A PROJECT REPORT

ON

Travel and Tourism Management System

SAVITRIBAI PHULE PUNE UNIVERSITY

In Partial Fulfillment of

MASTERS OF COMPUTER APPLICATION

By

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This is to certify that the project report entitled **Travel and Tourism Management System** submitted to the Department of MCA, **Sinhgad Institute of Business Administration and Research** in partial fulfillment of the requirement for the award of the degree of MASTER OF COMPUTER APPLICATIONS (Affiliated to Savitribai Phule Pune University), is an original work carried out by

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The matter embodied in this project is genuine work done by the student and has not been submitted whether to this Organization or to any other University/Organization for the fulfillment of the requirement of any course of study.

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Signature of Director-MCA :

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This is to certify that the Project Report entitled **Travel and Tourism Management System s**ubmitted to the Department of MCA, **Sinhgad Institute of Business Administration and Research** in partial fulfillment of the requirement for the award of the Degree of MASTER OF COMPUTER APPLICATIONS (**Affiliated to Savitribai Phule Pune University**) is an original work carried out by

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The matter embodied in this project is a genuine work done by the student and has been certified by the following internal and external examiners deputed by Savitribai Phule Pune University.

Internal Examiner

ACKNOWLEDGEMENT

We find great pleasure in expressing our deep sense of attitude towards all those who have made this possible for use to complete this project with success.

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Student Name **Student Sign**

Pradhan Rahul

Manishankar Dey

Introduction

1.1 Abstract

The Tourism Management System is designed to simplify and automate the management of travel-related activities, including customer details, hotel bookings, cancellations, and tourist destinations. This system provides a centralized platform for administrators to manage user information, hotels, and tour packages efficiently. It eliminates manual work, reduces errors, and ensures accurate, up-to-date information for users.

Tourists can register, book hotels and packages, and manage their reservations with ease. The system also allows for cancellations and sends booking confirmation notifications to users. By streamlining travel processes, the system enhances user convenience and saves time for both customers and administrators. Built with a focus on simplicity and accessibility, it ensures a seamless experience for all users while maintaining secure and centralized data management.

1.2 Existing System and Need for System

1. Existing System

The current travel and tourism industry primarily relies on traditional methods for booking and managing travel-related services. These include:Manual Booking Systems: Customers often have to visit travel agencies physically or communicate via phone/email for reservationsLack of Centralized Information: Information on hotels, transport, and tourist attractions is scattered across different platforms, making it difficult for travelers to make informed decisions.

Limited Accessibility: Many small-scale tourism operators do not have an online presence, limiting their reach to potential customers.

2. Need for the Proposed System

A dedicated Travel and Tourism Management System is essential to overcome these challenges. The need for this system arises due toAutomation & Efficiency: The system will automate travel bookings, ticketing, and itinerary management, reducing manual effort.

Centralized Information Hub: Users can access details on destinations, hotels, transportation, and attractions in one place.

1.3 Scope of System

Scope of the Tourism Management System

1. User Management

2. Hotel & Accommodation Management

3. Tour Package Management

4. Booking & Reservation System

1.4 Operating Environment - Hardware and Software

The system will operate in the following environment:

Hardware Requirements:

- Devices used by end-users (PCs, laptops)

Software Requirements:

Front End:
Java (Swing & AWT)
Backend:
Advanced Java , Mysql

1.5 Brief Description of Technology Used:

1.5.1 Operating systems used (Windows or Unix):

- Development: The development environment can be set up on both Windows with the majority of development happening in a cross-platform environment to ensure compatibility.
- Deployment: The system will be deployed on Heroku, which is a cloud platform that can be accessed via web browsers.

1.5.2 RDBMS/No SQL used to build database (MySQL/Oracle, Teradata, etc.):

- Relational Database Management System (RDBMS): The system will use Mysql, a powerful open-source relational database, to store user data, transactions, and budget information. Mysql is chosen for its reliability, scalability.

2 Proposed System

2.1 Study of Similar Systems

The Travel and Tourism Management System aims to overcome the limitations of the existing system by providing an automated, efficient, and user-friendly platform for travel planning and booking. The proposed system will have the following key features:

Features of the Proposed System

- **User Registration & Authentication**
- Users can sign up and log in securely using credentials.
- Admins and travel agencies will have separate access to manage bookings and services.

Search & Booking System

- Users can search for destinations, hotels, flights, and tourism packages.
- The system allows direct booking with real-time availability.

Itinerary Management

- Users can customize and plan their entire trip, including hotel stays, transport, and sightseeing.
- Itinerary suggestions based on user preferences and past travel history**.**

Online Payment Integration

- Secure payment gateways (credit/debit cards, UPI, wallets, etc.).

Tour Package Management

- Travel agencies can create, modify, and delete tour packages.
- Customers can compare packages based on price, ratings, and reviews.

2.2 Feasibility Study

1 Technical Feasibility

The system will be developed using Java for the desktop application, with a MySQL database for data managemen Integration of online payment gateways and APIs (e.g., Google Maps for location-based services) is technically possible.

2 Economic Feasibility

The initial development cost includes software tools, hosting, and payment gateway integration.

Reduced operational costs for travel agencies by minimizing manual efforts and paperwork.

3 Operational Feasibility

The system is designed to be user-friendly, requiring minimal training for users and travel agencies.

It simplifies the travel booking process, making it faster and more reliable.

2.3 Objectives of Proposed System

The Travel and Tourism Management System is designed to enhance the travel booking experience by providing an efficient, user-friendly, and automated platform. The key objectives of the proposed system are:

1. Automate the Booking Process

2. Centralized Information Management

3. Improve User Experience

4. Enable Secure Online Transactions

5. Provide Real-Time Availability and Updates

2.4 Users of System

1. Tourists (End Users)
2. Travel Agents / Tour Operators

3.Analysis and Design

3.1System Requirements (Functional and Non-Functional requirements)

1. Functional Requirements

These are the core functionalities that the system must provide.

User Management

Tourists can register, log in, and update their profiles.
Admins can manage users, including adding, modifying, and removing accounts.

Hotel & Accommodation Management

Users can search, filter, and view available hotels.
Admins can add, update, and remove hotel listings.
The system should display hotel details, including pricing, location, and availability.

Tour Package Management

Users can browse, select, and book tour packages based on destination, price, and availability.
Admins can add, modify, and remove tour packages.

Booking & Reservation System

Users can book hotels and tour packages through the platform.
The system generates booking confirmation and sends notifications via email/SMS.
Users can view and manage their bookings.

2. Non-Functional Requirements

These define the system's quality attributes.

Performance Requirements

The system should handle multiple users simultaneously without lag.
Response time for search and booking operations should be < 3 seconds.

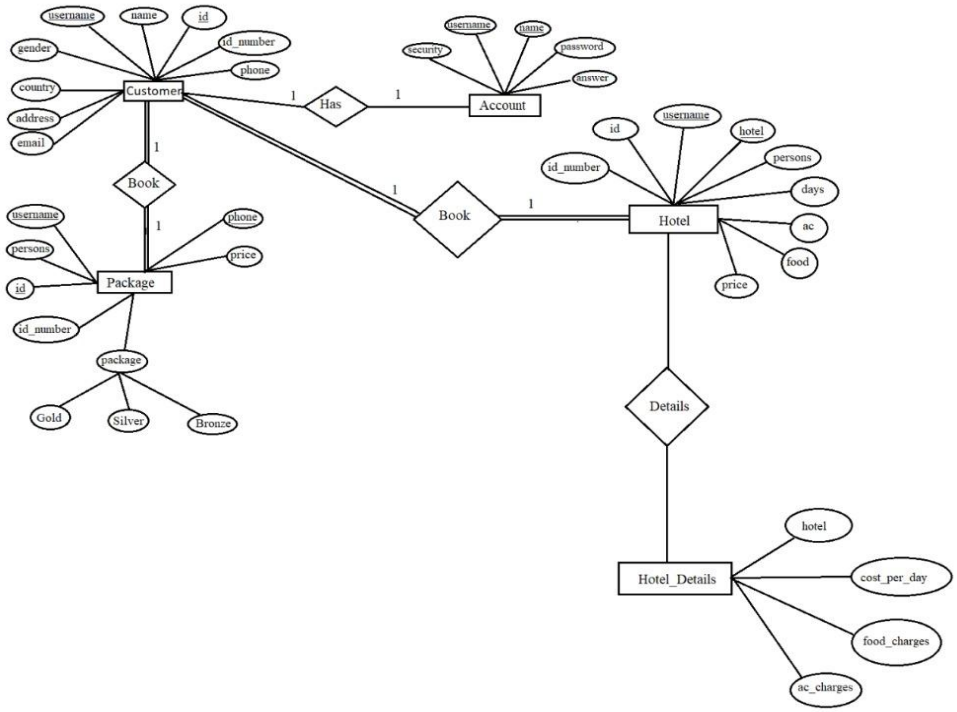
Security Requirements

User data must be encrypted and securely stored.
Implement role-based access control (RBAC) to restrict unauthorized actions.
Prevent SQL injection, cross-site scripting (XSS), and CSRF attacks.

Usability Requirements

The system should have a simple, intuitive, and user-friendly interface.
It must be responsive and work seamlessly on desktops, tablets, and smartphones.

3.2 Entity Relationship Diagram (ERD)



3.3 Table Structure

ACCOUNT:

Field	Type	Null	Key	Default	Extra
username	varchar(30)	NO	PRI	NULL	

Name	varchar(30)	NO	PRI	NULL	
password	varchar(30)	NO		NULL	
security	varchar(30)	NO		NULL	
Answer	varchar(30)	NO		NULL	

CUSTOMER:

Field	**Type**	**Null**	**Key**	**Default**	**Extra**
username	varchar(30)	NO	MUL	NULL	
id	varchar(30)	NO	PRI	NULL	
id_number	varchar(30)	NO		NULL	
name	varchar(30)	NO		NULL	
gender	varchar(30)	NO		NULL	
country	varchar(30)	NO		NULL	
address	varchar(30)	NO		NULL	
phone	varchar(30)	NO		NULL	
email	varchar(30)	NO		NULL	

BOOK PACKAGE:

Field	Type	Null	Key	Default	Extra
username	varchar(30)	NO	MUL	NULL	
package	varchar(30)	NO		NULL	
persons	int(10)	NO		NULL	

id	varchar(30)	NO	MUL	NULL	
id_number	varchar(30)	NO		NULL	
phone	varchar(30)	NO	PRI	NULL	
price	varchar(30)	NO		NULL	

TABLE 4.1.4: BOOK HOTEL:

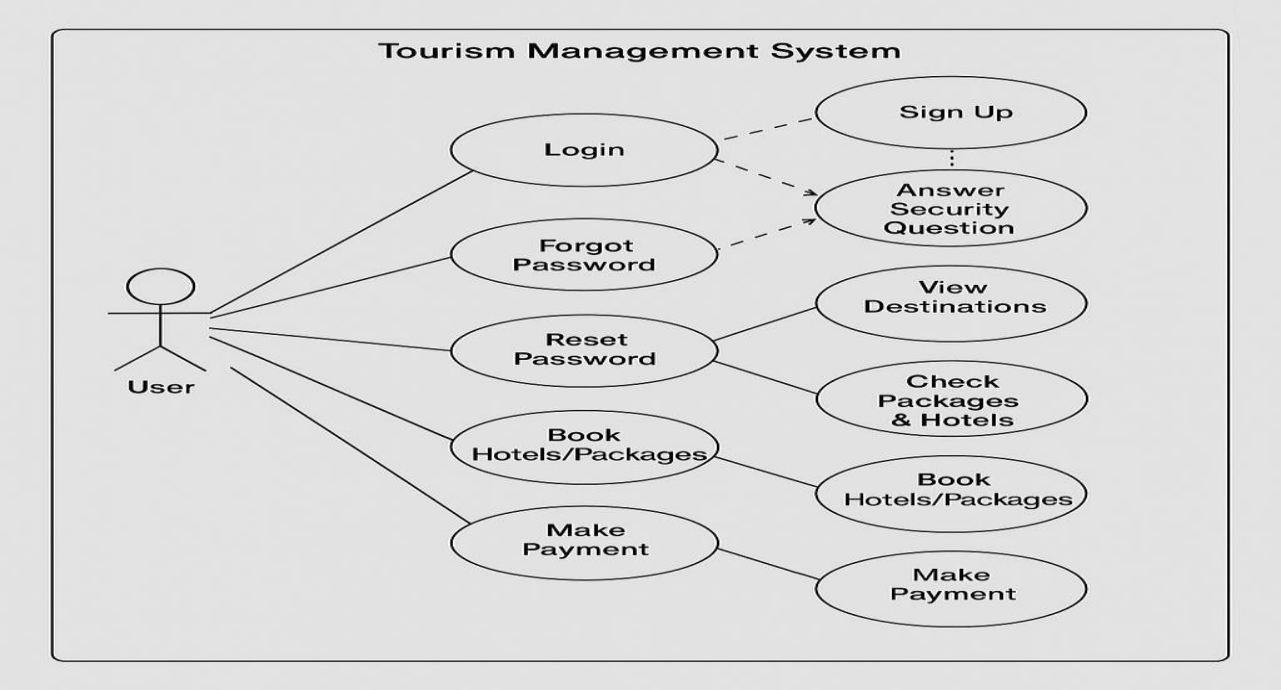
Field	Type	Null	Key	Default	Extra
username	varchar(30)	NO	MUL	NULL	
hotel	varchar(30)	NO	MUL	NULL	
persons	int(10)	NO		NULL	
days	int(10)	NO		NULL	
Ac	varchar(30)	NO		NULL	
food	varchar(30)	NO		NULL	
Id	varchar(30)	NO	MUL	NULL	
id_number	varchar(30)	NO		NULL	
phone	varchar(30)	NO	MUL	NULL	
price	varchar(30)	NO		NULL	

HOTEL:

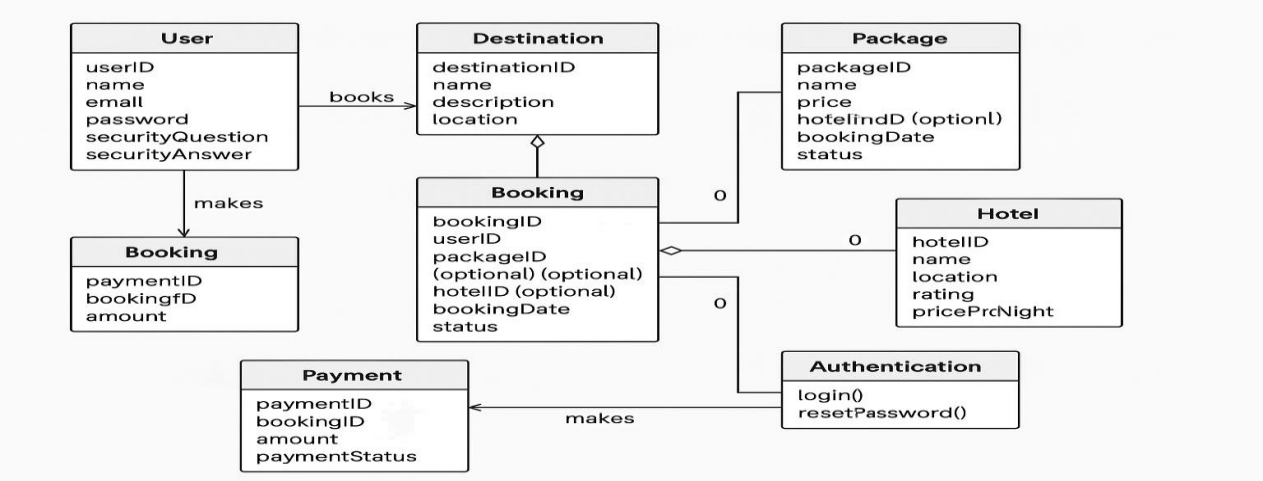
Field	Type	Null	Key	Default	Extra

hotel	varchar(30)	NO	PRI	NULL	
cost_per_day	int(10)	NO		NULL	
food_charges	int(10)	NO		NULL	
ac_charges	Int(10)	NO		NULL	

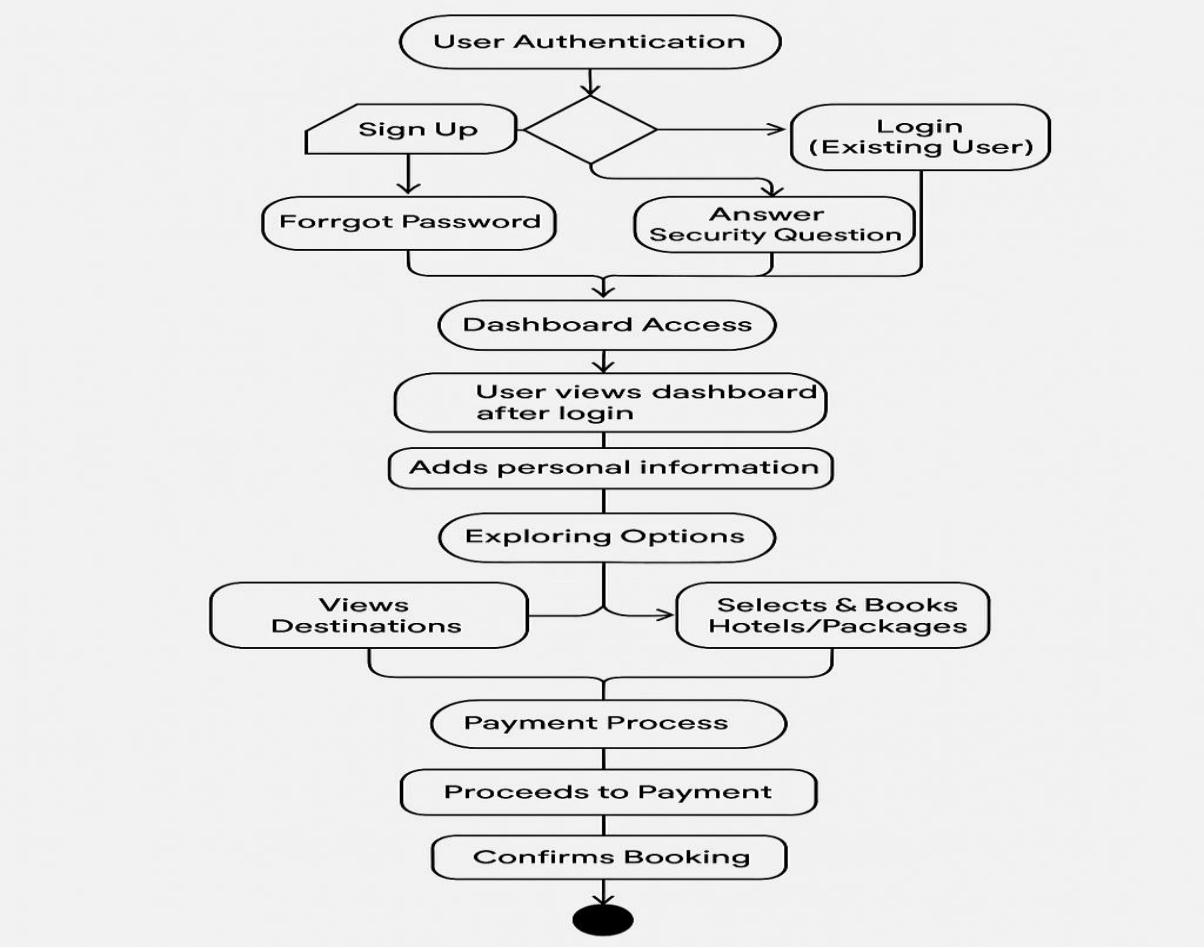
3.4 Use Case Diagrams



3.5 Class Diagram

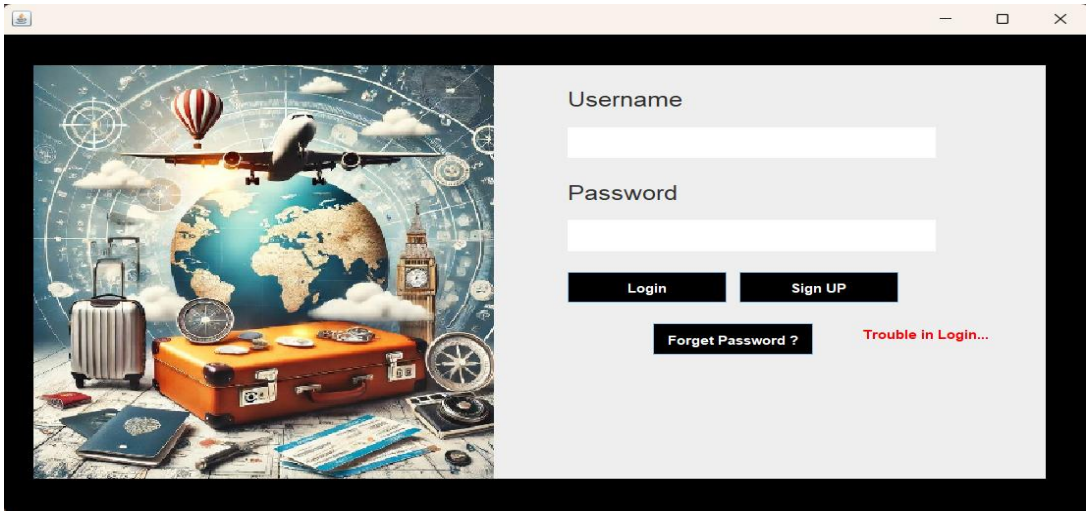


3.6 Activity Diagram



3.7 Sample Input and Output Screens

Input:



Output:

4.coding

Payment code:

```
package travel.management;

import javax.swing.*;

import java.awt.*;

import java.awt.event.*;

public class Payment extends JFrame implements ActionListener {

    JButton pay,back;

    Payment(){

        setBounds(500,200,800,600);

        setLayout(null);

        ImageIcon i1=new
ImageIcon((ClassLoader.getSystemResource("icons/paytm.jpeg")));

        Image
i2=i1.getImage().getScaledInstance(800,600,Image.SCALE_DEFAULT);
```

```
    ImageIcon i3=new ImageIcon(i2);
    JLabel image=new JLabel(i3);
    image.setBounds(0,0,800,600);
    add(image);
    pay = new JButton("Pay");
    pay.setBounds(420,5,80,40);
    pay.addActionListener(this);
    image.add(pay);
    back=new JButton("Back");
    back.setBounds(520,5,80,40);
    back.addActionListener(this);
    image.add(back);
    setVisible(true);
}
public void actionPerformed(ActionEvent ae){
    if(ae.getSource()==pay){
        setVisible(false);
        new Paytm();
    }else{
        setVisible(false);}
```

5 testing

Test cases No.	**Test case**	**Input Data**	**Steps to execute the test case**	**Expected Result**	**Actual Result**	**Pass/Fail**
1	Login Screen	Wrong username or password	After entering the data click on the login button	A proper message indicating the error should appear and the user should be redirected to login screen.	A message was displayed saying Invalid username or password	Pass
2	Insertion	If any field was not entered.	After entering the data click on the create button	A proper message indicating the error should appear and the user should be redirected to customer screen.	A message was displayed saying Enter all the details properly	Pass
3	Deletion	If any field was not entered.	After entering the data click on the delete button	A proper message indicating the error should appear and the user should be redirected to customer screen.	A message was displayed saying Enter all the details properly	Pass
4	Update	If any field was not entered.	After entering the data click on the update button	A proper message indicating the error should appear and the user should be redirected to update customer screen.	A message was displayed saying Enter all the details properly	Pass

6. Conclusion

The Travel and Tourism Management System is designed to modernize and streamline the travel booking experience by providing an efficient, user-friendly, and automated platform. This system eliminates the inefficiencies of traditional travel management by integrating real-time booking, secure payments, itinerary management, and customer support in one unified application.

By implementing this system, travel agencies, hotels, and users can benefit from:

Enhanced Efficiency – Automated booking and real-time availability reduce manual errors.

User Convenience – Easy access to destinations, hotels, and travel packages in one place.

Business Growth – Travel agencies can manage customers, bookings, and revenue effectively.

Secure Transactions – Integrated payment gateways ensure safe and smooth transactions.

Scalability – The system is designed to accommodate future upgrades and additional features.

This project successfully demonstrates how technology can transform the tourism industry, making travel planning faster, safer, and more accessible for all users. The Travel and Tourism Management System is not just a booking platform but a comprehensive solution for modern travel needs.

7.REFERENCES

We have taken references from many resources like YouTube and many websites.

Websites:

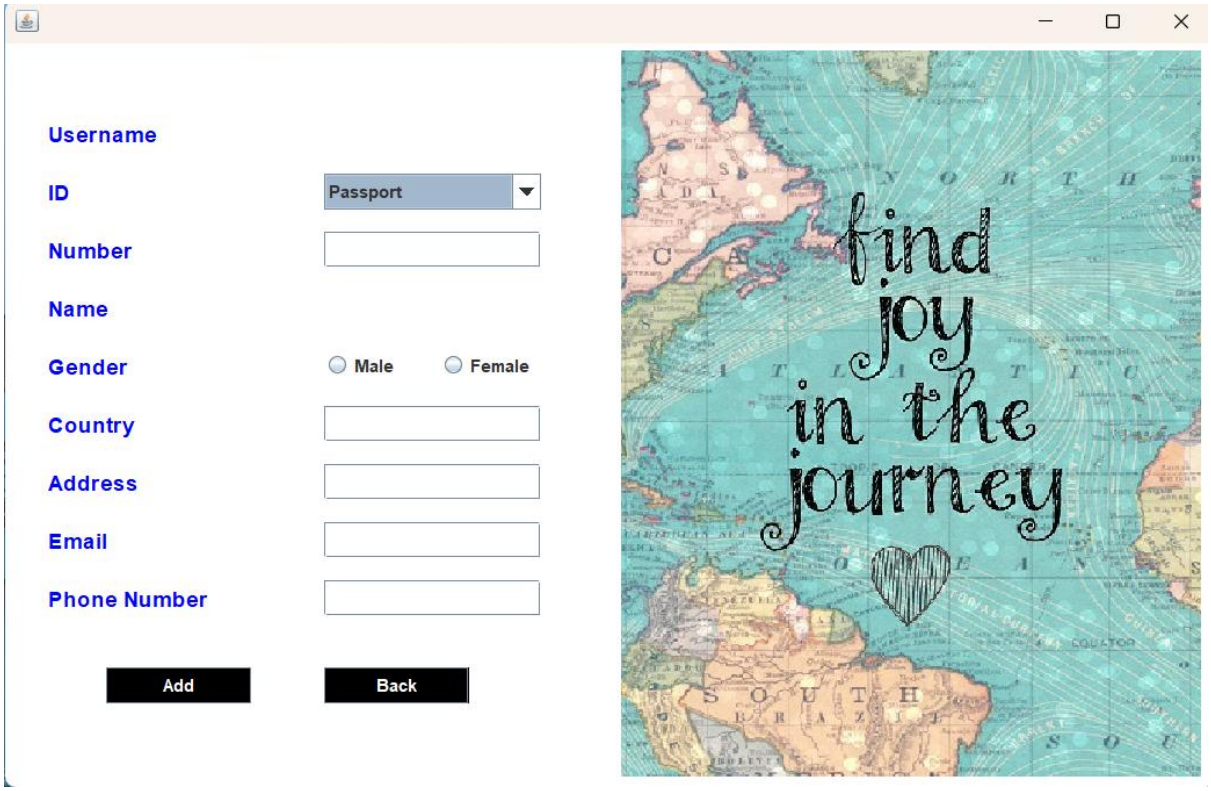
- https://www.w3schools.com
- https://www.javatpoint.com
- https://www.codecademy.com
- https://www.stackoverflow.com

YouTube video links:

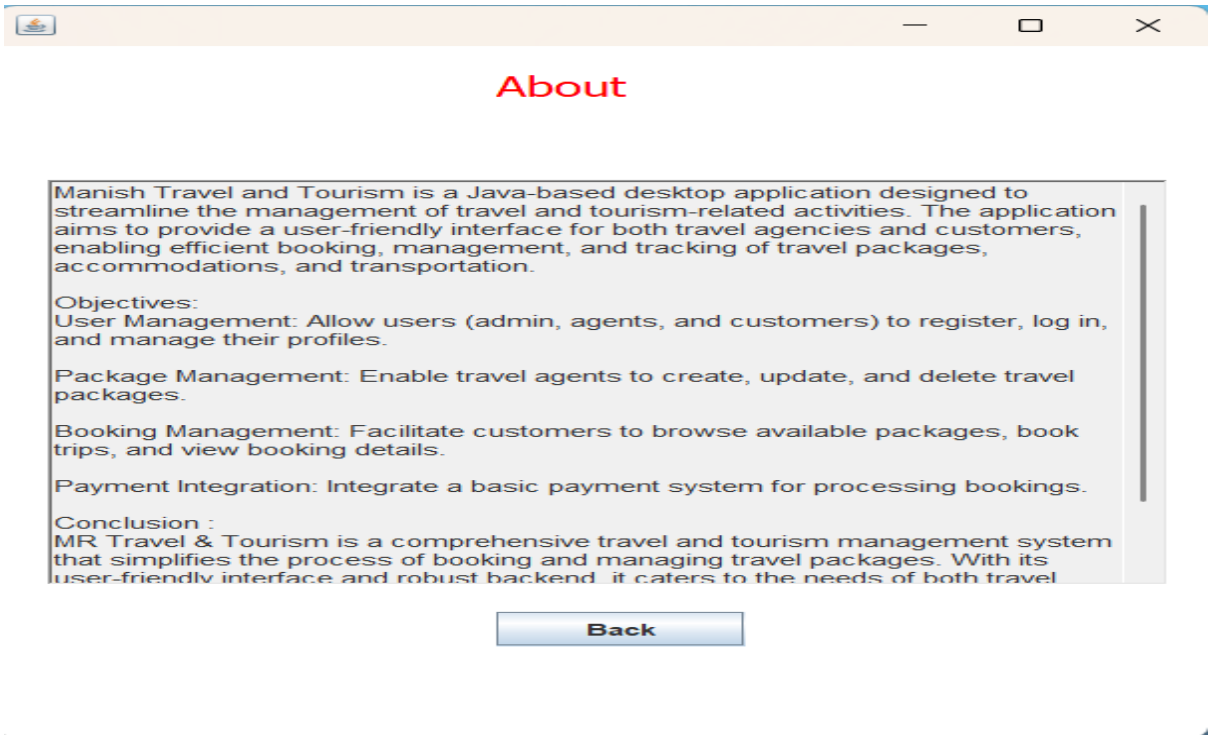
1. https://youtu.be/5vzCjvUwMXg
2. https://youtu.be/dwVj_g3TpZ4
3. https://youtu.be/L5RpqspNAuc

8.User Manual

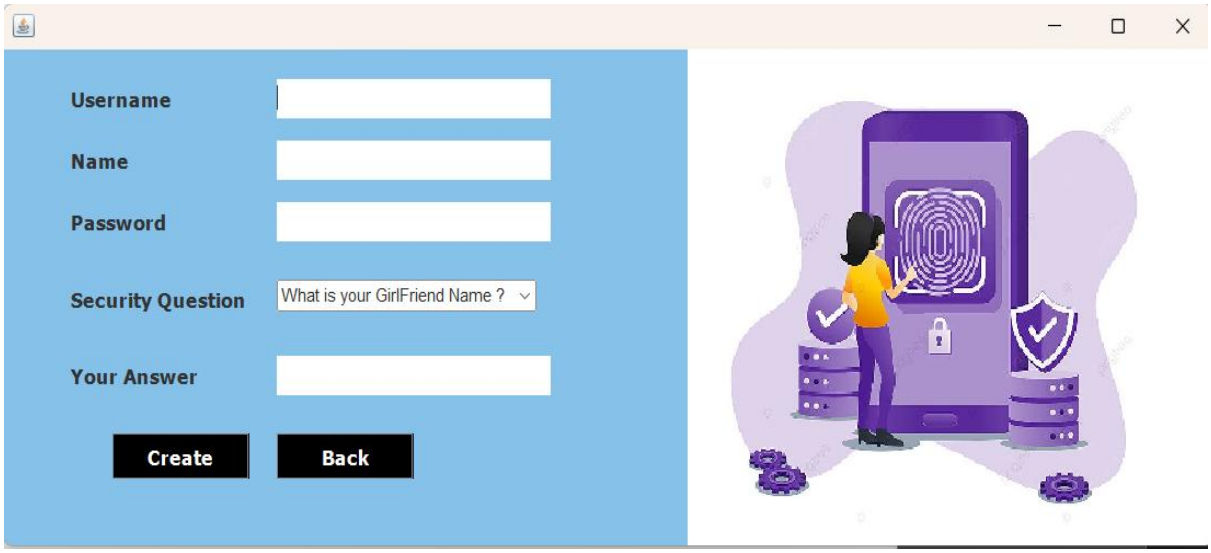
Add User Information



About



Signup:



Book Package: