NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Object Oriented Programming Mini Project:

"Car Rental MANAGEMENT SYSTEM"



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CERTIFICATE

This is to certify that the Course Project "Car Rental MANAGEMENT SYSTEM" is an authentic work carried out by Tanisha Bhadani(1NT20IS175), Saurabh Tripathi (1NT20IS148), Nitish Kumar (1NT20IS102), Shivam Maurya (1NT20IS102) bona fide students of Nitte Meenakshi Institute of Technology, Bangalore in partial fulfillment for the award of the degree of Bachelor of Engineering in INFORMATION SCIENCE AND ENGINEERING of Visvesvaraya Technological University, Belagavi during the academic year 2021-2022.

ABSTRACT

The client uses MS Excel, and maintains their records, however it is not possible for them to share the data from multiple systems in a multi user environment, there is a lot of duplicate work, and chance of mistake. When the records are changed they need to update each and every excel file. There is no option to find and print previous saved records. There is no security; anybody can access any report and sensitive data, also no reports to summary report. This Car Rental System is used to overcome the entire problem which they are facing currently, and make complete atomization of manual systems to computerized systems.

Code:

#include <iostream>
#include <fstream>
#include <conio.h>
#include <stdlib.h>
#include <unistd.h>
#include <dos.h>
#include <iomanip>
// Brought To You by code-projects.org
// included required library files
using namespace std;

```
class customer // customer class
private:
public:
 string customername;
 string carmodel;
 string carnumber;
 char data;
 // variables defined in this class in public mode.
class rent: public customer // inhereted class from
customer class
{
public:
 int days = 0, rentalfee = 0; // additional int
vatiables defined
 void data()
 {
  int login();
  login();
  cout << "\t\t\tPlease Enter your Name: "; //
taking data from the user
  cin >> customername;
  cout << endl;
  do
  {
   cout << "\t\t\tPlease Select a Car" << endl; //
giving user a choice to select among three different
models
   cout << "\t\t\tEnter 'A' for Tesla 2011." << endl;
   cout << "\t\t\tEnter 'B' for Hyundai 2015." <<
endl;
   cout << "\t\t\tEnter 'C' for Ford 2017." << endl;
   cout << endl;
   cout << "\t\t\tChoose a Car from the above
options: ";
   cin >> carmodel;
   cout << endl;
   cout <<
-----" << endl;
   if (carmodel == "A")
     system("CLS");
     cout << "You have choosed Tesla model
2011" << endl;
     ifstream inA("A.txt"); // displaying details of
```

```
model A
     char str[200];
     while (inA)
      inA.getline(str, 200);
      if (inA)
       cout << str << endl;
     sleep(2);
   if (carmodel == "B")
     system("CLS");
     cout << "You have choosed Hyundai model
2015" << endl;
     ifstream inB("B.txt"); // displaying details of
model B
     char str[200];
     while (inB)
      inB.getline(str, 200);
      if (inB)
       cout << str << endl;
     sleep(2);
   if (carmodel == "C")
   {
     system("CLS");
     cout << "You have choosed Ford model 2017"
<< endl;
     ifstream inC("C.txt"); // displaying details of
model C
     char str[200];
     while (inC)
      inC.getline(str, 200);
      if (inC)
       cout << str << endl;
     sleep(2);
   if (carmodel != "A" && carmodel != "B" &&
carmodel != "C")
     cout << "Invaild Car Model. Please try again!"
<< endl;
```

```
} while (carmodel != "A" && carmodel != "B" &&
carmodel != "C");
  cout <<
"_____
-----" << endl;
  cout << "Please provide following information: "
<< endl:
  // getting data from user related to rental service
  cout << "Please select a Car No.: ";
  cin >> carnumber;
  cout << "Number of days you wish to rent the
car: ";
  cin >> days;
  cout << endl;
 void calculate()
  sleep(1);
  system("CLS");
  cout << "Calculating rent. Please wait......" <<
endl;
  sleep(2);
  if (carmodel == "A" || carmodel == "a")
   rentalfee = days * 56;
  if (carmodel == "B" || carmodel == "b")
   rentalfee = days * 60;
  if (carmodel == "C" || carmodel == "c")
   rentalfee = days * 75;
 void showrent()
  ofstream fout("data.txt");
  cout << "\n\t\t
                           Car Rental -
                           " << endl;
Customer Invoice
  fout << "\n\t\t
                           Car Rental -
                           " << endl;
Customer Invoice
  cout << "\t\t
//////////" << endl;
  fout << "\t\t
//////////" << endl;
  cout << "\t\t | Invoice No. :"

<< "-----|" << setw(10) <<
"#Cnb81353"
     << " |" << endl;
  fout << "\t\t | Invoice No. :"
     << "-----|" << setw(10) <<
"#Cnb81353"
     << " |" << endl;
```

```
cout << "\t\t | Customer Name:"

<< "-----|" << setw(10) <<
customername << " |" << endl;
  fout << "\t\t | Customer Name:"
     << "-----|" << setw(10) <<
customername << " |" << endl;
  cout << "\t\t | Car Model :"
     << "-----|" << setw(10) <<
carmodel << " |" << endl;
  fout << "\t\t | Car Model :"
     << "-----|" << setw(10) <<
carmodel << " |" << endl;
  cout << "\t\t | Car No. :"
     << "-----|" << setw(10) <<
carnumber << " |" << endl;
  fout << "\t\t| Car No. :"
     << "-----|" << setw(10) <<
carnumber << " |" << endl;
  cout << "\t\t | Number of days :"
     << "-----|" << setw(10) << days << " |"
<< endl;
  fout << "\t\t | Number of days :"
     << "-----|" << setw(10) << days << " |"
<< endl;
  cout << "\t\t | Your Rental Amount is :"
     << "-----|" << setw(10) << rentalfee << " |"
<< endl;
  fout << "\t\t| Your Rental Amount is :"
     << "-----|" << setw(10) << rentalfee << " |"
<< endl;
  cout << "\t\t | Caution Money :"
     << "-----|" << setw(10) << "0"
     << " |" << endl;
  fout << "\t\| Caution Money :"
     << "-----|" << setw(10) << "0"
     << " |" << endl;
  cout << "\t\t | Advanced :"
     << "-----|" << setw(10) << "0"
     << " |" << endl;
  fout << "\t\t| Advanced :"
     << "-----|" << setw(10) << "0"
     << " |" << endl;
  cout << "\t\t
endl;
  cout << "\n";
  fout << "\t\t
                                    " << endl;
  fout << "\n";
  cout << "\t\t
               | Total Rental Amount is :"
```

```
<< "-----|" << setw(10) << rentalfee << " |"
<< endl;
  fout << "\t\t| Total Rental Amount is :"
     << "-----|" << setw(10) << rentalfee << " |"
<< endl;
  cout << "\t\t
endl;
  cout << "\t\t # This is a computer
generated invoce and it does not" << endl;
  cout << "\t\t
               require an authorised signture
#" << endl;
  cout << " " << endl;
  cout << "\t\t
//////////" << endl;
  cout << "\t\t You are advised to pay up the
amount before due date." << endl;
                 Otherwise penelty fee will be
  cout << "\t\t
applied" << endl;
  cout << "\t\t
//////////" << endl;
  fout.close();
  int f;
  system("PAUSE");
  system("CLS");
  ifstream inf("thanks.txt");
  char str[300];
  while (inf)
   inf.getline(str, 300);
   if (inf)
    cout << str << endl;
  inf.close();
 }
};
class welcome // welcome class
{
public:
 int welcum()
  ifstream in("welcome.txt"); // displaying welcome
ASCII image text on output screen fn1353
  if (!in)
```

```
cout << "Cannot open input file.\n";
  char str[1000];
  while (in)
   in.getline(str, 1000); // delim defaults to '\n' cp
     cout << str << endl;
  in.close();
  sleep(1);
  cout << "\nStarting the program please wait....."
<< endl;
  sleep(1);
  cout << "\nloading up files....." << endl;
  sleep(1); // function which waits for (n)
seconds
  system("CLS"); // cleares screen
};
int main()
 welcome obj1; // object created for welcome
 obj1.welcum(); // welcum function is called
 rent obj2;
 // object created for rent class and further
member functions are called
 obj2.data();
 obj2.calculate();
 obj2.showrent();
 return 0; // end of the program
}
int login()
 string pass = "";
 char ch;
 cout << "\n\n\n\n\n\n\n\t\t\t\t\t CAR RENTAL
SYSTEM \n\n";
 cout << "\t\t\t\t\t-----
 cout << "\n\t\t\t\t\t\t</pre>
LOGIN \n";
 cout << "\t\t\t\t\t----\n\n";
 cout << "\t\t\t\tEnter Password: ";</pre>
 ch = getch();
 while (ch != 13)
```

OUTPUT

```
Car Rental - Customer Invoice
Invoice No. :---- #Cnb81353
Customer Name:-----
Car Model :-----|
| Car No. :-----|
                         34
Number of days :-----
                         56
Your Rental Amount is :-----
                       3136
Caution Money :-----
Advanced :-----
                         0
| Total Rental Amount is :-----
                       3136
```

CONCLUSION:

We hereby conclude that the project submitted to the NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY, BANGALORE, is a record of an original work done by us under the guidance of Mainak Chakraborty, Prof. Of Information Science & Engineering branch, and this project work is submitted in the partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Information Science and Engineering. The results embodied in this have not

been submitted to any other University or Institute for the award of any degree or diploma.

THANK YOU