Project Mushika [Share Auto Booking System]

A Project Report

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By

B. Sai Chetan

22261A0410

Under the Guidance of

Mr. B. Kesava Rao,

Assistant Professor, Dept of E.C.E

Department of Electronics and Communications Engineering

Mahatma Gandhi Institute of Technology

Autonomous

Department of Electronics and Communications Engineering

C E R T I F I C A T E

This is to certify that **B.Sai Chetan** bearing Roll No. **22261A0410**

of the **I semester B. Tech**. **of Electronics and Communications Engineering** (Autonomous) has satisfactorily completed the Project entitled "***Project Mushika [Share Auto Booking System]"*** in the partial fulfillment for qualifying the project work course during the academic year 2022-2023

Mini Project Coordinator

B. Kesava Rao
Dept of E.C.E

Head of the Department

Dr. S.P. Singh
Dept of E.C.E

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B. Sai Chetan

22261A0410

ABSTRACT

Travel industry is evolving day to day. As the industry evolves the need to digitalize all the transactions becomes need of the hour. This project which is implemented on C platform helps to manage bus scheduling and bookings. This Bus Booking System is a easily deployable, integrated end-to-end system starting from searching bus routes to book them. The main objective of this project is to provide the better work efficiency, security, accuracy, reliability, feasibility. The error occurred could be reduced to nil and working conditions can be improved.

CONTENTS

1. Introduction

Over the years, transportation of humans from place to place has been very difficult and uncomfortable due to lack of system and facilities that are necessary to facilitate fast, easy and convenient movement of people from one place to another.

In recent times, there are a number of interventions that are made to improve available transport systems. Some of these interventions include; travel guides, trip transport planners, ticketing systems etc. Transport agencies in the whole wide-world aim at making public transit systems more attractive for travelers; therefore making mobility of the system more convenient for both travelers and staff of the transport agencies.

Also, managing records, transactions of ticketing, making reservations easy and moving from the complex manual system to the electronic system is a necessity. The transit network is increasing in complexity and integrating several tools which can help transport agencies to achieve further advancement in public transportation systems.

A platform known as a "**Share Auto Booking System**" enables users to reserve shared auto-rickshaws in advance, just like they would a taxi or ride-sharing service. Using a sharing auto booking system may have the following advantages:

Convenience: Users can skip the inconvenience of looking for a shared auto-rickshaw on the street by using a share car booking system. Instead, customers can just reserve a ride ahead of time, and the auto-rickshaw will pick them up at the prearranged place.

Saving time: Making a shared car reservation in advance allows users to avoid waiting for a shared auto-rickshaw to arrive and haggling over prices with the driver. In order to help consumers plan their travel, the booking system can also provide an expected arrival time.

Safety: By allowing consumers to track the location of the auto-rickshaw while on the ride, a sharing auto booking system can add an extra degree of security. Users can comment and rate the driver, which can point up any potential safety issues.

Cost-effective: In many places, share auto-rickshaws are a common form of transportation since they are frequently less expensive than conventional taxis. Users can further cut their travel expenses by splitting the cost of the trip with other passengers by using a share auto booking system.

2. Implementation

Booking tickets could be simplified by it. I spent the most of my time on this project working with the ideas of files, functions, and nested loops in C. I recently created a straightforward interface that is incredibly simple to use. Most everything was functional. Yet, the fact that there isn't a specific database for this project is the fundamental reason why the cancellation of tickets failed.

A share auto-booking mechanism is simply implemented in C in this software. The user can see the specifications of the autos that are available, reserve a ride on a shared auto, and quit the application. To record passenger information such name, auto number, and the number of needed seats, it employs a structure called "pd." Additionally, it defines features for scheduling a ride, viewing available Autos, producing a ticket, and figuring out fees.

The program includes an easy-to-use user interface that asks for the user's input and displays the results. The many menu options are handled by a switch-case statement. The program serves as an excellent illustration of how to create a straightforward system using C's structures, functions, and file handling.

3. Algorithm

Here's a step by step algorithm of code:

Step – 1:- Include necessary header files i.e., stdio.h, stdlib.h and string.h

Step – 2:- Define a structure named "pd" with three variables (name, auto_num, num_of_seats)

Step – 3:- Declare and define functions: booking(), viewdetails(), printticket(), specificauto() and charge ().

Step – 4:- Declare main() function with return type "int"

Step – 5:- Print details of the project

Step – 6:- Get user input for menu_choice using scanf()

Step – 7:- Use a switch-case statement to perform actions based on the user's choice

If the user chooses 1, call the booking() function

If the user chooses 2, call the viewdetails() function
If the user chooses 3, return 0 to exit the program
If the user enters any other number, print "Invalid choice"

Step – 8:- Use a label "start" to go back to the beginning of the menu options after completing the requested action

Step – 9:- Define the viewdetails() function to display a list of available autos with their corresponding details

Step – 10:- Define the booking() function to take details from the user, get valid auto number and print a ticket if the entered auto number is valid

Step – 11:- Define the charge() function to calculate and return the fare based on the auto number and number of seats

Step – 12:- Define the printticket() function to print the details of the ticket

Step – 13:- Open a file named "seats_reserved.txt" and append details to it when the user confirms the ticket booking

Step – 14:- Close the file and go back to the beginning of the menu using a label "start

4. Results

Main Page:-

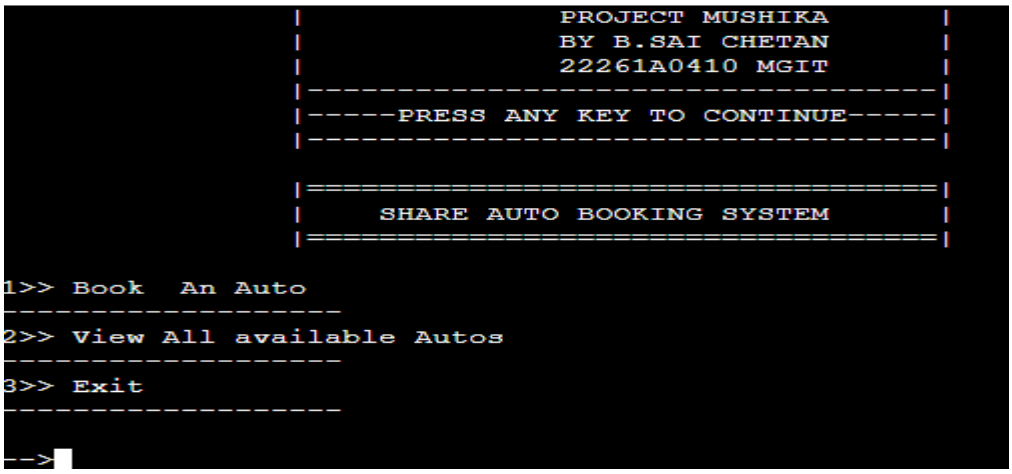

Fig.1. Main Page.

For Booking an Auto:-

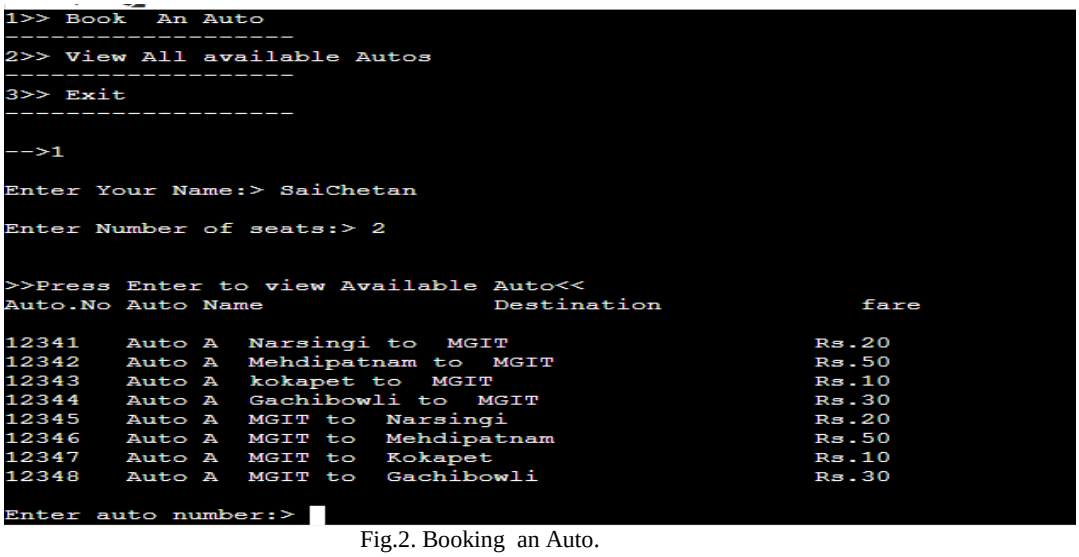

Fig.2. Booking an Auto.

To View Available Auto:-

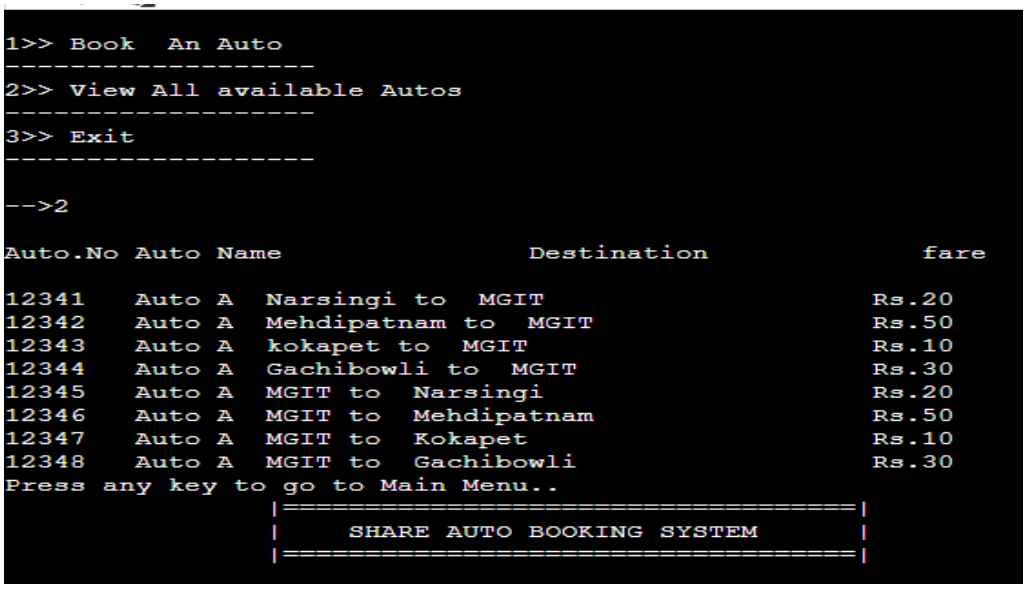

Fig.3.To view available auto.

Enter Auto Number to Book a Auto and to Print Ticket:-

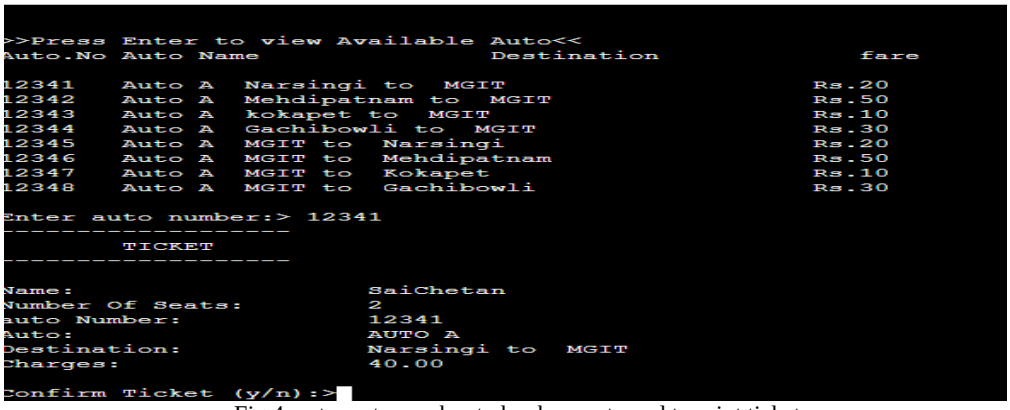

Fig.4. enter auto number to book an auto and to print ticket.

To Confirm Ticket:-

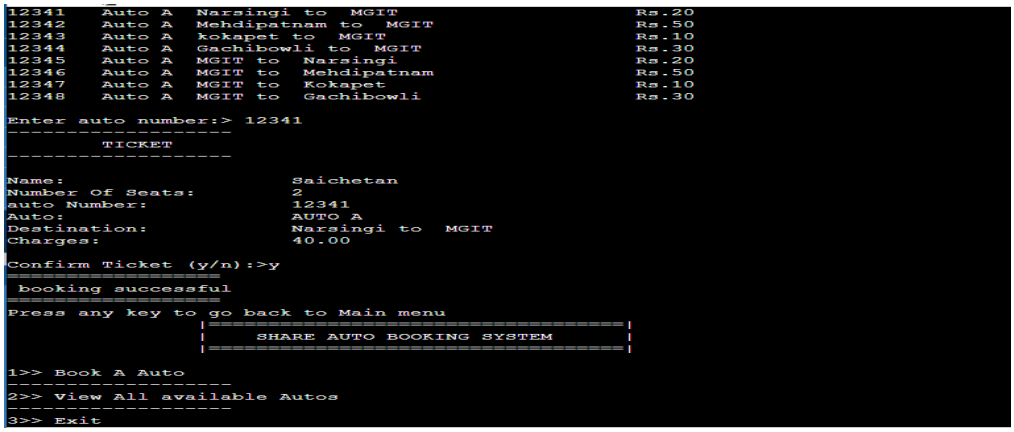

Fig.5. To Confirm Ticket.

Text File:-

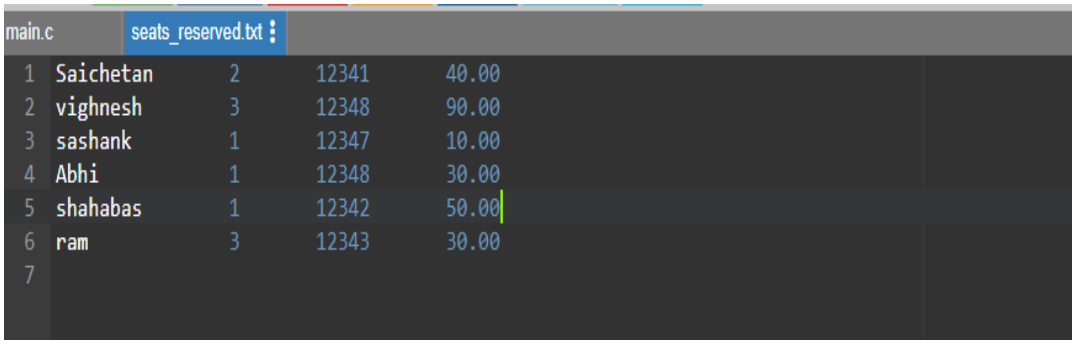

Fig.6. Text File.

5. Conclusion

Ultimately, a share auto booking system can give customers a quick, easy, and affordable way to reserve shared auto-rickshaws while also guaranteeing their safety and security. It enables users to reserve shared auto-rickshaws in advance, just like they would a taxi or ride-sharing service.

6. REFERENCES

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