

A
PROJECT REPORT ON
SAFARI
Travel And Tour Management System

SUBMITTED IN PARTIAL FULFILLMENT OF
DIPLOMA IN ADVANCED COMPUTING (PG-DAC)



UNDER THE GUIDENCE OF

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CERTIFICATE

This is to certify that the project work under the title '**Travel and Tour Management System**' is done by **Ajay Maruti Khade, Digvijay Dilip Sawant, Gaurav Kumar, Shubham Ulhas Dangat, Kritika Shrivastava** in partial fulfilment of the requirement for award of Diploma in Advanced Computing Course.

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Date :- 14-03-2023

ACKNOWLEDGEMENT

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ABSTRACT

Internet plays a big role in our lives, especially after the wake of Covid. It's not always feasible to find and visit tour service centres to get and book desired destination's tours at specific time. As everyone can observe that the Internet users are increasing day by day and considering this fact, the main objective of our web-based application "SAFARI Travel And Tour Management System" is to facilitate the offline customer online and to provide them a feasible and smooth online travel booking experience as customers shouldn't spend their precious time in markets trying to find out best deal.

In our project, we aim to provide an application for travel agencies by which they can manage different tour packages based on the destinations. By using this, the tour company can tailor tour packages spanning various destinations at almost every price point. Also search module allows the admin to find and update or upgrade the tour packages with ease.

This module can also even be extended for customer's application page by which customers can find the right tour package for them at every budget, depending on the tour locations.

2. INTRODUCTION

Tourism has turned out to be an economic booster contributing to the economic development of many countries over the last few decades. People see holidays as a necessity, and not as luxury in the present scenario. Tourism calls for coordination and cooperation between tour operators, and tourists. The need for a robust and dynamic tour management application has been around since the advent of the tourism concept.

Thus we have developed an application to provide the best travelling services to the customers and travel agents. The Tourism Management System provides a search platform where a tourist can find their tour places according to their choices. This system also helps to promote responsible and interesting tourism so that people can enjoy their holidays at their favourable places and develop tourism with different cultures so that they enrich the tourism experience and build pride.

The Tourism Management System is a web-based application. The objective of this project is to develop a system that automates the processes and activities of a travel agency. It is tedious for a customer to plan a particular journey and have it executed properly. This project is developed to replace the currently existing system, which helps in keeping records of the customer details of destination as well as payment received. The proposed system is highly automated and makes the travelling activities much easier and flexible. The users can get the very right information at the very right time. This will increase the trust of the customer into the tourism company as well.

This project is designed with SQL Server as Data Base. All the data will be stored in the server and in case of any data losing situation, a backup will be available by this server. The details related to every aspect of the tourist will be available separately. The admins just have to click once and all the details will be available to them.

2. PRODUCT OVERVIEW AND SUMMERY

2.1 PURPOSE

Our Project, 'SAFARI' is web-based online tour booking and management application which aims to develop a system that automates the processes and activities of a travel agency and provide users a best travelling experience.

2.2 SCOPE

"SAFARI" aims to deliver a web-based application that hosts a wide collection of tours and shows that users can browse through. Users can see tours details, choose tour by destination and budget and accordingly book tickets for the tours they like. They can register their profile, sign in, book tickets and pay for it. They can view their booking history as well. Once they are done, they can logout of their profile. Admins can manage various tour details like tour timings, seats available, price for every tour category, adding new tours, etc. Admins can even delete users if the need arises.

'SAFARI' is an interface for both customers (for browsing tours and booking tickets) and admins (for managing tours).

2.3 OVERVIEW

A. TECHNOLOGIES USED

i. FRONT END

- HTML
- CSS
- Java Script
- Bootstrap
- React
- Axios

ii. BACK END

- Spring Boot
- Spring Data JPA
- Hibernate
- REST

iii. DATABASE MANAGEMENT SYSTEM

- MYSQL

B. FEATURES PROVIDED

i. FOR CUSTOMERS

- a) Register, Login, Logout – New customers can register on the site. Existing users can then login to access their account information and logout when the account is not in use.
- b) View & Update Profile – When logged in, users can view their profile and update their details.
- c) Browse – Users can browse the tours according to Destination and Budget.
- d) Book Tours – If User find a tour of desired destination according to his budget he can book it. User can add many tourists such as family members in one booking.
- e) Cancel Booking – If any uncertainty happens User can cancel booking.
- f) History of Bookings – User can see his history of booked tours.
- g) Feedback – User can give feedback for overall experience about application and service.

ii. FOR ADMIN

- a) Login, Logout – Similar to user's admin can login and logout to access their account.
- b) Add New Tours – Admins can add new tours with all necessary details like tour name, source, destination, start date, end date, no. of seats, travelling mode, price per seat etc.

- c) Update Tour – Admin can update tour details if need occurs due to any uncertainty like natural calamities.
- d) Browse Tour – Admin can find a tour by destination or budget, see the details about tour and update details if necessary.
- e) View Bookings – Admin can view all bookings done on application.
- f) View Feedback – Admin can view all feedbacks by all users.

iii. FOR GUEST

- a) Browse – Guest can browse the tour according to Destination and Budget. If he wants book tour needs to register and login first.

2.4 FEASIBILITY STUDY

Feasibility is the determination of whether a project is worth undertaking or not. Before actually recommending the new system, it is important to investigate if it is feasible to develop it.

Before developing and implementing a system, we have to make sure that the system is feasible in the following ways:

A. TECHNICAL FEASIBILITY

In this type of feasibility study, the system analyst has to check whether it is possible or not to develop the requested system with the available manpower, software, hardware, etc.

This project makes use of cross-platform software and solutions like Java, and hence can run on any operating system. React, used in front-end, is swift and light weight framework when it comes to delivering the requested page as it doesn't reload the entire page for every HTTP request. It only re-renders the components that need to fetch new data. Also, as React is modular in nature, it is easy to develop new components and scale up existing components in order to add new features to the system. The combination of Spring Boot, Spring Data JPA and Hibernate for backend make for a fast, easy to set-up and reliable system to interact with the database, as they are secure and transactional in nature. Since the sensitive data of

customers and admins need to be stored in a robust and secure database, MySQL database management system was chosen as it is an industry standard.

B. OPERATIONAL FEASIBILITY

In this type of feasibility study, the operation of the system is considered. An analysis is performed on whether it is feasible for the user department to use the application. Thus, the proposed system is said to be operationally feasible only if clients are able to understand the system clearly and correctly, and can use it with ease.

In the design of this project, we always kept user experience in mind. We made an effort to have a good user interface with consistent theme and alluring design to keep the users interested and engaged. In our project, the use of universally known icons and instructions that are easy to understand makes sure that the user will not need any special technical know-how to use the application. We made sure that the information available throughout the application is arranged in a logically coherent and consistent manner, guaranteeing that the users will have a smooth and effortless experience and even enjoy using the application.

C. ECONOMIC FEASIBILITY

In this type of feasibility study, the benefits of the system to the organization are considered by taking into consideration the cost-benefit analysis. All the software and technologies used in our project free, open-source, and widely available, with each of the technologies having an extensive community support. This makes “SAFARI” an economically feasible solution to the organizations that wish to implement it.

3. REQUIREMENTS FULFILLED

3.1 FUNCTIONAL REQUIREMENTS

Following are the functional requirements fulfilled by our project:

- Users can browse through all available tours and book tour.
- Users can book tour for desired destination according to his budget.
- User can cancel booking.
- User can update his profile.
- User can view his booking history.
- User can give feedback.
- Admin can manage tour details.
- Admin can check all bookings by all users.
- Admin can view all users' feedbacks.
- Guests visiting application can see tours according to destination and budget.
- Guests require to register and login to book tours.

3.2 NON-FUNCTIONAL REQUIREMENTS

Following are the non-functional requirements fulfilled by our project:

- Since the application uses lightweight and established software components that are also cross-platform, it is remarkably performant and has good support for every operating system.
- The use of React for front end and Spring Boot, Spring Data JPA and Hibernate for back end delivers quick response times to admins and users alike.

4. PROJECT DESIGN

4.1 DATA MODEL

The following tables depict the database design used for ‘SAFARI-Travel And Tour Management System’ application.

A. Table For Users:

```
mysql> desc users;
```

Field	Type	Null	Key	Default	Extra
user_id	bigint	NO	PRI	NULL	auto_increment
address	varchar(100)	NO		NULL	
date_of_birth	date	NO		NULL	
email	varchar(255)	NO		NULL	
first_name	varchar(20)	NO		NULL	
last_name	varchar(20)	NO		NULL	
password	varchar(255)	NO		NULL	
phone_no	bigint	NO		NULL	
role	varchar(255)	YES		NULL	

B. Table For Tour Details:

Field	Type	Null	Key	Default	Extra
tour_id	bigint	NO	PRI	NULL	auto_increment
activities	varchar(30)	YES		NULL	
booking_amount	double	NO		NULL	
destination	varchar(30)	NO		NULL	
max_seats	int	YES		NULL	
source	varchar(30)	NO		NULL	
tour_detail_info	varchar(50)	YES		NULL	
tour_end_date	date	NO		NULL	
tour_name	varchar(30)	NO		NULL	
tour_start_date	date	NO		NULL	
tour_type	varchar(255)	YES		NULL	
transportation_mode	varchar(255)	YES		NULL	

C. Table For Bookings:

Field	Type	Null	Key	Default	Extra
booking_id	bigint	NO	PRI	NULL	auto_increment
booking_date	date	NO		NULL	
payment_status	varchar(255)	NO		NULL	
seat_count	int	NO		NULL	
total_amount	bigint	NO		NULL	
tour_id	bigint	YES	MUL	NULL	
user_id	bigint	YES	MUL	NULL	

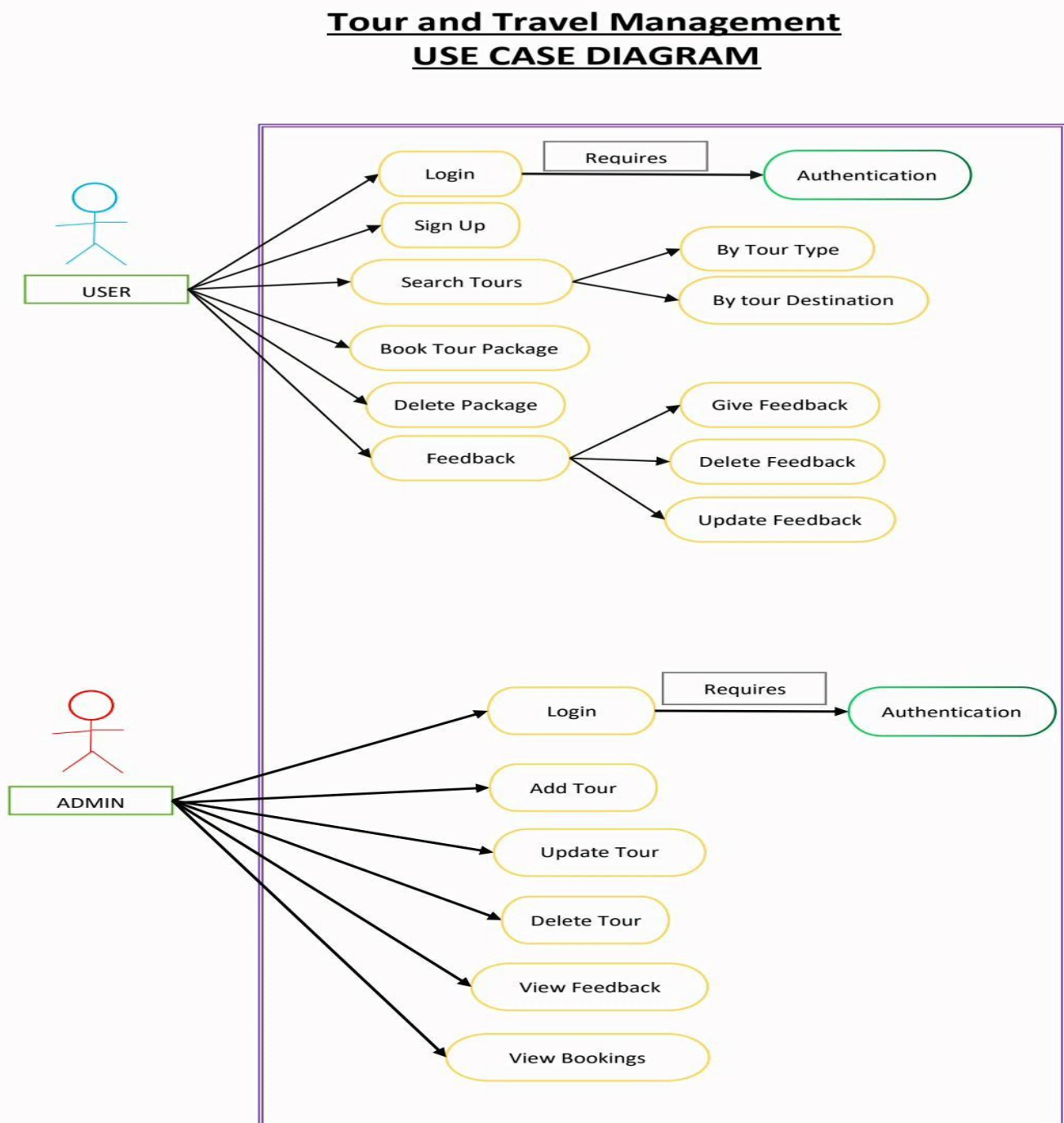
D. Table For Tourist Details:

Field	Type	Null	Key	Default	Extra
tourist_id	bigint	NO	PRI	NULL	auto_increment
age	int	NO		NULL	
id_proof	varchar(255)	NO		NULL	
id_proof_no	varchar(255)	NO		NULL	
tourist_name	varchar(20)	NO		NULL	
booking_id	bigint	YES	MUL	NULL	

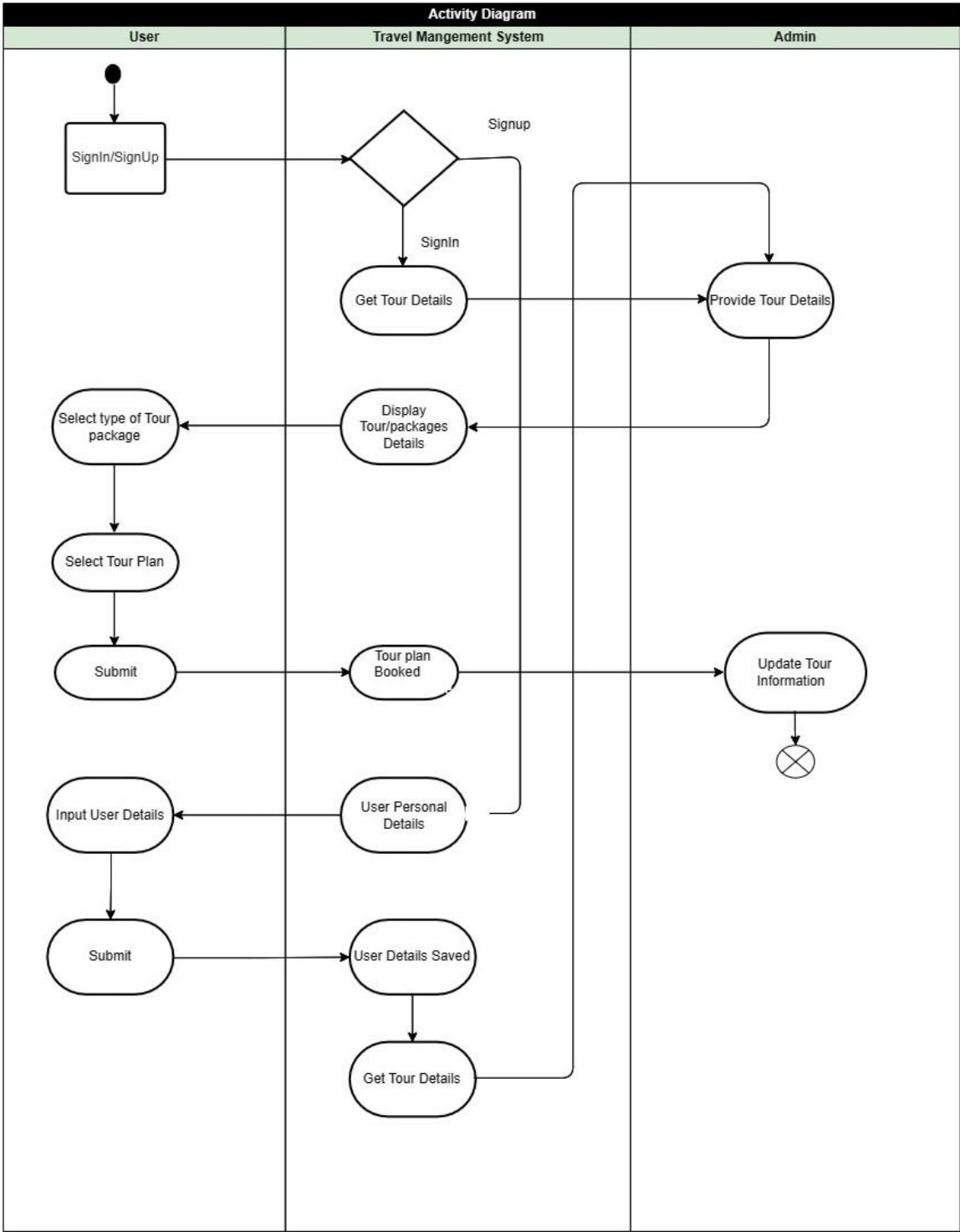
E. Table For Feedback:

Field	Type	Null	Key	Default	Extra
feedback_id	bigint	NO	PRI	NULL	auto_increment
comment	varchar(255)	NO		NULL	
email	varchar(255)	NO		NULL	
first_name	varchar(255)	NO		NULL	
rating	int	YES		NULL	
user_id	bigint	YES	MUL	NULL	

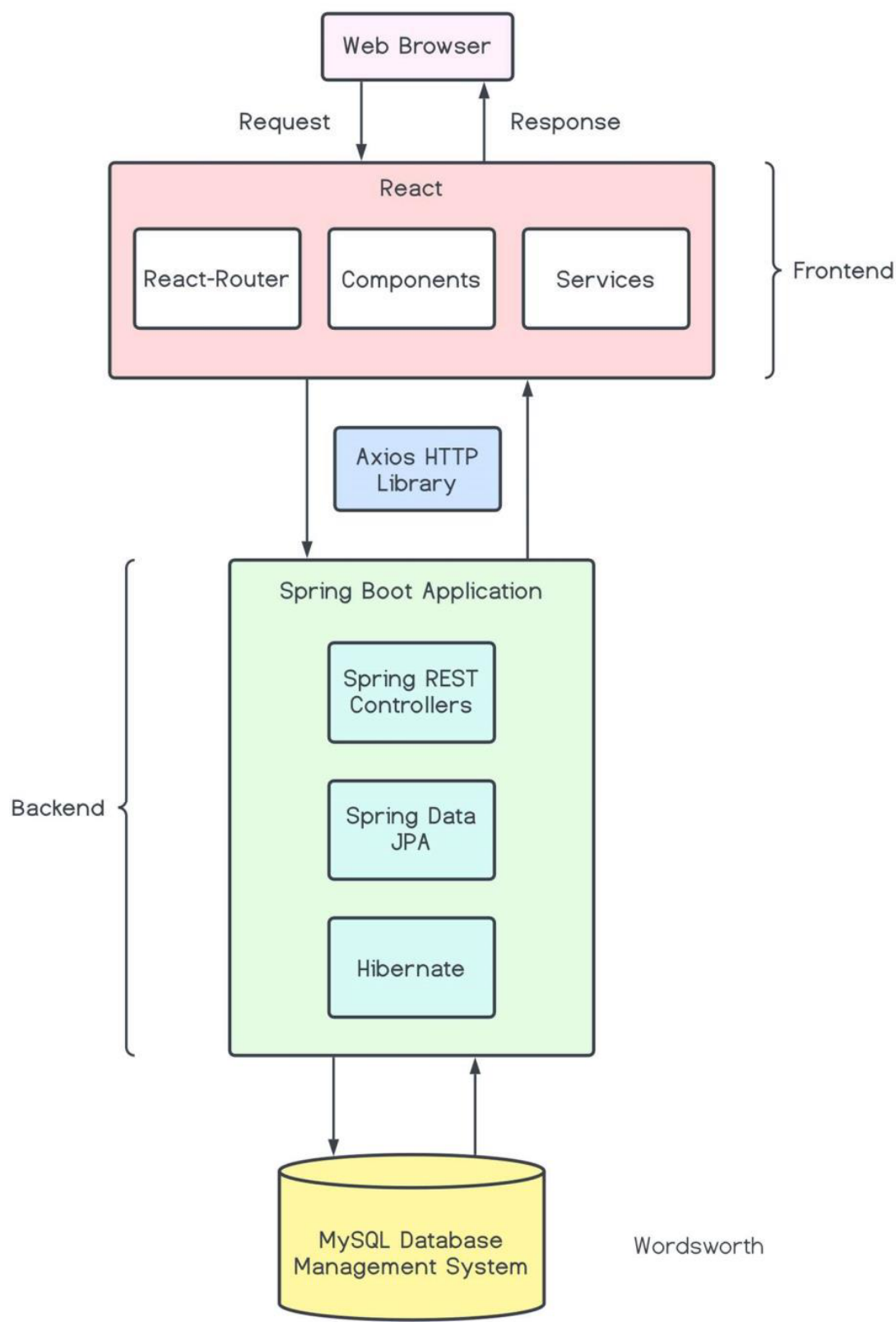
4.2 USE CASE DIAGRAM



4.3 ACTIVITY DIAGRAM

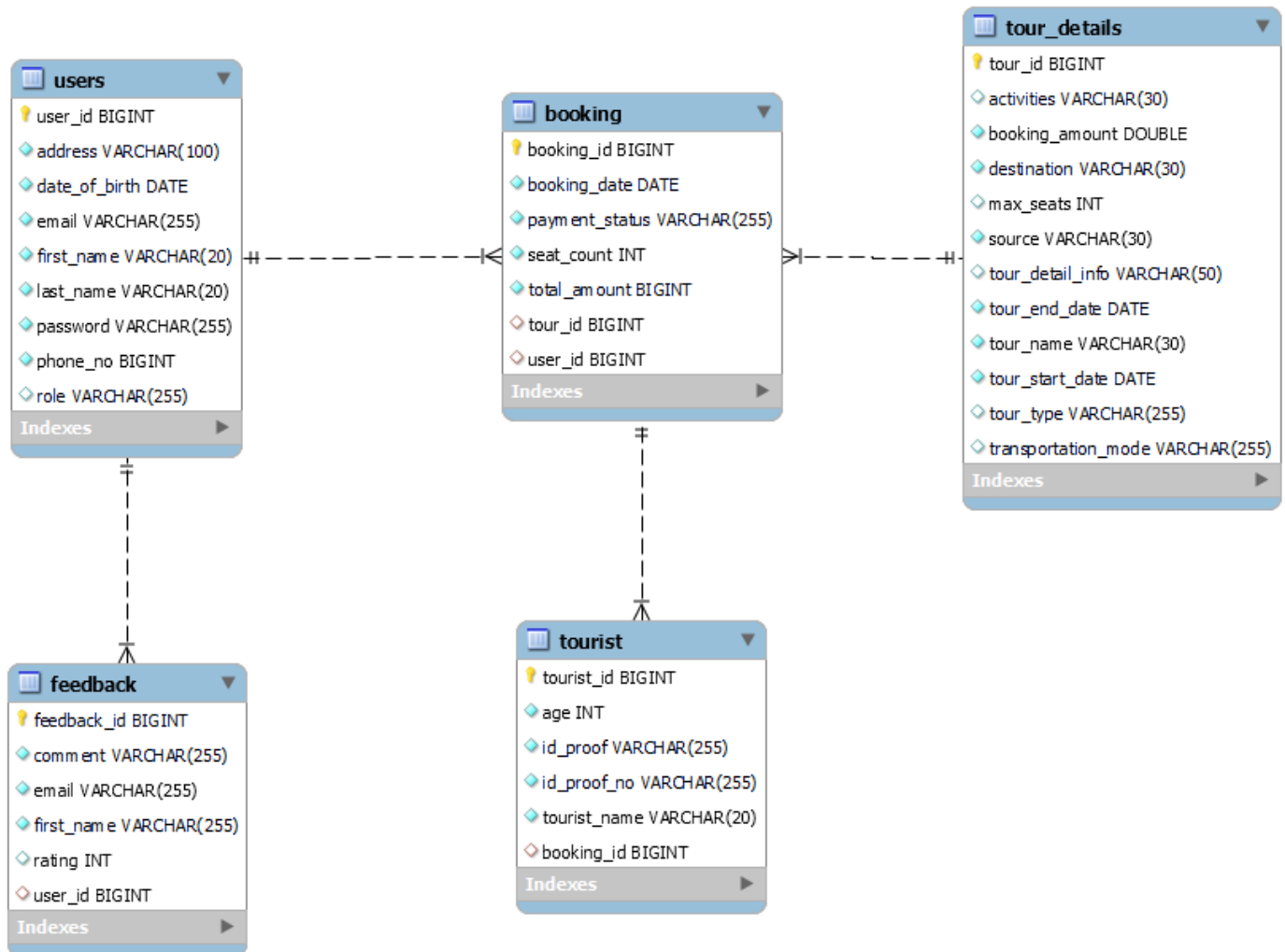


4.4 PROJECT ARCHITECTURE



Wordsworth

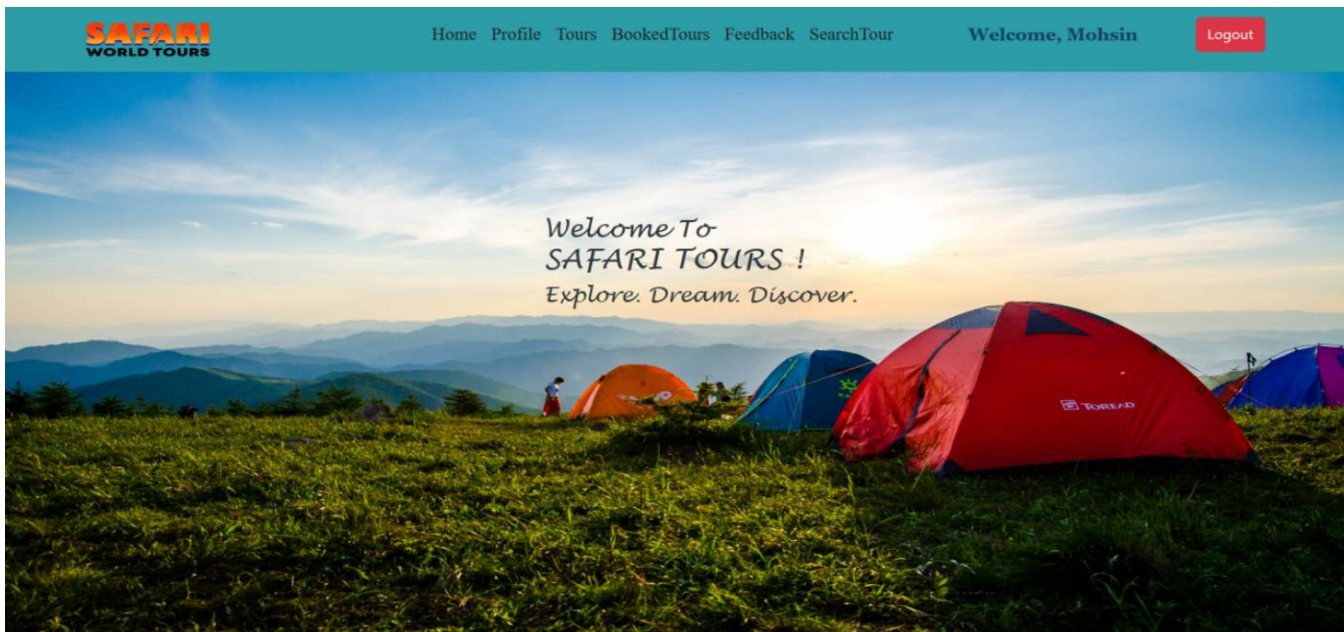
4.5 ER DIAGRAM



5. PROJECT SCREENSHOTS

5.1 USER

➤ User UI



➤ User Login

Login

Email

Password

Do not have an account? [Resister Here!](#)

Login

➤ User Sign UP

SignUp

Email

Password

Confirm Password

Role

First Name

date Of Birth



Address

Phone No

Already have an account? [Login here](#)

Signup

➤ Update Profile

Update Profile

First Name

Mohsin

Last Name

Khan

Email

Mohsin@gmail.com

Password

Mohsin@123

DOB

16-04-1997

Phone Number

8158931704

Address

Gaya

Update

➤ View Profile


User Profile

Edit


First Name: Mohsin
Last Name: Khan
Email: Mohsin@gmail.com

dob: 1997-04-16
phone no: 8158931704
Address: Gaya


➤ Search Tours



Search By Destination



Search By Duration



Search By Budget


➤ Tour Packages


Mumbai to Kashmir

Explore Kashmir package

30001/-

per person

 days

 18 seats

 TRAIN

Activities : **Snow Rafting, treking etc**

Tour Type : **DOMESTIC**

Tour Details : **You can visit beautiful Kashmir**

Start Date : **2023-03-30**

End Date : **2023-04-05**

Book


Pune to Pune

Historical Pune package

12000/-

per person

 days

 46 seats

 BUS

Activities : **Treking**

Book

➤ Tourist Details

No of Tourists = 3

No of Seats Available = 15

Name Age ID Proof ID Number

Name Age ID Proof ID Number

Remove

Name Age ID Proof ID Number

Remove

Add

Book

Total Amount = 90003

➤ Cancel Booking

Tour Name: 'Explore Kashmir'

Booking Id: 9

Mumbai to Kashmir

 TRAIN

30001/-

per person

No of Seats: 2

Start Date : 2023-03-30 End Date :2023-04-05

Booking Date : 2023-03-12 Total Amount :60002

Cancel Booking

➤ Give Feedback

Feedback

Full name

Enter your first name

Email

name@example.com

Tell us your experience

Rating

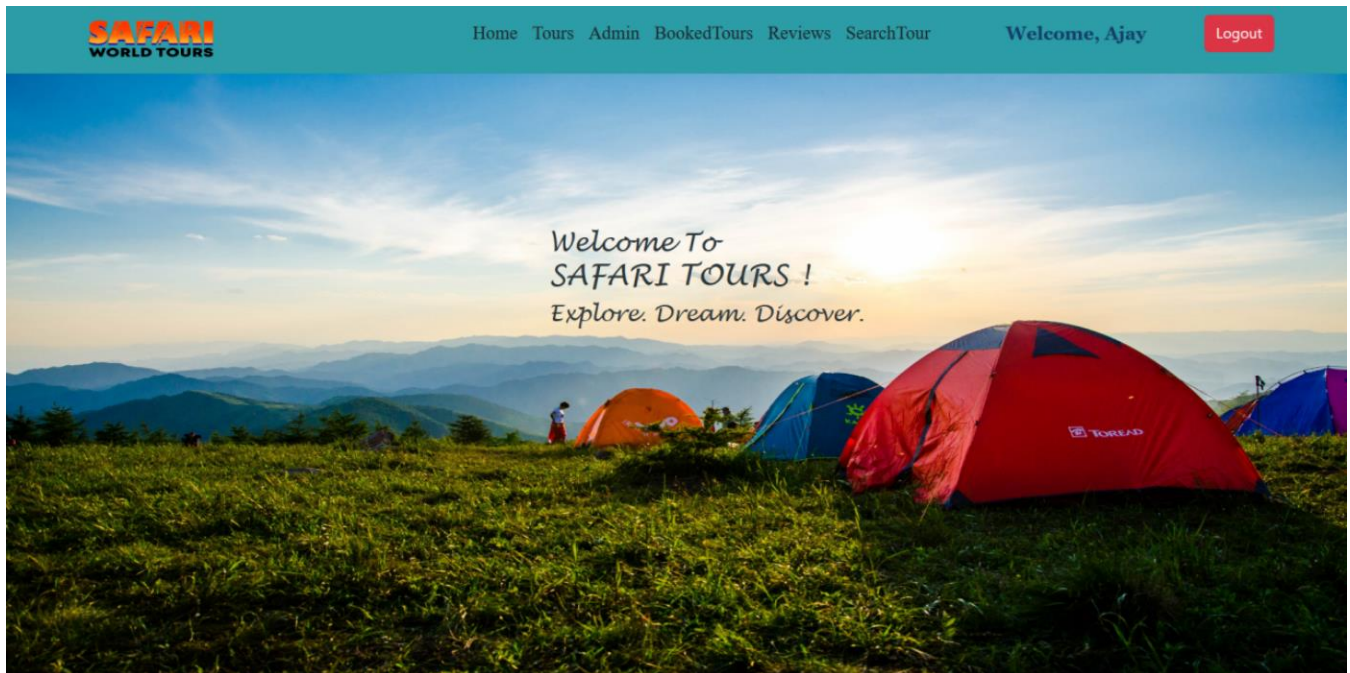


Comments

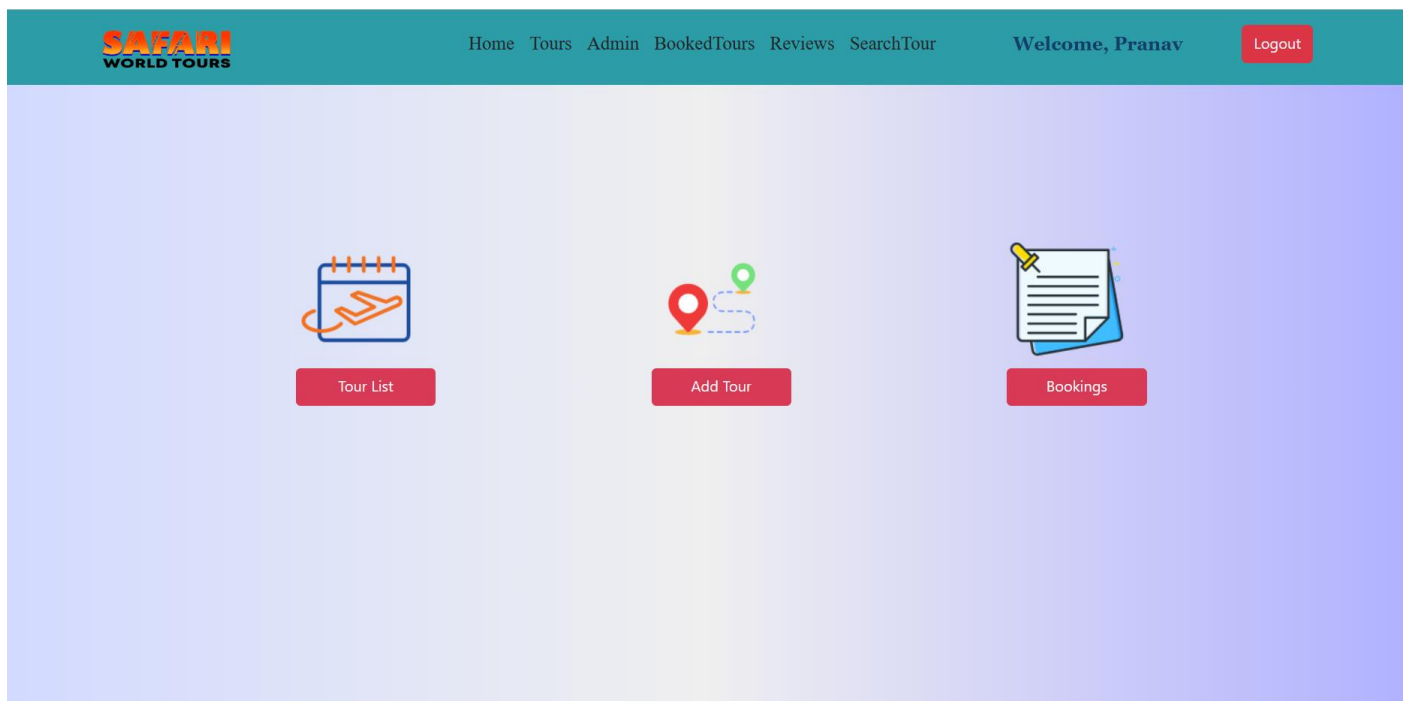
Send

5.2 ADMIN

➤ Admin UI



➤ Admin Functionalities



➤ Add Tour

Add Tours

Tour name :

Source :

Destination :

Start Date :

dd-mm-yyyy

End Date :

dd-mm-yyyy

Seats Available :

Services

--Choose Transport--

Types

--Choose tour type--

Activities :

Tour Details :

Booking Amount :

Save

➤ Update Or Delete Tour

Mumbai to Kashmir

Explore Kashmir

22 seats

TRAIN

30001/-

per person

Update

Delete

Activities : **Snow Rafting, trekking etc**

Tour Type : **DOMESTIC**

Tour Details : **You can visit beautiful Kashmir**

Start Date : **2023-03-30**

End Date : **2023-04-05**

➤ View Booked Tours

SAFARI
WORLD TOURS

[Home](#) [Tours](#) [Admin](#) [BookedTours](#) [Reviews](#) [SearchTour](#)

Welcome, Pranav

[Logout](#)

Tour Name: 'Explore Kashmir'

Booking Id: 3

Mumbai to Kashmir

TRAIN

30001/-

per person

No of Seats: 1

Start Date : **2023-03-30** End Date : **2023-04-05**

Cancel Booking

Booking Date : **2023-03-10** Total Amount : **25000**

Tour Name: 'Explore Kashmir'

Booking Id: 4

Mumbai to Kashmir

TRAIN

30001/-

per person

No of Seats: 1

Start Date : **2023-03-30** End Date : **2023-04-05**

Cancel Booking

➤ View Feedbacks



Name : ajay

Email Id : ajay@gmail.com

Good



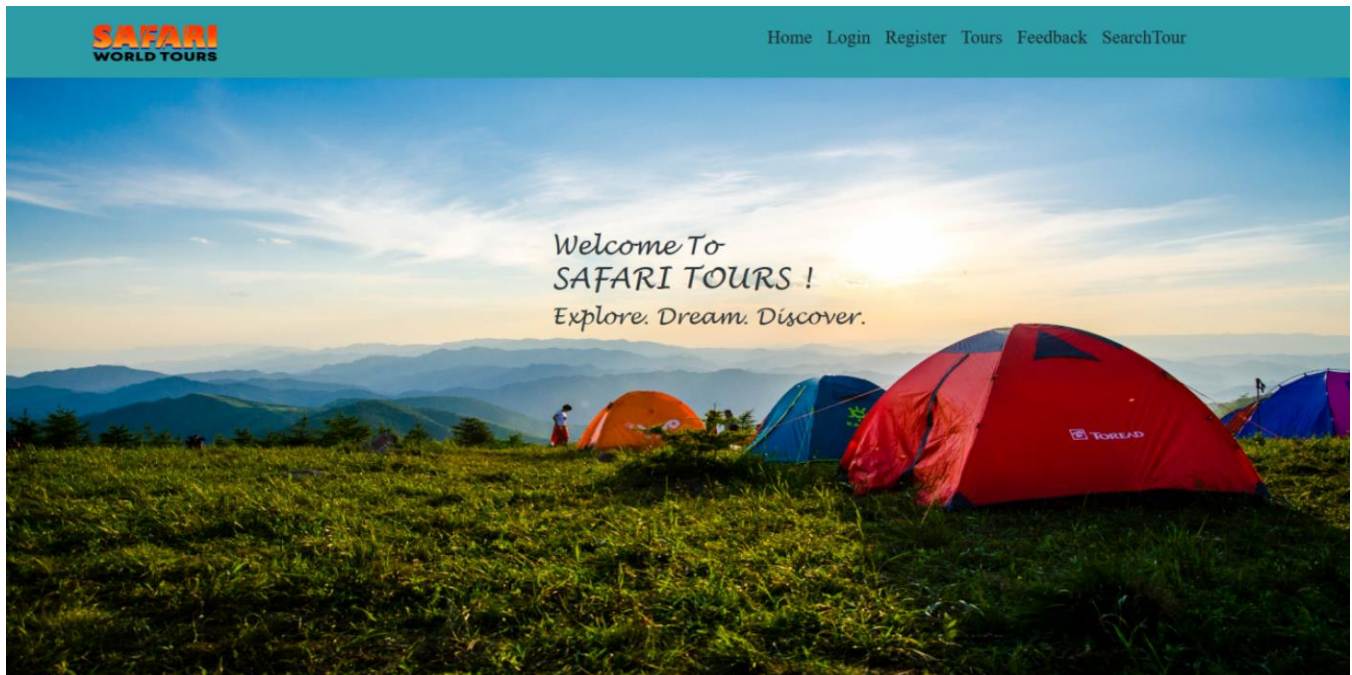
Name : mohsin

Email Id : Mohsin@gmail.com


very good

5.3 Guest

➤ Guest UI





➤ Search Tours


[Home](#) [Login](#) [Register](#) [Tours](#) [Feedback](#) [SearchTour](#)

Mumbai to Kashmir

Explore Kashmir package

 days

 18 seats

 TRAIN

Activities : **Snow Rafting, trekking etc**

Tour Type : **DOMESTIC**


Tour Details : **You can visit beautiful Kashmir**


Start Date : **2023-03-30** End Date : **2023-04-05**


30001/-
per person

Pune to Pune

Historical Pune package

 days

 46 seats

 BUS

Activities : **Treking**

12000/-
per person

6. TESTING

One of the main purposes of testing is to validate and verify that the system works as intended. No program or system design is perfect. However, if we implement the system without proper testing, then it may cause problems and lead to a bad user experience.

Testing and checking outcomes of each test gives us the best chance to detect and correct errors before the system is implemented in a production environment.

In the course of our project, we made an effort to manually test each component. In all cases, we obtained the desired results as demonstrated below.

Sr. No.	Test Case	Expected Result	Actual Result	Error Message
1	Register Page	Redirected to Personal details	OK	Nothing
2	Login Page	User/Admin Login through this page	OK	Please enter username and password again.
3	Edit Password	Password will be reset	OK	Nothing
4	Search Tour	Gives all tours	OK	Nothing
5	Booking Package	All the fields should be filled for submission	OK	Nothing
6	Checking login or not	User is logged in or not	OK	Nothing
7	Go to tourist's page	Set added information about person	OK	Nothing
8	Add information in tourist table	Save this all data into booking table	OK	Nothing
9	Add Feedback	Save the feedback of User	OK	Nothing
10	Logout	It will logout from user profile.	OK	Nothing

7. CONCLUSION

“SAFARI-Travel And Tour Management System”, an online tour booking application, was developed by our project team to simplify the tour searching and booking and manage tour data easily. We tried using the latest technologies that are cross-platform and robust. Each and every software we used was open-source in nature, which keeps the cost of production at a minimum.

We were also meticulous about the user experience aspect of our application so that navigating our website is an easy and seamless experience.

In conclusion, “SAFARI-Travel And Tour Management System” as an application would definitely be a good choice for any tour management business that wishes to enter the online market. We are confident that the numerous features and visually appealing look of the application will certainly give a big boost to the business.

8. FUTURE SCOPE

Using whatever we have learnt over the duration of this course, we tried to make our project as user-friendly and gave it as many features as possible in the limited time allotted for the project work. That said, there are certainly more features that can be added to our application. Some of those are mentioned below:

1. This application can be expanded for multiple tour management companies at one place.
2. Additional payment means can be added other than cards.
3. After a confirmed purchase, an email with the invoice of the orders can be sent to the customer.
4. Further payment functionality can be enhanced by adding payment gateway.
5. CAPTCHA can be added to login page.
6. An email notification can be sent to the users for an tour after their booking if any changes in tour timings.

9. REFFERENCES

Following is the list of websites we referred during the course of our project:

- a. <https://getbootstrap.com/docs/5.1/getting-started/introduction/>
- b. <https://reactjs.org/docs/getting-started.html>
- c. <https://www.baeldung.com/>
- d. <https://www.w3schools.com/>
- e. <https://docs.spring.io/springdata/jpa/docs/current/reference/html/#reference>
- f. <https://javaee.github.io/javaee-spec/javadocs/>
- g. <https://javadoc.io/doc/org.springframework.data/spring-datajpa/latest/index.html>
- h. <https://learncodewithdurgesh.com/>
- i. <https://stackoverflow.com>