

RAILWAY RESERVATION SYSTEM

GROUP MEMBERS:

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CONCEPTS USED: 1. Functions 2. Encapsulation 3. Inheritance 4. Composition 5. Pointers 6. Dynamic Memory 7. Header Files 8. File Handling 9. Static Variables

PROJECT DESCRIPTION AND WORKING: Our Project is about Railway reservation and management. This program has two ways to use it. First is to use it as an Admin and second as a User. The admin has administration privileges in which he can set the train information and the admin can also access the account information, can check the complaints, suggestion and can even change the information of the train. The user can create an account and log in with the account where he can check information, book tickets, cancel tickets, file a suggestion or complaint, can check train timings. The user can directly log in as a guest but he will not be able to book tickets but he can file a complaint or suggestion and check the train information.

Awais's Contribution: In Admin class, Awais has created CreateDataBase(), DisplayDataBase(), display (), NewTrain (), SetNextTrainDetails() and in User class, he's created Timing (), Inquiry (). In **CreateDataBase** and **DisplayDataBase**, he's used **csv files to store the username and passwords using file handling**. Create function would create a new csv file if it's already not created. He's used two header files **login.h** and **signup.h** which will store and read data of user. **Display ()** function is also a login system for Admin. It'll give access to the admin privileges if we provide right pass. **NewTrain()** will simply reset the train booking file by calling Reset function from Booking Class of Jawad. **SetNextTrainDetails()** is a function for admin to edit the details like Arrival, Departure, etc. **Timing ()** function for user to check railway timings and **Inquiry ()** function for user to check the information like Arrival time, seats left, etc of the current train.

Amaan's Contribution: Amaan has created the suggestion and complaint function in both the admin and the user. In user which he takes the suggestion or complaint from the user and if the user is logged in the user's name is not taken and if the user is a guest name is taken and in respective txt file, in admin, the admin can see the complaint and suggestion on-screen and Amaan has also contributed in debugging he would fix the bugs in the other team member's code.

Jawad's Contribution: Jawad has created the Booking class. In the booking class, there is a facility that allows the user to book seats in three different classes Business, First, Economy class. There is a function for seat cancellation that allows users to cancel the seat. All the data about seat reservations are stored in files. When the program starts the arrays are initialized with the file data. There are three static variables that store info about in which class how many seats are booked. Another function is reset Data that allows the admin to reset all seat data when all seats are booked.

Note: Admin Password = "aetooc"