

PROBLEM SOLVING WITH PROGRAMMING [RA20]

(PSP)

COURSE PROJECT

(2021-22)

Developed By:

**ROHITH.CH 2103A51452**

**AKHILESH 2105A41118**

**P. PRABHAS 2103A51238**

**SHASHANK 2105A41132**

Under the Guidance of

***Dr. MOHAMMED ALI SHAIK***

Assistant Professor, school of CS&AI

Department Computer Science and Artificial Intelligence

***SR University***

Warangal.

***PROBLEM STATEMENT:***

Write a c program to implement Airline Reservation System

Provide the functionality for below mentioned:

* Entering passengers details
* First Name ---> fname
* Last Name ---> lname
* age
* gender
* phone number---> pno
* aadhar number ---> id

***MODULES:***

In this application all variables are declared globally so that these variables can be accessed throughout the program at any function call. We can choose any function by using function calls which are declared in switch-case. The application asks the person who runs the program to enter the personal details. Then person can choose the flights along with source and destination. After, passenger choosing the flight the ticket will be issued with all details.

In this application the following modules are used:

1. Read/Input

It takes personal details of the passengers as the input from the user.

1. Choosing of a flight

In this module choosing of a flight is done by passengers choosen wise. In this module switch case has been used and also string function strcat has been used.

1. Choosing Class

By selecting 1st option, passengers seat will be allocated in business class whereas by selecting option-2, passengers seat will be allotted in economy class.

1. Selecting/choosing seats

Passengers can select the seats in the choosen class. If passenger choose business class then he can select the seat in the business class. If passenger choosen economy class then they can selct the seat in the economy class itself.

1. Ticket

After entering their details, choosing the flight, choosing the class and selecting the seats by the passengers at last the ticket will be displayed with all the details.

KNOWLEDGE REQUIRED TO DEVELOP THIS APPLICATION

* + Control Statements (if-else, switch)
  + Strings and its functions (strcat)
  + Functions (Any type of user defined functions)
  + Basic system function

SOURCE CODE [.C FILE]:

#include<stdio.h>

#include<string.h>

#include<stdlib.h>

int main()

{

int c,p,i,age,flight,j;

char flightst[30]="Visit" ,fname[15],lname[15],gender[6],pno[10],id[10];

int s[10];

printf("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Welcome to AIRLINES\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

printf("\nEnter Your First Name:");

scanf("%s",&fname);

printf("\nEnter Your Last Name:");

scanf("%s",&lname);

printf("\nEnter Your Gender:");

scanf("%s",&gender);

printf("\nEnter Your Age:");

scanf("%d",&age);

printf("\nEnter Your Phone Number:");

scanf("%s",&pno);

printf("\nEnter Aadhar No:");

scanf("%s",&id);

printf("\n Source------->Destination FlightName \n");

printf("1. Hyd--->Goa Vistara \n");

printf("2. Chennai---->Bhopal IndiGo \n");

printf("3. Hyd--->Goa SpiceJet \n");

printf("4. Delhi--->Kolkata Vistara \n");

printf("5. Hyd--->Delhi Vistara \n");

printf("6. Mumbai--->Chennai Vistara \n");

printf("7. Hyd--->Bengaluru Vistara \n");

printf("8. India--->Kuwait Vistara \n");

printf("9. Tirupathi--->Hyd SpiceJet \n");

printf("10.Goa--->Mumbai SpiceJet \n");

printf("11.Banglore--->Delhi SpiceJet \n");

printf("12.Pune--->Banglore SpiceJet \n");

printf("13.Mumbai--->Dubai SpiceJet \n");

printf("14.Kolkata--->Bangkok SpiceJet \n");

printf("15.Chennai--->Delhi SpiceJet \n");

printf("16.Chennai--->Singapore IndiGo \n");

printf("17.Chennai--->Hyd IndiGo \n");

printf("18.Delhi--->Pune IndiGo \n");

printf("19.Goa--->Delhi IndiGo \n");

printf("20.Kathmandu--->Delhi IndiGo \n");

printf("21.Banglore--->Colombo IndiGo \n");

printf(" Choose: ");

scanf("%d",&flight);

switch(flight){

case 1:

strcat(flightst," To Goa");

break;

case 2:

strcat(flightst," To Bhopal ");

break;

case 3:

strcat(flightst," To Goa");

break;

case 4:

strcat(flightst," To Kolkata");

break;

case 5:

strcat(flightst," To Delhi");

break;

case 6:

strcat(flightst," To Chennai");

break;

case 7:

strcat(flightst," To Bengaluru");

break;

case 8:

strcat(flightst," To Kuwait");

break;

case 9:

strcat(flightst," To Hyd");

break;

case 10:

strcat(flightst," To Mumbai");

break;

case 11:

strcat(flightst," To Delhi");

break;

case 12:

strcat(flightst," To Banglore");

break;

case 13:

strcat(flightst," To Dubai");

break;

case 14:

strcat(flightst," To Bangkok");

break;

case 15:

strcat(flightst," To Delhi");

break;

case 16:

strcat(flightst," To Singapore");

break;

case 17:

strcat(flightst," To Hyd");

break;

case 18:

strcat(flightst," To Pune");

break;

case 19:

strcat(flightst," To Delhi");

break;

case 20:

strcat(flightst," To Delhi");

break;

case 21:

strcat(flightst," To Colombo");

break;

default:

return 0;

}

printf("^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^\n");

printf(" Class:\n (1) Business Class\n (2)Economic class\n\n");

printf("^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^\n");

printf(" Choose: ");

scanf("%d",&c);

switch(c)

{

case 1:

printf("\*\*\*\n");

printf(" Business class:\n");

printf(" Seats available:\n |1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|16|17|18|19|20|\n\n");

printf("\*\*\*\n");

printf(" Pick a seat: ");

scanf("%d",&p);

if(p <= 20)

{

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

printf(" %s \n",flightst);

printf(" Class: Business class\n");

printf(" Seat no : %d\n\n",p);

printf(" Aadhar No:%s\n",id);

printf(" Name:%s.%s\n",fname,lname);

printf(" Gender:%s\n",gender);

printf(" Age:%d\n",age);

printf(" Phone Number:%s\n",pno);

}

else

printf("\nWrong number! No seat for you!\n\n");

break;

case 2:

printf("\*\*\n");

printf(" Economical class:\n");

printf(" Seats available:\n |21|22|23|24|25|26|27|28|29|30|31|32|33|34|35|36|37|38|39|40|\n\n");

printf("\*\*\*\n");

printf(" Pick a seat: ");

scanf("%d",&p);

if(p >= 21 && p<=40)

{

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

printf(" Trip from %s\n",flightst);

printf(" Class: Economical class\n");

printf(" Seat no : %d\n\n",p);

printf(" Aadhar No:%s\n",id);

printf(" Name:%s.%s\n",fname,lname);

printf(" Gender:%s\n",gender);

printf(" Age:%d\n",age);

printf(" Phone Number:%s\n",pno);

}

else

printf("\nWrong number! No seat for you!\n\n");

break;

default:

break;

}

printf(" Thank you......Happy Journey... %s.%s\n",fname,lname);

return 0;

}

OUT PUT :

BUSINESS CLASS

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Welcome to AIRLINES\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Enter Your First Name:Deekshith

Enter Your Last Name:Nellutla

Enter Your Gender:Male

Enter Your Age:19

Enter Your Phone Number:9391444796

Enter Aadhar No:2103

Source------->Destination FlightName

1. Hyd--->Goa Vistara

2. Chennai---->Bhopal IndiGo

3. Hyd--->Goa SpiceJet

4. Delhi--->Kolkata Vistara

5. Hyd--->Delhi Vistara

6. Mumbai--->Chennai Vistara

7. Hyd--->Bengaluru Vistara

8. India--->Kuwait Vistara

9. Tirupathi--->Hyd SpiceJet

10.Goa--->Mumbai SpiceJet

11.Banglore--->Delhi SpiceJet

12.Pune--->Banglore SpiceJet

13.Mumbai--->Dubai SpiceJet

14.Kolkata--->Bangkok SpiceJet

15.Chennai--->Delhi SpiceJet

16.Chennai--->Singapore IndiGo

17.Chennai--->Hyd IndiGo

18.Delhi--->Pune IndiGo

19.Goa--->Delhi IndiGo

20.Kathmandu--->Delhi IndiGo

21.Banglore--->Colombo IndiGo

Choose: 3

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

Class:

(1) Business Class

(2)Economic class

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

Choose: 1

\*\*\*

Business class:

Seats available:

|1|2|3|4|5|6|7|8|9|10|11|12|13|14|15|16|17|18|19|20|

\*\*\*

Pick a seat: 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Visit To Goa

Class: Business class

Seat no : 2

Aadhar No:2103

Name:Deekshith.Nellutla

Gender:Male

Age:19

Phone Number:9391444796

Thank you......Happy Journey... Deekshith.Nellutla

--------------------------------

Process exited after 42.11 seconds with return value 0

Press any key to continue . . .

ECONOMIC CLASS

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Welcome to AIRLINES\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Enter Your First Name:Deekshith

Enter Your Last Name:Nellutla

Enter Your Gender:Male

Enter Your Age:19

Enter Your Phone Number:9391444796

Enter Aadhar No:2103

Source------->Destination FlightName

1. Hyd--->Goa Vistara

2. Chennai---->Bhopal IndiGo

3. Hyd--->Goa SpiceJet

4. Delhi--->Kolkata Vistara

5. Hyd--->Delhi Vistara

6. Mumbai--->Chennai Vistara

7. Hyd--->Bengaluru Vistara

8. India--->Kuwait Vistara

9. Tirupathi--->Hyd SpiceJet

10.Goa--->Mumbai SpiceJet

11.Banglore--->Delhi SpiceJet

12.Pune--->Banglore SpiceJet

13.Mumbai--->Dubai SpiceJet

14.Kolkata--->Bangkok SpiceJet

15.Chennai--->Delhi SpiceJet

16.Chennai--->Singapore IndiGo

17.Chennai--->Hyd IndiGo

18.Delhi--->Pune IndiGo

19.Goa--->Delhi IndiGo

20.Kathmandu--->Delhi IndiGo

21.Banglore--->Colombo IndiGo

Choose: 19

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

Class:

(1) Business Class

(2)Economic class

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

Choose: 2

\*\*

Economical class:

Seats available:

|21|22|23|24|25|26|27|28|29|30|31|32|33|34|35|36|37|38|39|40|

\*\*\*

Pick a seat: 33

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Trip from Visit To Delhi

Class: Economical class

Seat no : 33

Aadhar No:2103

Name:Deekshith.Nellutla

Gender:Male

Age:19

Phone Number:9391444796

Thank you......Happy Journey... Deekshith.Nellutla

--------------------------------

Process exited after 47.39 seconds with return value 0

Press any key to continue . . .