In our project, we have imitated the official ticket reservation website of Indian railways. This program can be actually be used as an enquiry machine, because it saves the data even after exiting the program.

Instructions to run:-

Compile res.cpp, resmain.cpp and trainres.cpp together with any c++ compiler (Use g++ if possible).

Using g++: g++ res.cpp resmain.cpp trainres.cpp

This should create an executable file a.out. Use command ./a.out to run the program

Login screen:-

Loaded via loginscreen() function.

We have maintained an account for each and every user of program, which contains information about him and his balance.

One is allowed to login to existing account or create a new account when the program is started, or exit the program. List of usernames and passwords is stored in the file “userdata” new users’ data gets saved at the end. Both username and password must be less than 20 characters.

Sample username and password:

Username: 123

Password: 123

Main screen:-

Loaded via mainscreen() function.

This is like the index of the program. All the functions which can be done in our program are listed. The choice is then entered and the corresponding window of that function opens.

(1) Schedule of a particular train

First the available trains are showed up. Right now we have 16 trains. Enter the number of the train you are interested in and its schedule will show up. It includes all the station it stops at, along with the time at which it stops, and their distance from the source station. If a train runs for multiple days, it also shows the day of travel.

NOTE: All times in this program are in the format of 24 hrs HH:MM, and dates in the format DD MM YYYY. Please enter in this format, wherever required.

In our program, the day of travel is absolute and same for all passengers, irrespective of their source and destination.

Train starts its journey at day 1.

If you enter a wrong number. Nothing shows up except the headings.

(2) Get list of trains between 2 stations or book a ticket

This is used to book tickets.

Enter the source and destinition stations of your journey. For that you must know the station codes. You can know them from the attached file name "Station codes.txt". Note that all stations of India are not included in our data. Station codes must be in CAPITALS.

Sample data:

Source: NDLS

Destination: KOTA

All the trains between these two stations are displayed. Choice is given if you want to book tickets or get further information about the trains. If you choose to book tickets, number of the desired train is to be entered next. This shows further information about the train and also asks the date of journey.

Tickets can be booked only upto 10 days from today. Also the train runs only on particular days of the week. Only dates corresponding to those days can be selected.

If tickets are available, the coaches which are not full are displayed, along with their types, ticket prices, and number of available seats.

Ticket price is directly proportional to the distance between two stations. It does n ot depend on the train, but only on the type of the coach.

Select the coach you want to book a ticket in. you are asked to confirm booking.

If you do not have enough balance, a message regarding so is displayed and you need to recharge through option 6 of main screen. We maintain a record of balance of each user of this program, which remains saved even after the program is terminated.

If balance is available, it is deducted by the appropriate amount, and a ticket pnr is generated. This pnr acts as a handle for the ticket in later use. The information regarding the booking is saved.

(3) Enquiry about a running train

This shows the current status of running train. You are asked to enter the train number. PLEASE DO NOT ENTER INCORRECT NUMBER, as it will lead to segmentation fault and program will exit without saving.

After you enter the number, you need to enter its today’s day of journey. For example, if train started yesterday, you should enter 2. If you enter something impossible, an error message shows up.

Sample data:

Train num: 12618 (Runs every day, so no error of invalid query)

Day: 1

This will show up the next station, or the current status of train (ie “train not yet departed” or “train reached destination”). Output depends on current time.

It also gives the option of checking the time left for journey, which also depends on passenger’s destination station.

(4) Order food

Food can be ordered through this option. The menu is loaded from file “foodmenu” and displayed, along with price and veg/nonveg category.

Enter the indexes of required items, followed by their quantities. Enter 0 when order is finished. For example, if you want 4 Aloo parathas and 3 veg biryanis, you should enter “3 4 8 3 0”

If you don’t have enough balance, you will be asked to recharge.

If you have enough balance, total will be displayed and you will be asked to confirm. Then enter your password to finalize the order. The bill will be deducted from your balance. Updated balance will be displayed.

(5) Cancel ticket

First, pnr of all the tickets booked by you will be displayed. It is loaded from ”ticketdata” file. If no bookings exist, the file contains “0”.

You can get more details about a ticket by entering 1 and then entering pnr. You can also directly cancel by entering 2 and then entering pnr.

If you enter pnr,the amount of refund you will get is shown. Refund is 80% of cost of ticket. You will be given choice to continue cancellation. Then you will need your password to confirm cancellation. Ticket cancellation will erase the data of your ticket from “ticketdata” file, and the ticket will again be available for booking. The refund will be credited to your balance. Updated balance will be displayed.

(6) See current account balance or recharge

First the present account balance is shown. Enter the amount to recharge or enter 0 to return without recharging. Only the administrator can recharge. After entering amount, you will be asked for admin password, which is “qwerty” by default. Updated balance is shown.

(7) Change the account password

The current password is asked for confirmation and then you are asked to enter the new password. Re-enter the new password to confirm. Change in password is recorded in “userdata” file.

(0)Log out

Logs out your account for signing in through different user or exiting the program. Takes you to login screen.