Project Report:



BUS MANAGEMENT SYSTEM IN C PROGRAMMING

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# Introduction:

The bus reservation system is a console-based app in which we provide different facilities. In this app, we have a login and registration system and also different categories of buses like higher medium and low category and different rent of every different bus category. Total sites in each bus are 10 and this app provides 24 hours service and customer choice the different routes for his traveling and also different rent for different routes after the traveling it informs the customer the total rent of the customer

Source code:

#include<stdio.h>

#include<string.h>

#include<cstdlib>

#include<conio.h>

#include<stdlib.h>

//The variable are global variable

int i,p,rate,Z,j,k,l,age,phone\_number;

char email[20], name[8], name1[8];

char bus, root;

int bus\_sit, time;

struct login//it is structure for login and registration function

{

char first\_name[20];

char last\_name[20];

char user\_name[20];

char password[20];

};

void registration()//this function is working for the registration

{

system("color 1f");

printf("\n\_\_\_\_\_\_\_\_\_\_\n");

printf("REGISTER:");

printf("\n----------\n");

FILE \*information;//here we are using file handling

information = fopen("information.txt", "a");//here we are open the file as well as we give the name of the file in the append mode

struct login k;// here we are using structure for taking information for the registration of any person

printf("Enter first name: ");

scanf("%s", k.first\_name);

printf("Enter Last name: ");

scanf("%s", k.last\_name);

printf("username: ");

scanf("%s", k.user\_name);

printf("Password: ");

scanf("%s", k.password);

printf("\nThanks for Registering!, %s", k.user\_name);

printf("\n\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

fwrite(&k, sizeof(k), 1, information);

fclose(information);//here we are close the file

}

void login()// this funtion is working for the login

{

system("color 1f");

printf("\n\_\_\_\_\_\_\_\n");

printf("LOGIN:");

printf("\n-------\n");

char user\_name[20],password[20];// here we are taking information for the person because here we are checking ,is it registration or not???

for(int i=0; i<3; i++)

{

FILE \*information; //here we are using again file handling

information=fopen("information.txt", "r");//here we are again open the file but in this time it is in the read mode

struct login k;//here are we again using structure

printf("user\_id: ");//taking user id

scanf("%s", &user\_name);

printf("password: ");//taking password

scanf("%s", &password);

int n=0;

while(fread(&k, sizeof(k), 1, information))//here we are using login for checking

{

if((strcmp(user\_name,k.user\_name)==0) && (strcmp(password,k.password)==0))//here we are checking ,is it register or not if he registration //the program going forword otherwise program going to be end!!

{

printf("Welcome, %s!\n", &user\_name);// if he give right password and and id then we are welcome them

n++;// here we are increment the "n"

break;

}

}

if (n == 0){

printf("Credentials did not matched.\n\n");//if they enter wrong password then it written in the screen

}

else if (n==1){

break;

}

if (i == 2){

printf("\nError: Retry Limit exceeded %d", i);

exit(0);//every person can try only 3 time afterthat program going to be at end

}

fclose(information);//here we are closing the file

}

}

void bus\_type()//it is working for the asking bus condition!!!

{

system("color f0");

printf("\t\t|||\*\*\*WELCOME TO OUR APP\*\*\*||\t\t\n");

printf("\t\t\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\t\t\n");

system("color 4f");

printf("\nPlease Enter the bus catgory:\n");

printf("---------------------------------\n");

printf("Enter A: for Higher condition, 8$ per km\n");

printf("Enter B: for Medium condition, 5$ per km\n");

printf("Enter C: for Lower condition, 2$ per km\n");

printf("\nBus type: ");

scanf("%s", &bus);//here we are asking the bus condition

switch(bus)

{

case 'A':

{

printf("Welcome to Higher condition\n");

rate=8;

break;

}

case 'B':

{

printf("Welcome to Medium condition\n");

rate=5;

break;

}

case 'C':

{

printf("Welcome to Lower condition\n");

rate=2;

break;

}

default:

{

printf("Invalid Bus category\n");

exit(0);// the user enter wrong category the program ended !!

break;

}

}

}

void seat()//it is asking for the seat number

{

system("color 4f");

printf("\nSeat Selection\n");

printf("----------------");

printf("\nSeat available in the bus: 10\n");

printf("Which seat number do you want\n");

printf("Seat number: ");

scanf("%d", &bus\_sit);//here we are asking the sit number

if (bus\_sit < 10)

printf("your seat number is %d\n", bus\_sit);

else{

printf("Seat not available");

exit(0);

}

}

void route()//it is asking for the route

{

system("color 4f");

printf("\nWhich route do you want to go ?\n");

printf("-------------------------------------\n");

printf("Enter A: Defence to Gulshan lqbal\n");

printf("Enter B: Shanti Nagar to Model Colony\n");

printf("Enter C: Dalmia to Liyar\n");

printf("Enter D: Urdu university to Nipa chowrangi\n");

printf("Enter E: North Karachi to Nazimabad\n");

printf("\nRoute: ");

scanf("%s", &root);//asking the root

printf("\n");

}

void route\_switch()// here we are telling total rent

{

system("color 4f");

switch(root)

{

case 'A':

{

printf("Route: Defence to Gulshan lqbal\n");

printf("Distance: 20km\n");

printf("Fare: %d$\n", rate\*20);

break;

}

case 'B':

{

printf("Route: Shanti Nagar to Model Colony\n");

printf("Distance: 12km\n");

printf("Fare: %d$\n", rate\*12);

break;

}

case 'C':

{

printf("Route: Dalmia to Liyar\n");

printf("Distance: 14km\n");

printf("Fare: %d$\n", rate\*14);

break;

}

case 'D':

{

printf("Route: Urdu university to Nepa chowragi\n");

printf("Distance: 3km\n");

printf("Fare: %d$\n", rate\*3);

break;

}

case 'E':

{

printf("Route: North Karachi to Nazimabad\n");

printf("Distance: 10 km\n");

printf("Fare: %d$\n", rate\*10);

break;

}

default:

{

printf("INVAID BUS CATORGORY\n");

exit(0);

break;

}

}

}

int main()

{

system("color 1f");

int i,p,rate,Z,j,k,l,age,phone\_number;

char email[20], name[8], name1[8];

char bus, root;

int bus\_sit, time;

int choice;

printf("---------------------------------------------\n");

printf("Enter 1 for Registration\nEnter 2 for Login\n");

printf("---------------------------------------------\n\nEnter(1 or 2): ");

scanf("%d", &choice);

if(choice == 1)//if the user enter the 1 then registration function start the work

{

int s;

registration();

printf("\nWould you like to sign-in ?\n");

printf("press 2 to sign in: ");

scanf("%d", &s);

if (s == 2){

login();

}

}

else if(choice == 2)//if the user enter the 2 then login function starting the work

{

login();

}

else

{

exit(0);// if they enter the wrong number then function going to be at ended

}

bus\_type();

seat();

route();

printf("24 hour clock format\n");

printf("At what time do you want the Bus: ");

scanf("%d", &time);//here we are asking bus timing

printf("Please reach the stop at %d sharp.\n\n\n", time);

route\_switch();

printf("\nYour journey is completed!\n");

printf("Thanks for travelling with us!\n");

return(0);

}

# Algorithm:

1. The program starts with a loading screen then giving the choice of registration and login
2. If he registered himself then his information store in “Information.txt” file and then he can login for the bus ticket reservation.
3. After that, he choice the bus condition if he enter the “A” then he book higher condition or if he enter the “B” then he book medium condition or if he enter the “C” then he book lower condition . In the menu the values are taken in switch-case condition and then according to the bullets printed on the screen in the menu the program executed that specific case of the menu.
4. Furthermore, the program asking the seat number from out of the 10 and if enter greater than 10 then app give error.
5. In the next function the program show the different routes
6. After that, The user choice the different option by the switch case and also this function tell the total rent of the customer

RESULTH:

