

## COMPUTER-SCIENCE PROJECT WORK

Academic Year 2018 –2019

PROJECT MADE BY

1)

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## **ACKNOWLEDGEMENTS**

I would like to express my sincere gratitude to my Computer Science mentor Mr.Hitesh Patel, for his vital support, guidance And encouragement—without which this project would not have come forth. I would also like to express my gratitude to other staff of the Department of Computer Lab for their support during the making of this Project.

## **AIM**

### **C++ Project On Railway Ticket Booking Services**

## **PURPOSE**

Electronically handling of trains's record to enhance the accuracy, flexibility, Reliability and to remove the human's error. To provide accurate information about the addition, deletion and modified records. To provide, efficient, accurate, reliable, fast, and robust structure that can handle any number of passenger's transactions.

## **INTRODUCTION**

This project is based on railway reservation system. Basically concerned with the reservation by user and admin mode of railway services. The need of this system arouse because as is the known fact that India has the largest railway network in the whole world and it is not possible to handle such a large system manually.By computerizing it became possible to overcome the limitations and make the system operations more efficient. The complexity in handling data and 1records of such a vast system got reduced and became easier by computerizing the system.

Being more specific, this online railway reservation system can perform the basic functions like user mode and admin mode. The account contains comprehensive information of the user entered during the registration and allows the user to access account to enquire about trains and train schedule, seat availability and make afresh reservations. The Admin will be able to update user account details &

train details . This includes adding and updating of train, station, train routes and also managing the user id's and their passwords.

## **WORKING OF THE PROGRAM**

This program has 2 Modes as follows:

### **1) ADMIN MODE**

Which uses “password” as this modes password.

### **2) USER MODE**

This mode is only accessible by the users which are allotted user ID's and password.

The user ID's and its Passwords are as follows:

<u>SR.NO.</u>	<u>USER ID's</u>	<u>PASSWORDS</u>
1	Madhuri	password
2	Hitesh	password
3	Manish	password
4	Manarth	password
5	Divyam	password

All needed files and data is already given in the CD(Attached at last in the file).

## **CODING OF THE PROGRAM**

### **C++ CODING OF THE PROGRAM**

```
#include<stdio.h>
```

```
/*
```

Defines types and macros needed for the Standard I/O Package defined in Kernighan and Ritchie and extended under UNIX System V. Defines the standard I/O predefined streams stdin, stdout, stderr, and declares stream-level I/O routines.

```
*/
```

```
#include<conio.h>
```

```
/*
```

Declares various functions used in calling the DOS console I/O routines.

```
*/
```

```
#include<stdlib.h>
```

```
/*
```

Declares several commonly used routines: conversion routines, search/sort routines, and other miscellany.

```
*/
```

```
#include<string.h>
```

```
/*
```

Declares several string- and memory-manipulation routines.

```
*/
```

```
#include<iostream.h>
```

```
/*
```

Declares the basic C++ (version 2.0) streams (I/O) routines.

```
*/
```

```
#include<constrea.h>
```

```
/*
```

It allows you to create output streams that write to specified windows on the screen, in specified colors, and at specific locations.

```
*/
```

```
#include<time.h>
```

```
/*
```

Defines a structure filled in by the time-conversion routines, and a type used by other time routines; also provides prototypes for these routines.

```
*/
```

```
#include<iomanip.h>
```

```
/*
```

Declares the C++ streams I/O manipulators and contains macros for creating parameterized manipulators.

```
*/
```

```
#include<fstream.h>
```

```
/*
```

```
    Declares the C++ stream classes that support file input and  
    output.
```

```
*/
```

```
char f[10]="f";
```

```
char s[10]="s";
```

```
int addr,ad,flag,f1,d,m,i,amt;
```

```
float tamt;
```

```
//class login defined
```

```
class login
```

```
{
```

```
    public:
```

```
    char id[100];
```

```
    char pass[100];
```

```
    char *password;
```

```
//function to get User IDs and its passwords.
```

```
    void getid()
```

```
    {
```

```
        cout<<"Enter your id:";
```

```
        gets(id);
```

```
        password=getpass("Enter the password:");
```

```
        strcpy(pass,password);
```

```
    }
```

```
//function to display id and password when needed.
```

```
    void displayid()
```

```
    {
```

```

    cout<<"Id:";
    puts(id);
    cout<<"Password:";
    puts(pass);
}
};

//class detail defined
class detail
{
    public:
    int tno;
    char tname[100];
    char bp[100];
    char dest[100];
    int c1,c1fare;
    int c2,c2fare;
    int d,m,y;

//function to get details for reservation of seats
    void getdetail()
    {
        cout<<"Enter the details as follows\n";
        cout<<"Train no:";
        cin>>tno;
        cout<<"Train name:";
        gets(tname);
        cout<<"Boarding point:";
        gets(bp);
        cout<<"Destination pt:";
        gets(dest);
        cout<<"No of seats in first class & fare per ticket:";
        cin>>c1>>c1fare;
    }
};

```

```

        cout<<"No of seats in second class & fare per ticket:";
        cin>>c2>>c2fare;
        cout<<"Date of travel:";
        cin>>d>>m>>y;
    }

//function to display details of th seats reserved by user
void displaydetail()
{
    cout<<tno<<" \t"<<tname<<" \t"<<bp<<" \t"<<dest<<"\t";
    cout<<c1<<" \t"<<c1fare<<"\t"<<c2<<" \t"<<c2fare<<"\t";
    cout<<d<<"-"<<m<<"-"<<y<<"\t"<<endl;
}

};

//class reservation defined
class reser
{
    public:
    int pnr;
    int tno;
    char tname[100];
    char bp[10];
    char dest[100];
    char pname[10][100];
    int age[20];
    char clas[10];
    int nosr;
    int i;
    int d,m,y;
    int con;
    float amc;

//function to get details of train and seats required for reservation.

```



```

void getresdet()
{
    cout<<"Enter the details as follows\n";
    cout<<"Train no:";
    cin>>tno;
    cout<<"Train name:";
    gets(tname);
    cout<<"Boarding point:";
    gets(bp);
    cout<<"Destination pt:";
    gets(dest);
    cout<<"No of seats required:";
    cin>>nosr;
    for(i=0;i<nosr;i++)
    {
        cout<<"Passenger name:";
        gets(pname[i]);
        cout<<"Passenger age:";
        cin>>age[i];
    }
    cout<<"Enter the class f-first class s-second class:";
    gets(clas);
    cout<<"Date of travel:";
    cin>>d>>m>>y;
    cout<<"Enter the concession category\n";
    cout<<"1.Military\n2.Senior citizen\n3.None\n";
    cin>>con;
    cout<<".....END OF GETTING DETAILS.....\n";
}

```

//function to display the details of the seats booked by any user when needed.

```

void displayresdet()

```

```

{
    cout<<".....\n";
    cout<<".....\n";
    cout<<"Pnr no:"<<pnr;
    cout<<"\nTrain no:"<<tno;
    cout<<"\nTrain name:";
    puts(tname);
    cout<<"Boarding point:";
    puts(bp);
    cout<<"Destination pt:";
    puts(dest);
    cout<<"No of seats reserved:"<<nosr;
    for(i=0;i<nosr;i++)
    {
        cout<<"Passenger name:";
        puts(pname[i]);
        cout<<"Passenger age:"<<age[i];
    }
    cout<<"\nYour class:";puts(clas);
    cout<<"\nDate of reservation:"<<d<<"-"<<m<<"-"<<y;
    cout<<"\nYour concession category:"<<con;
    cout<<"\nYou must pay:"<<amc<<endl;
    cout<<"*****\n";
    cout<<".....END OF RESERVATION.....\n";
    cout<<"*****\n";
}

```

//display passengers details when asked in program.

```

void displaypass()
{
    cout<<"\n\nPnr no:"<<pnr;
    cout<<"\nTrain no:"<<tno;

```

```

cout<<"\nTrain name:";
puts(tname);
cout<<"Your Seat Class:";
puts(clas);
cout<<"Date of Reservation:"<<d<<"-"<<m<<"-"<<y;
cout<<"\nNo of seats reserved:"<<nosr;
for(i=0;i<nosr;i++)
{
    cout<<"\nPassenger name:";
    puts(pname[i]);
    cout<<"Passenger age:"<<age[i];
    getch();
}
getch();
};

void manage();
void user();
void database();
void res();
void reserve();
void displaypassdetail();
void enquiry();
//Main of the program
void main()
{
    {
        clrscr();
        constream cout;
        cout<<setclr(2);
        cout<< "\n\n\n\n\n\n\n\n\n\n\n"

```



```

"      |      | `      |      | |      | _ | _      | `      |      | |      | `      | \n "
"      |      | `      |      | |      | | | `      |      | |      |      | \n "
"      |      | `      | _____ | | _____ | | | `      |      | |      |      | \n ";
getch();
}
{
clrscr();
constream cout;
cout<<setclr(4);
cout<<"\n\n\n\n\n\n\n\n\n\n\n THIS PROGRAM IS MADE (CODED) BY : \n\n"
"                                1)                                \n"
"                                NAME:   MANARTH PATEL\n"
"                                ROLL NO:           \n"
"                                2)                                \n"
"                                NAME:   DIVYAM SINGH \n"
"                                ROLL NO:           \n";
getch();
}
{
constream cout;
cout<<setclr(7);
}
clrscr();
int ch;
cout<<"~~~~~\n";
cout<<".....WELCOME TO RAILWAY RESERVATION SYSTEM.....\n";
cout<<"~~~~~\n";
do
{
cout<<"^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^\n";
cout<<"1.Admin mode\n2.User mode\n3.Exit\n";

```

```

cout<<"Enter your choice:";
cin>>ch;
cout<<endl;
switch(ch)
{
    case 1:
        database();
        break;
    case 2:
        user();
        break;
    case 3:
        exit(0);
}
}
while(ch<=3);
getch();
}
/*
function that checks admins password if enetered correct than allows to
use program as by admin mode if entered incorrect than asked to enter correct
password or ask to use program as user mode if user id and password exists.
*/
void database()
{
    char *password;
    char *pass="password";
    password=getpass("Enter the admininistrator password:");
    detail a;
    fstream f;
    int ch;

```

```

char c;
if(strcmp(pass,password)!=0)
{
    cout<<"Enter the password correctly \n";
    cout<<"You are not permitted to logon admin mode\n";
    cout<<"Try to use program as user if user id and password is allotted to you\n";
    cout<<"If you don't have user id too then ask admin to add your id and
password\n";
    goto h;
}
if(strcmp(pass,password)==0)
{
    char c;
    do
    {
        cout<<"\n.....ADMINISTRATOR MENU.....\n";
        cout<<"1.Create detail data base\n2.Add details\n";
        cout<<"3.Display details\n4.User management\n";
        cout<<"5.Display passenger details\n6.Return to main menu\n";
        cout<<"Enter your choice:";
        cin>>ch;
        cout<<endl;
        switch(ch)
        {
            case 1:
                f.open("t.txt",ios::out | ios::binary);
                do
                {
                    a.getdetail();
                    f.write((char *) & a,sizeof(a));
                    cout<<"Do you want to add one more record?\n";
                    cout<<"y-for Yes\nn-for No\n";

```

```

        cin>>c;
    }
    while(c=='y');
    f.close();
break;
case 2:
    f.open("t.txt",ios::in | ios::out | ios::binary | ios::app);
    a.getdetail();
    f.write((char *) & a,sizeof(a));
    f.close();
break;
case 3:
    cout<<"T.No\t T.Name\tB.P\tD.P \tF.C\tCost \tS.C\tCost \tD.O.T\n";

    cout<<"_____
_____ \n\n\n";
    f.open("t.txt",ios::in | ios::out | ios::binary | ios::app);
    f.seekg(0);
    while(f.read((char *) & a,sizeof(a)))
    {
        a.displaydetail();
    }
    f.close();
break;
case 4:
    manage();
break;
case 5:
    displaypassdetail();
break;
}
}

```



```

        while(ch<=5);
        f.close();
    }
    h:
}

/*function to revoke "void res()" when needed to reserve seats but once asks
either to continue booking or leave booking.*/

```

```

void reserve()
{
    int ch;
    do
    {
        cout<<"1.Reserve\n2.Return to the main menu\n";
        cout<<"Enter your choice:";
        cin>>ch;
        cout<<endl;
        switch(ch)
        {
            case 1:
                res();
                break;
        }
    }
    while(ch==1);
    getch();
}

```

//function to calculate the final amount to be paid by user and then store all data in a file named "p.txt".

```

void res()
{
    detail a;
    reser b;

```

```

fstream f1,f2;
time_t t;
f1.open("t.txt",ios::in | ios::out | ios::binary);
f2.open("p.txt",ios::in | ios::out | ios::binary | ios::app);
int ch;
b.getresdet();
while(f1.read((char *) &a,sizeof(a)))
{
    if(a.tno==b.tno)
    {
        if(strcmp(b.clas,f)==0)
        {
            if(a.c1>=b.nosr)
            {
                amt=a.c1fare;
                addr=f1.tellg();
                ad=sizeof(a.c1);
                f1.seekp(addr-(7*ad));
                a.c1=a.c1-b.nosr;
                f1.write((char *) & a.c1,sizeof(a.c1));
                if(b.con==1)
                {
                    cout<<"Concession category:MILITARY PERSONNEL\n";
                    b.amc=b.nosr*((amt*50)/100);
                }
                else if(b.con==2)
                {
                    cout<<"Concession category:SENIOR CITIZEN\n";
                    b.amc=b.nosr*((amt*60)/100);
                }
                else if(b.con==3)

```

```

{
    cout<<"You cannot get any concession\n";
    b.amc=b.nosr*amt;
}
srand((unsigned)time(&t));
b.pnr=rand();
f2.write((char *) & b,sizeof(b));
b.displayresdet();
cout<<"-----\n";
cout<<"-----Your ticket is reserved-----\n";
cout<<"-----End of reservation menu-----\n";
}
else
{
    cout<<"*****Sorry req seats not available*****\n";
}
}
else if(strcmp(b.clas,s)==0)
{
    if(a.c2>=b.nosr)
    {
        amt=a.c2fare;
        addr=f1.tellg();
        ad=sizeof(a.c2);
        f1.seekp(addr-(5*ad));
        a.c2=a.c2-b.nosr;
        f1.write((char *) & a.c2,sizeof(a.c2));
        if(b.con==1)
        {
            cout<<"Concession category:MILITARY PRESONNEL\n";
            b.amc=b.nosr*((amt*50)/100);

```

```

    }
    else if(b.con==2)
    {
        cout<<"Concession category:SENIOR CITIZEN\n";
        b.amc=b.nosr*((amt*60)/100);
    }
    else if(b.con==3)
    {
        cout<<"You cannot get any concession\n";
        b.amc=b.nosr*amt;
    }
    f2.write((char *) & b,sizeof(b));
    b.displayresdet();
    cout<<"-----\n";
    cout<<"-----Your ticket is reserved-----\n";
    cout<<"-----End of reservation-----\n";
}
else
{
    cout<<"*****Sorry req no of seats not available*****\n";
}
}
getch();
goto h;
}
else
{
    flag=0;
}
}
if(flag==0)

```

```

{
    cout<<".....Wrong train no.....\n";
    cout<<".....Enter the train no from the data base.....\n";
}
f1.close();
f2.close();
getch();
h:
}

//function to display passngers details when needed and provokes object from function -
"void displaypass()"
void displaypassdetail()
{
    fstream f;
    reser b;
    f.open("p.txt",ios::in | ios::out | ios::binary);
    f.seekg(0);
    while(f.read((char *) & b,sizeof(b)))
    {
        b.displaypass();
    }
    f.close();
    getch();
}

//function to get the details of trains available for booking train seats.
void enquiry()
{
    cout<<"T.No\t T.Name\tB.P\tD.P \tF.C\tCost \tS.C\tCost \tD.O.T\n";
    cout<<"_____
    ____\n\n\n\n";
    fstream f;
    f.open("t.txt",ios::in | ios::out | ios::binary);

```

```

detail a;
while(f.read((char *) & a,sizeof(a)))
{
    a.displaydetail();
}
getch();
}

//function to make user use user mode by entering user id and password provided.
void user()
{
    login a;
    int ch;
    cout<<"*****\n";
    cout<<"*****WELCOME TO THE USER MENU**\n";
    cout<<"*****\n";
    char *password;
    fstream f;
    f.open("id.txt",ios::in | ios::out | ios::binary);
    char id[100];
    puts("Enter your id:");
    gets(id);
    password=getpass("Enter your password:");
    while(f.read((char *) & a,sizeof(a)))
    {
        if((strcmp(a.id,id)==0)&&(strcmp(a.pass,password)==0))
        {
            do
            {
                cout<<"1.Reserve\n2.Enquiry\n3.Return to the main menu\n";
                cout<<"Enter your choice:";
                cin>>ch;

```

```

        cout<<endl;
        switch(ch)
        {
            case 1:
                reserve();
                break;
            case 2:
                enquiry();
                break;
        }
    }
    while(ch<=2);
    goto j;
}
else
{
    d=1;
}
}
if(d==1)
{
    cout<<"Enter your user id and password correctly\n";
}
getch();
j:
}

//function to manage user ids and password.
void manage()
{
    int ch;
    fstream f;

```

```

char c;
login a;
cout<<".....WELCOME TO THE USER MANAGEMENT MENU.....\n";
do
{
    cout<<"1.Create id data base\n2.Add details\n";
    cout<<"3.Display details\n4.Return to the main menu\n";
    cout<<"Enter your choice:";
    cin>>ch;
    cout<<endl;
    switch(ch)
    {
        case 1:
            f.open("id.txt",ios::out | ios::binary);
            do
            {
                a.getid();
                f.write((char *) & a,sizeof(a));
                cout<<"Do you want to add one more record\n";
                cout<<"y-Yes\nn-No\n";
                cin>>c;
            }
            while(c=='y');
            f.close();
            break;
        case 2:
            f.open("id.txt",ios::in | ios::out | ios::binary | ios::app);
            a.getid();
            f.write((char *) & a,sizeof(a));
            f.close();
            break;
    }
}

```



```
case 3:
f.open("id.txt",ios::in | ios::out | ios::binary);
f.seekg(0);
while(f.read((char *) & a,sizeof(a)))
{
    a.displayid();
}
f.close();
break;
}
}
while(ch<=3);
getch();
}
```



PROGRAM

THIS PROGRAM IS MADE (CODED) BY :

1)

NAME: MANARTH PATEL

ROLL NO:

2)

NAME: DIUYAM SINGH

ROLL NO:

```
.....WELCOME TO RAILWAY RESERVATION SYSTEM.....
```

```
^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^
```

- 1.Admin mode
- 2.User mode
- 3.Exit

Enter your choice:

```
.....WELCOME TO RAILWAY RESERVATION SYSTEM.....
```

```
^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^
```

- 1.Admin mode
- 2.User mode
- 3.Exit

Enter your choice:1

Enter the administrator password:

Enter the password correctly

You are not permitted to logon this mode

```
^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^
```

- 1.Admin mode
- 2.User mode
- 3.Exit

Enter your choice:

^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^

- 1.Admin mode
- 2.User mode
- 3.Exit

Enter your choice:1

Enter the administrator password:

Enter the password correctly

You are not permitted to logon this mode

^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^

- 1.Admin mode
- 2.User mode
- 3.Exit

Enter your choice:1

Enter the administrator password:

.....ADMINISTRATOR MENU.....

- 1.Create detail data base
- 2.Add details
- 3.Display details
- 4.User management
- 5.Display passenger details
- 6.Return to main menu

Enter your choice:

3.Exit

Enter your choice:1

Enter the administrator password:

.....ADMINISTRATOR MENU.....

- 1.Create detail data base
- 2.Add details
- 3.Display details
- 4.User management
- 5.Display passenger details
- 6.Return to main menu

Enter your choice:1

Enter the details as follows

Train no:23

Train name:MP EXP

Boarding point:Mumbai

Destination pt:Patna

No of seats in first class & fare per ticket:500 1812

No of seats in second class & fare per ticket:1000 1215

Date of travel:23 7 2019

Do you want to add one more record?

y-for Yes

n-for No

```
4.User management
5.Display passenger details
6.Return to main menu
Enter your choice:1

Enter the details as follows
Train no:23
Train name:MP EXP
Boarding point:Mumbai
Destination pt:Patna
No of seats in first class & fare per ticket:500 1812
No of seats in second class & fare per ticket:1000 1215
Date of travel:23 7 2019
Do you want to add one more record?
y-for Yes
n-for No
n
```

```
.....ADMINISTRATOR MENU.....
1.Create detail data base
2.Add details
3.Display details
4.User management
5.Display passenger details
6.Return to main menu
Enter your choice:
```

```
.....ADMINISTRATOR MENU.....
1.Create detail data base
2.Add details
3.Display details
4.User management
5.Display passenger details
6.Return to main menu
Enter your choice:2

Enter the details as follows
Train no:26
Train name:PM EXP
Boarding point:Patna
Destination pt:Mumbai
No of seats in first class & fare per ticket:500 1812
No of seats in second class & fare per ticket:1000 1215
Date of travel:26 7 2019
```

```
.....ADMINISTRATOR MENU.....
1.Create detail data base
2.Add details
3.Display details
4.User management
5.Display passenger details
6.Return to main menu
Enter your choice:
```

.....ADMINISTRATOR MENU.....

- 1.Create detail data base
- 2.Add details
- 3.Display details
- 4.User management
- 5.Display passenger details
- 6.Return to main menu

Enter your choice:3

T.No	T.Name	B.P	D.P	F.C	Cost	S.C	Cost	D.O.T
23	MP EXP	Mumbai	Patna	500	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019

.....ADMINISTRATOR MENU.....

- 1.Create detail data base
- 2.Add details
- 3.Display details
- 4.User management
- 5.Display passenger details
- 6.Return to main menu

Enter your choice:\_

26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019
----	--------	-------	--------	-----	------	------	------	-----------

.....ADMINISTRATOR MENU.....

- 1.Create detail data base
- 2.Add details
- 3.Display details
- 4.User management
- 5.Display passenger details
- 6.Return to main menu

Enter your choice:4

.....WELCOME TO THE USER MANAGEMENT MENU.....

- 1.Create id data base
- 2.Add details
- 3.Display details
- 4.Return to the main menu

Enter your choice:1

Enter your id:Hitesh

Enter the password:

Do you want to add one more record

y-Yes

n-No

\_



```
2.Add details
3.Display details
4.User management
5.Display passenger details
6.Return to main menu
Enter your choice:4

.....WELCOME TO THE USER MANAGEMENT MENU.....
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:1

Enter your id:Hitesh
Enter the password:
Do you want to add one more record
y-Yes
n-No
n
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:_
```

```
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:1

Enter your id:Hitesh
Enter the password:
Do you want to add one more record
y-Yes
n-No
n
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:2

Enter your id:Madhuri
Enter the password:
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:
```



```
n-No
n
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:2
```

```
Enter your id:Madhuri
Enter the password:
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:3
```

```
Id:Hitesh
Password:password
Id:Madhuri
Password:password
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:_
```

```
Id:Hitesh
Password:password
Id:Madhuri
Password:password
1.Create id data base
2.Add details
3.Display details
4.Return to the main menu
Enter your choice:4
```

```
.....ADMINISTRATOR MENU.....
```

```
1.Create detail data base
2.Add details
3.Display details
4.User management
5.Display passenger details
6.Return to main menu
Enter your choice:6
```

```
^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^
```

```
1.Admin mode
2.User mode
3.Exit
Enter your choice:_
```

```

.....ADMINISTRATOR MENU.....
1.Create detail data base
2.Add details
3.Display details
4.User management
5.Display passenger details
6.Return to main menu
Enter your choice:6

^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^
1.Admin mode
2.User mode
3.Exit
Enter your choice:2

*****
*****WELCOME TO THE USER MENU**
*****
Enter your id:
Hitesh
Enter your password:
1.Reserve
2.Enquiry
3.Return to the main menu
Enter your choice:_

```

```

1.Admin mode
2.User mode
3.Exit
Enter your choice:2

*****
*****WELCOME TO THE USER MENU**
*****
Enter your id:
Hitesh
Enter your password:
1.Reserve
2.Enquiry
3.Return to the main menu
Enter your choice:2

```

T.No	T.Name	B.P	D.P	F.C	Cost	S.C	Cost	D.O.T
23	MP EXP	Mumbai	Patna	500	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019

Enter your password:

1.Reserve

2.Enquiry

3.Return to the main menu

Enter your choice:2

T.No	T.Name	B.P	D.P	F.C	Cost	S.C	Cost	D.O.T
23	MP EXP	Mumbai	Patna	500	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019

1.Reserve

2.Enquiry

3.Return to the main menu

Enter your choice:1

1.Reserve

2.Return to the main menu

Enter your choice:1

Enter the details as follows

Train no:

2.Enquiry

3.Return to the main menu

Enter your choice:1

1.Reserve

2.Return to the main menu

Enter your choice:1

Enter the details as follows

Train no:23

Train name:MP EXP

Boarding point:Mumbai

Destination pt:Patna

No of seats required:2

Passenger name:Hitesh

Passenger age:32

Passenger name:Jatin

Passenger age:30

Enter the class f-first class s-second class:f

Date of travel:23 7 2019

Enter the concession category

1.Military

2.Senior citizen

3.None

3\_

```

3
.....END OF GETTING DETAILS.....
You cannot get any concession
.....
.....
Pnr no:6204
Train no:23
Train name:MP EXP
Boarding point:Mumbai
Destination pt:Patna
No of seats reserved:2Passenger name:Hitesh
Passenger age:32Passenger name:Jatin
Passenger age:30
Your class:f

Date of reservation:23-7-2019
Your concession category:3
You must pay:3624
*****
.....END OF RESERVATION.....
*****
-----
-----Your ticket is reserved-----
-----End of reservation menu-----

```

```

You must pay:3624
*****
.....END OF RESERVATION.....
*****
-----
-----Your ticket is reserved-----
-----End of reservation menu-----

```

```

1.Reserve
2.Return to the main menu
Enter your choice:2

```

```

1.Reserve
2.Enquiry
3.Return to the main menu
Enter your choice:2

```

T.No	T.Name	B.P	D.P	F.C	Cost	S.C	Cost	D.O.T
23	MP EXP	Mumbai	Patna	498	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019

23	MP EXP	Mumbai	Patna	498	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019

1.Reserve  
 2.Enquiry  
 3.Return to the main menu  
 Enter your choice:3

^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^

1.Admin mode  
 2.User mode  
 3.Exit  
 Enter your choice:2

\*\*\*\*\*  
 \*\*\*\*\*WELCOME TO THE USER MENU\*\*  
 \*\*\*\*\*

Enter your id:  
 Madhuri  
 Enter your password:  
 Enter your user id and password correctly

1.Admin mode  
 2.User mode  
 3.Exit  
 Enter your choice:2

\*\*\*\*\*  
 \*\*\*\*\*WELCOME TO THE USER MENU\*\*  
 \*\*\*\*\*

Enter your id:  
 Madhuri  
 Enter your password:  
 1.Reserve  
 2.Enquiry  
 3.Return to the main menu  
 Enter your choice:2

T.No	T.Name	B.P	D.P	F.C	Cost	S.C	Cost	D.O.T
23	MP EXP	Mumbai	Patna	498	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019



Enter your password:

1.Reserve

2.Enquiry

3.Return to the main menu

Enter your choice:2

T.No	T.Name	B.P	D.P	F.C	Cost	S.C	Cost	D.O.T
23	MP EXP	Mumbai	Patna	498	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	500	1812	1000	1215	26-7-2019

1.Reserve

2.Enquiry

3.Return to the main menu

Enter your choice:1

1.Reserve

2.Return to the main menu

Enter your choice:1

Enter the details as follows

Train no: \_

1.Reserve

2.Enquiry

3.Return to the main menu

Enter your choice:1

1.Reserve

2.Return to the main menu

Enter your choice:1

Enter the details as follows

Train no:26

Train name:PM EXP

Boarding point:Patna

Destination pt:Mumbai

No of seats required:1

Passenger name:Madhuri

Passenger age:65

Enter the class f-first class s-second class:f

Date of travel:26 7 2019

Enter the concession category

1.Military

2.Senior citizen

3.None

3

```
3.None
3
.....END OF GETTING DETAILS.....
```

You cannot get any concession

```
.....
.....
```

Pnr no:20512

Train no:26

Train name:PM EXP

Boarding point:Patna

Destination pt:Mumbai

No of seats reserved:1Passenger name:Madhuri

Passenger age:65

Your class:f

Date of reservation:26-7-2019

Your concession category:3

You must pay:1812

```
*****
```

```
.....END OF RESERVATION.....
```

```
*****
```

```
-----
```

```
-----Your ticket is reserved-----
```

```
-----End of reservation menu-----
```

```
_
```

Your class:f

Date of reservation:26-7-2019

Your concession category:3

You must pay:1812

```
*****
```

```
.....END OF RESERVATION.....
```

```
*****
```

```
-----
```

```
-----Your ticket is reserved-----
```

```
-----End of reservation menu-----
```

1.Reserve

2.Return to the main menu

Enter your choice:2

1.Reserve

2.Enquiry

3.Return to the main menu

Enter your choice:3

```
^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^
```

1.Admin mode

2.User mode

3.Exit

Enter your choice:\_

-----End of reservation menu-----

1.Reserve  
2.Return to the main menu  
Enter your choice:2

1.Reserve  
2.Enquiry  
3.Return to the main menu  
Enter your choice:3

^^^^^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^^^^^

1.Admin mode  
2.User mode  
3.Exit  
Enter your choice:1

Enter the administrator password:  
.....ADMINISTRATOR MENU.....

1.Create detail data base  
2.Add details  
3.Display details  
4.User management  
5.Display passenger details  
6.Return to main menu  
Enter your choice:\_

1.Create detail data base  
2.Add details  
3.Display details  
4.User management  
5.Display passenger details  
6.Return to main menu  
Enter your choice:  
3

T.No	T.Name	B.P	D.P	F.C	Cost	S.C	Cost	D.O.T
23	MP EXP	Mumbai	Patna	498	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	499	1812	1000	1215	26-7-2019

.....ADMINISTRATOR MENU.....

1.Create detail data base  
2.Add details  
3.Display details  
4.User management  
5.Display passenger details  
6.Return to main menu  
Enter your choice:



23	MP EXP	Mumbai	Patna	498	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	499	1812	1000	1215	26-7-2019

.....ADMINISTRATOR MENU.....

- 1.Create detail data base
- 2.Add details
- 3.Display details
- 4.User management
- 5.Display passenger details
- 6.Return to main menu

Enter your choice:5

Pnr no:17208

Train no:23

Train name:MP EXP

Your Seat Class:f

Date of Reservation:23-7-2019

No of seats reserved:2

Passenger name:Hitesh

Passenger age:32

23	MP EXP	Mumbai	Patna	498	1812	1000	1215	23-7-2019
26	PM EXP	Patna	Mumbai	499	1812	1000	1215	26-7-2019

.....ADMINISTRATOR MENU.....

- 1.Create detail data base
- 2.Add details
- 3.Display details
- 4.User management
- 5.Display passenger details
- 6.Return to main menu

Enter your choice:5

Pnr no:17208

Train no:23

Train name:MP EXP

Your Seat Class:f

Date of Reservation:23-7-2019

No of seats reserved:2

Passenger name:Hitesh

Passenger age:32

Passenger name:Jatin

Passenger age:30\_

5.Display passenger details

6.Return to main menu

Enter your choice:5

Pnr no:17208

Train no:23

Train name:MP EXP

Your Seat Class:f

Date of Reservation:23-7-2019

No of seats reserved:2

Passenger name:Hitesh

Passenger age:32

Passenger name:Jatin

Passenger age:30

Pnr no:20512

Train no:26

Train name:PM EXP

Your Seat Class:f

Date of Reservation:26-7-2019

No of seats reserved:1

Passenger name:Madhuri

Passenger age:65

Passenger age:32

Passenger name:Jatin

Passenger age:30

Pnr no:20512

Train no:26

Train name:PM EXP

Your Seat Class:f

Date of Reservation:26-7-2019

No of seats reserved:1

Passenger name:Madhuri

Passenger age:65.....ADMINISTRATOR MENU.....

1.Create detail data base

2.Add details

3.Display details

4.User management

5.Display passenger details

6.Return to main menu

Enter your choice:6

^^^^^^^^^^^^^^^^^MAIN MENU^^^^^^^^^^^^^^^^^

1.Admin mode

2.User mode

3.Exit

Enter your choice:3\_

## **CONCLUSION**

- The system effectively automated the functions involved in the processes being handled manually before.
- The cost & benefit analysis shows that the system was quite successful in saving costs for the Admin & generate equivalently huge benefits.
- The system is secure & scalable. The system design has been done keeping user-friendliness and efficiency in mind.

## **SCOPE OF THE PROJECT**

Scope of this project is to replace the manual work of railway management system with the new advanced computerized system. User does not need much training to use this software, as this software is very user friendly and easy to use. It replaces all the paper work also. In this software we can store thousands of records. It replaces all the calculation works also as it automatically calculate and print the bill. Some main advantages are:-

- PNR Numbers are generated automatically by system itself(RANDOMIZED).
- If any invalid entry done by the users which is nature of human being but checks by the machine so this software gives the error message to the users to indicate about the invalid entry at every point of program.

## **LIMITATIONS OF PROGRAM**

- Cancellation of seats is not being done by this program.
- To earase all available train details one must clear the file named "t.txt".
- To earase all user ID's and its Password's one must clear the file named "id.txt".
- To earase all booked seats / reserved seats one must clear the file named "p.txt".
- After earasing the file data admin must make a new record of trains available and user ID's and its Passwords.

*/\*( THIS LIMITATIONS CAN BE ONLY REMOVED WHEN THE PROGRAM's CODE IS STUDIED MORE AND WHEN THE CODDER OF THE PROGRAM EDITS AND ADD ANOTHER CODES AND MAKE IT PROGRAM WITHOUT LIMITATIONS)\*/*

## **BILBOGRAPHY**

- C++ BOOK [Sumit Arora] (11<sup>th</sup> & 12<sup>th</sup> )
- C++ Online Guide(Google 'search engine tool')
- Computer Science Teacher(Hitesh Patel)