PROJECT REPORT

on

BUS RESERVATION SYSTEM

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in

Object Oriented Programming

SY B. TECH

Under the Guidance of

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ACKNOWLEDGEMENT

Our sincere thanks to our teacher Mrs. Mrunal Annadate for guiding us in the process of project making. We have learnt many new things throughout the making of this OOP project. We wish to continue learning and creating new applications. During this project, we have experienced many formatting errors due to very small mistakes, though due to this our focus and patience to bear the errors and remain calm has drastically increased and thus it has also improved our productivity in normal studies.

LIST OF TABLES

Table name	Description
Table 1	Storing bus records.
Table 2	Storing customer records.
Table 3	Storing login records.

1. Table 1

File=" bus.txt"

Variables	Datatype
number	string
name	string
seats	int
driverName	string
freeseats	int
dp	string
ds	string

1. Table 2

File=" cus.txt"

Variables	Datatype
name	string
number	string
seat	string
id	string
contact	string

2. Table 3

File="login.txt"

Variables	Datatype
userName	string
pass	string

CHAPTER 1

1.1 Introduction

This is a bus ticket booking system that stores the bus data on the hard drive.

It takes user input for storing details of user and reserving the seat for the user.

There is an admin login option to change some parameters related to the buses and view all the customer details from database.

Admin login is specific and no one can create new account unless it is mentioned by the programmer in the code file.

After successful booking of the ticket by the user, there is a reference number provided which is used to keep track of the user.

Also, the user can cancel the ticket and thus the reference number associated with that ticket is deleted from database.

There is a facility of adding new buses if in case the company buys a new bus and wants to operate on this app.

Also, the admin can edit the existing bus details like the driver's name and number of seats.

1.2 Aim and Objectives of Project

To implement concept of class in OOP.

To make use of the member functions with use of class object.

To store and access the data on hard drive using file handling.

CHAPTER 2

Methodology

For this system there is a class created named ‘Bus’.

In the class there are all the functions related to the bus reservation system.

So, in the main function we create an object of the class ‘Bus’ and then call it’s member function named ‘Start’ from which the code execution starts and everything is initialized.

2.1 Problem statement

To create a bus reservation system using objects and file handling algorithm in C++.

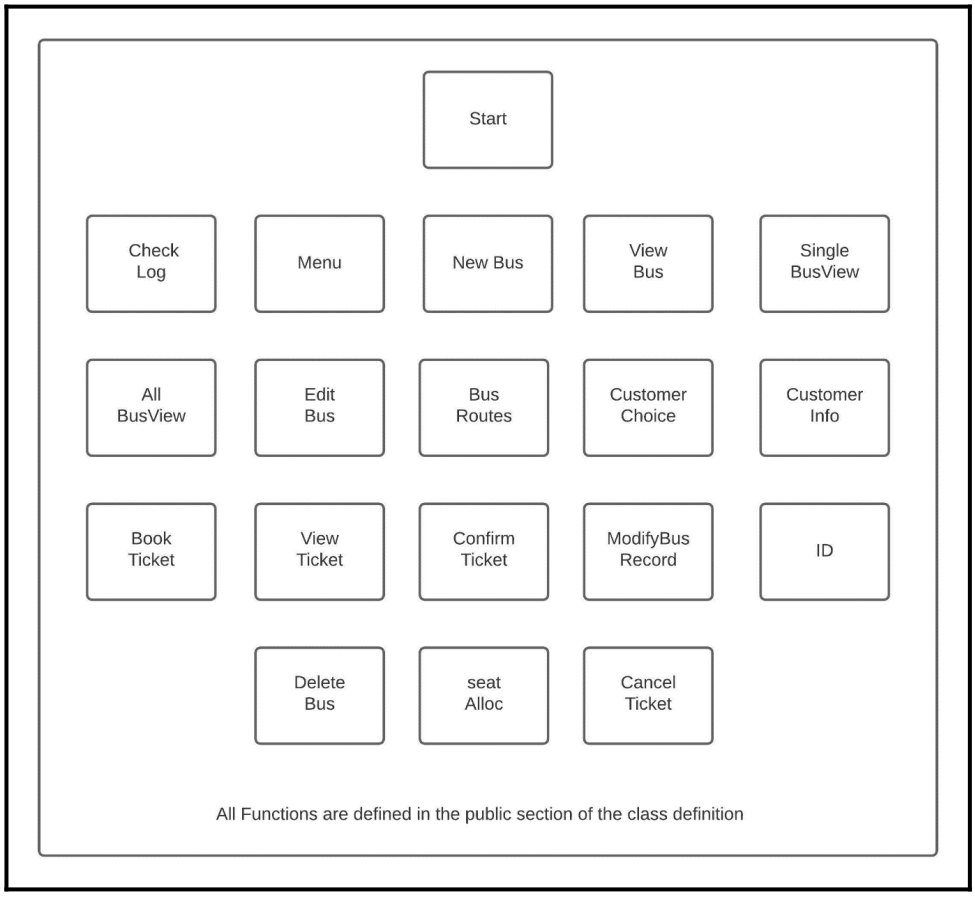
2.2 System requirements

Software used is Visual Studio Code.

Input is taken from user and the output is displayed in the terminal window.

There are some libraries required other than ‘iostream’ to execute the file handling statements and some windows function.

2.3 Class diagram of System



CHAPTER 3

3. Results

This program successfully implements the concept and flowchart of the bus reservation system.

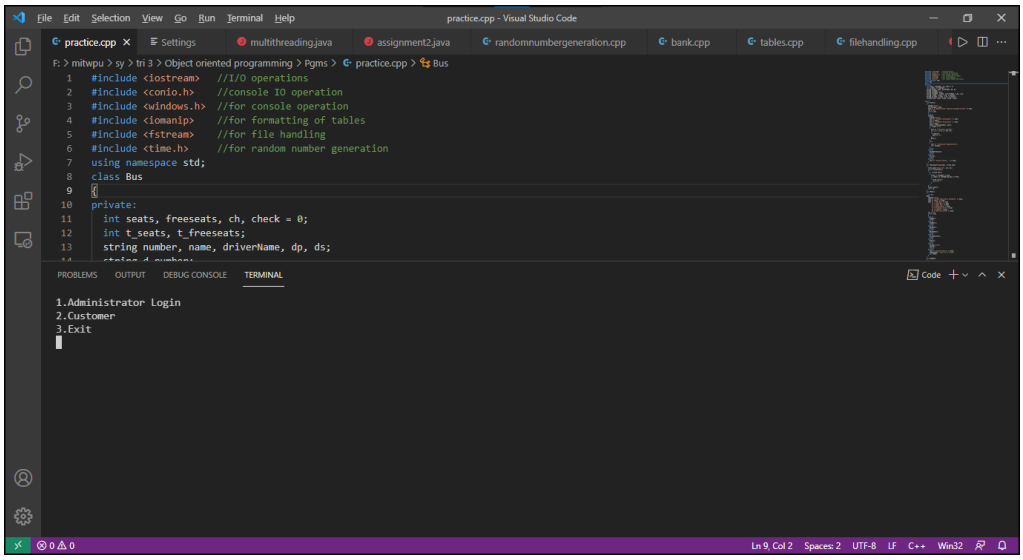
It can handle the data in the files that are created to store the data of the user and the admin data.

It is efficient in accessing the data and executes the code smoothly in minimal time.

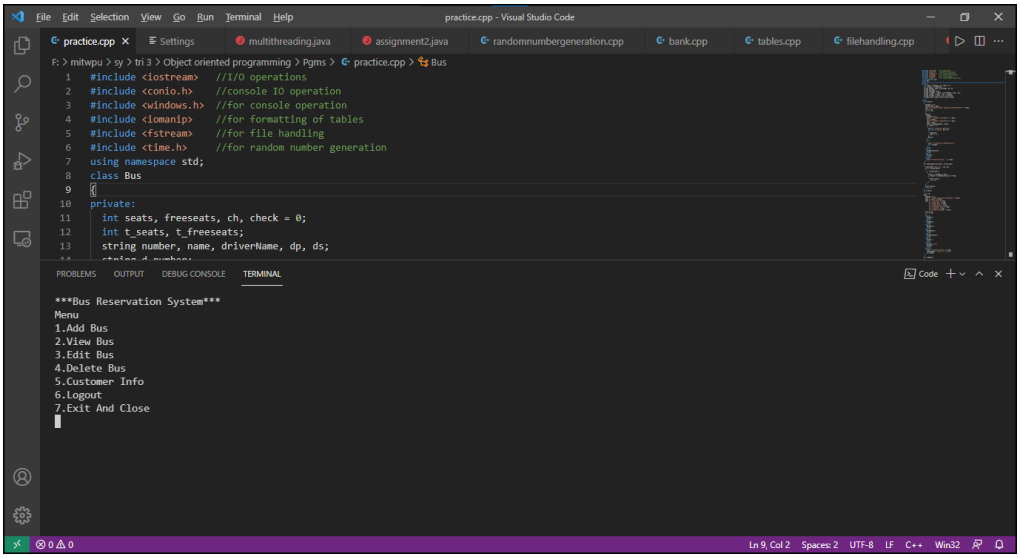
There is no glitch of the program to get into an infinite execution or getting halted at some conditions.

The memory is used efficiently.

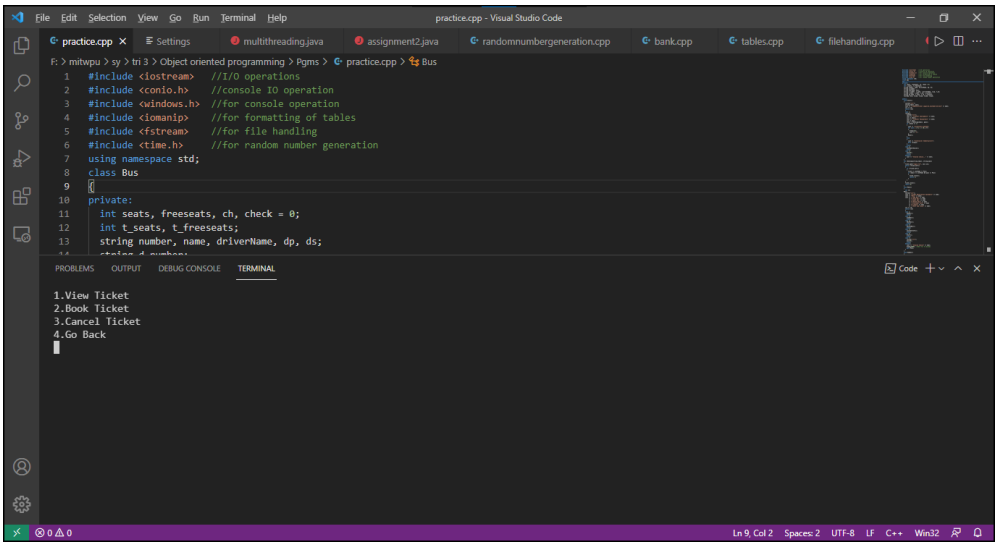
Starting of the application



After successful login of admin



After choosing customer option from 1st screen



CHAPTER 4

4. Conclusion

Bus reservation system using C++ was implemented successfully using file handling features to manage the data of the app.

Learning outcome

The major thing we learned from this project was the concept and advantages of using file handling in development of an application.

Also, we learned the approach to use for development of any application and the parameters to consider for successful implementation.

We learned memory management and how to make its use efficient and avoid duplication of data in the database.

References

https://www.javatpoint.com/

https://www.geeksforgeeks.org/

https://www.tutorialspoint.com/index.htm

https://www.learncpp.com/