Final Report
(Railway Ticket Reservation System)

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1   Abstract

Brief Description:

The Railway Ticket Reservation System facilitates the passengers to enquire about the trains available, booking and cancelling of tickets, enquire about the status of the booked ticket, etc. The aim is to design and develop a data basemaintaining the records of the different trains, train status and passengers.To use this system, its user should be registered and should have a valid login id and password to make their reservation. Users without login id and password can make new registration and get their id and set password. This is to keep each passenger safe by preventing fraud and secure transactions.After registration, passengers have to enter the source and destination station name and the system will provide the details of the trains available for the particular destination and their arrival and departure time and date. Upon selecting a particular train the details of available seats would be displayed. The passenger can choose the seat of his choice. The fare details would be displayed after the selection process. There is an option for female passengers to opt to travel with female co-passengers.This system also provides E-pass facilities for passengers who regularly travel by train. On availing E-pass facility the passenger is eligible to get certain discounts on the ticket fare.There is also an option to reserve food while booking the ticket. The passenger can also order food while travelling and get the food delivered in the next station. The passenger can access this facility using his

PNG code. On cancelling the order one hour before delivery allows a 90 percent refund for the passenger

Key Features:

1. Registration of user

2. Prevent fake registrations and also ensure safe transactions

3. Booking tickets

4. Cancelling booked tickets

5. Accessing train schedule

6. Display of seat details on selecting a train

7. Display of fare as per input received

8. Food reservation for passengers

9. E-pass facility

10. Option of opting to travel with female co-passengers for ladies

2 Introduction

The Railway Ticket Reservation System facilitates the passengers to enquire about the trains available, booking and cancelling of tickets, enquire about the status of the booked ticket, etc. The aim is to design and develop a data basemaintaining the records of the different trains, train status and passengers.

Registration of user: Takes the details of a passenger and registers him/her and gives a username and password to login.

Login: On entering the correct username and password,you'll be navigated to the main menu where you can use the system.

Main Menu: Displays the operations you can perform in the system

Accessing Train Schedule:Displays the train schedule showing the train details like train number,train name,train arrival and departure timing and the source and destination.

Booking Ticket: Takes the input from the user and books ticket and saves the details of the ticket in a file.

Option for opting to travel with female co-passengers:If a passenger is female and wants to travel with female co-passenger then that passenger is allocated suitable seats.
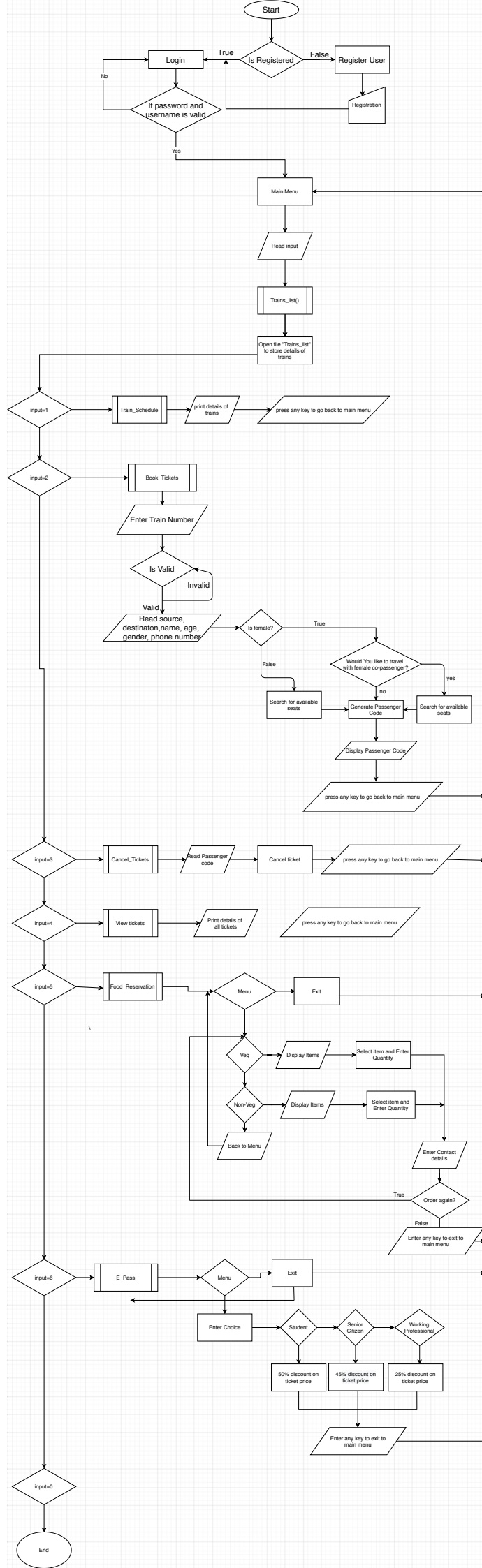
Cancelling ticket: In case a person wishes to cancel his booked ticket, he can do so by giving his passenger code.

View booked tickets: This option lets the user see all the tickets that has been booked till now.

Food reservation: A passenger can order food while travelling and get it within the next half an hour. He gets an option to choose from the veg and non-veg menu. Passenger has to give his details like name, phone number, seat no, etc to order food.

E-pass:Students,working professionals and senior citizens can avail an option for E-pass. They will have to pay for the E-pass and can avail their e-pass by providing their details.

3 Flowchart or Algorithm

Flowchart

- **Start**

- **Is Registered**
  - True → **Login**
  - False → **Register User** → **Registration**

- **Login**
  - **If password and username is valid**
    - No → Login
    - Yes → Main Menu

- **Main Menu**
  - **Read input**
  - **Trains_list()**
  - **Open file "Trains_list" to store details of trains**

- **input=1** → **Train_Schedule** → **print details of trains** → **press any key to go back to main menu**

- **input=2** → **Book_Tickets**
  - **Enter Train Number**
  - **Is Valid**
    - Invalid → (loop back)
    - Valid → **Read source, destinaton, name, age, gender, phone number**
  - **Is female?**
    - True → **Would You like to travel with female co-passenger?**
      - no → **Generate Passenger Code**
      - yes → **Search for available seats** → **Generate Passenger Code**
    - False → **Search for available seats** → **Generate Passenger Code**
  - **Display Passenger Code**
  - **press any key to go back to main menu**

- **input=3** → **Cancel_Tickets** → **Read Passenger code** → **Cancel ticket** → **press any key to go back to main menu**

- **input=4** → **View tickets** → **Print details of all tickets** → **press any key to go back to main menu**

- **input=5** → **Food_Reservation**
  - **Menu**
    - **Exit**
    - **Veg** → **Display Items** → **Select item and Enter Quantity**
    - **Non-Veg** → **Display Items** → **Select item and Enter Quantity**
    - **Back to Menu**
  - **Enter Contact details**
  - **Order again?**
    - True → (loop back to Menu)
    - False → **Enter any key to exit to main menu**

- **input=6** → **E_Pass**
  - **Menu**
    - **Exit**
    - **Enter Choice**
      - **Student** → **50% discount on ticket price**
      - **Senior Citizen** → **45% discount on ticket price**
      - **Working Professional** → **25% discount on ticket price**
    - **Enter any key to exit to main menu**

- **input=0** → **End**

4 Source Code

1. menu.c

```c
#include<stdio.h>
#include<string.h>
#include "structures.h"
#include "epass.h"
#include "foodo.h"
#include<stdlib.h>
#include<windows.h>
#include<conio.h>
static int input,t_index=0,m=1,f=1;
void Trains_list()
{
    FILE *fp=fopen("E:\\Trains_list.txt","w");
        int trainArraySize = 5;
        Trains trains[5]={{12267,"AC Duronto Express","Mumbai","Ahmedabad","2
        for(int i=0;i<trainArraySize;i++)
        {
                Trains train = trains[i];
                fwrite(&train,sizeof(Trains),1,fp);
        }
    fclose(fp);
}
void Train_Schedule()
{
    system("cls");
    Trains tr;
    FILE *fp=fopen("E:\\Trains_list.txt","r");
    printf("\t\t\t\t\t");
    for(int i=0;i<110;i++)
        printf("-");
    printf("\n\t\t\t\t\t");
```

```c
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        printf("\t\t\t\t\t");
        printf("Train Schedule\n");
        printf("\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        printf("Train no.\tTrain name\t\t\tSource\t\tDestination\tArrival time\tI
        printf("\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        while(fread(&tr,sizeof(Trains),1,fp))
            printf("\n\t\t\t\t\t%d\t\t%s\t\t%s\t\t%s\t%s\t\t%s\n",tr.train_no,tr.
        fclose(fp);
        printf("\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\nPress any key to go back to main menu");
        getch();
        system("cls");
        menu();
}

void Show_Train_Schedule(){
        system("cls");
```

```c
        Trains tr;
        FILE *fp=fopen("E:\\Trains_list.txt","r");
        printf("\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t\t");
        printf("\t\t\t\t\t");
        printf("Train Schedule\n");
        printf("\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        printf("Train no.\tTrain name\t\t\tSource\t\tDestination\tArrival time\tI
        printf("\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        while(fread(&tr,sizeof(Trains),1,fp))
            printf("\n\t\t\t\t\t\t%d\t\t%s\t\t%s\t\t%s\t%s\t\t%s\n",tr.train_no,tr.
        fclose(fp);
        printf("\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
        printf("\n\t\t\t\t\t");
        for(int i=0;i<110;i++)
            printf("-");
}
```

```c
void Book_Tickets()
{
    pass_t p[100];
    int tr_no,i,j=0,g;
    char ch,c,str[5],cc;
    Trains tr;
    FILE *fp=fopen("E:\\Trains_list.txt","rb");
    label:
        system("cls");
                Show_Train_Schedule();
        printf("\n\n:::Ticket Booking Counter:::\n");
        printf("Enter train no.:");
        scanf("%d",&tr_no);
        for(i=1;i<6;i++)
        {
            fread(&tr,sizeof(Trains),1,fp);
            if(tr_no==tr.train_no)
                j=i;
        }
    if(j!=0)
    {
        p[t_index].train_no=tr_no;
        printf("Enter the details:\n");
        while((getchar())!='\n');
        printf("Passenger name:");
        gets(p[t_index].name);
        printf("Age:");
        scanf("%d",&p[t_index].age);
        label1:
        printf("Gender(1.Male 2.Female 3.Other) :");
        scanf("%d",&g);
        while((getchar())!='\n');
        if(g==1||g==2||g==3)
```

```c
{
    switch(g)
    {
        case 1:
            strcpy(p[t_index].gender,"Male");
            break;
        case 2:
            strcpy(p[t_index].gender,"Female");
            label3:
            printf("Would you like to travel with female co-passenger
            scanf("%c",&cc);
            if(cc=='y'||cc=='Y')
            {
                if(f<11)
                {
                    p[t_index].seat_no=f;
                    f++;
                }
                else
                {
                    printf("Sorry no seats available");
                }
            }
            else if((cc=='n')||(cc=='N'))
            {
                p[t_index].seat_no=0;
            }
            else
            {
                printf("Invalid input! Try again");
                goto label3;
            }
            while((getchar())!='\n');
```

```c
                    break;
                case 3:
                    strcpy(p[t_index].gender,"Other");
                    break;
        }
    }
    else
    {
        printf("\nInvalid input! Try again\n");
        goto label1;
    }
    label2:
    printf("Phone number:");
    gets(p[t_index].phone_no);
    if(strlen(p[t_index].phone_no)<10)
    {
        printf("\nInvalid input! Try again\n");
        goto label2;
    }
    printf("Do you want to confirm your booking?(y/n)");
    c=getch();
    printf("%c",c);
    if(c=='y'||c=='Y')
    {
        printf("\nYour ticket has been booked successfully!\n");
        itoa(t_index+1,str,10);
        strcpy(p[t_index].png_code,"PNG_");
        strcat(p[t_index].png_code,str);
        if((g==1||g==3)||(g==2&&p[t_index].seat_no==0))
        {
            p[t_index].seat_no=m+10;
            m++;
        }
```

```c
            strcpy(p[t_index].train_name, tr.train_name);
            p[t_index].t_fare=tr.fare;
            printf("\nWait till your ticket is being generated...");
            Sleep(1000);
            system("cls");
            char pcode[50],tN[50],pN[50];
            strcpy(pcode, p[t_index].png_code);
            strcpy(tN, p[t_index].train_name);
            strcpy(pN, p[t_index].name);
            int tn = p[t_index].train_no;
            int sn = p[t_index].seat_no;
            FILE *tt;
            tt=fopen("tickets.txt","a");
            fprintf(tt,"Passenger code: %s || Train no.: %d || Train name: %s || Pa
            fclose(tt);
            printf("\n\nTicket details:\n");
            printf("Passenger code: %s\nTrain no.: %d\nTrain name: %s\nSource
                        t_index++;
            j=0;
        }
    }
    else
    {
        printf("Invalid train number\n");
        printf("Do you want to try again?(y/n)");
        ch=getch();
        printf("%c",ch);
        if(ch=='y'||ch=='Y')
        {
            goto label;
        }
    }
    fclose(fp);
```

```c
        printf("\n\nPress any key to go back to main menu");
        getch();
        system("cls");
        menu();
}
void View_Tickets()
{
        system("cls");
        FILE *fptr = fopen("tickets.txt", "r");
        printf(":::Ticket Details:::\n\n");
        char ch = fgetc(fptr);
        while (ch != EOF)
        {
            printf("%c", ch);
            ch = fgetc(fptr);
        }
        fclose(fptr);
        printf("\n\nPress any key to go back to main menu");
        getch();
        system("cls");
        menu();
}

void View_File(char* filename)
{
        FILE *fptr = fopen(filename, "r");
        printf(":::File Contents:::\n\n");
        char ch = fgetc(fptr);
        while (ch != EOF)
        {
            printf("%c", ch);
            ch = fgetc(fptr);
        }
```

```c
        printf("\n\nPress any key to go back to main menu");
        getch();
        menu();
}


void tryCancel(char* pcode)
{
        FILE *fp;
        FILE *tempfp;
        char str[MAXCHAR];
        char* filename = "tickets.txt";
        char* tempfile = "temptickets.txt";


        fp = fopen(filename, "r");
        tempfp = fopen(tempfile,"w");
        if (fp == NULL)
        {
            printf("Could not open file %s",filename);
            return 1;
        }
        if (tempfp == NULL){
            printf("Could not open file %s",tempfile);
            return 1;
        }
        while (fgets(str, MAXCHAR, fp) != NULL)
        {
            if (strstr(str, pcode) != NULL)
            {
                printf("\nThe following ticket will be cancelled:\n");
                printf("%s", str);
            }
            else
            {
```

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```c
                fprintf(tempfp,"%s",str);
            }
        }
        printf("\nTicket cancellation process completed!\n\n");
        fclose(fp);
        fclose(tempfp);
        remove(filename);
        rename(tempfile,filename);
}


void Cancel_Tickets()
{
        system("cls");
        char pcode[20];
        printf("Enter passenger code :");
        scanf("%s",pcode);
        FILE*fp1=fopen("tickets.txt","r");
        if(fp1==NULL)
        {
            printf("\nNo bookings done yet");
        }
        fclose(fp1);
        tryCancel(pcode);
        printf("\n\nPress any key to go back to main menu");
        getch();
        system("cls");
        menu();
}
void Food_Reservation()
{
        mainmenuf();
}
void E_pass()
```

```c
{
    mainmenu_e();
}
void menu()
{
    for(int i=0;i<422;i++)
    {
        printf("-");
    }
    printf("\t\t\t\t\t\t\t");
    printf("\t\t\t\t\t");
    printf("RAILWAY TICKET RESERVATION SYSTEM\n");
    for(int i=0;i<422;i++)
    {
        printf("-");
    }
    printf(":::Main Menu:::\n");
    printf("1. Train Schedule\n");
    printf("2. Booking Tickets\n");
    printf("3. Cancelling Tickets\n");
    printf("4. View Booked Tickets\n");
    printf("5. Food Reservation\n");
    printf("6. E-pass\n");
    printf("7. Exit\n");
    printf("Choose an option: ");
    scanf("%d",&input);
    Input();
}
void Input()
{
    Trains_list();
    if(input==1)
        Train_Schedule();
```

```c
        else if(input==2)
            Book_Tickets();
        else if(input==3)
            Cancel_Tickets();
        else if(input==4)
            View_Tickets();
        else if(input==5)
            Food_Reservation();
        else if(input==6)
            E_pass();
        else if(input==7)
            exit(0);
        else
        {
            printf("Invalid input");
            Sleep(1000);
            system("cls");
            menu();
        }
}
int main(void)
{
    First_page();
    Login_Register();
    menu();
    return 0;
}
```

2. structures.h

```c
#ifndef STRUCTURES_H_INCLUDED
#define STRUCTURES_H_INCLUDED
struct Train
{
```

```c
    int train_no;
    char train_name[50];
    char from[50];
    char to[50];
    char dep_time[10];
    char arr_time[10];
    int fare;
    int f_seats;
    int m_seats;
};
struct Passenger
{
    char png_code[50];
    int train_no;
    //char from[50];
    //char to[50];
    char name[50];
    int age;
    char gender[10];
    char phone_no[50];
    int seat_no;
    char train_name[50];
    int t_fare;
};
struct user
{
    char password[100];
    char state[50];
    char address[1000];
    char firstname[100];
    char lastname[100];
    char mobilenumber[10];
    char email[50];
```

```c
    char gender[50];
    char profession[100];
    char status[100];
    int pincode;
    char username[100];
    //char from[50];
    //char to[50];
};

typedef struct user M;
typedef struct Passenger pass_t;
typedef struct Train Trains;

void Trains_list();
void Train_Schedule();
void menu();
void Input();
void Book_Tickets();
void Cancel_Tickets();
void View_Tickets();
void Tickets();

void First_page();
void Login();
void Register();
void Login_Register();

#endif
```

3. first_screen.c

```c
#include<stdio.h>
#include<stdlib.h>
#include<windows.h>
```

```c
#include "structures.h"
#include<dos.h>
#include<dir.h>
#include<string.h>
#include<conio.h>
static char c[10];
static char username[100],password[50];
void First_page()
{
    for(int i=0;i<422;i++)
    {
        printf("-");
    }
    printf("\t\t\t\t\t\t\t");
    printf("\t\t\t\t\t");
    printf("RAILWAY TICKET RESERVATION SYSTEM\n");
    for(int i=0;i<422;i++)
    {
        printf("-");
    }
    printf("1.Login\n2.New User? Register\n");
}
void Login()
{
    system("cls");
    lu:
    printf(":::Login:::\n");
    printf("Username:");
    scanf("%s",username);
    if(strcmp("admin",username)!=0)
    {
        printf("Invalid username");
        goto lu;
```

```c
    }
lp:
    printf("Password:");
    for(int i=0;i<8;i++)
    {
        password[i]=getch();
        printf("*");
    }
    if(strcmp("password",password)!=0)
    {
        printf("Invalid password");
        goto lp;
    }
    printf("\nPlease wait...");
    Sleep(1000);
    system("cls");
}
void Register()
{
    system("cls");
    registration();
    Sleep(1000);
    Login();
}
void Login_Register()
{
    scanf("%s",c);
    if(strcmp(c,"1")==0)
        Login();
    else if(strcmp(c,"2")==0)
        Register();
    else
    {
```

```c
        printf("Enter a valid option:");
        Login_Register();
    }
}
```

4. registration.c

```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
#include "structures.h"
static int index;
int registration()
{
    M multiple[100];
    int i,g,status;
    index=0;
    while((getchar())!='\n');
    printf(":::Registration desk:::\n");
    printf("Firstname :");
    gets(multiple[index].firstname);
    printf("Lastname :");
    gets(multiple[index].lastname);
    printf("Mobile number :");
    gets(multiple[index].mobilenumber);
    printf("Gender:(1.Male   2.Female   3.Other):");
    scanf("%d",&g);
    switch(g)
    {
    case 1:
        strcpy(multiple[index].gender,"Male");
        break;
    case 2:
        strcpy(multiple[index].gender,"Female");
```

```c
            break;
        case 3:
            strcpy(multiple[index].gender,"Other");
            break;
    }
    printf("Martial status(1.Married  2.Unmarried):");
    scanf("%d",&status);
    switch(status)
    {
    case 1:
        strcpy(multiple[index].status,"Married");
        break;
    case 2:
        strcpy(multiple[index].status,"Unmarried");
        break;
    }
        while((getchar())!='\n');
    printf("Profession :");
    gets(multiple[index].profession);
    printf("Residential address :");
    gets(multiple[index].address);
    printf("Pin code :");
    scanf("%d",&multiple[index].pincode);
        while((getchar())!='\n');
    printf("State :");
    gets(multiple[index].state);
    printf("Email-id :");
    gets(multiple[index].email);
    strcpy(multiple[index].username,"admin");
    strcpy(multiple[index].password,"password");
    printf("Username :%s\n",multiple[index].username);
    printf("Password :%s\n",multiple[index].password);
    index++;
```

```c
        return 0;
}
```

5. epass.h

```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
#include<stdlib.h>
#include"structures.h"

void returnfunc();
void mainmenu_e();
void menu_e();
void student();
void old();
void job();

void mainmenu_e()
{
        system("cls");
        printf(":::E-Pass  Facility:::\n");
        printf("1. Menu\n2. Exit\n\nEnter Your Choice :");
        int choice;
        scanf("%d",&choice);
        if(choice==1)
        {
                menu_e();
        }
        else if(choice==2)
        {
                system("cls");
                menu();
        }
```

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```c
            else
            {
                    printf("\n\t     Enter valid choice.");
            }


}


void menu_e()
{
            system("cls");
            printf("You are :\n");
            printf("1. Student\n2. Senior Citizen\n3. Working Professional\n4. Ba
            printf("Enter choice :");
            int k;
            scanf("%d",&k);
                    int wait;
            for(wait=0;wait<=10000;wait++)
            {
                    printf("\rIn progress : %d",wait/100);
            }
            if(k==1)
            {
                    system("cls");
                    student();
            }
            else if(k==2)
            {
                    system("cls");
                    old();
            }
            else if(k==3)
            {
                    system("cls");
```

```c
                job();
        }
        else if(k==4)
        {
                system("cls");
                mainmenu_e();
        }
        else
        {
                printf("Wrong Input !Please Re-enter The Correct Option.....
                menu_e();
        }
}
void student()
{
        char name1[20];
        char name2[20];
    char school[20];
    char phone[50];
    int age;
    char address[40];
    char ch[10];
        printf("Please Give Your Details :\n");
        gets(ch);
        printf("First Name :");
        gets(name1);
        printf("Last Name :");
        gets(name2);
        printf("School Name :");
        gets(school);
        printf("Address :");
        gets(address);
    printf("Phone :");
```

```c
            gets(phone);
            printf("Age  :");
            scanf("%d",&age);
            printf("\n\n");
            printf("Entered  Details :\n");
            printf("Pay  Rs.450");
            system("cls");
            printf("E-Pass  :\n");
            printf("First  Name :%s\nLast  Name :%s\nPhone :%s\nAge :%d\n Address :"
            printf("\n\nPress  any  key  to  go  back  to  main  menu");
            getch();
            system("cls");
            menu_e();
}
void old()
{
            char  name1[20];
            char  name2[20];
        char  phone[50];
        int  age;
        char  address[40];
            printf("Please  Give  Your  Details  :\n");
            printf("First  Name  :");
            while(getch!='\n');
            gets(name1);
            printf("Last  Name  :");
            gets(name2);
            printf("Phone  :");
            gets(phone);
            printf("Age  :");
            scanf("%d",&age);
            printf("\n\n");
            printf("Your  Entered  Details  Are  :\n");
```

```c
        printf("Pay Rs.500");
        system("cls");
        printf("E-Pass :\n");
        printf("First Name :%s\nLast Name :%s\nPhone :%s\nAge :%d\nAddress :%
        printf("\n\nPress any key to go back to main menu");
        getch();
        system("cls");
        menu_e();
}
void job()
{
        char name1[20];
        char name2[20];
    char phone[50];
    int age;
    char address[40];
    char work[40];
    printf("Please Give Your Details :\n");
        printf(" First Name :");
        while(getch!='\n');
        gets(name1);
        printf("Last Name :");
        gets(name2);
        printf("Address :");
        gets(address);
    printf("Work Address :");
        scanf("%s",work);
        printf("Phone :");
        gets(phone);
        printf("Age :");
        scanf("%d",&age);
        printf("\n\n");
        printf("Your Entered Details Are :\n");
```

```c
            printf("Pay Rs.750");
        system("cls");
        printf("E-Pass :\n");
        printf("First Name :%s\nLast Name :%s\nPhone :%s\nAge :%d\nAddress :%
        printf("\n\nPress any key to go back to main menu");
        getch();
        system("cls");
        menu_e();
}
```

6. foodo.h

```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
#include<stdlib.h>
void returnfunc();
void mainmenuf();
void menuf();
void vegetarian();
void nonvegetarian();
void details();

FILE *fp,*ft,*dp,*dt;

int s;
char findrecord;
int again;
int quantity;
double total=0;
int t;

void mainmenuf()
{
```

```c
        system("cls");
        printf(":::Food Order System:::\n");
        printf("Go To :\n");
        printf("1. Menu\n2. Exit\n");
        printf("Enter your choice :");
        int choice;
        scanf("%d",&choice);
        if(choice==1)
        {
                menuf();
        }
        else if(choice==2)
        {
                system("cls");
                printf("\n\n\n");
                printf("*******************************THANK YOU*************
                printf("*********Feeling HUNGRY ? Just Call PKG CATERERS*****
                Sleep(1000);
                system("cls");
                menu();
        }
        else
        {
                printf("\nEnter valid choice");
        }

}

void menuf()
{

        system("cls");
        printf("You are :\n1. Vegetarian\n2. Non-vegetarian\n3. Press 0 to ex
```

```c
        int k;
        scanf("%d",&k);
        for(int wait=0;wait<=10000;wait++)
        {
                printf("\rIn progress : %d",wait/100);
        }
        if(k==1)
        {
                system("cls");
                vegetarian();
        }
        else if(k==2)
        {
                system("cls");
                nonvegetarian();
        }
        else if(k==0)
        {
                system("cls");
                mainmenuf();
        }
        else
        {
                printf("Wrong Input !Please Re-enter The Correct Option\n");
                menuf();
        }
}
void vegetarian()
{
        int choice;
        int again;
        int quantity;
        printf(":::Veg Menu:::\n");
```

```c
        char v;
        FILE *vmenu;


vmenu=fopen("vegmenu.txt","rt");
        while((v=getc(vmenu))!=EOF)
{
        printf("%c",v);
}
fclose(vmenu);
vl:
printf("\nEnter What You Want :");
        scanf("%d",&choice);
        if(choice==1)
        {
                printf("Quantity :");
                scanf("%d",&quantity);
                total=total + 40*(quantity);
                printf("\n");

        printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\n\nEnter
        scanf("%d",&again);
        printf("\n");
        if(again==1)
        {
            printf("\n\n");
            goto vl;
        }
        else if(again==2)
        {
            printf("Your Total Amount Is : Rs. %.2lf\n\n",total);
            int totl = total;
            FILE *ttl;
            ttl = fopen("order.txt","a");
```

```c
        fprintf(ttl,"\nGrand Total : %d\n",totl);
        fclose(ttl);
        details();
}
}
else if(choice==2)
{
        printf("Quantity :");
        scanf("%d",&quantity);
        total=total + 60*(quantity);
        printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
        scanf("%d",&again);
        if(again==1)
        {
                printf("\n\n");
                goto vl;
        }
        else if(again==2)
        {
                printf("Your Total Amount Is : Rs. %.2lf\n\n",total);
                int totl = total;
                FILE *ttl;
                ttl = fopen("order.txt","a");
                fprintf(ttl,"\nGrand Total : %d\n",totl);
                fclose(ttl);
                details();
        }
}
else if(choice==3)
{
        printf("Quantity :   ");
        scanf("%d",&quantity);
        total=total + 45*(quantity);
```

```c
                printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
                scanf("%d",&again);
                if(again==1)
                {
                        printf("\n\n");
                        goto vl;
                }
                else if(again==2)
                {
                        printf("Your Total Amount Is : Rs. %.2lf\n\n",total);
                        int totl = total;
                        FILE *ttl;
                        ttl = fopen("order.txt","a");
                        fprintf(ttl,"\nGrand Total : %d\n",totl);
                        fclose(ttl);
                        details();
                }
        }
        else if(choice==4)
        {
                printf("Quantity :");
                scanf("%d",&quantity);
                total=total + 35*(quantity);
                printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
                scanf("%d",&again);
                if(again==1)
                {
                        printf("\n\n");
                        goto vl;
                }
                else if(again==2)
                {
                        printf("Your Total Amount Is : Rs. %.2lf\n\n",total);
```

```c
                        int totl = total;
                        FILE *ttl;
                        ttl = fopen("order.txt","a");
                        fprintf(ttl,"\nGrand Total : %d\n",totl);
                        fclose(ttl);
                        details();
                }
        }
        else if(choice==5)
        {
                printf("Quantity :");
                scanf("%d",&quantity);
                total=total + 150*(quantity);
                printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
                scanf("%d",&again);
                if(again==1)
                {
                        printf("\n\n");
                        goto vl;
                }
                else if(again==2)
                {
                        printf("Your Total Amount Is : Rs. %.2lf\n\n",total);
                        int totl = total;
                        FILE *ttl;
                        ttl = fopen("order.txt","a");
                        fprintf(ttl,"\nGrand Total : %d\n",totl);
                        fclose(ttl);
                        details();
                }

        }
        else if(choice==6)
```

```c
        {
                system(" cls ");
                menuf();
        }
        else
        {
                printf("Wrong Input! Re-enter THe Correct Option\n\n");
                if(getch())
                vegetarian();
        }
}
void nonvegetarian()
{
        int choice;
        int again;
        int quantity;
        printf(":::Non Veg Menu:::\n");
        char n;
        FILE *nmenu;
        nmenu = fopen("nonveg.txt","rt");
        while((n=getc(nmenu))!=EOF)
        {
                printf("%c",n);
        }
        nvl:
        printf("\n\nEnter Choice Number of the Item You Want :");
        scanf("%d",&choice);
        if(choice==1)
        {
                printf("Quantity : ");
                scanf(" %d",&quantity);
                total=total + 100*(quantity);
                printf("\n");
```

```c
                printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
                scanf(" %d",&again);
                if(again==1)
                {
                        printf("\n\n");
                        goto nvl;
                }
                else if(again==2)
                {
                        printf("Your Total Amount Is :%.2lf\n\n",total);
                        int totl = total;
                        FILE *ttl;
                        ttl = fopen("order.txt","a");
                        fprintf(ttl,"\nGrand Total : %d\n",totl);
                        fclose(ttl);
                        details();
                }
        }
        else if(choice==2)
        {
                printf("Quantity :");
                scanf(" %d",&quantity);
                total=total + 120*(quantity);
                printf("\n");
                printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
                scanf(" %d",&again);
                if(again==1)
                {
                        printf("\n\n");
                        goto nvl;
                }
                else if(again==2)
                {
```

```c
                printf("Your Total Amount Is :%.2lf\n\n",total);
                int totl = total;
                FILE *ttl;
                ttl = fopen("order.txt","a");
                fprintf(ttl,"\nGrand Total : %d\n",totl);
                fclose(ttl);
                details();
        }
}
else if(choice==3)
{
        printf("Quantity :");
        scanf(" %d",&quantity);
        total=total + 85*(quantity);
        printf("\n");
        printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
        scanf(" %d",&again);
        if(again==1)
        {
                printf("\n\n");
                goto nvl;
        }
        else if(again==2)
        {
                printf("Your Total Amount Is :%.2lf\n\n",total);
                int totl = total;
                FILE *ttl;
                ttl = fopen("order.txt","a");
                fprintf(ttl,"\nGrand Total : %d\n",totl);
                fclose(ttl);
                details();
        }
}
```

```c
else  if (choice==4)
{
        printf("Quantity :");
        scanf(" %d",&quantity);
        total=total + 35*(quantity);
        printf("\n");
        printf("Press 1 To Order Again :\nPress 2 To Get Your Total:\
        scanf(" %d",&again);
        if (again==1)
        {
                printf("\n\n");
                goto nvl;
        }
        else  if (again==2)
        {
                printf("Your Total Amount Is :%.2lf\n\n",total);
                int totl = total;
                FILE *ttl;
                ttl = fopen("order.txt","a");
                fprintf(ttl,"\nGrand Total : %d\n",totl);
                fclose(ttl);
                details();
        }
}
else  if (choice==5)
{
        system("cls");
        menuf();
}
else
{
        printf("Wrong Input! Re-enter THe Correct Option\n\n");
        nonvegetarian();
```

```c
        }
}
void details()
{
        char name1[20];
        char name2[20];
        char phone[50];
        char address[40];
        printf("Please Give Your Contact Details \n");
        printf(" First Name : ");
        scanf("%s",name1);
        printf("Last Name : ");
        scanf("%s",name2);
        printf("Phone : ");
        scanf("%s",phone);
        printf("Seat Number : ");
        scanf("%s",address);
        printf("\n\n");
        printf("Your Entered Details Are --->\n");
        FILE *cust;
        cust = fopen("order.txt","a");
        fprintf(cust,"Order Placed By : %s %s\nPhone number : %s\n",name1,nam
        fclose(cust);
        printf("First Name :%s\nLast Name :%s\nPhone :%s\nSeat Number :%s\n",
        printf("\n\n\n");
        printf("                    ***************************************
        printf("                              Your Order Will
        printf("
.....HAPPY ORDERING.....\n");
        printf("                    ***************************************
        printf("Press any key to go back to main menu\n");
        getch();
        menuf();
```

}

5   Results
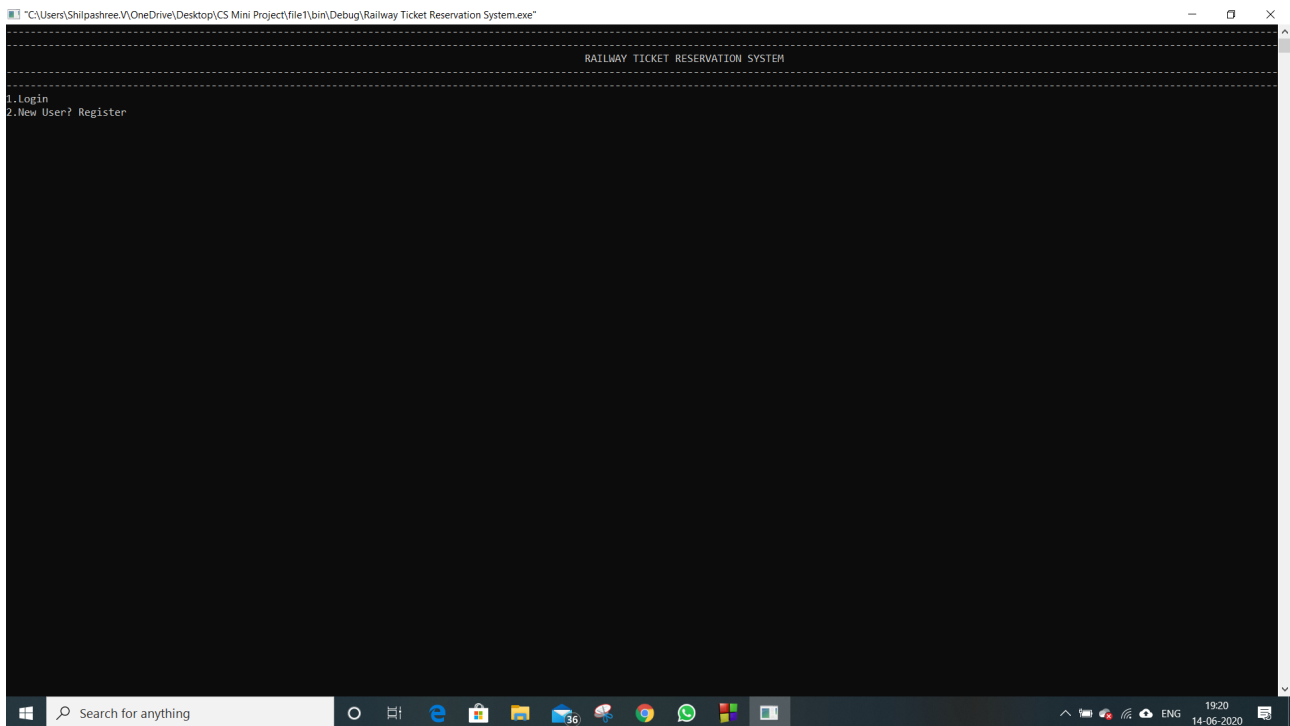
Figure 1: Login or register portal
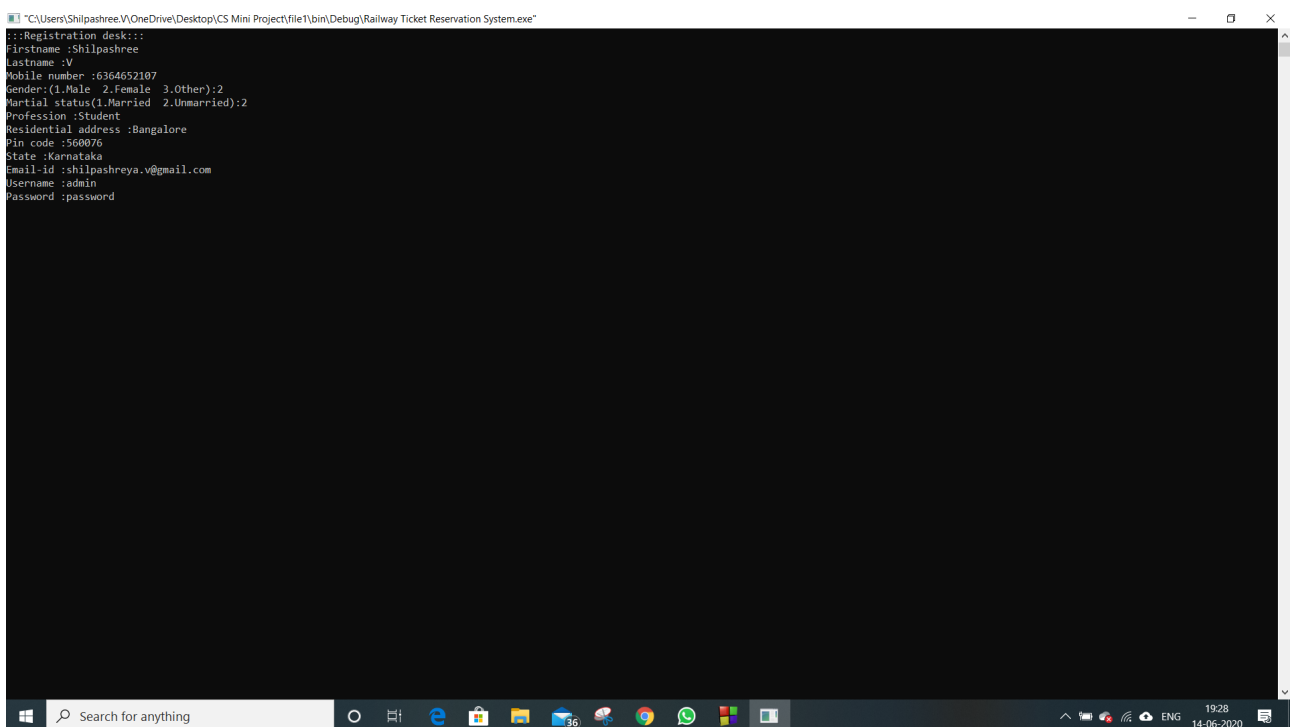
Figure 2: Registration desk

Figure 3: Login of user

Figure 4: Main Menu

Figure 5: Train Schedule

Figure 6: Booking Ticket

Figure 7: Display of Ticket Details
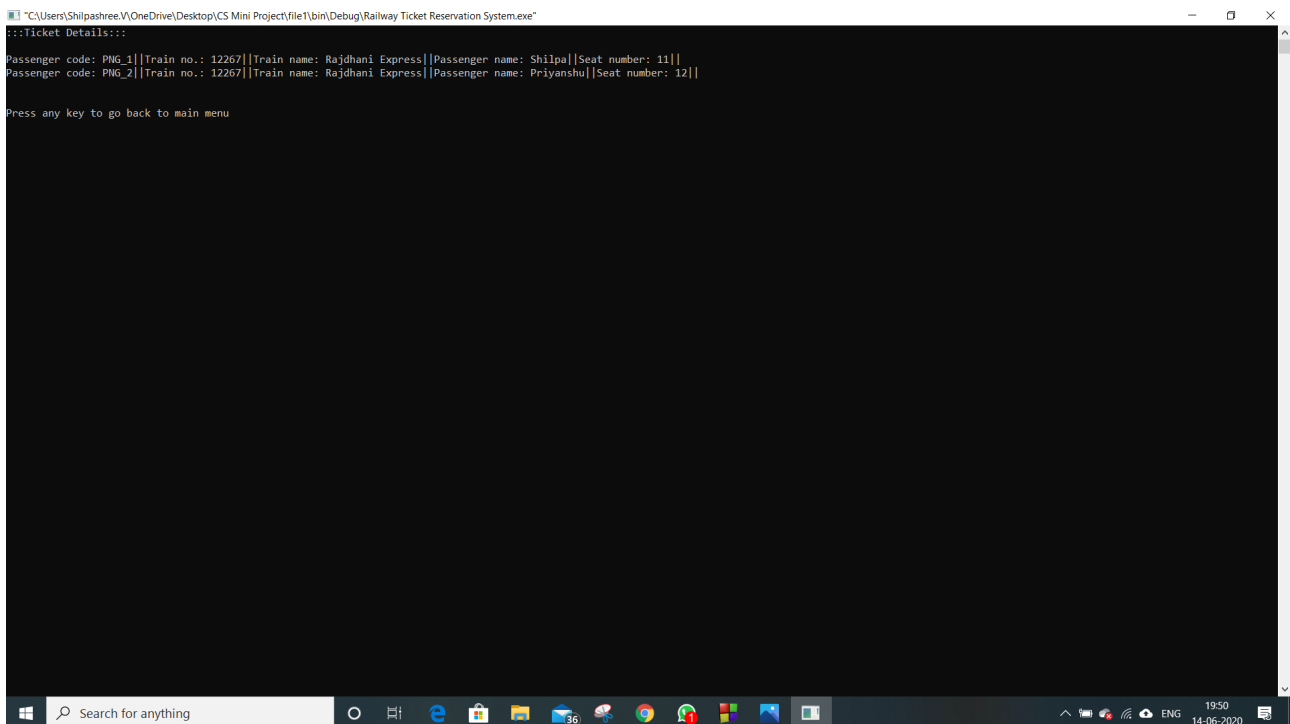
Figure 8: Details of all the tickets booked
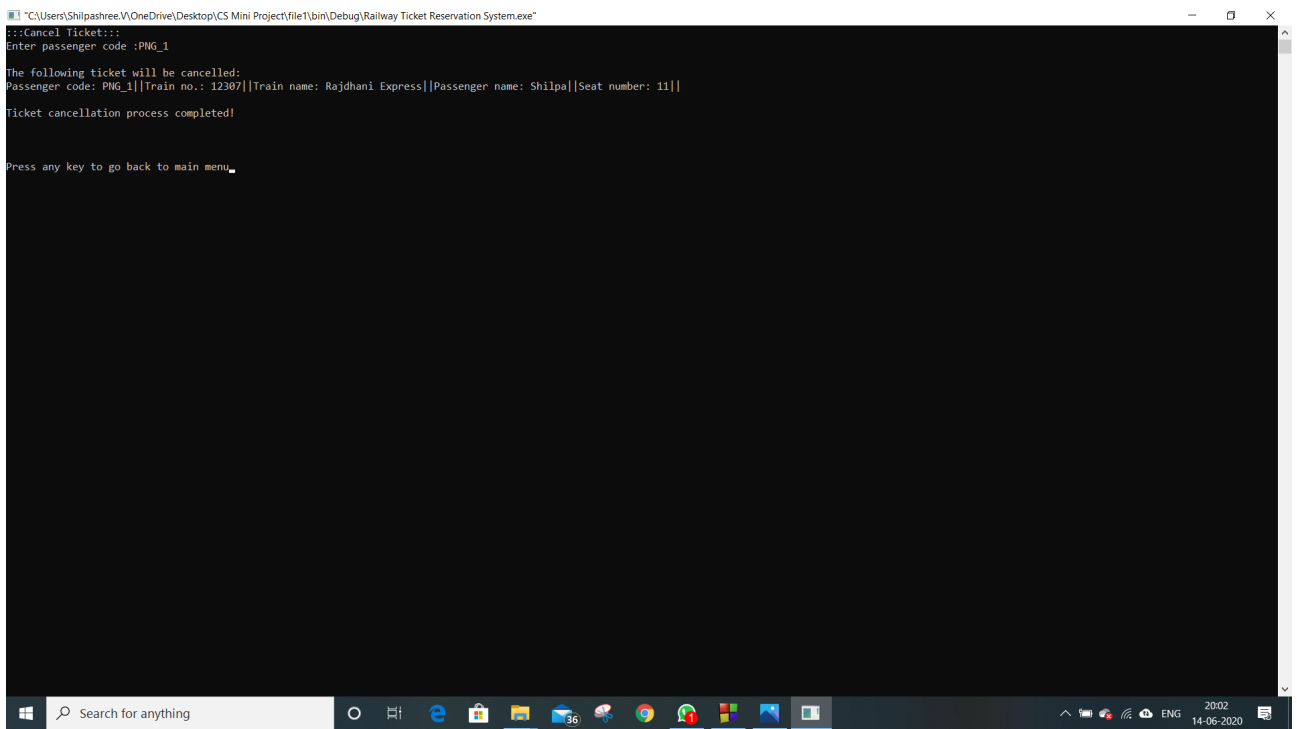
Figure 9: Cancelling Ticket
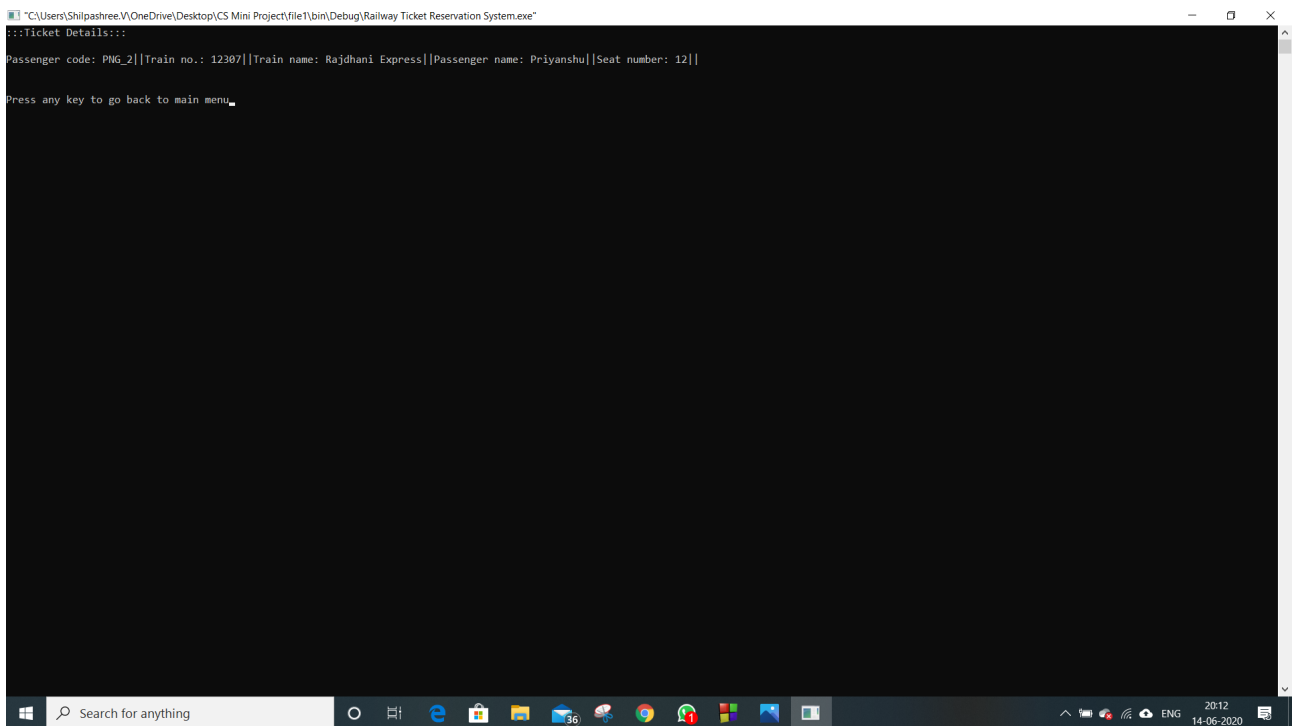
Figure 10: Details of all the tickets booked post cancellation of a ticket
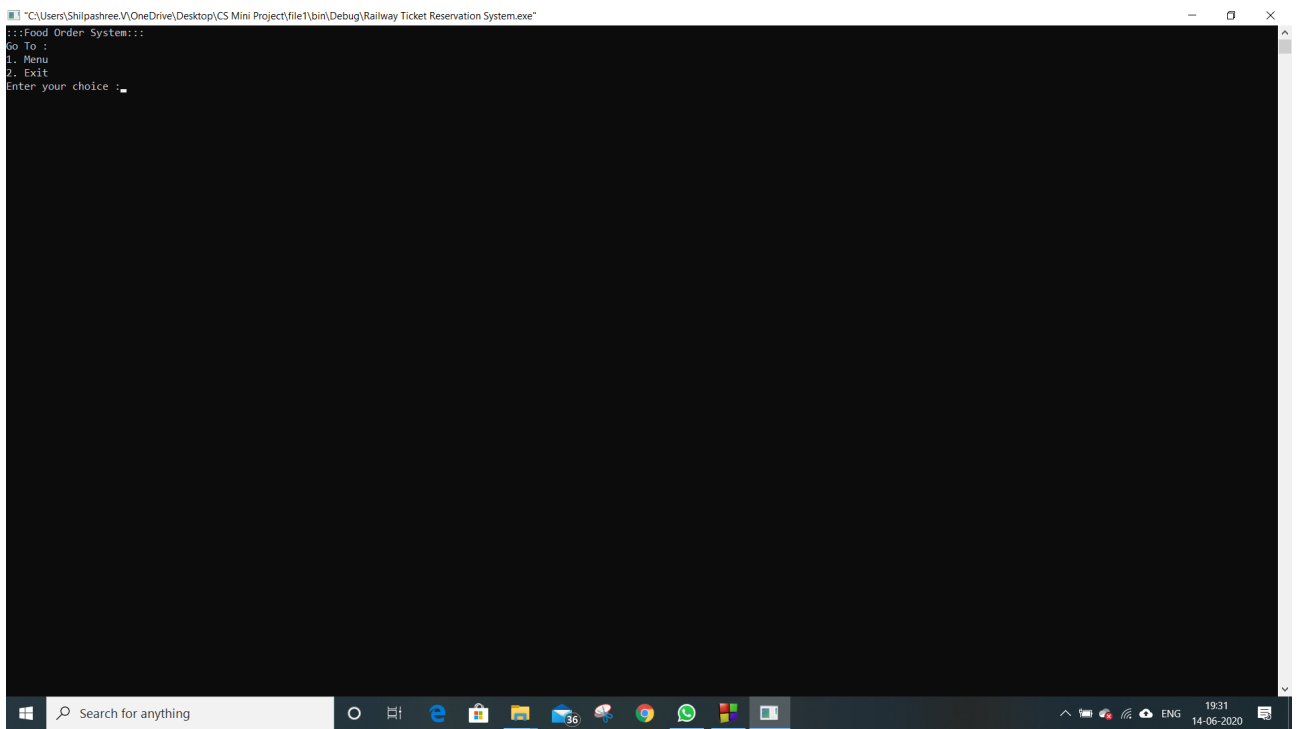
Figure 11: Food order system
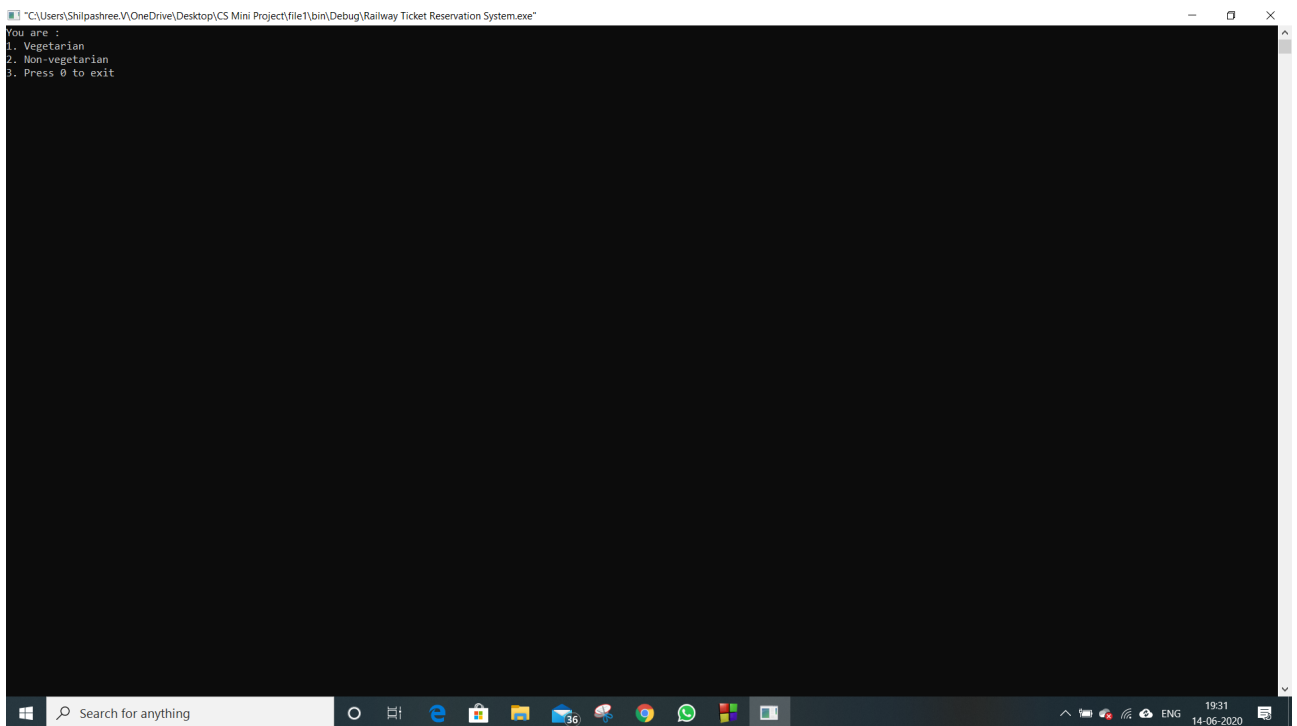
Figure 12: Choosing veg or non-veg

47

Figure 13: Ordering veg food

Figure 14: Ordering non-veg food

48
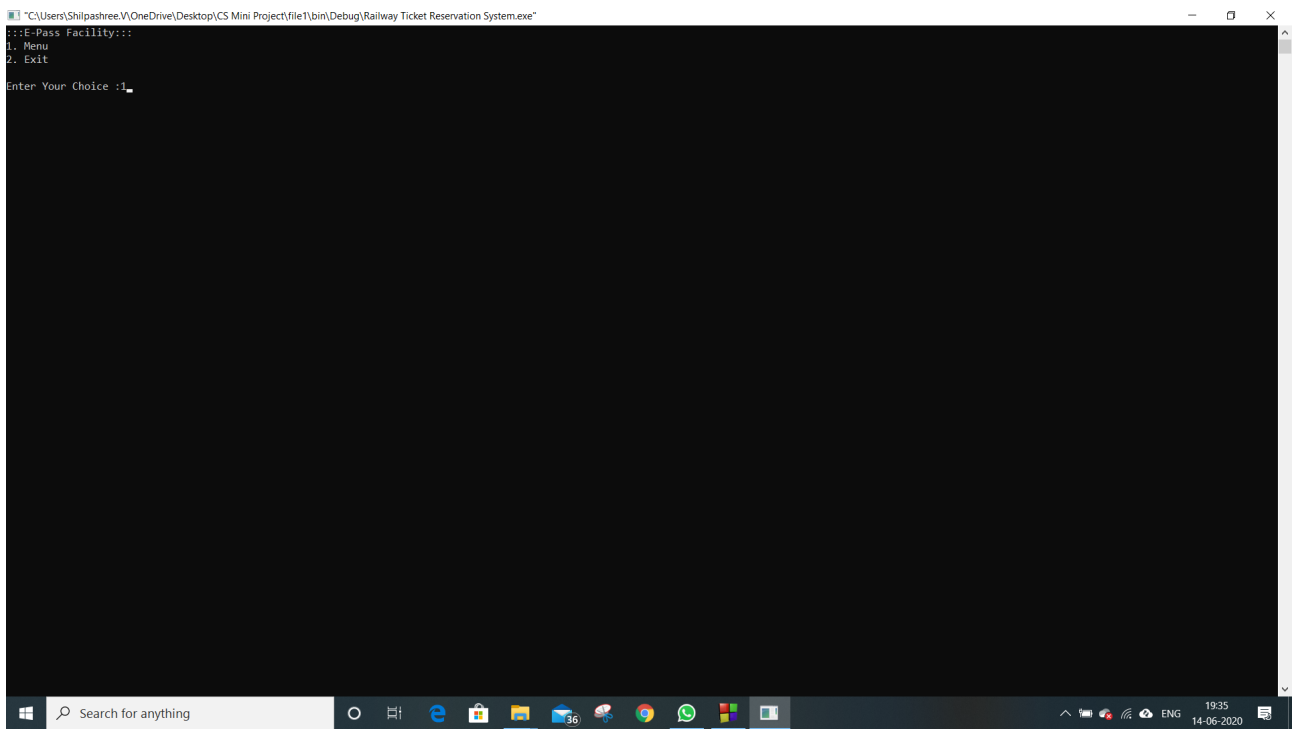
Figure 15: E-pass facility
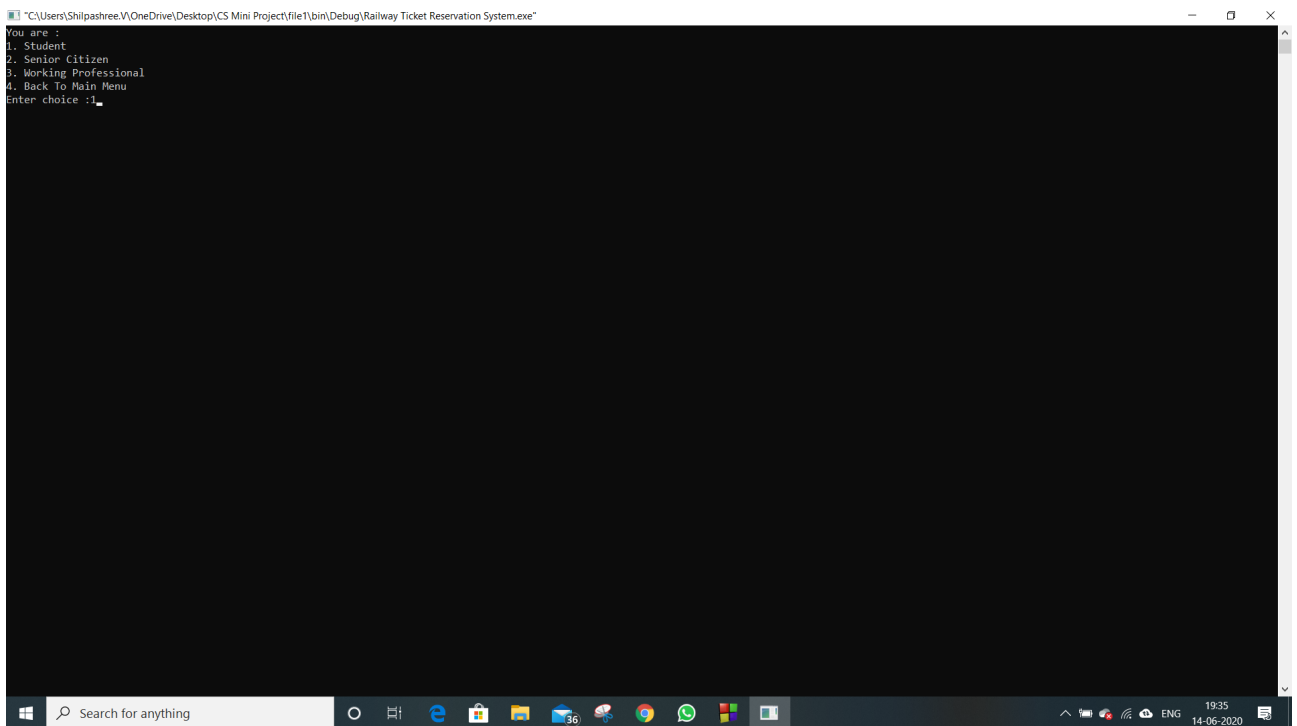
Figure 16: Choice of profession/age

Figure 17: E-pass booked

Figure 18: Exit from program

6 References:

1. https://youtu.be/3P4UQqyqXiM

**** END ****