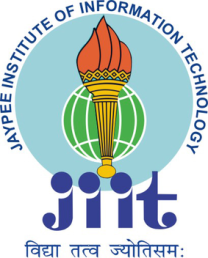
***JAYPEE INSTITUTE OF INFORMATION***

***TECHNOLOGY, NOIDA , SECTOR-62***

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***SDF-II MINI PROJECT***

***SYNOPSIS***

***Railway reservation system***

***SUBMITTED TO:***

***Mr.K Vimal Kumar sir***

***BY :***

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***(BTECH – CSE 2nd SEMESTER)***

***acknowledgement***

*We extend our sincere thanks to* ***Jaypee Institute of Information and Technology*** *which provided us with the opportunity to make the project using**C++ Programming which helped us implement and practice skills we have**learned till now.We also take this opportunity to express a deep sense of gratitude to* ***Mr.K Vimal Kumar sir*** *for her cordial support, valuable suggestions and**guidance.We would like to thank our friends and family for the support and**encouragement they have given us during the course of work.*

***ABSTRACT OF THE PROJECT***

*In this project, we are focusing on the concepts of C++ programming to create a railway reservation system .This project uses C++ language to program the logic of the said system and create a user-friendly interface. We are using the topics that we have studied in sdf .*

*It is also used to ease the task of railway reservation.*

***introduction***

*The railway reservation system facilitates the passengers to enquiry about the trains available on the basis of source and destination, booking and cancellation of tickets, enquiry about the status of the booked ticket, etc. The aim of case study is to design and develop a data base maintaining records of different trains, train status and passengers.*

*This project contains introduction to the railways reservation system. It is the computerized system of reserving the seats of train seats in advance. It is mainly used for a long route. Online reservation has made the process for the reservation of seats very much easier than ever before.*

***objective of the project***

*In our country India, there are number of counters for the reservation of the seats and one can easily make reservations and get tickets. Railway reservation system, has described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization it better utilization of resources.*

*Administrator of the project, with the help of a password, can enter new train record, display all train records, modify train records and delete train records. The record of train includes its number, name, source, destination, and days on which it is available, whereas record of train status includes dates for which tickets can be booked, total number of seats available, and number of seats already booked.*

***topics of sdf used***

* *Basis of C++ language.*
* *Data types*
* *Operators*
* *If else*
* *Arrays*
* *Function*
* *Loops*
* *Data file handling*
* *Pointers*
* *OOPs(Encapsulation, Data Hiding, Polymorphism, Inheritance, Data Abstraction etc.)*

***modules used***

*The various modules used in the projects are:*

***Admin mode:***

* *Add Train details*
* *Add Passenger details*

***User mode:***

* *Reserve ticket*
* *Cancel ticket*
* *Enquiry*

***Note- New Modules and Sub Modules can be added as per the requirement of the management system.***

***project category***

*This Project comes under file handling management category in C++ language. File handling is done using concept of array in C++ language. It is console based and user interactive. The UI is interactive and easily understandable.*

*Software used:*

* *Software apps like Code blocks or visual studio code are used in creating in the project.*
* *Code blocks: Is an IDE used for C++ language. It has inbuilt compiler.*
* *Visual Studio Code: It is same like Code blocks but a compiler like mingw or any has to be installed for compilation of the code.*
* *System can be any 32/62 bit.*
* *Ram should be greater than or equal to 4 GB.*

***Conclusion and future scope***

*This C++ Program provides a computerized version of Railway Reservation System which will benefit the passengers as well as the worker of the railway. This Railway Reservation System Project in C++ can perform functions. File handling has been extensively used in this project for almost all functions. It also has facility for passenger login where passengers can login and see status of train like boarding of trains and many more.*

***Scope:***

*The different areas where this program can be used are :*

* *Any railway department can make use of it for maintaining the details of trains(like boarding station , departure time, arrival time, train name and number , number of seats and fare charges).*
* *Any passenger can check PNR status of any train (like number of seats available, fare charges etc.)*

*There is another future scope of this facility that more features like money transactions for train bookings can be added.*

***references***

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