Car Rental System

Mohd Nasar Siddiqui 220661

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Registration Process

Our car rental system ensures a seamless experience for customers, employees,
and managers. Users register securely with unique IDs and passwords, guaran-
teeing efficient and personalized service.

For Already Registered Users

REG Type	Password
Manager	manager
Customer	user
Employee	employee

Manager Dashboard

Operations

1. Visit Employee Dashboard

2. Visit Customer Dashboard

3. Visit Car Inventory

Employee Dashboard

1. Add Employee

2. Delete Employee

3. Modify Employee Details

4. See all Employees

Customer Dashboard

1. Add Customer

2. Delete Customer

3. Modify Customer Details

4. See all Customers

Car Inventory

1. Add Car to Inventory

2. Update Car Details

3. Delete a Car

4. Approve a Rent Request

5. Display All Cars in Inventory

User login page (custoumer/employee)

Operations

1. View All Available Cars

2. View All Rented Cars

3. Post a Rent Request

4. Return a Car

5. Show Total Amount

6. Show Pending Requests

7. View Profile

Functionality

Upon entering the system, users are directed to the homepage where they are prompted to specify their designation. If identified as a manager, authentication is required. Following this, the system fetches the manager from the managerlist vector and designates them as the logged-in manager. Subsequently, they are redirected to the manager dashboard, granting them control over various operations outlined in the manager section.

For customers and employees, upon selecting their designation, the system redirects them to the user login page after authentication. Once logged in, they gain access to perform operations similar to those specified for managers. Users, irrespective of their role, can post requests for multiple cars, provided they meet the minimum rating and car rent limit criteria. Additionally, they can view all posted requests, rented cars, and browse through available cars.

In the case of multiple users vying for the same car, the system checks if each user satisfies the minimum rating requirement and car rent limit. Users can also post requests for multiple cars. The system facilitates users in tracking all their posted requests and rented cars.

For managers, a comprehensive view is provided. They can access information on all cars rented, review pending requests for a specific car, and approve

requests by selecting the car model and inputting the user ID to whom the car will be rented. Upon approval, all pending requests for that car are cleared, and the car is moved to the rented list of the respective user.

Code Structure

A Car class that has all the attributes and methods related to car then a User class a Base class for Manager Custumer and Employee with all attributes and methods common for all . then a custoumer class inheriting both Car and User next is emplyee class inheriting custoumer as its nearly same finally manager class inheriting Custoumer as it inherits User and Car

Data Handling

Sorry just can't implement the file handling (very complex at the stage I implemented the functionalities with dynamic memeory allocation) the program is running in loop to keep all the data in vector . the data will persist untill the program is running please check all the code without exiting the program use go 'Back' to keep the data.