A PROJECT ON

"TOURISM MANAGEMENT SYSTEM"

SUBMITTED IN
PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE COURSE OF
DIPLOMA IN ADVANCED COMPUTING FROM CDAC



SUNBEAM INSTITUTE OF INFORMATION TECHNOLOGY HINJAWADI

SUBMITTED BY:

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UNDER THE GUIDENCE OF:

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CERTIFICATE

This is to certify that the project work under the title 'Tourism Management System' is done by Shubham Wakte, Prathamesh Vyavhare, Prajwal Thakur and Gaurav Kumar in partial fulfillment of the requirement for award of Diploma in Advanced Computing Course.

Mr. Nilesh Pawar Project Guide Mr.Yogesh Kolhe Course Co-Coordinator

Date: 16 August 2024

ACKNOWLEDGEMENT

A project usually falls short of its expectation unless aided and guided by the right persons at the right time. We avail this opportunity to express our deep sense of gratitude towards Mr. Nitin Kudale (Center Coordinator, SIIT, Pune) and Mr. Yogesh Kolhe (Course Coordinator, SIIT, Pune).

We are deeply indebted and grateful to them for their guidance, encouragement and deep concern for our project. Without their critical evaluation and suggestions at every stage of the project, this project could never have reached its present form.

Last but not the least we thank the entire faculty and the staff members of Sunbeam Institute of Information Technology, Pune for their support.

Shubham Wakte Pratamesh Vyavhare Prajwal Thakur Gauray Kumar

0324 PG-DAC SIIT Pune

1. INTRODUCTION TO PROJECT

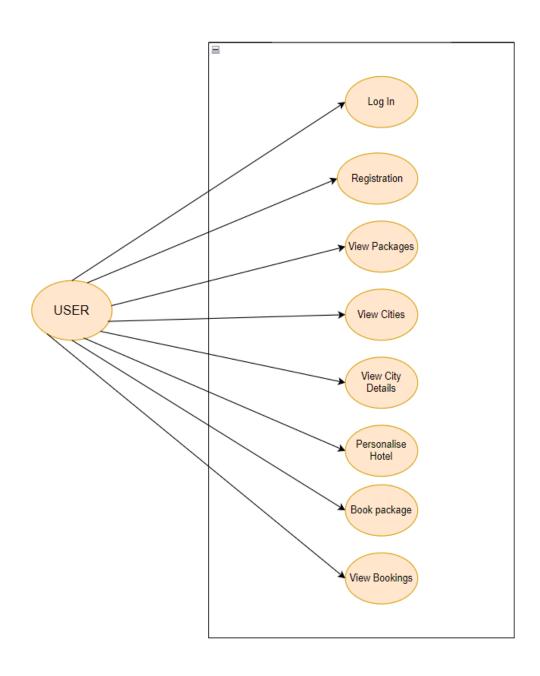
The Tourism Management System (TMS) is an innovative software solution designed to streamline the operations of tourism businesses. It automates various processes, including booking management, package creation, and customer handling, thereby reducing manual efforts and improving efficiency. The system provides a centralized platform where users can browse and book travel packages, check availability, and make secure online payments, making it easier for both customers and administrators to manage their tasks.

At the core of the TMS is its package management feature, which allows tourism admin to create, modify, and delete travel packages with ease. These packages can include details such as itineraries, pricing, and availability, all of which are displayed to customers in a user-friendly interface. The system also supports filtering and searching for packages based on user preferences, ensuring that customers can find the perfect travel option tailored to their needs.

Security and data privacy are paramount in the TMS, with features such as role-based access control and JWT authentication to ensure that user information is protected. The system also generates detailed reports and analytics, offering valuable insights into sales, bookings, and customer satisfaction. Overall, the TMS is designed to enhance the operational efficiency of tourism businesses while delivering a seamless and enjoyable experience for customers.

2. REQUIREMENTS

2.1 FUNCTIONAL REQUIREMENTS



2.1 User Account

A **user** is an individual who interacts with the platform to explore and manage travel-related services. To gain access, the user must register by providing essential personal information, such as their name, email address, and password. This data is securely stored in the system's database, creating a user profile that allows for a personalized and seamless experience. Once registered and logged in, users have full access to the platform's features, including browsing available travel packages, viewing city details, selecting hotels, booking packages, and managing their bookings. The system is designed to ensure that users can navigate these features easily, making informed decisions and enjoying a smooth, efficient process. The user's profile not only stores their personal information but also keeps track of their preferences and past interactions, enhancing future experiences by offering tailored recommendations and options.

On the other hand, an **admin** has elevated privileges within the system, allowing them to manage various aspects of the platform. Admins are responsible for maintaining the integrity and functionality of the system by overseeing user accounts, managing travel packages, and ensuring that the information available to users is accurate and up-to-date. They have access to administrative tools that enable them to add, update, or delete content, monitor user activity, and manage bookings. Admins also play a crucial role in handling any issues that arise, such as resolving user queries or managing system settings. The admin interface is designed to provide comprehensive control while being intuitive and easy to use, ensuring that admins can efficiently perform their duties and keep the platform running smoothly.

2.2 Registration and Creation of Account

Registration is the initial step for new users to join the platform and begin their travel planning journey. The registration process is designed to be simple and intuitive, requiring users to provide essential details such as their name, email address, password, and any other necessary

information. Once registered, users receive confirmation of their successful account creation, and they are then able to access the full range of services offered by the platform.

By creating an account, users gain the ability to save their preferences, view and manage bookings, and receive personalized recommendations based on their interests. Registration not only empowers users to take full advantage of the platform's features but also allows them to establish a continuous and personalized relationship with the platform, making future interactions smoother and more tailored to their needs.

2.3 Explore Packages

The platform offers a comprehensive view of travel packages that cater to a wide array of interests and preferences. Users can explore these packages through an intuitive interface that provides detailed information on each option, including the destinations covered, the duration of the trip, pricing, and the specific experiences included in the package. This feature is designed to help users easily compare different packages, assess the value offered, and make informed decisions about which package best suits their travel desires

The package viewing experience is enriched with high-quality images, customer reviews, and additional content that highlights the unique aspects of each package.

2.4 Cities Based on Package

Within the platform, users have the ability to delve into the details of various cities that are part of the available travel packages. This feature allows users to explore potential travel destinations at a more granular level, offering insights into the unique characteristics and attractions of each city. Users can browse through a curated list of cities, each accompanied by descriptive content, vibrant images, and information about key attractions, cultural highlights, and must-see landmarks. This exploration helps users gain a deeper understanding of what each city has to offer, enabling them to envision their travel experience and make choices that align with their interests and desires. The city details are presented in a way that is both informative and engaging, encouraging users to immerse themselves in the possibilities of each destination.

2.5 Journey Details

This include an in-depth exploration of each destination within a travel package. Here, users can access a detailed itinerary, outlining what they will do each day during their stay. This includes descriptions of daily activities, excursions, and cultural experiences that make each day unique. Additionally, this section offers users the option to select a hotel based on their preferences and interests. Users can choose from a range of accommodations, each with detailed information on amenities, location, and pricing. This personalized approach ensures that users can tailor their stay to their specific needs, making their trip more enjoyable and comfortable.

2.6 Booking the Package

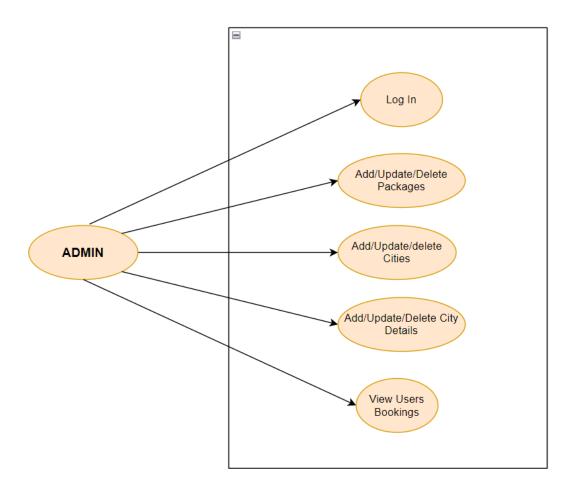
After selecting their desired travel package, cities, and hotels, users are prompted to enter their personal information, including details such as name, contact information, and any special requests. This information is crucial for finalizing the journey and ensuring that all aspects of the trip are tailored to the user's preferences.

Once the user information is entered, the system presents a comprehensive summary of the booking. This summary includes all the details of the selected package, such as the itinerary, hotel accommodations, total cost, and any additional services. The summary allows users to review their choices and make any necessary adjustments before proceeding.

After confirming that everything is correct, users can move on to the payment stage. The payment process is secure and straightforward, offering multiple payment options to suit the user's convenience. Once the payment is successfully processed, users receive a confirmation of their booking, including a detailed itinerary and booking reference.

2.7 See Bookings

The feature allows users to review and manage their existing reservations. From this section, users can view details of their booked packages, including itinerary, hotel information, and payment status.



The **admin** role is equipped with a range of powerful tools to manage the platform effectively. Admins can view the total number of registered users, providing insights into user engagement and growth. They can also access and review all bookings, ensuring accuracy and resolving any issues. Admins have the authority to update, add, or delete travel packages, keeping the offerings current and attractive. Additionally, they can manage cities and their detailed information, ensuring users have access to accurate and relevant destination details. This comprehensive control helps maintain the platform's efficiency, relevance, and user satisfaction.

3. DESIGN

3.1 Database Design

The following table structures depict the database design.

Table 1: Users

| Field | Туре | Null | Key | Default | Extra |
|----------------------|--------------|------|-----|---------|----------------|
| id | bigint | NO | PRI | NULL | auto_increment |
| email | varchar(30) | YES | UNI | NULL | |
| First_name | varchar(30) | NO | | NULL | |
| Last_name | varchar(30) | NO | | NULL | |
| password | varchar(255) | NO | | NULL | |
| Phone_number | varchar(15) | NO | UNI | NULL | |
| role | varchar(255) | YES | | NULL | |
| security_answer | varchar(255) | NO | | NULL | |
| security_question_id | bigint | YES | MUL | NULL | |

Table 2: Packages

| Field | Type | Null | Key | Default | Extra |
|-----------------|--------------|------|-----|---------|----------------|
| id | bigint | No | PRI | NULL | auto_increment |
| image_path | varchar(255) | YES | | NULL | |
| package_details | varchar(255) | YES | | NULL | |
| package_name | varchar(100) | NO | | NULL | |
| package_name | double | NO | | NULL | |

Table 3 : Cities

| Feild | Туре | Null | Key | Default | Extra |
|-------------------|--------------|------|-----|---------|----------------|
| id | bigint | NO | PRI | NULL | auto_increment |
| city_details | text | NO | | NULL | |
| city_image | longblob | YES | | NULL | |
| day_1_description | text | NO | | NULL | |
| day_2_description | text | NO | | NULL | |
| day_3_description | text | NO | | NULL | |
| day_4_description | text | NO | | NULL | |
| duration | varchar(255) | NO | | NULL | |
| ending_date | date | NO | | NULL | |
| locations | varchar(255) | NO | | NULL | |
| city_name | varchar(255) | NO | | NULL | |
| city_price | double | NO | | NULL | |
| starting_date | date | NO | | NULL | |
| package_id | bigint | YES | MUL | NULL | |

Table 4 : Security Questions

| Feild | Type | Null | Key | Default | Extra |
|----------|--------------|------|-----|---------|----------------|
| id | bigint | NO | PRI | NULL | auto_increment |
| question | Varchar(255) | YES | UNI | NULL | |

Table 5 : Hotels

| Feild | Туре | Null | Key | Default | Extra |
|--------------------|--------------|------|-----|---------|----------------|
| id | bigint | NO | PRI | NULL | auto_increment |
| address | varchar(255) | NO | | NULL | |
| bonfire | bit(1) | NO | | NULL | |
| breakfast | bit(1) | NO | | NULL | |
| check_in_date | date | NO | | NULL | |
| check_out_date | date | NO | | NULL | |
| free_wi_fi | bit(1) | NO | | NULL | |
| housekeeping | bit(1) | NO | | NULL | |
| luggage_assistance | bit(1) | NO | | NULL | |
| name | varchar(255) | NO | | NULL | |
| pool | bit(1) | NO | | NULL | |
| rate_per_person | double | NO | | NULL | |
| restaurant | bit(1) | NO | | NULL | |
| star_rating | int | NO | | NULL | |
| city_id | bigint | YES | MUL | NULL | |

Table 6 : Images

| Feild | Type | Null | Key | Default | Extra |
|------------|--------------|------|-----|---------|----------------|
| id | bigint | NO | PRI | NULL | auto_increment |
| image_path | varchar(255) | NO | | NULL | |
| city_id | bigint | YES | MUL | NULL | |

Table 7 : Bookings

| Feild | Type | Null | Key | Default | Extra |
|-------------------|--------------|------|-----|---------|----------------|
| id | bigint | NO | PRI | NULL | auto_increment |
| booking_no | varchar(255) | NO | UNI | NULL | |
| city_name | varchar(255) | NO | | NULL | |
| is_payment_status | tinyint(1) | YES | | 0 | |
| no_of_passengers | bigint | YES | | NULL | |
| package_name | varchar(255) | NO | | NULL | |
| total_cost | double | YES | | NULL | |
| user_id | bigint | YES | MUL | NULL | |
| hotel_name | varchar(255) | NO | | NULL | |

Table 8 : Travellers

| Feild | Type | Null | Key | Default | Extra |
|------------|--------------|------|-----|---------|----------------|
| id | bigint | NO | PRI | NULL | auto_increment |
| aadhaar_no | varchar(255) | YES | UNI | NULL | |
| age | bigint | NO | | NULL | |
| email | varchar(255) | YES | UNI | NULL | |
| gender | varchar(255) | YES | | NULL | |
| name | varchar(255) | NO | | NULL | |
| booking_id | varchar(255) | NO | MUL | NULL | |

4. CODING STANDARDS IMPLEMENTED

Naming and Capitalization

Below summarizes the naming recommendations for identifiers in Pascal casing is used mainly (i.e. capitalize first letter of each word) with camel casing (capitalize each word except for the first one) being used in certain circumstances.

| Identifier | Case | Examples | Additional Notes |
|-----------------|--------------------|--------------------|---|
| | | Person, BankVault, | Class names should be based on "objects" or "real |
| Class | Pascal | SMSMessage, | things" and should generally be nouns . No '_' signs |
| | | Dept | allowed. Do not use type prefixes like 'C' for class. |
| Method | Camel | getDetails, | Methods should use verbs or verb phrases. |
| Wicthod | Camer | updateStore | victious should use verbs of verb phrases. |
| | | | Use descriptive parameter names. Parameter names |
| Parameter | Camel | personName, | should be descriptive enough that the name of the |
| 1 arameter | Camer | bankCode | parameter and its type can be used to determine its |
| | | | meaning in most scenarios. |
| Interface | Pascal with "I" | Disposable | Do not use the '' sign |
| | prefix | | _ 8 |
| Property | Pascal | ForeColor, | Use a noun or noun phrase to name properties. |
| Troperty | 1 dSed1 | BackColor | Ose a noun of noun phrase to name properties. |
| Associated | | _foreColor, | |
| private member | _camelCase | backColor | Use underscore camel casing for the private member |
| variable | | | variables |
| | | | |
| | Pascal with | | |
| Evantion Class | | WahEvantien | |
| Exception Class | "Exception" suffix | WebException, | |
| | SUITIX | | |

Comments

- Comment each type, each non-public type member, and each region declaration.
- Use end-line comments only on variable declaration lines. End-line comments are comments that follow code on a single line.
- Separate comments from comment delimiters (apostrophe) or // with one space.
- Begin the comment text with an uppercase letter.
- End the comment with a period.
- Explain the code; do not repeat it.

5. TEST REPORT

GENERAL TESTING:

| SR- | | | ACTUAL | |
|-----|------------------------|-----------------------------|--------|-----------------------|
| NO | TEST CASE | EXPECTED RESULT | RESULT | ERROR MESSAGE |
| 1 | Register Page | Redirected to Next page | OK | Nothing |
| | | | | Please enter username |
| 2 | Login Page | Pop-up will come | Ok | and password again . |
| | | Only users password will be | | |
| 3 | Forget password | reseted | Ok | Nothing |
| | | Gives cities inside that | | |
| 4 | View packages | particular package | Ok | Nothing |
| | | All the fields should be | | |
| 5 | Booking Package | filled for submission | Ok | Nothing |
| 6 | Checking login or not | User is logged in or not | Ok | Nothing |
| | Add person details for | Add personal info and | | |
| 7 | Travel | document | Ok | Nothing |
| 8 | Goto Summary Page | Verify Details entered | Ok | Nothing |
| | Add information in | Save this all data into | | |
| 9 | booking table | booking table | Ok | Nothing |
| | | On back it should be | | |
| 10 | Transaction | reverted to previous page | Ok | Nothing |
| | | It shows you all | | |
| | | transactions done | | |
| 11 | View transaction done | previously | Ok | Nothing |
| | | It will logout from user | | |
| 12 | Logout | profile. | Ok | Nothing |

6. PROJECT MANAGEMENT RELATED STATISTICS

| DATE | WORK PERFORMED | SLC Phase | Additional Notes |
|---------------|---|---|---|
| APR 12,2024 | Project Allotment and User Requirements Gathering | Feasibility Study | Our team met Mr. Nilesh Pawar sir to get understanding of project |
| APR 20,2024 | Initial SRS Document Validation And Team Structure Decided | Requirement Analysis (Elicitation) | The initial SRS was presented to understand his requirements better |
| APR 25,2024 | Designing the use-cases, Class Diagram, Collaboration Diagram, E-R Diagram and User Interfaces | Requirement Analysis & Design Phase | Database Design completed |
| MAY 2,2024 | Business Logic Component design Started | Design Phase | |
| MAY 5,2024 | Coding Phase Started | Coding Phase | 60% of Class Library implemented. |
| MAY 12,2024 | Implementation of Web Application and Window Application Started | Coding Phase | Class Library Development going on. |
| MAY 20, 2024 | Implementation of Web Application and Window Application Continued | Coding Phase and Unit Testing | Class Library Modified as per the need. |
| JUNE 5, 2024 | Implementation of Web Application and Window Application Continued | Coding Phase and Unit Testing | |
| JUNE 15, 2024 | After Ensuring Proper Functioning the Required Validations were Implemented | Coding Phase and Unit Testing | Module Integration was done by the Project Head |

| JUNE 22, 2024 | The Project was Tested by the respective Team Leaders and the Project Head | Testing Phase (Module Testing) | |
|----------------------|--|--------------------------------------|--|
| JULY 8, 2024 | The Project was Submitted to Other Project Leader of Other Project Group For Testing | (Acceptance | The Project of Other Team was Taken up by the Team for Testing |
| AUG 10 & 12, 2024 | The Errors Found were Removed | Debugging | The Project was complete for submission |
| AUG 16, 2024 | Final Submission of Project | | |

7. CLASS DAIGRAM

Cities

- + id: BIGINT
- + cityDetails: TEXT
- + citylmage: LONGBLOB
- + day1Description: TEXT
- + day2Description: TEXT
- + day3Description: TEXT
- + day4Description: TEXT
- + duration:VARCHAR(255)
- + endingDate: DATE
- + locations: VARCHAR(255)
- + cityName: VARCHAR(255)
- + cityPrice: DOUBLE
- + startingDate: DATE
- + packageld: BIGINT
- + City()
- + addCity()
- + getCityDetails()

Users

- + id: BIGINT
- + email: VARCHAR(30)
- + firstName: VARCHAR(30)
- + lastName: VARCHAR(30)
- + password: VARCHAR(255)
- + phoneNumber: VARCHAR(15)
- + role: VARCHAR(255)
- + securityQuestionId: BIGINT
- + User()
- + addUser()
- + getUserInfo()
- + validateUser()

Traveller

- + id: BIGINT
- + aadhaarNo: VARCHAR(255)
- + age: BIGINT
- + email: VARCHAR(255)
- + gender: VARCHAR(255)
- + name: VARCHAR(255)
- + bookingId: VARCHAR(255)
- + Traveller()
- + addTraveller()
- + getTravellerInfo()

Images

- + id: BIGINT
- + imagePath: VARCHAR(255)
- + cityld: BIGINT
- + Image()
- + addImage()
- + getImageInfo()

Hotel

- + id: BIGINT
- + address: VARCHAR(255)
- + bonfire: BIT(1)
- + breakfast: BIT(1)
- + checkInDate: DATE
- + checkOutDate: DATE
- + freeWiFi: BIT(1)
- + name: VARCHAR(255)
- + pool: BIT(1)
- + ratePerPerson: DOUBLE
- + starRating: INT
- + cityld: BIGINT
- + Hotel()
- + addHotel()
- + getHotelInfo()

Booking

- + id: BIGINT
- + bookingNo: VARCHAR(255)
- + cityName: VARCHAR(255)
- + hotelName: VARCHAR(255)
- + isPaymentStatus: TINYINT(1)
- + noOfPassengers: BIGINT
- + packageName: VARCHAR(255)
- + totalCost: DOUBLE
- + userId: BIGINT
- + Booking()
- + checkBooking()
- + addBooking()
- + deleteBooking()

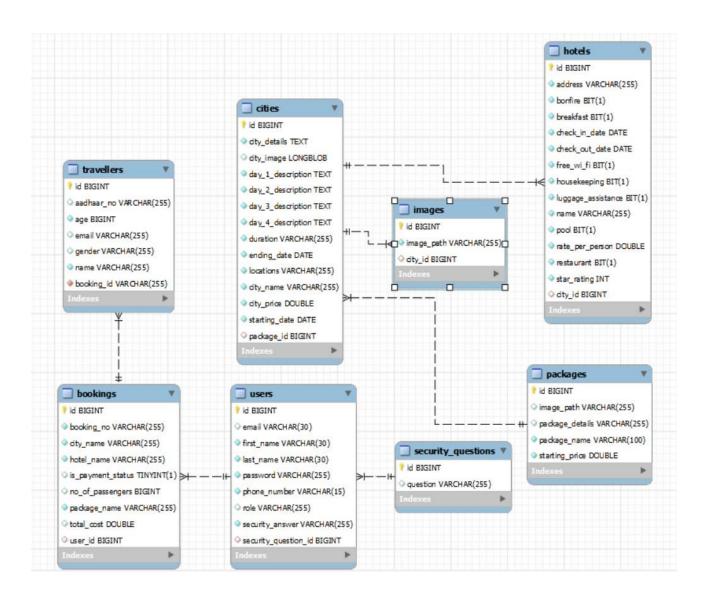
Package

- + id: BIGINT
- + imagePath: VARCHAR(255)
- + packageDetails: VARCHAR(255)
- + packageName: VARCHAR(100)
- + startingPrice: DOUBLE
- + Package()
- + addPackage()
- + getPackageInfo()

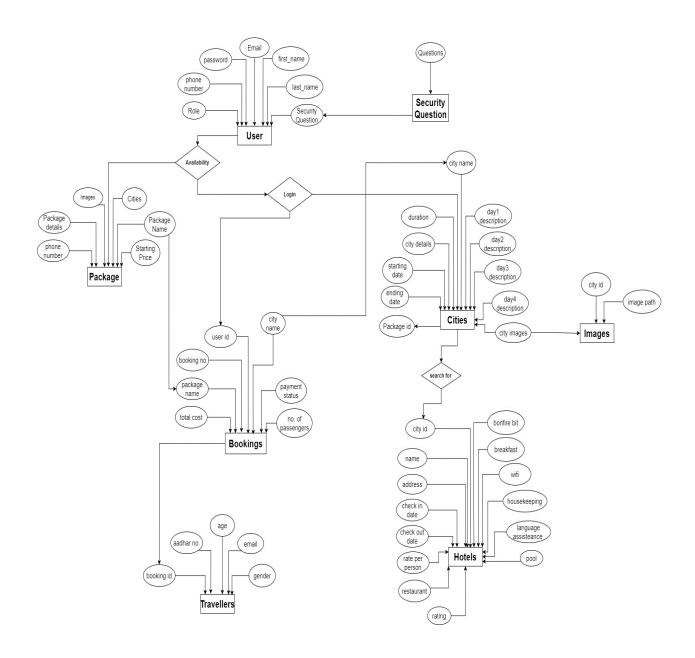
Security Question

- + id: BIGINT
- + question: VARCHAR(255)
- + SecurityQuestion()
- + addQuestion()
- + getQuestionInfo()

8. EER DIAGRAM



9. Workflow diagram



10. UI

10.1 User UI

1.Homepage



2.Package Details





Embark on a spiritual journey with our carefully curated pilgrimage package. This package offers a unique opportunity to visit sacred sites, explore religious landmarks, and experience the rich cultural heritage of a region

starting at ₹ 13000



Adventure

Get ready for the ultimate adrenaline rush! Our flexible adventure package takes you on a thrilling journey through rugged landscapes, scenic vistas, and heart-pumping activities and push your limits, challenge yourself, and create lifelong memories!

starting at ₹ 16000

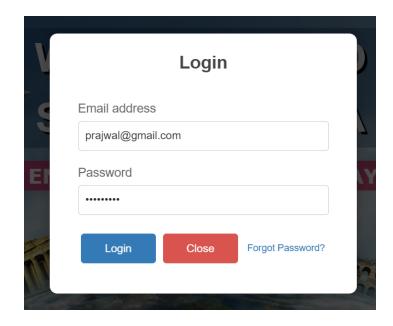


pilremage

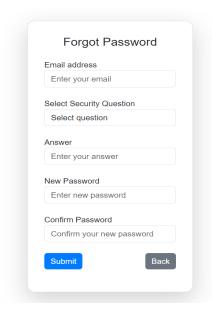
Embark on a spiritual journey with our carefully curated pilgrimage package. This package offers a unique opportunity to visit sacred sites, explore religious landmarks, and experience the rich cultural heritage of a region.

starting at ₹ 18000

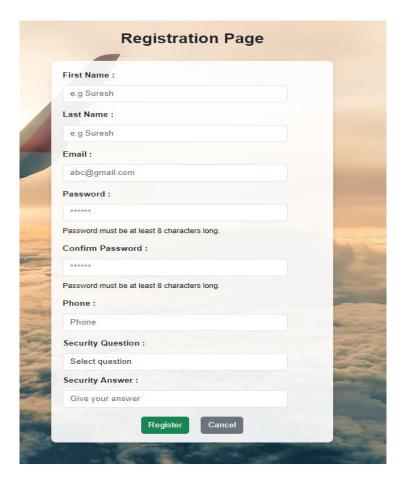
3.Login page



4. Forget Password



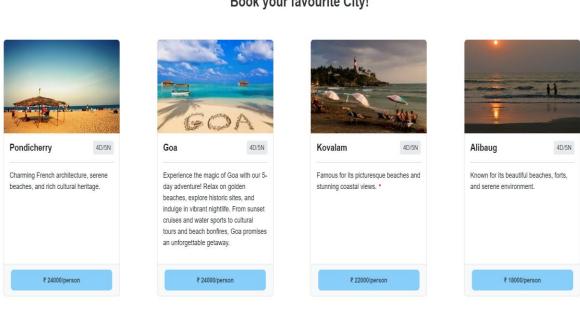
5.Registration page



5.Cities page



Book your favourite City!



6.City Details page



Hello, prajwal@gmail.com Logout

Goa

Duration: 4D/5N Location: bagha beach-Calangute beach-Chapora Fort

Experience the magic of Goa with our 5-day adventure! Relax on golden beaches, explore historic sites, and indulge in vibrant nightlife.

From sunset cruises and water sports to cultural tours and beach bonfires, Goa promises an unforgettable getaway.



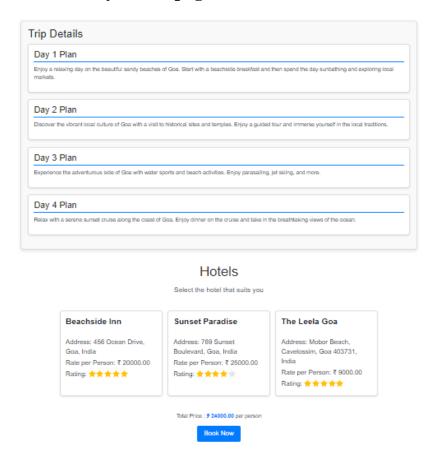




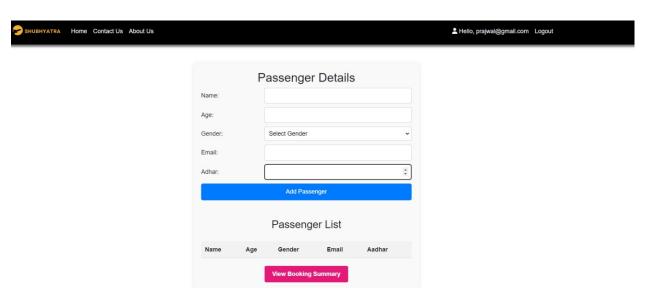




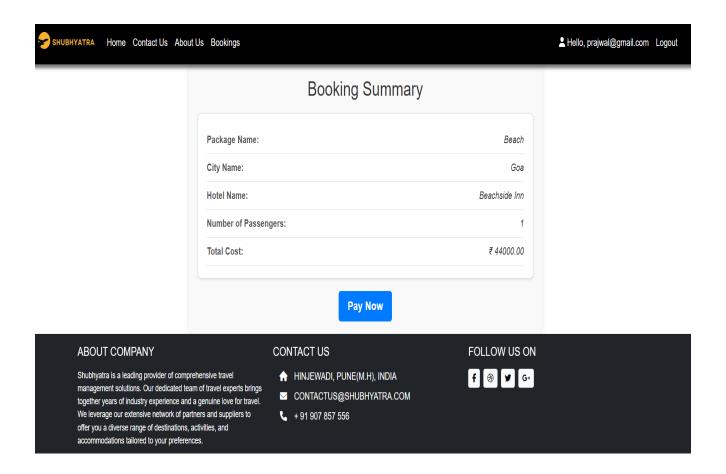
7. More Details on CityDetails page



8. Add passenger Page

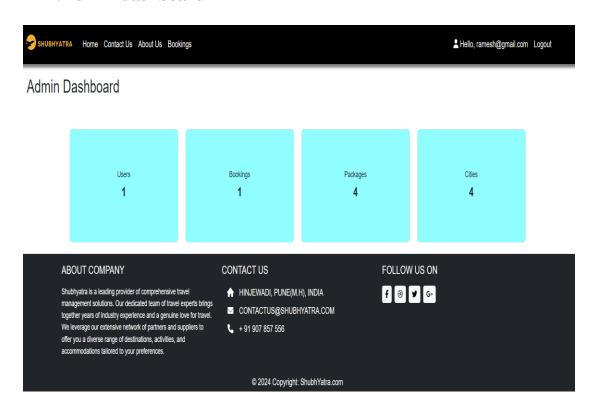


9. Booking Summary

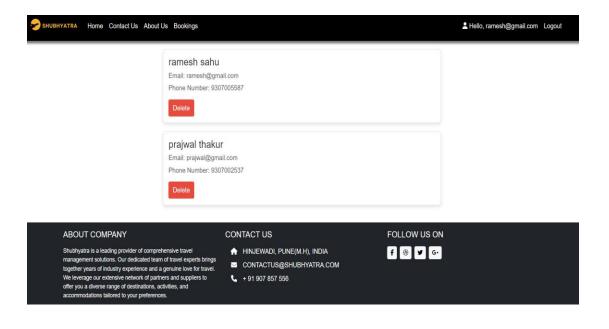


8.2 Admin's UI

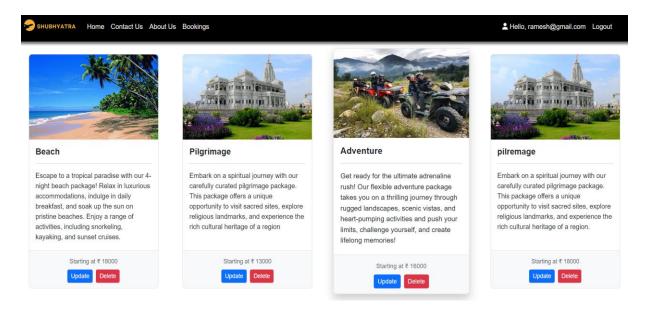
1.Admin dashboard



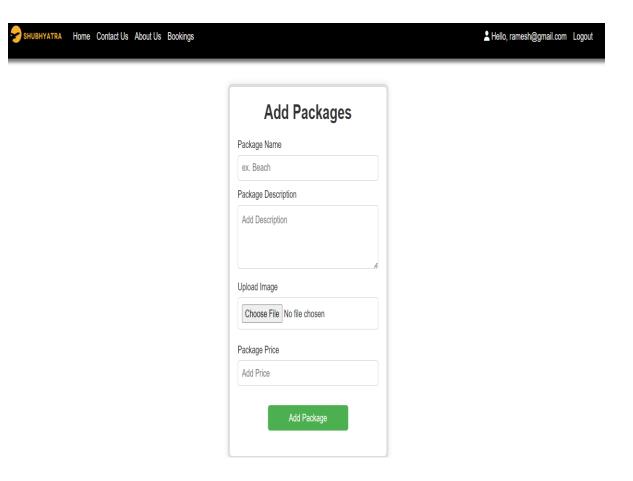
3. UserList Page



4. Update and Delete package

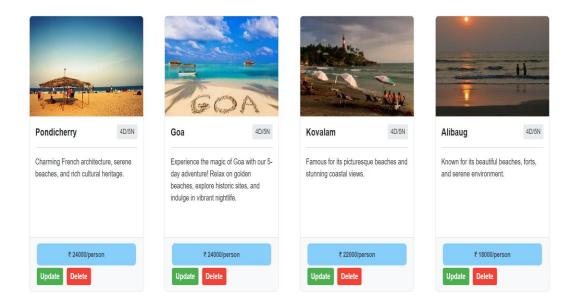


5. Add packages

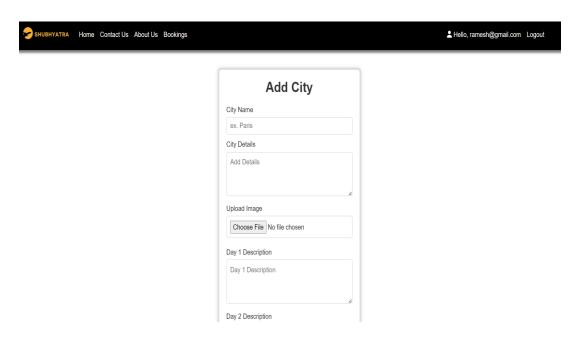


6. Update and Delete City

Book your favourite City!



7. Add City



8. See Bookings



All Booking Details

| # | Booking No | City Name | Payment Status | No. of Passengers | Package Name | Hotel Name | Total Cost |
|---|------------------|-----------|----------------|-------------------|--------------|------------|------------|
| 1 | BN-7XH7SF49-7519 | Goa | Paid | 1 | Beach | | ₹ 44000.00 |
| | | | | | | | |