PES UNIVERSITY

Department of Computer Science & Engineering

Problem Solving with C Laboratory-UE20CS152

Apr-Aug, 2021

Mini - Project Synopsis

Date: 17/06/2021

TITLE: Simulation of a Train Ticket Reservation System using C

Objectives: We intend to simulate the working and algorithms behind a simple train ticket booking system using the C language. Implementation of all the basic functions under this process have been made successfully so far. The aim is to use key concepts of C (arrays, pointers and data structures) to mock functions like - login, ticket booking, final display and cancel ticket options.
We will also be using the concept of file operations to store the login data of the user in real time and use it for the authentication algorithm while the user needs to cancel the ticket. Attempts to reduce code complexity using comments and reduction of unwanted code/variables will be pursued actively.
For the project delivery, efficient delegation of work and methods to boost overall team efficiency (regular team meetings and use of GitHub) also gets a high position on our priority list, thereby improving the speed and accuracy of our unit.

Description in points:

1. Login page with dual function - (to mimic the official IRCTC page)- login / cancel an existing ticket

2. Display of available trains and their respective departure times (using a random generator function) from a database of 25 trains and times.

3. Display of places and accepting start and stop station inputs

4. Accepting of Bio data, reservation and other essential data

5. Algorithm that uses multiple variables and parameters to display the final amount that needs to be paid

6. Immediate cancel ticket option.

7. Thank you and ticket details display page.

8. Compilation of the final makefile.

Current Status of Implementation:

We have seen significant progress in our work and believe that close to 40% of our code is finished. Several test runs have been done and many of our functions are running well. A few more functions need to be implemented, and the process of creating them has started. We expect to deliver the project on time,bug free and with all necessary criteria met.

Team Details:

#	Name	SRN	Signature of Student	Remarks by Faculty
1.	Poornachandra	PES1UG20EC134		
2.	Neelan Patil	PES1UG20EC120		
3.	Roshan Srihari	PES1UG20EC159		
4.	Rohan Mahesh Rao	PES1UG20EC156		