ST JOSEPH ENGINEERING COLLEGE

An Autonomous Institution

Affiliated to VTU, Belagavi

Mangaluru-575028

MINI PROJECT REPORT ON

"TRAVEL MANAGEMENT SYSTEM"

Submitted By

Jestan Dsouza **4SO21CS067**
Nishanth **4SO21CS099**

Under the guidance of

Ms Veena Kumari Crasta
Assistant Professor,
Department of CSE

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2022-2023

ST JOSEPH ENGINEERING COLLEGE

An Autonomous Institution

Vamanjoor, Mangaluru-575028

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

Certified that the project work entitled **"Travel Management System"** carried out by

Jestan	4SO21CS067
Nishanth	4SO21CS099

Bonafide students of IV semester students in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of St Joseph Engineering College during the year 2022-23. It is certified that all corrections/ suggestions indicated during Internal Evaluation have been incorporated in the report.The project report has been approved as it satisfies the academic requirements in respect of mini-project work .

Ms Veena Kumari Crasta
Project Guide

Dr Sridevi Saralaya
HOD-CSE

EXTERNAL VIVA

NAME OF THE EXAMINER **SIGNATURE**

1.

2.

Acknowledgment

The satisfaction and euphoria that accompanies the successful completion of any task would be incomplete without mentioning the people who made it possible, whose constant guidance and encouragement crowned our efforts with success.

We take this opportunity to thank those who have helped and motivated us throughout the completion of this project.

We would like to express our deep and sincere gratitude to our project guide, **Ms Veena Kumari Crasta**, Assistant Professor, Department of Computer Science and Engineering, for her constant guidance and support, without which this project wouldn't have been completed successfully.

We owe our great debt to **Dr Sridevi Saralaya**, Head of the Department of Computer Science and Engineering, for her support and encouragement during the course of development of this project.

We extend our gratitude to the entire faculty and the staff of the Department of Computer Science and Engineering, SJEC, for their advice, kind co-operation and assistance throughout the academic year.

Lastly, we would like to express our heartfelt appreciation towards our classmates and seniors for their guidance and suggestions.

Abstract

To get the organized management for the travel plan through various cities connected through network and arrangement can be made regarding to this.

Helps the tourists from different places to schedule their trip according to the allotted cities.To get the organized management for the travel plan through various cities connected through network and arrangement can be made regarding to this.
Helps the tourists from different places to schedule their trip according to the allotted cities.

The Travel Management System (TMS) is a comprehensive software solution designed to streamline and enhance the efficiency of travel-related processes for both individuals and organizations. In today's fast-paced world, managing travel arrangements can be a complex and time-consuming task. The TMS offers a user-friendly and automated approach to address these challenges.

The core objective of the Travel Management System is to simplify the entire travel lifecycle, from trip planning and booking to expense tracking and reporting. It leverages cutting-edge technology to provide users with a seamless and customizable experience, whether they are planning a single business trip or organizing a group vacation.

Here Travel Management System represents a pivotal shift in how individuals and organizations manage their travel needs. By leveraging automation, data analytics, and user-friendly interfaces, it empowers users to make informed travel decisions, reduce costs, and enhance overall travel experiences. Whether used by businesses, travel agencies, or individuals, the TMS offers a holistic solution for efficient and stress-free travel to the locations you plan.

Table of Contents

List of Figures

List of Tables

Chapter 1

Introduction

The Travel Management System is crucial for scheduling the travel easier. It's all about making it simple for people to book packages and ensuring a smooth journey. Unlike the old way of visiting new places, this system deals with planning their vacation, schedules, and what they like, which can be tricky but also offer chances to make it better. This research is about understanding how this system works and finding ways to make it work even better while dealing with the challenges of managing a huge and complex travel booking network.

1.1 Problem Definition

The current travel system faces operational inefficiencies and customer service limitations and also there is no centralised platform available. These challenges encompass issues in planning on their daily schedule with the plans they kept for weekend and on holidays, and also due to insufficient knowledge on some platform's like this, and inconvenience in their passenger boarding processes. This project's objective is to tackle these problems by developing and introducing a personalized travel booking system and thereby spending time in the place they choose. Here our project is specifically designed on that with the ultimate aim of improving operational efficiency and elevating travelers satisfaction.

1.2 Scope and Importance

The significance and scope of this project are centered around transforming the travel management system, which plays a pivotal role in modern travel booking plans. Unlike traditional prior to journey taking suggestions from some people who were already visited there and then making booking tickets, this system offers a comprehensive solution for tourists to schedule , select preferences, and navigate a complex network of routes and schedules. By optimizing this system, we aim to simplify the travel booking process, reduce booking complexities, minimize travel disruptions, and ultimately elevate passenger satisfaction. This project is crucial in enhancing the overall efficiency and effectiveness,hence making it an essential improvement to the existing travel management infrastructural ideas.

Chapter 2

Software Requirement Specification

2.1 Functional Requirement Specification

Functional Requirement Specification

- Details of Operations Conducted in Every Screen:

  The system should allow passengers to search for popular places htey desire to go and making schedules. Users should be able to book package and cancel packages for various classes and categories. Travelers should be able to select preferences such as package type, their comfort preferences, and meal options. The system should enable users to view the packages they have booked. Passengers should have the ability to check status and scheduled information.

- Data Handling Logic:

  The system should validate traveler information, including name, age, and identity details. It should ensure real-time updates on availability of diiferent packages. Handling of payment information, including payment gateway integration and confirmation. Managing and updating information on destinations they selected schedules, customers allocations, and maintaining their records.

- System Reports and Outputs:

  Generation of booked packages and booking confirmations. Reporting number of occupancy rates. Passenger and their travel performance analytics.

- Utility provided: The traveller can access the necessary components like calculators and notepad for his convenience with regard to note something or to calculate.

- Workflow Information:

  Step-by-step sequences for package booking and hotel booking, including payment processing. Workflow for boarding, including ticket verification and seat allocation. Processes for handling schedule changes, cancellations, and refunds. Interaction points with station staff and onboard services.

- User Access Control:

  Define user roles such as passengers, managing staff, and administrators. Specify access permissions, including who can create, modify, or delete passenger records and bookings. Implement secure login mechanisms to safeguard passenger and payment information.

- Regulatory and Compliance Needs:

  Ensure compliance with travel safety regulations and standards. Adhere to data protection laws, safeguarding passenger information. Implement audit trails for monitoring and compliance reporting. Compliance with accessibility standards for travelers with special needs as required.

- Incorporating these functional requirements into the travel managing system's design and development process ensures it meets operational needs, enhances traveler experience, and complies with regulatory obligations. This comprehensive document serves as a guiding reference throughout the project, aligning functionalities and features with the project's objectives and user expectations while ensuring data security and compliance.

2.2 Software Requirement Specification

Software Requirement Specification

- **Language** : JAVA
- **Database used**: MySQL.
- **Design used**: Java interfaces building classes like AWT,Swing,etc.
- **Operating System**: Window 11.
- **Software used**: Eclipse IDE, MySQL server.

2.3 Hardware Requirement Specification

- **Installed Memory** : 1GB or Higher
- **Processor**: 1GHz or Higher.
- **Hard Disk Space**: GB availability .
- **Display**: Standard outpout display.

Chapter 3

System Design

3.1 ER Diagram

Figure:?? Shows the ER diagram of travel management database.

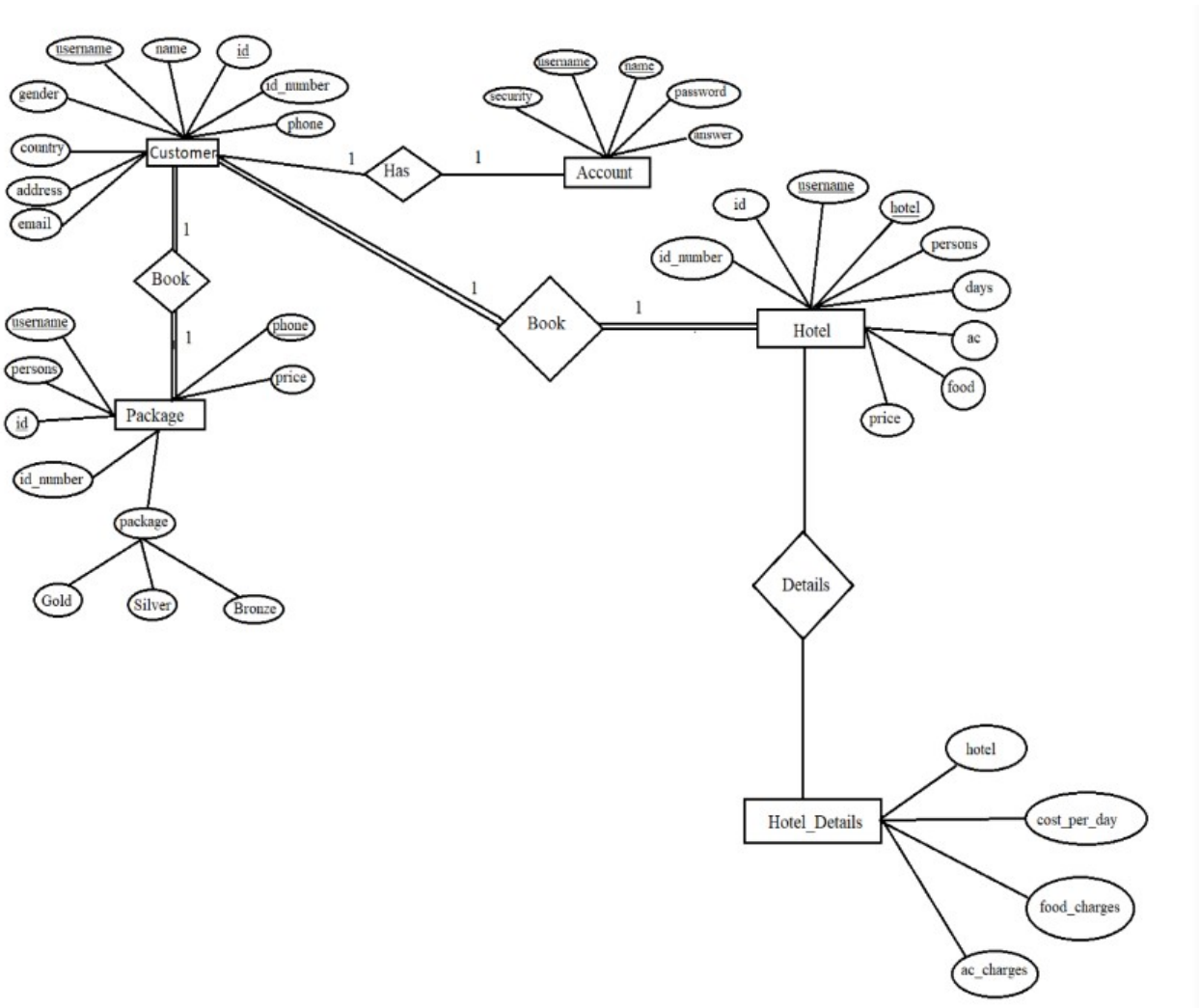

Figure 3.1: ER diagram

3.2 Schema Diagram

Figure:3.2 Shows the Schema Diagram of railway reservation Database.

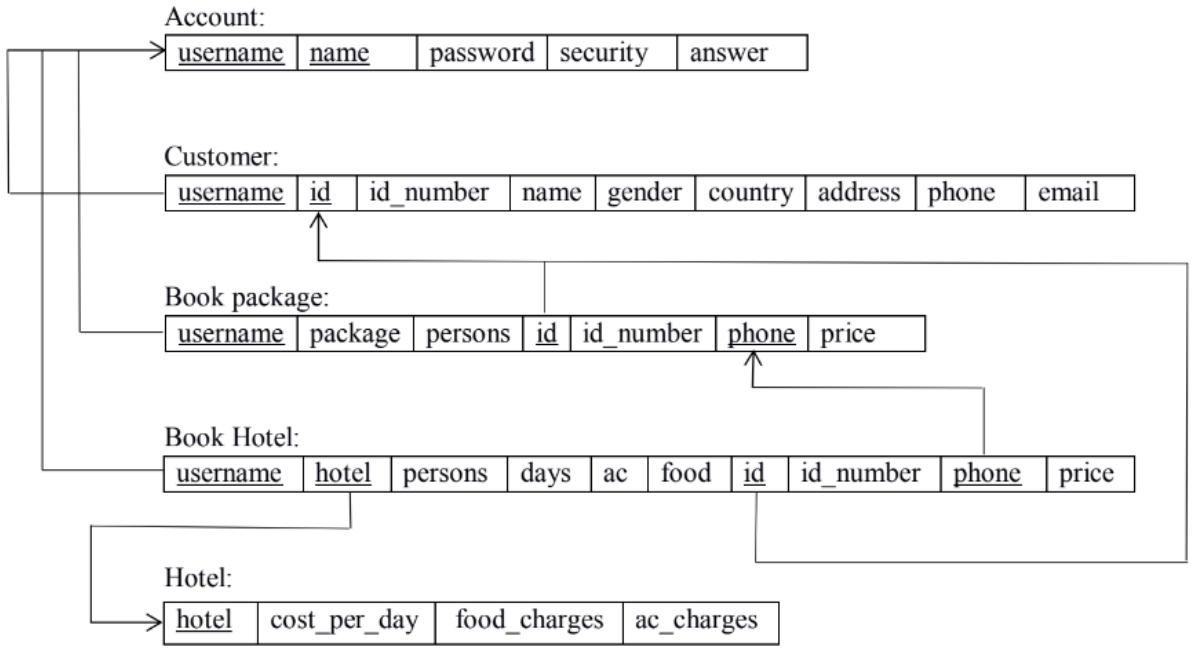

Figure 3.2: Schema diagram

3.3 Table description

Attributes	Datatype	Constraints	Description
user-id	VARCHAR	PRIMARY KEY	ID of user
user name	VARCHAR	NOT NULL	Name of the user
password	VARCHAR	NOT NULL	Password of the user
security	VARCHAR	NOT NULL	Security question of the user
answer	VARCHAR	NOT NULL	Answer for security of the user

Table 3.1: Login table

Attributes	Datatype	Constraints	Description
user-id	VARCHAR	NOT NULL	ID of the particular user
ID proof	VARCHAR	NOT NULL	Id Proof given
ID proof no	VARCHAR	NOT NULL	ID Proof Number
username	VARCHAR	NOT NULL	Fullname of User
gender	VARCHAR	NOT NULL	Gender of the User
country	VARCHART	NOT NULL	Country belong to
Address	IVARCHAR	NOT NULL	Address of Traveller
phone	VARCHAR	NOT NULL	Phone No of Traveller
email	VARCHAR	NOT NULL	Email ID of the Traveller

Table 3.2: Customer Details table

Attributes	Datatype	Constraints	Description
username	VARCHAR	PRIMARY KEY	ID of the customer
package	VARCHAR	NOT NULL	Package Booked by Customer
no persons	INT	NOT NULL	Number of Traveller
ID proof	VARCHAR	NOT NULL	Id Proof given
ID proof no	VARCHAR	NOT NULL	ID Proof Number
phone	VARCHAR	NOT NULL	Phone No of Traveller
email	VARCHAR	NOT NULL	Email ID of the Traveller

Table 3.3: Package Booked table

Attributes	Datatype	Constraints	Description
hotel name	VARCHAR	FOREIGN KEY	Name of the Hotel
Location	VARCHAR	FOREIGN KEY	Location of the Hotel
cost per day	VARCHAR	NOT NULL	Allocation charge of the Hotel
food charges	VARCHAR	NOT NULL	Food Charge/day on the Hotel
AC charge	VARCHAR	NOT NULL	AC Charge/day on the Hotel

Table 3.4: Hotel Available table

Attributes	Datatype	Constraints	Description
username	VARCHAR	PRIMARY KEY	ID of the Traveller
hotel name	VARCHAR	FOREIGN KEY	Name of the Hotel Booked
no persons	INT	NOT NULL	Number of travellers in the group
days	INT	NOT NULL	Number of days Scheduled
AC charge	VARCHAR	NOT NULL	AC taken by Traveller
food	VARCHAR	NOT NULL	Meals taken by Traveller
ID proof	VARCHAR	NOT NULL	ID proof given
ID proof no	VARCHAR	NOT NULL	ID Number given by Traveller
price	INT	NOT NULL	Price of the Hotel Booked

Table 3.5: Booked Hotel table

Chapter 4

Screenshots

Figure:4.1 Shows the screenshot of Login page

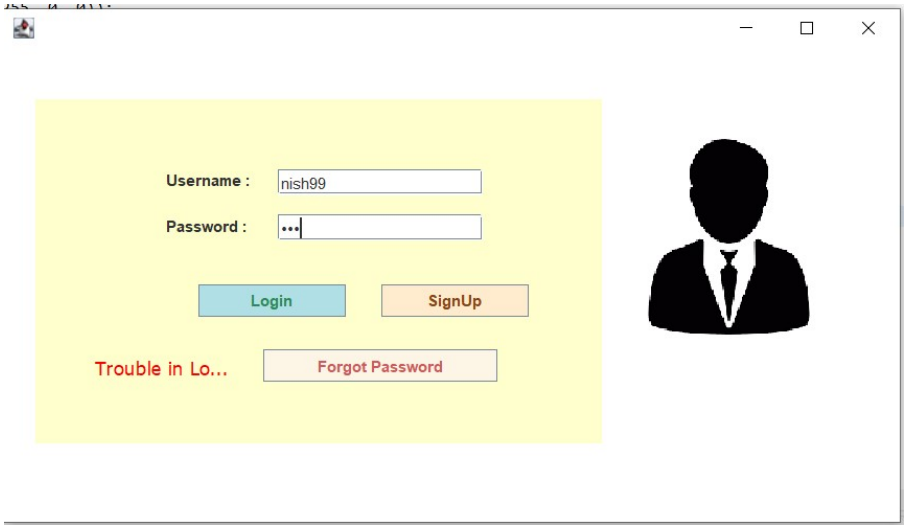

Figure 4.1: User Login Page

Figure:4.2 Shows the screenshot of Sign-up page

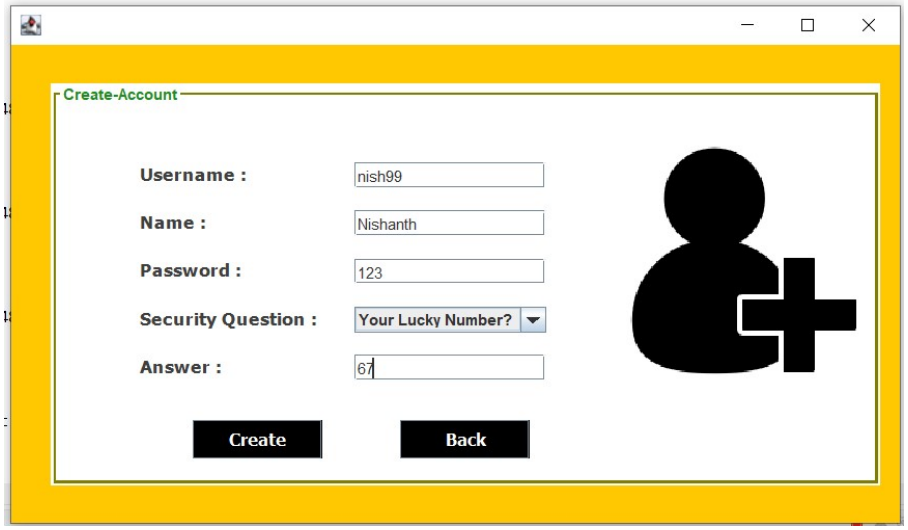

Figure 4.2: User Sign-up Page

Figure:4.3 Shows the screenshot of adding customer details page

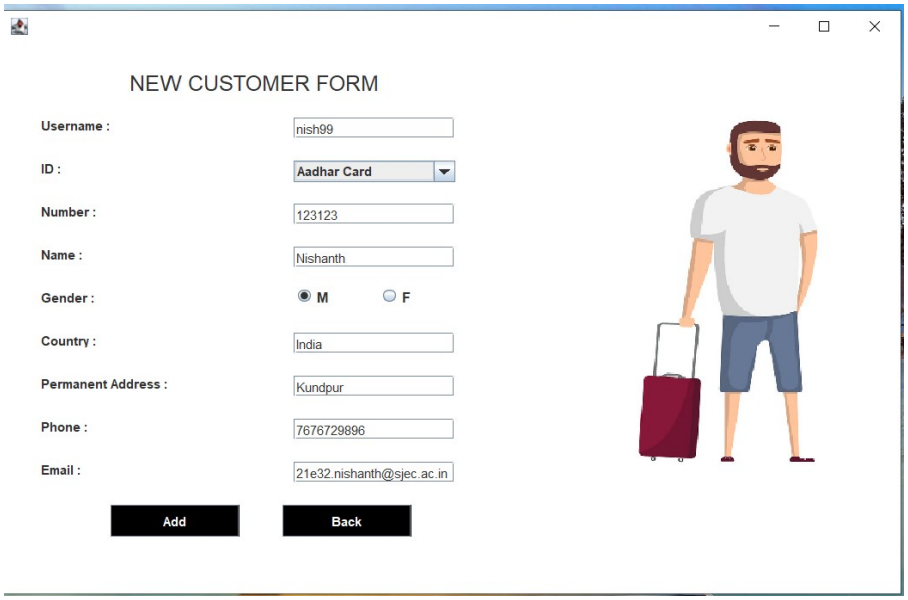

Figure 4.3: Adding Details

Figure:4.4 Shows the screenshot of Updating Customer Details page

Figure 4.4: Update Details

Figure:4.5 Shows the screenshot of Check Package Page

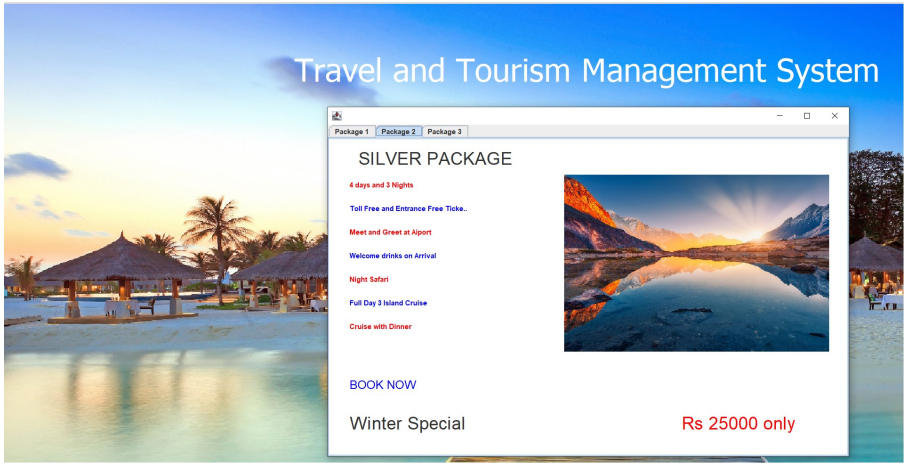

Figure 4.5: Check Package

Figure:4.6 Shows the screenshot of Book Package Page

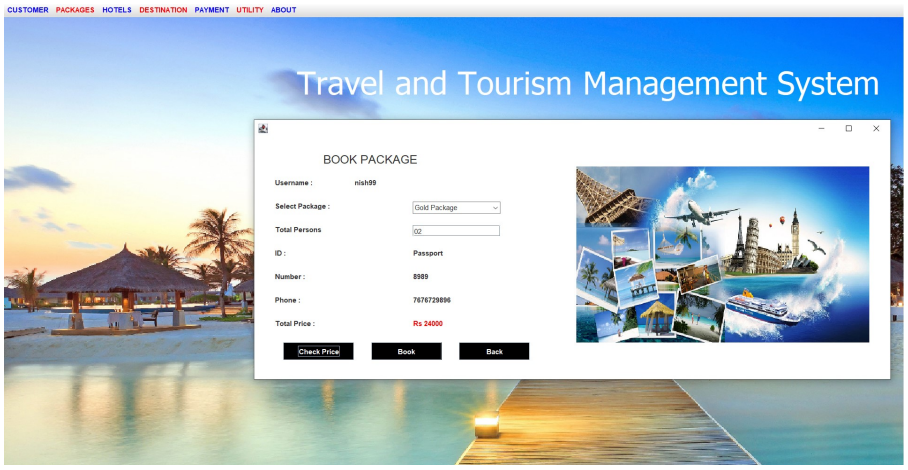

Figure 4.6: Book Package

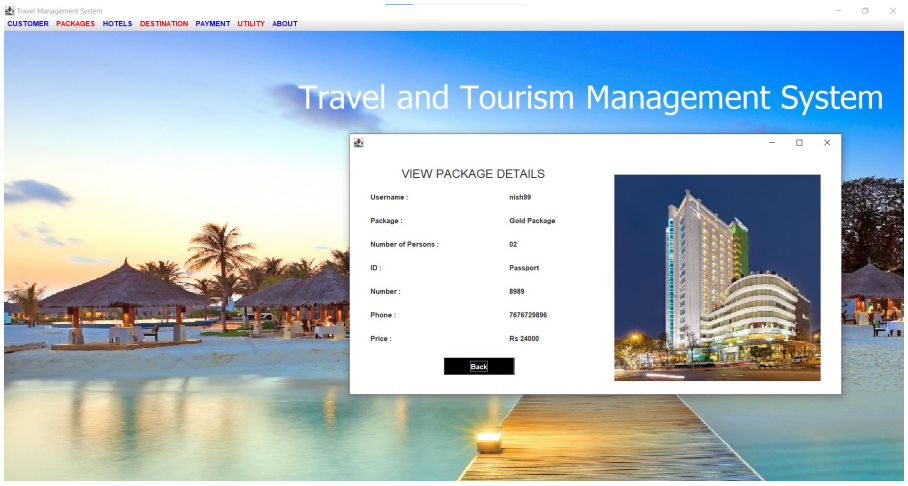

Figure 4.7: Package Detail

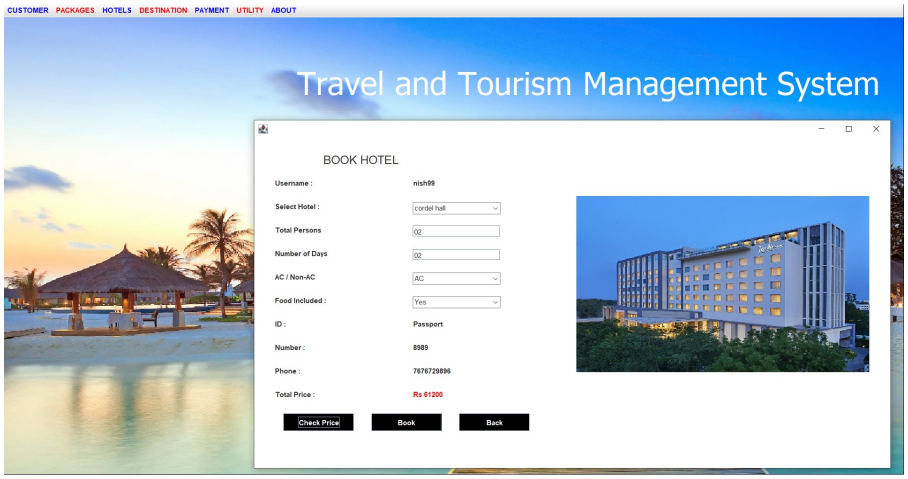

Figure 4.8: Book Hotel

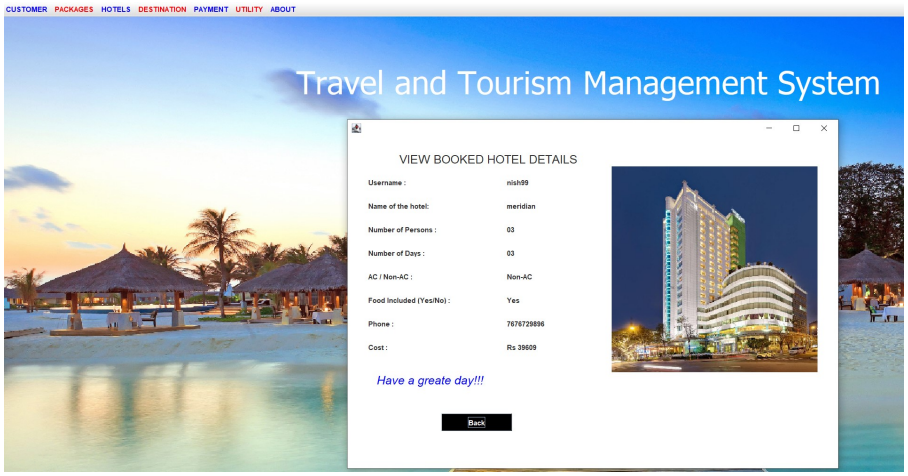

Figure 4.9: View Booked Hotel

Chapter 5

Conclusion and Future Scope

Conclusion

- The introduction of the enhanced Travel Management system represents a significant stride towards improving the efficiency and effectiveness of travel services. By addressing operational inefficiencies, simplifying packing booking processes, and minimizing travel disruptions, we have laid the groundwork for a more seamless and passenger-centric approach to travel.
- Through the implementation of this system, we anticipate a reduction in traveller inconvenience and a noticeable enhancement in overall traveller satisfaction. The potential benefits extend well beyond the immediate scope of this project, as an improved Travel Management system can positively impact not only traveller but also the broader transportation industry and regional economies.
- In conclusion, this project underscores the importance of innovation and modernization in the field of travel management. By continually seeking ways to enhance the travel scheduling system, we can better adapt to evolving traveller needs and provide superior travel services, ultimately contributing to the growth and development of sustainable and efficient transportation networks.

Future Scope

- Smart Travel Package Booking and Contactless Payments: Implementing advanced ticketing solutions with contactless payment options, mobile ticketing, and QR code technology to enhance the convenience and safety of ticket purchase and validation.
- Predictive Maintenance: Leveraging data analytics and IoT (Internet of Things) sensors to predict and prevent equipment failures, reducing service disruptions and improving the overall reliability of travel schedules..
- High-Speed Transportion Expansion: Exploring opportunities for high-speed location networks and flight services to connect major cities, reducing travel times and increasing the efficiency of long-distance transportation.
- Digital Signage and Passenger Information Systems: Enhancing passenger experience through digital signage, real-time updates on train schedules, platform changes, and interactive maps for seamless navigation within stations..
- Time Efficiency of the passenger can be minimised as the traveller can find the that he what to visit and book the package as per his comfort

Bibliography

[1] M.Ziemer A .J.Crouch (2013). "Travel and Tourism Management: A Case Study Analysis." International Journal of Tourism Technology , 45(4), 121-111.

[2] Gregory.R.Wood, Linda VolonineEfraim turbane (2019)."Information Technology for Management:Digital Service for Insight,Action,Sustainable Performance." International Journal of Tourism Technology, 17(4), 211-211.

[3] Ulrike Gretzel,Peter O'Conner(2018). "Enterprises System for Management" International Travel Management Engineering, 13(1), 35-55.

[4] Mathias, Chaudhary, P. (2018). "Optimizing Travel Scheduling and Operations: A Data-Driven Approach." Journal of Tour Planning and Schedule Management, 10(2), 70-99.