

**CAR RENTAL MANAGEMENT**

C++ PROJECT



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About Project

Car Rental System is based on a concept to rent cars and generate rental invoice of a rental company. Before stepping into the main system a user has to pass through a login system to get access, then only the user can select cars with a different model and different price. This mini project contains limited features, but the essential one.

Talking about the features of the Car Rental System, after logging in the user can select available cars. After selecting a car, the system displays selected car details which contain maximum power, mileage and many more if user he/she need to book a car then he/she has to provide the name and national ID.

ALGORITHM:

1. Start

2. Create a structure for cars and declare string varaibles for car mark,model,color,maxs\_speed,and int variable named price.

3. We use different functions like login,regitration,home,getcar and rentcar.

4. In main() function,we read a int variable choice and create a switch case for three choices like login,register and exit.

5. In login() function,declare variables as userId,password,id,pass and count and read from user.

6. Declare condition for login like (id==userId && pass==password).

7. If count==1 then login else print user not found.

8. In registration() function, declare and read variables like ruserId,rpassword,rid,and rpass.

9. Registration function used create new account for user for login and continue the process.

10. In home() function, print options for user like need a car,give car,return to login and exit.

11. Create a switch case using choice to select the required option and confirm booking.

12. In getcar() function, print list of cars with models by using forloop.

13. Print all specifications of different cars using choice.

14. And choice 10 and 11 for login page and to exit.

15. In rentcar() function, enter details of user and details of car that user want to give for rent.

16. And also print rent price for each model and all set to give a car.

17. Stop.

CODE:

#include <iostream>

#include <fstream>

#include <string.h>

using namespace std;

struct Cars

{

string mark [10] = {"Hyundai","BMW","Mercedes","Audi","Tesla","Skoda","Volkswagun","Toyota","Ford"};

string model [10] = {"2016MD","2018AS","2018DS","2017LA","2018OW","2005Ps","2008PW","2010QW","2016SA"};

string color [10] = {"Red","black","yellow","Blue","Red","Brown","Silver","Black","grey"};

string maxs\_peed [10] = {"100 Km/h ","150 Km/h","150 Km/h","170 Km/h","130 Km/h","140 Km/h","130 Km/h","120 Km/h","150 Km/h"};

int price [ 10 ] = {1000,2000,3000,5000,2000,3000,4000,6000,7000} ;

}car;

void login();

void registration();

void home();

void getcar();

void rentcar();

int main()

{

int choice;

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t-------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t\t\t WELCOME TO CAR RENTAL SYSTEM \n";

cout<<"\t\t\t\t\t\t\t\t\t-------------------------------------------------------------------------\n\n";

cout<<"\t\t\t\t\t\t\t\t\t ------------------------------ \n";

cout<<"\t\t\t\t\t\t\t\t\t| Menu |\n";

cout<<"\t\t\t\t\t\t\t\t\t ------------------------------\n";

cout<<"\t\t\t\t\t\t\t\t\t| Press 1 to LOGIN |"<<endl;

cout<<"\t\t\t\t\t\t\t\t\t| Press 2 to REGISTER |"<<endl;

cout<<"\t\t\t\t\t\t\t\t\t| Press 3 to EXIT |"<<endl;

cout<<"\t\t\t\t\t\t\t\t\t ------------------------------\n";

cout<<"\n\t\t\t\t\t\t\t\t\tPlease Enter your Choice: ";

cin>>choice;

cout<<endl;

switch(choice)

{

case 1:

login();

break;

case 2:

registration();

break;

case 3:

system("cls");

cout<<"\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n";

cout<<"\t\t\t\t\t\t\t\t\t\t\t\t Thank you :)";

cout<<"\n\t\t\t\t\t\t------------------------------------------------------------------------------------------------------------------------";

cout<<"\n\t\t\t\t\t\t\t\t\t\t\t \* The program has been terminated \*";

cout<<"\n\n\n\n\n\n\n\n\n\n\n\n";

exit;

break;

default:

system("cls");

cout<<"\n\n\n\n\t\t\t\t\t\t\t\t\tPlease select from the options given above..!!\n"<<endl;

main();

}

}

void login()

{

int count;

string userId, password, id, pass;

system("cls");

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t-------------------------------------------------------------------------\n\n";

cout<<"\t\t\t\t\t\t\t\t\tPlease Enter the User Name and the Password : "<<endl;

cout<<"\n\t\t\t\t\t\t\t\t\t-------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t\t\tUser Name: ";

cin>>userId;

cout<<"\t\t\t\t\t\t\t\t\t-----------------------------\n";

cout<<"\t\t\t\t\t\t\t\t\tPassword : ";

cin>>password;

cout<<"\n";

ifstream input("records.txt");

while(input>>id>>pass)

{

if(id==userId && pass==password)

{

count=1;

system("cls");

}

}

input.close();

if(count==1)

{

system("cls");

cout<<"\n\n\t\t\t\t\t\t\t++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++";

cout<<"\n\t\t\t\t\t\t\t\t \*\*\* LOGIN is successfull \*\*\*\n";

cout<<"\t\t\t\t\t\t\t++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++";

home();

}

else

{

cout<<"\n\n\t\t\t\t\t\t\t++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\*\*\* User Name not found. Plear check your username and password \*\*\*";

cout<<"\n\t\t\t\t\t\t\t\t\t ---------------------------------------------------------\n";

cout<<"\n\n";

main();

}

}

void registration()

{

string ruserId, rpassword,rid,rpass;

system("cls");

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t ....Register yourself Here....";

cout<<"\n\t\t\t\t\t\t\t\t\t------------------------------------------------------------------\n";

cout<<"\n\t\t\t\t\t\t\t\t\tEnter UserName: ";

cin>>ruserId;

cout<<"\t\t\t\t\t\t\t\t\t-----------------------------\n";

cout<<"\t\t\t\t\t\t\t\t\tEnter the password : ";

cin>>rpassword;

cout<<"\t\t\t\t\t\t\t\t\t-----------------------------\n";

ofstream f1("records.txt",ios::app);

f1<<ruserId<<' '<<rpassword<<endl;

system("cls");

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t--------------------------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t\t\t Your Registration is successfull..!! ";

cout<<"\n\t\t\t\t\t\t\t\t\t--------------------------------------------------------------------------------------------\n";

main();

}

void home()

{

cout<<"\n\n\n\t\t\t\t\t\t\t --------------------------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t\t \* WELCOME TO THE CAR RENTAL SYSTEM \* ";

cout<<"\n\t\t\t\t\t\t\t --------------------------------------------------------------------------------------------\n";

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t \_\_\_\_\_\_\_\_\_\_\n";

cout<<"\t\t\t\t\t\t\t\t\t | 1. Need a car |\n";

cout<<"\t\t\t\t\t\t\t\t\t | 2. Give car on rent |\n";

cout<<"\t\t\t\t\t\t\t\t\t | 3. Return to login page |\n";

cout<<"\t\t\t\t\t\t\t\t\t | 4. EXIT |\n";

cout<<"\t\t\t\t\t\t\t\t\t -------------------------- \n";

cout<<"\n\n";

cout<<"\t\t\t\t\t\t\t\t----------------------------------------------------------\n";

int choice;

cout<<"\t\t\t\t\t\t\t\t How can we help you: ";

cin>>choice;

switch(choice)

{

case 1:

getcar();

break;

case 2:

rentcar();

break;

case 3:

main();

break;

case 4:

system("cls");

cout<<"\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n";

cout<<"\t\t\t\t\t\t\t\t\t\t\t\t Thank you :)";

cout<<"\n\t\t\t\t\t\t------------------------------------------------------------------------------------------------------------------------";

cout<<"\n\t\t\t\t\t\t\t\t\t\t\t \* The program has been terminated \*";

cout<<"\n\n\n\n\n\n\n\n\n\n\n\n";

exit;

break;

}

}

void getcar()

{

system("cls");

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n";

cout<<"\t\t\t\t\t\t\t\t\t\t The list of available cars is given below -->\n";

cout<<"\n\t\t\t\t\t\t----------------------------------------------------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n";

cout<<"\t\t\t\t\t\t\t|\tS.No\t |\tBrand\t |\tModel\t |\tCharge per day\t |\tmax\_speed\t|\n";

cout<<"\t\t\t\t\t\t\t-------------------------------------------------------------------------------------------------\n";

int num=1;

for(int i=0 ;i<9;++i)

{

cout<<"\t\t\t\t\t\t\t";

cout<<"|\t"<<num<<". \t | "<<car.mark[i]<<"\t | "<<car.model[i]<<" |\t "<<car.price[i]<<"\t |\t "<<car.maxs\_peed[i]<<"\t|"<<endl;

num++ ;

}

cout<<"\t\t\t\t\t\t\t-------------------------------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t-------------------------------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t| Press 10: Goto login page |\n";

cout<<"\t\t\t\t\t\t\t| Press 11: TO Exit |\n";

cout<<"\t\t\t\t\t\t\t-------------------------------------------------------------------------------------------------\n\n";

int choice;

cout<<"\t\t\t\t\t\t\t Select from the List: ";

cin>>choice;

if (choice<=9)

{

system("cls");

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t--------------------------------------------------";

cout<<"\n\t\t\t\t\t\t\t\t\t\t\tYou have selected ---->";

cout<<"\n\t\t\t\t\t\t\t\t\t--------------------------------------------------";

cout<<"\n\n\t\t\t\t\t\t\t\t\t\t";

cout<<"Brand : "<<car.mark[choice-1];

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<"Model : "<<car.model[choice-1];

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<"Price per day : "<<car.price[choice-1];

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<"Max\_speed : "<<car.maxs\_peed[choice-1];

cout<<"\n\n\t\t\t\t\t\t\t\t\t--------------------------------------------------";

cout<<"\n\n\t\t\t\t\t\t\t\t\t \* Enter your contact details \* ";

cout<<"\n\n\t\t\t\t\t\t\t\t\t--------------------------------------------------\n";

string name;

cout<<"\t\t\t\t\t\t\t\t\t Name : ";

cin>>name;

long long n;

cout<<"\t\t\t\t\t\t\t\t\t Mobile No. : ";

cin>>n;

ofstream set("Bookings.txt",ios::app);

set<<choice<<' '<<name<<' '<<n<<endl;

cout<<"\n\n\n\t\t\t\t\t\t\t====================================================================================\n";

cout<<"\t\t\t\t\t\t\t\t\t\t \* BOOKING CONFIRMED \*";

cout<<"\n\t\t\t\t\t\t\t====================================================================================\n";

main();

}

else if(choice==10)

{

main();

}

else

{

exit;

}

}

void rentcar()

{

system("cls");

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t\t-----------------------------------------------\n";

cout<<"\n\t\t\t\t\t\t\t\t\t\t ==> Please provide the following details: ";

cout<<"\n\t\t\t\t\t\t\t\t\t\t-----------------------------------------------\n";

string name;

cout<<"\n\t\t\t\t\t\t\t\t\t\t Your Name : ";

cin>>name;

long long n;

cout<<"\t\t\t\t\t\t\t\t\t\t Mobile No. : ";

cin>>n;

string brand;

cout<<"\t\t\t\t\t\t\t\t\t\t Car Brand : ";

cin>>brand;

string model;

cout<<"\t\t\t\t\t\t\t\t\t\t Model : ";

cin>>model;

int p;

cout<<"\t\t\t\t\t\t\t\t\t\t MinPrice Expected : ";

cin>>p;

ofstream f1("lesseeRecord.txt",ios::app);

f1<<name<<" "<<n<<" "<<brand<<" "<<model<<" "<<p<<endl;

system("cls");

cout<<"\n\n\n\t\t\t\t\t\t\t\t\t\t ---------------------------------------";

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<" Name : "<<name;

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<" mobile No. : "<<n;

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<" Brand : "<<brand;

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<" Model : "<<model;

cout<<"\n\t\t\t\t\t\t\t\t\t\t";

cout<<" Price per day : "<<p;

cout<<"\n\t\t\t\t\t\t\t\t\t\t ---------------------------------------";

cout<<"\n\n\t\t\t\t\t\t\t --------------------------------------------------------------------------------------------\n";

cout<<"\t\t\t\t\t\t\t\t\t\t \* Your are all Set to give your car on rent !!\n\t\t\t\t\t\t\t\t\t\t\tWe will inform you on constomer's request \*";

cout<<"\n\t\t\t\t\t\t\t--------------------------------------------------------------------------------------------------\n\n";

cout<<"\n\n\n";

home();

}

OUTPUT:

















