

Project Report: Travel Management System

Introduction

The Travel Management System (TMS) is a comprehensive software solution developed to enhance the efficiency and effectiveness of travel-related services. It serves as a one-stop platform for managing customer information, facilitating cab services, handling hotel bookings, and generating accurate billing. The TMS is built using the C++ programming language, offering a robust and portable solution primarily designed for Windows platforms.

Platform

The Travel Management System is developed in C++, leveraging standard C++ libraries and features. Its console-based interface ensures ease of use and portability across different Windows environments. The use of C++ provides a stable foundation for future updates and modifications.

Objectives/Purpose

The core objectives of the Travel Management System are as follows:

Customer Management: Efficiently capture and store customer details, providing a streamlined approach for both customer and administrative purposes.

Cab Services: Simplify the process of cab booking by offering options for standard and luxury cabs, along with transparent cost calculations.

Hotel Bookings: Collaborate with various hotels to provide users with diverse options, allowing them to choose packages tailored to their preferences.

Billing: Generate clear and detailed bills for customers, encompassing both cab and hotel costs.

User Interface: Develop an intuitive and interactive command-line interface for users to navigate through the system seamlessly.

Features

Customer Management

Data Capture: Collect and store essential customer information, including ID, name, age, mobile number, address, and gender.

History Display: Provide a convenient way to access details of old customers.

Cab Services

Cab Options: Present users with options to rent both standard and luxury cabs.

Cost Calculation: Dynamically calculate and display the cost based on the selected cab type and distance.

Hotel Bookings

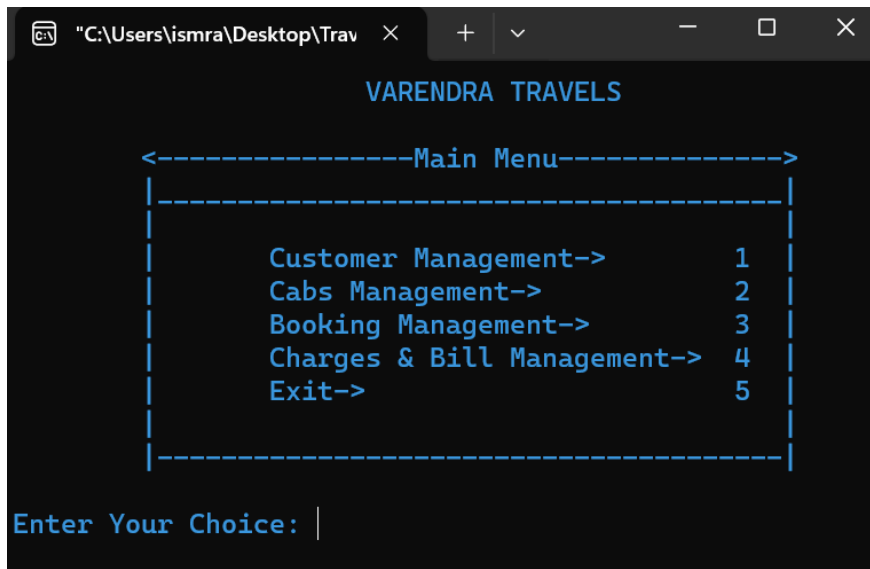
Hotel Collaboration: Partner with multiple hotels to offer a variety of choices.

Package Selection: Allow users to select from different hotel packages with associated costs.

Billing

Receipt Generation: Create detailed receipts for customers, outlining individual charges for hotel and cab services.

Record Keeping: Store generated receipts in a file for future reference.



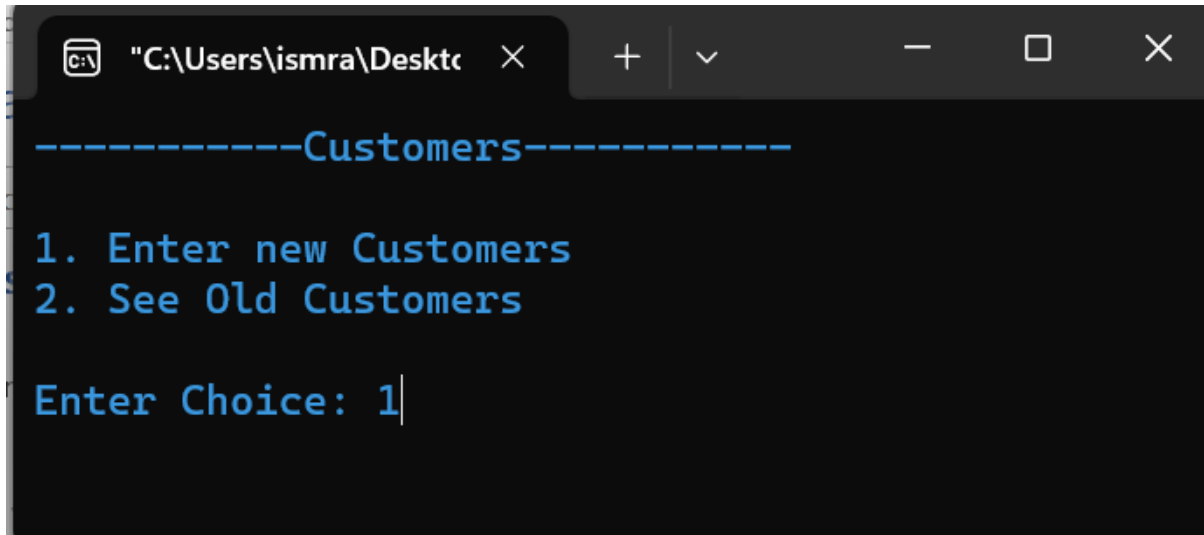
```
"C:\Users\ismra\Desktop\Trav" X + v - □ X
VARENDRA TRAVELS
<-----Main Menu----->
|
| Customer Management->      1
| Cabs Management->         2
| Booking Management->      3
| Charges & Bill Management-> 4
| Exit->                     5
|
|
Enter Your Choice: |
```

Output

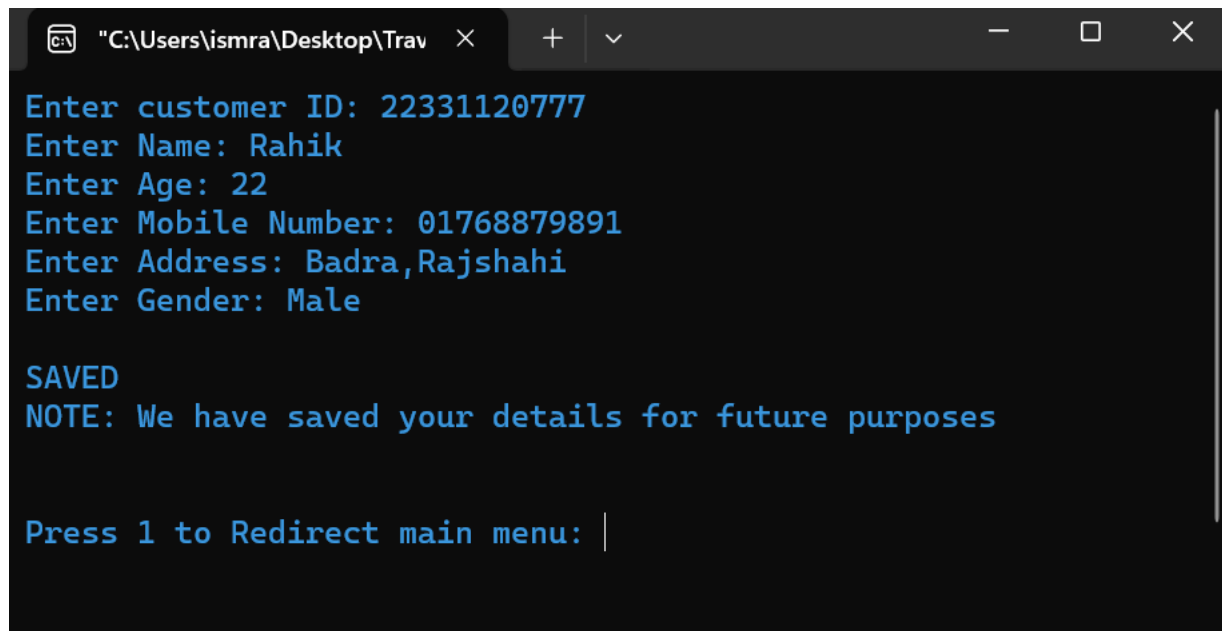
The Travel Management System delivers the following outputs:

Customer Details: Safely stored in a file for future reference.

Saving new customer Details:



```
"C:\Users\ismra\Desktop\Trav" X + v - □ X
-----Customers-----
1. Enter new Customers
2. See Old Customers
Enter Choice: 1|
```



```
"C:\Users\ismra\Desktop\Trav" X + v - □ X
Enter customer ID: 22331120777
Enter Name: Rahik
Enter Age: 22
Enter Mobile Number: 01768879891
Enter Address: Badra,Rajshahi
Enter Gender: Male

SAVED
NOTE: We have saved your details for future purposes

Press 1 to Redirect main menu: |
```

See old Customer details:

```
"C:\Users\ismra\Desktop" X + v - □ X
-----Customers-----
1. Enter new Customers
2. See Old Customers
Enter Choice: 2|
```

```
"C:\Users\ismra\Desktop" X + v - □ X
Name: Rahik
Age: 22
Mobile Number: 1768879891
Address: Badra,Rajshahi
Gender: Male
Press 1 to Redirect main menu: |
```

Cab Booking: Transparent cost calculation and an option to proceed with cab hire.

```
"C:\Users\ismra\Desktop\Trav" X + v - □ X

VARENDRA TRAVELS

<-----Main Menu----->
|
| Customer Management->      1
| Cabs Management->         2
| Booking Management->      3
| Charges & Bill Management-> 4
| Exit->                     5
|
|-----|

Enter Your Choice: 2
```

```
"C:\Users\ismra\Desktop\Trav" X + v - □ X

We collaborated with fastest, safest and smartest cab service around the city
.....ABC Cabs.....

1. Rent a standard cab - Tk.20 for 1KM
2. Rent a luxury cab - Tk.40 per 1KM

To calculate the cost for your journey:
Enter which kind of cabs you need:
1
Enter kilometers you want to travel: 40

Your tour cost: 800Taka for a Standard Cab
Press 1 to hire this cab: orPress 2 to select another cab: 1
```

```
"C:\Users\ismra\Desktop\Tri" X + v - □ X

You successfully hired a Standard cab

Goto Menu and take your receipt

Press 1 to Redirect to Main menu: |
```

Hotel Booking: A selection of hotels and packages, each with associated costs.

```
"C:\Users\ismra\Desktop\Trav  X + v - □ X
<-----Main Menu----->
|
| Customer Management->      1
| Cabs Management->         2
| Booking Management->      3
| Charges & Bill Management-> 4
| Exit->                     5
|
|-----|
Enter Your Choice: 3|
```

```
"C:\Users\ismra\Desktop\Trav  X + v - □ X
-->Book a Luxury Hotel using the system <--
1.HotelGrand Riverview

2.HotelDalas

3.HotelHotel X

Currently we collaborated with the above hotels!
Press any key to back or
Enter number of the hotel you want to book: 1|
```

```
"C:\Users\ismra\Desktop\Trav" X + v - □ X
The best view of the Padma River that you can enjoy. Stay cool and get chilled in the summer sun with our unique beverages.
Packages offered by GRAND RIVERVIEW:
1. Standard Pack
    All basic facilities you need just for: Taka.5000.00
2. Premium Pack
    Enjoy Premium at Taka.10000.00
3. Luxury Pack
    Live a luxury at GRAND RIVERVIEW for only Taka.20000.00

Press another key to back or
Package number you want to book: 1

You have successfully booked Standard Pack at GRAND RIVERVIEW
Goto menu and take the receipt

Press 1 to redirect to main menu: |
```

Billing Receipt: A detailed receipt with a breakdown of charges.

```
"C:\Users\ismra\Desktop\Trav" X + v - □ X
VARENDRA TRAVELS

<-----Main Menu----->
|-----|
| Customer Management->      1 |
| Cabs Management->         2 |
| Booking Management->      3 |
| Charges & Bill Management-> 4 |
| Exit->                    5 |
|-----|

Enter Your Choice: 4|
```

```
"C:\Users\ismra\Desktop\Trav" X + v - □ X
-->Get your receipt <--
Your receipt is already printed you can get it from the file path

to display the details of your receipt in the screen press 1: or enter another key to go back to main menu
|
```

```
File Edit View [Settings Icon]

-----VARENDRA Travel Agency-----
-----Receipt-----

Customer ID: 792

Description          Total
Hotel Cost:          5000.00
Travel (Cab) Cost:      800.00

Total Charge:          5800.00

-----THANK YOU-----

Ln 1, Col 1 | 100% | Windows (CRLF) | UTF-8
```

Future Work

User Authentication: Implement secure user authentication mechanisms to restrict access and enhance system security.

Database Integration: Integrate a database system for efficient data management, retrieval, and scalability.

GUI Enhancement: Develop a user-friendly graphical interface to enhance the overall user experience.

Online Booking: Extend the system to enable customers to make bookings online for added convenience.

Conclusion

The Travel Management System serves as a robust and versatile solution for addressing the complexities of travel-related services. With features encompassing customer management, cab services, hotel bookings, and billing, the system caters to the diverse needs of both travel agencies and customers. As the foundation for a comprehensive travel management system,

further developments and enhancements can propel it towards becoming an industry-standard solution.

Submitted by,

I. S. M Rahik

ID: 223311207

3rd Semester (Section: F)