

Car Rental System

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Problem statement

Due to the digitalization, the tours and travels were forced to shift their application process from offline to online, thus they require an effective, efficient and friendly way to do the required task like taking input from user, adding users to the database, accessing all inputs only to the owner and to update the data as some changes occur.

How you approach the problem

We planned all the necessary inputs and outputs which will be required to do the above task and then we made two major portals, one for the admin or the owner of the rental store and one for the users of the rental store. We introduced the concept that once a customer is using this program, He/she either need to input their existing credentials or He/she needs to enrol as a new customer to the store. The customer portal has options like viewing personal information, inquire regarding the availability of the vehicle and information regarding the vehicle and even to apply for a vehicle, print the current trip bill etc, one interesting note is that until and unless the customer fully pays the bill, he/she is not allowed to go on for another trip. The admin portal contains options like view customer details, vehicle details and edit vehicle information and update certain information. The admin portal also has an option of adding, deleting vehicle from the system. The admin portal can only be accessed by certain users who have the User ID and password, if the system finds the

credentials correct then only it will give access to the admin portal or else, he/she is not permitted.

Soo, we planned the above things and distributed the task equally among both the partners and did their job, one as the owner portal builder and another as the customer portal builder. We made weekly checkpoints in order to avoid deadline pressure and we successfully made our work done before time.

We even took guidance from the online sources to compute certain parts of the program, but we even made sure that we do not copy the code as it was, we try to understand the algorithm and then we implemented it by ourselves.

We even checked out other type of similar projects online which were similar and took ideas from those projects and implement certain algorithm into our code.

Things you learned during the entire project

1. Certain functions used in C++ which were not available in ANSI C which can make code look less complex
2. Certain keywords which can be used to make the code simpler.
3. Certain algorithm to evaluate different functions, like how to add time and date to the code which automatically generates itself.
4. Determining type of error and then rectifying it.
5. How to work with functions and more importantly when you have two portals which work different and demand different input, output, storage, access and approach.
6. How to plan things and implement it by parts.
7. How friend function work and implement it.
8. How STL library work in the C++.
9. How we defeat real world problem with the help of object oriented programming language.

The limitations for your project.

Once you close the programme then you can't get the previous information. So every time when you start the programme then you start from the beginning. Owner can't change the password from the run time but he/she change password through coding. And another disadvantage of this project is that we can't verify the phone number and email address of the customer.