreign Keys (1)
suprice	nchar(10)	Ш		<unnamed> (Car: caid)</unnamed>
caid	int	✓		Triggers (0)
sutransmission	nchar(20)	✓		
sufueltype	nchar(20)	✓		
suseatingcap	nchar(10)	✓		
		_		

View

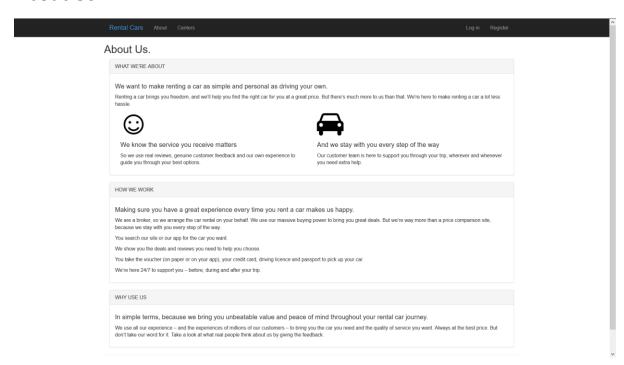
	Name	Data Type	Allow Nulls	Default	▲ Keys (1)	
π0	vid	int			<unnamed> (Primary Key, Clustered: vid</unnamed>)
	vdate	date	✓		Check Constraints (0)	
	vname	nchar(20)	✓		Indexes (0) Foreign Keys (0)	
	carout	nchar(20)	✓		Triggers (0)	
	carin	nchar(20)	✓			
			_			

SCREENSHOTS

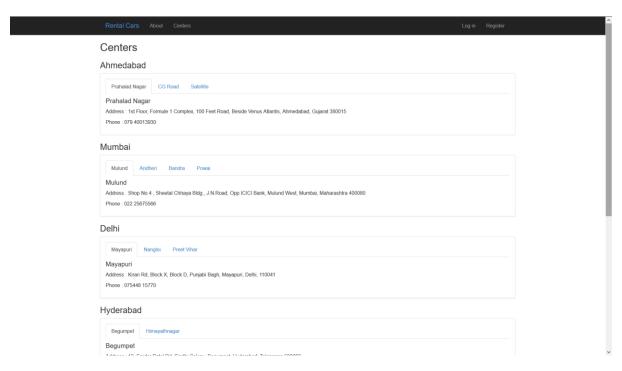
Home



About Us



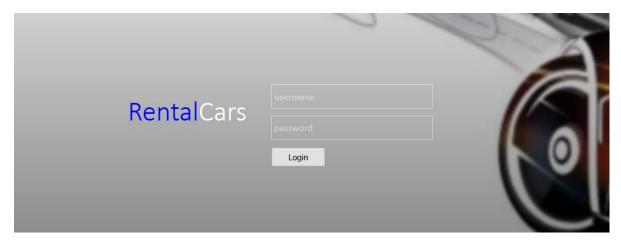
Centers



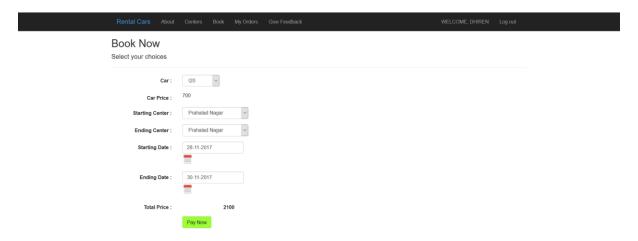
Register



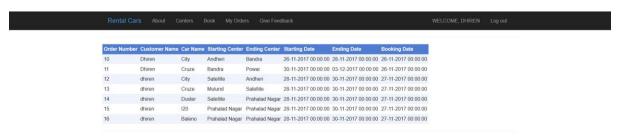
Login



Book



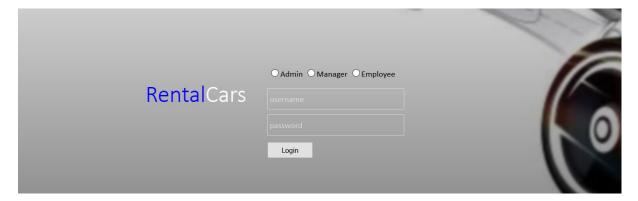
My Orders



Give Feedback



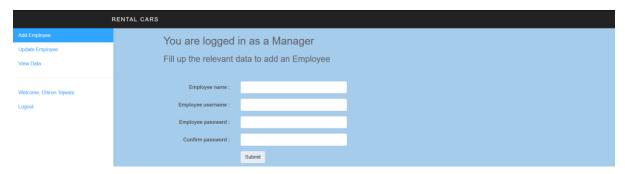
Login for Admin, Manager and Employee



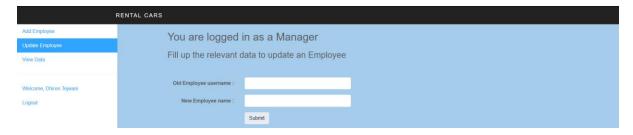
Employee Page



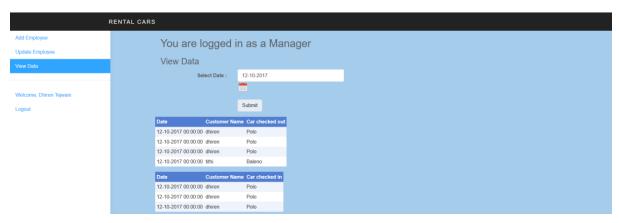
Add Employee of Manager



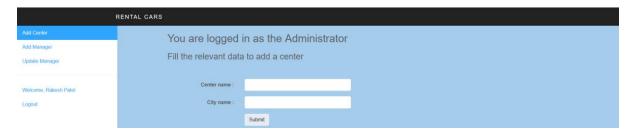
Update Employee of Manager



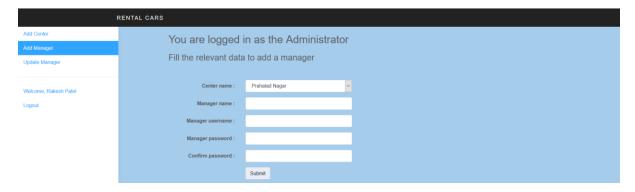
View Data of Manager



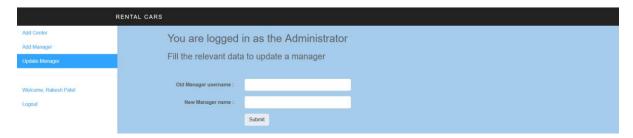
Add Center of Admin



Add Manager of Admin



Update Manager of Admin



Payment Page



Payment Receipt

