IUHS CAMPUS FINAL ASSIGNMENT SEMESTER 03.
SOFTWARE DESIGN CONCEPT & WEBTECNOLOGY.

Safari Trip Management System

- Team introduction

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➢ Introduction

A safari trip management system include features such as itinerary planning, booking management, resource allocation, wildlife tracking, communication tools, and safety protocols. It is used by safari operators, tour guides, and participants to streamline the planning and execution of safari trips.

❖ Background

Offer a unique and exhilarating experience for enthusiasts seeking to explore the beauty of nature and wildlife. However, orchestrating a seamless and enriching safari trip involves overcoming logistical challenges, ensuring safety, and maximizing the thrill of discovery. To address these complexities, we introduce the Safari Trip Management System, a comprehensive solution designed to enhance every facet of the safari experience.

❖ System Environment

1. How system will work

The Safari Trip Management System orchestrates a seamless experience for users by integrating a range of features aimed at simplifying the planning, execution, and enjoyment of safari adventures.

2. What the system needs

making it easy for every users to use the system.

➢ User Stories

01. As a customer, I want to browse and explore safari packages.

02. As a user, I want to search for safari packages based on specific criteria like destination, duration.

03. As a traveler, I want to view high-quality images and videos of safari destinations and accommodations.

04. As a user, I want to read reviews and ratings from other travelers to make informed decisions about safari packages.

05. As a traveler, I want to check the real-time availability of safari packages for my preferred travel dates.

06. As a user, I want to receive personalized recommendations based on my past safari preferences and bookings,

07. As a customer, I want to be notified about special discounts or promotions on safari packages.

08. As a traveler, I want a seamless and user-friendly booking process with clear instructions.

09. As a user, I want to receive an email confirmation with detailed information about my booked safari.

10. As a customer, I want to have the option to cancel or modify my safari reservation within a reasonable timeframe.

11. As a traveler, I want to access a map showing the safari route and key destinations.

12. As a user, I want to receive reminders and updates about my upcoming safari trip via email or SMS.

13. As a traveler, I want to access a mobile-friendly version of the safari trip management system for on-the-go planning.

14. As a user, I want to share my booked safari details on social media platforms.

15. As a customer, I want to view a checklist for necessary items and documents for the safari.

16. As a traveler, I want to contact customer support easily for any inquiries related to my safari trip.

17. As a traveler, I want to receive a detailed invoice and receipt for my safari booking.

18. As a customer, I want to receive real-time updates on weather conditions at the safari destination.

19. As a user, I want to receive notifications for any changes to my safari itinerary.

20. As a customer, I want to download a mobile app for managing my safari trip.

21. As a traveler, I want to have access to a 24/7 helpline for emergencies during the safari.

22. As a user, I want to be notified about upcoming safari-related events and festivals.

23. As a user, I want to rate and review the safari trip management system for future improvements.

24. As a customer, I want to receive notifications about upcoming safari trips based on my preferences and history.

25. As a user, I want to have the option to upgrade my accommodation or activities during the safari.

26. As a traveler, I want to see recommended clothing and gear for the safari destination.

27. As a customer, I want to track the status of my payment and receive a confirmation upon successful payment.

28. As a traveler, I want to receive information about the local culture and traditions at the safari destination.

29. As a customer, I want to explore optional add-ons, such as photography tours or cultural experiences.

30. As a traveler, I want to receive personalized suggestions for additional activities during my safari.

➢ Functional Requirement

- Sign up

The system shall provide a user-friendly and secure sign-up functionality to allow individuals to create accounts and access the services offered.

Features:

01.User Registration Form:

The system shall present a registration form requesting essential information from the user, including but not limited to:

Full Name

Email Address

Password

Additional required information specific to the application (e.g., date of birth, username).

02.Password Policy

The system shall enforce a password policy, including minimum length, complexity requirements, and expiration intervals.

Passwords shall be securely stored using industry-standard encryption techniques.

03.Terms and Conditions Acceptance:

Users shall be required to accept the terms and conditions or user agreement before completing the sign-up process. A checkbox or similar mechanism shall be provided on the registration form for users to indicate their agreement.

- ## Sign in

01.The system shall provide a secure and user-friendly sign-in functionality to allow registered users to access their accounts and avail of system services.

02.The User Authentication module enables users to access the system securely by entering their username and password. This section outlines the specific requirements for user login.

03.The User Authentication and Authorization module ensure the secure access of users to the system by validating their email and password. This section details the specific requirements for verifying user credentials during the login process

- LOCATION

1.The system displays all safari locations

The Location-Based Safari Showcase module aims to offer an immersive and personalized experience for users exploring safari destinations. The seamless integration of location services ensures a dynamic and engaging platform for users to discover and connect with these extraordinary locations

2.Users have the ability to obtain their current location.

The Location Retrieval feature enhances user engagement by allowing users to seamlessly obtain their current location while prioritizing data security and privacy. The implementation of clear consent mechanisms and performance requirements aligns with the overall goals of safari trip management system.

- SAFARI PACKAGES

The Safari Package Management module is a pivotal component of the safari trip management system, facilitating users in exploring, obtaining information about, and selecting safari packages. This section delineates the specific requirements and functionalities associated with safari package management.

- ABOUT US

About us module is a vital component of the safari trip management system, allowing customers to view a comprehensive list of services and actively engage by providing comments and showcasing reviews from other customers. This section details the specific requirements and functionalities associated with customer interaction

- CONTACT US

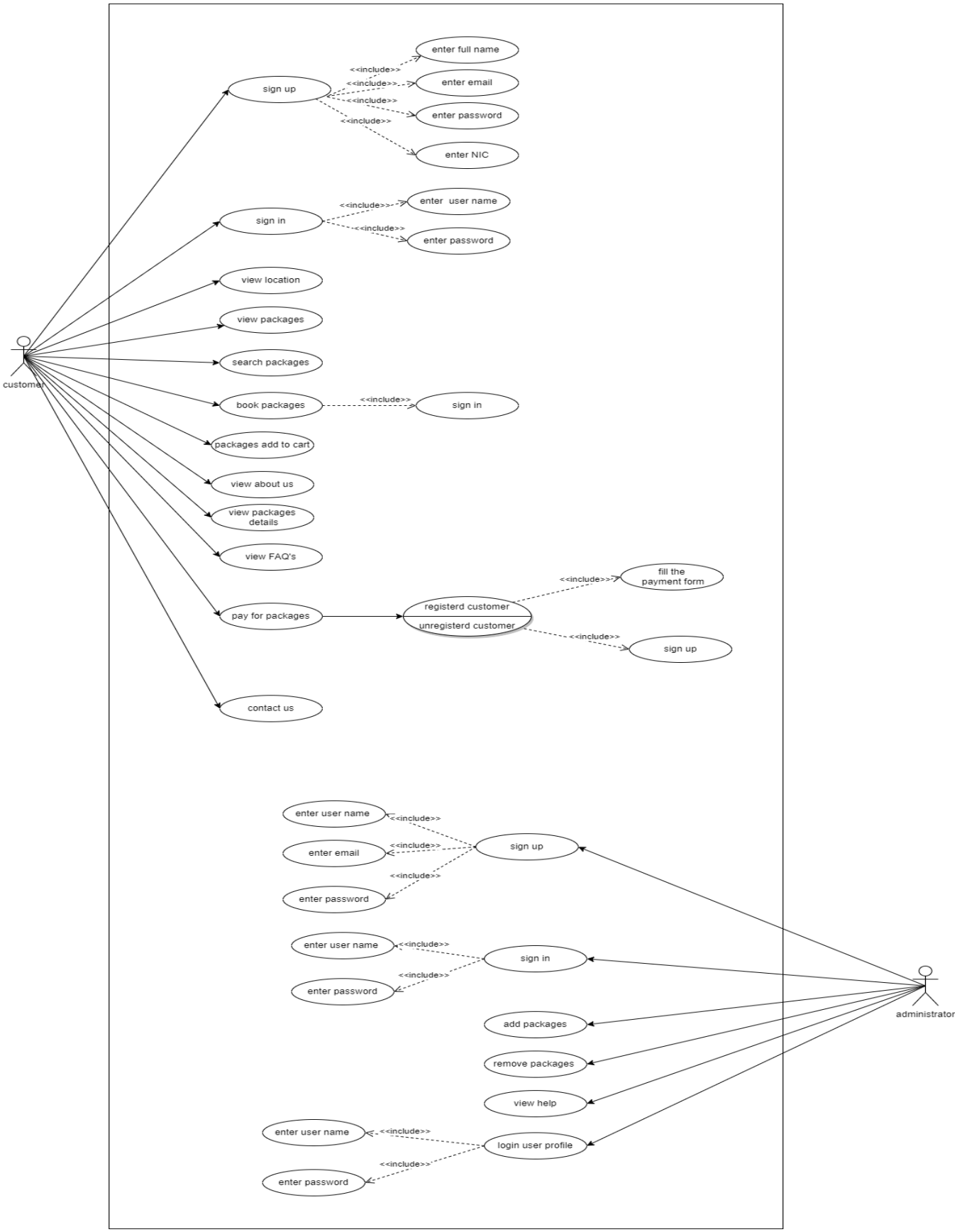
The Customer-Owner Communication module facilitates direct communication between customers and system owners. This section outlines the specific requirements for customers to initiate contact with system owners.

- FAQ’S

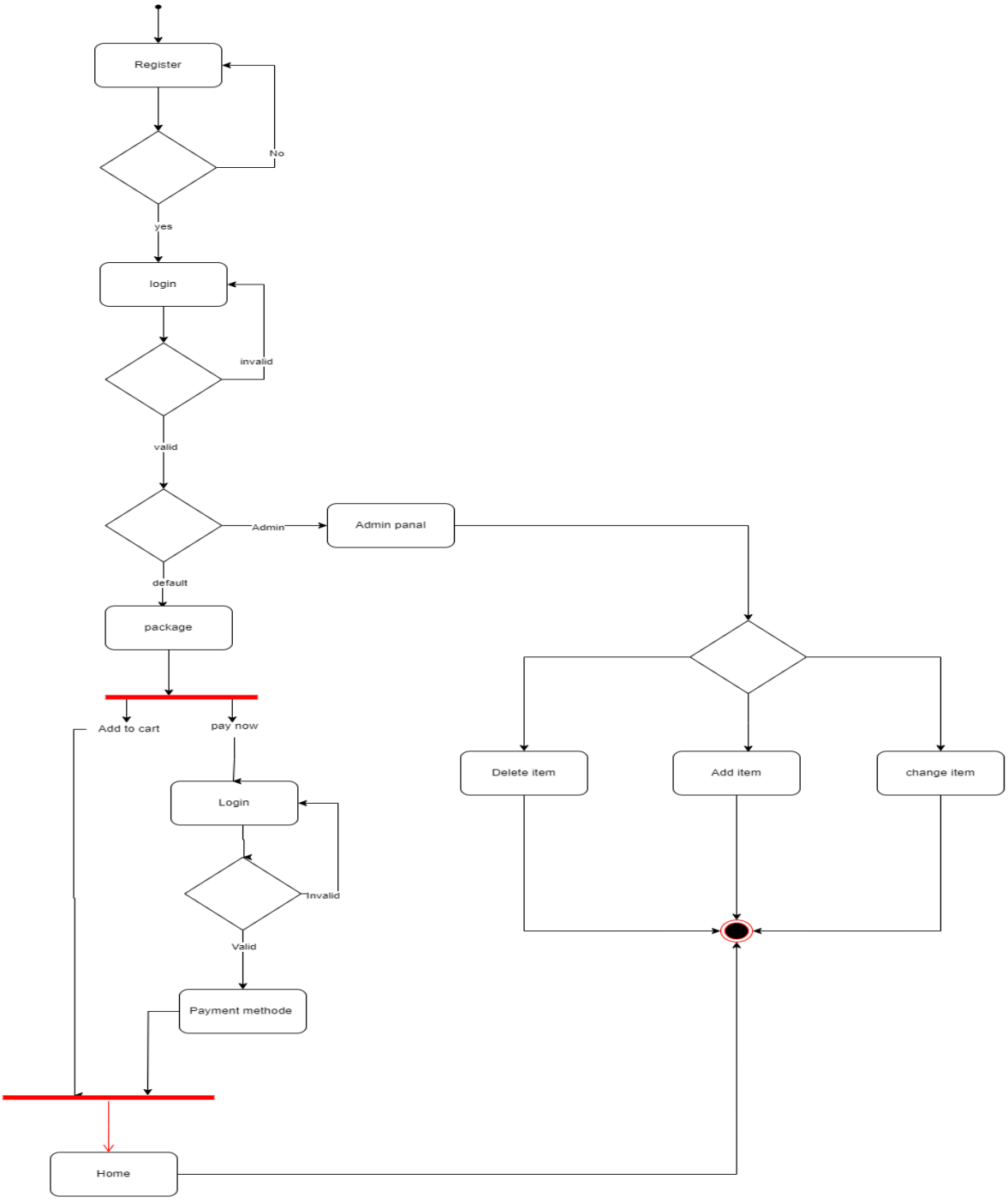
The system provide a dedicated section for Frequently Asked Questions (FAQs) to facilitate customer access to relevant information

The FAQ section show prominently displayed within the customer-facing user interface, accessible from the main navigation or a designated section

➢ Use Case Diagram



- Activity Diagram



- Use case Scenarios

01. User Case Scenario: Booking a Safari Trip

    Actor: Regular User

Description: A user wants to book a safari trip to a national park. They log in to the system, browse available safari packages, select a preferred package, customize their itinerary by choosing activities, provide necessary details, and complete the booking by making a payment.

02. User Case Scenario: Admin Managing Safari Packages

    Actor: Administrator

    Description: An administrator logs in to the admin dashboard. They add a new safari package with details such as destination, accommodation options, activities, and pricing. The admin edits the details of an existing package and removes outdated packages. They review and manage user bookings, including confirming reservations and updating itinerary details.

03. User Case Scenario: User Reviewing a Safari Experience

    Actor: Regular User

    Description: After completing a safari trip, a user logs in to the system to share their experience. They navigate to the trip they took, submit a detailed review, and provide ratings for various aspects of the safari, such as guides, accommodation, and overall experience. The user's review

becomes visible to other users interested in the same safari package

04. User Case Scenario: Admin Generating Reports

Actor: Administrator

Description: An administrator logs in to the admin dashboard to generate reports. They access the reporting and analytics section, select parameters such as time frame and safari packages, and generate reports on user engagement, revenue, and the popularity of different safari packages. The admin downloads and reviews the generated reports for decision-making and planning

05. User Case Scenario: Mobile Booking

Actor: Regular User

Description: A user on a mobile device wants to book a safari trip. They log in through the mobile interface, browse available packages, and successfully book a trip. The mobile interface ensures a seamless experience.

06. User Case Scenario: Accessibility Testing

Actor: Quality Assurance Team

Description: The quality assurance team tests the system's accessibility by using assistive technologies. They verify that

users with diverse abilities can navigate and use the system effectively, meeting accessibility standards.

➢ Non-Functional Requirements

• Performance Requirements

01. Error Handling: The system provide informative error messages within 5 seconds in case of unexpected errors, ensuring that users are promptly informed of any issues.

02. The system implement a visual feedback mechanism wherein buttons within the user interface are highlighted when the mouse pointer hovers over them.

03. Upon successful completion of a payment transaction, the system shall display a pop-up message confirming the transaction. Upon clicking the "OK" button on the pop-up, the system shall redirect the user to the home page.

• Usability Requirements

01. The system present package details in a manner that is easy to read and comprehend for users.

Package details, including pricing, features, and any other relevant information, the displayed using legible font sizes and styles to ensure readability.

02. Users shall be able to view a list of available packages within the system.

Each package listing shall include an option for users to either book the package or add it to the cart for future processing.

The booking or cart action initiated through a clear and intuitive user interface element, as a button associated with each package.

Upon selecting the booking option, users shall be guided through a booking process, capturing necessary details such as date, quantity, or any other relevant information.

If the user chooses to add a package to the cart, the system shall provide a visual confirmation and allow users to review and modify the cart contents before proceeding to checkout.

03. Users shall be able to view the contents of their shopping cart, including details such as package names, quantities, and prices.

Each package listed in the cart shall include an option for users to remove it from the cart.

The removal action shall be initiated through a clear and intuitive user interface element, such as a "Remove" button associated with each package.

Once removed, the system shall promptly update the cart, removing the specified package, and provide visual confirmation of the action.

- Reliability Requirements

    01. User passwords securely stored in the system's database using encryption.
    02. The system shall implement robust security measures to protect the confidentiality and integrity of customer payment details.

- Other Requirements

    Input forms and controls shall be designed to minimize user errors and provide helpful feedback in case of input validation issues.

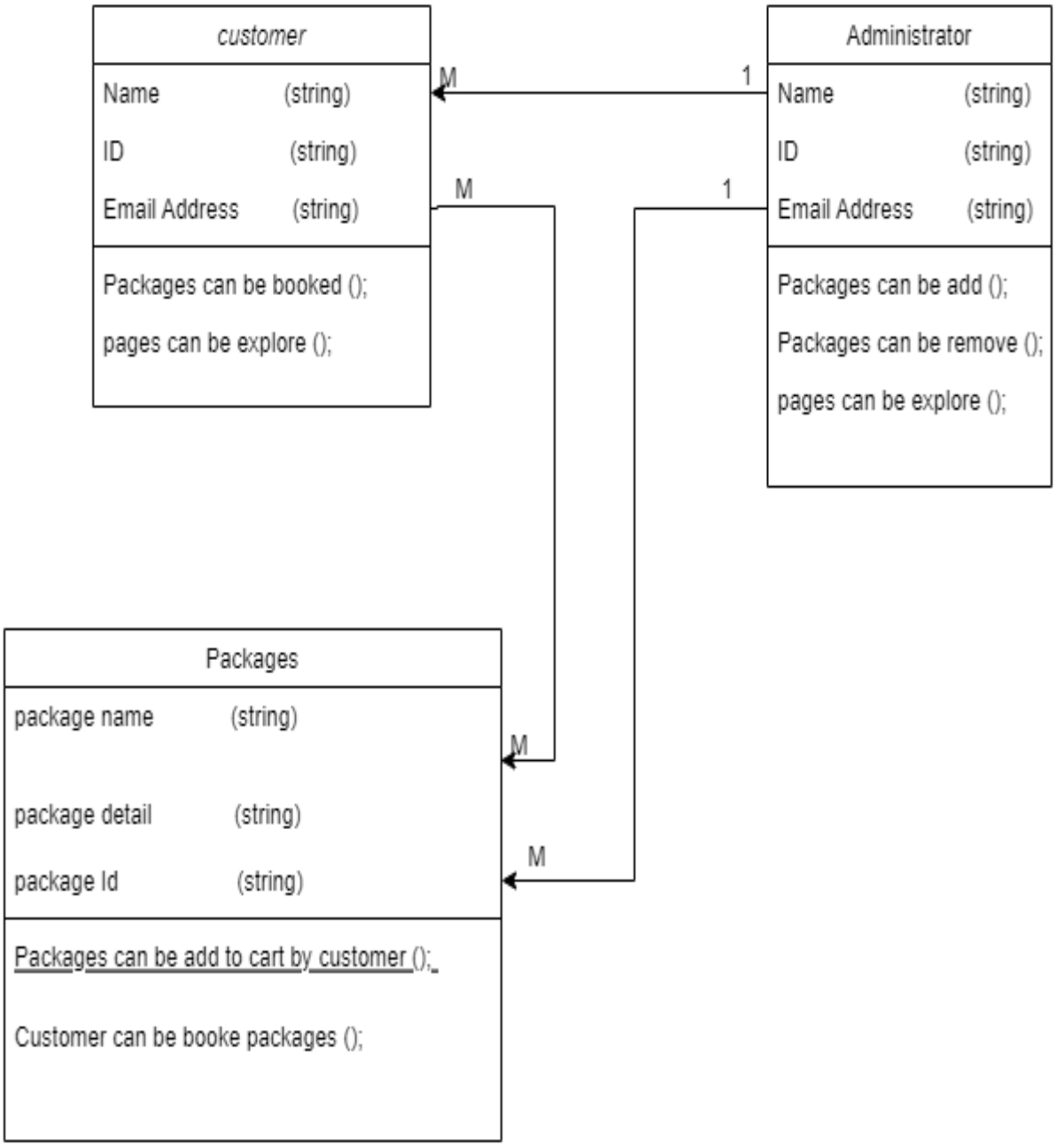
    The system employ consistent design elements, such as colour schemes, typography, and iconography, to maintain visual coherence throughout the user interface.

    Responsive design principles applied to ensure a seamless and consistent experience across various devices and screen sizes.
    User onboarding processes, including tutorials or guides, available to assist new users in understanding the system's features and functionalities.
    Common actions or workflows streamlined to reduce the number of steps required to accomplish tasks, optimizing the overall user journey.

➢ Database System

ER Diagram

- Class Diagram



- User Interfaces

https://www.figma.com/file/ekhWHU9xpT77isrdduz8Yo/Untitled?type=design&node-id=0%3A1&mode=design&t=nUeUHi1IHS3bcv4l-1

- Constraints

01. Budget Constraint

The development, implementation, and maintenance of the Safari Trip Management System are subject to a budget constraint of some money. This constraint encompasses all project-related expenses, including software development, infrastructure, third-party integrations, testing, training, marketing, and ongoing maintenance. The project team is required to operate within this financial boundary, and any proposed changes affecting the budget must undergo a formal approval process outlined in

02. Time Constraint

The Safari Trip Management System is expected to be deployed and operational within a timeframe of one month from the project initiation date. Delays beyond this schedule may impact stakeholder expectations and additional costs. The project team is committed to adhering to the specified timeline, and any proposed extensions must be approved by the project sponsor.

03. Regulatory Compliance

The system must comply with all relevant local and international regulations governing the tourism and travel industry. Any changes in regulations during the development or operational phases must be promptly addressed to ensure continued compliance.

04. Technology Constraints

The system must be compatible with widely used web browsers (e.g., Chrome, Firefox, Safari) and operating systems (e.g., Windows, macOS, Android, iOS). Compatibility testing will be conducted to ensure optimal user experience across various devices and platforms.

05. Security and Privacy Constraints

Stringent security measures must be implemented to safeguard user data and ensure privacy. Compliance with industry standards and regulations for data protection is mandatory. Any identified security vulnerabilities must be addressed promptly to maintain the integrity of the system.

06. Environmental Constraints

The system must operate under various environmental conditions, including fluctuating internet connectivity and potential power

outages. Robust error handling and data recovery mechanisms should be in place to mitigate the impact of such conditions.

- Verification Criteria

01. User Authentication:

Verification Criteria:

Verify that users can successfully register an account.

Confirm that registered users can log in with valid credentials.

Test that incorrect login attempts result in appropriate error messages.

02. Safari Package Booking:

Verification Criteria:

Verify that users can view a list of available safari packages.

Confirm that users can select a package and initiate the booking process.

Test the accuracy of the pricing calculation for selected packages

03. Payment Processing:

Verification Criteria:

Confirm that users can securely enter and save payment details.

Test the payment gateway integration for successful transactions.

- Possible Test Cases and Test Scenarios

1. Sign-up/Login:

Valid and invalid email/password combinations.

Social media login integration.

Account deactivation and reactivation.

2. User Profile:

Update profile information (name, travel preferences, allergies).

Manage past trip history and reviews.

Subscribe to trip updates and promotions.

3. Search engine:

Filter trips by destination, dates, price range, safari type, animal sightings.

Search using keywords (luxury, family-friendly, etc.).

View real-time availability and capacity.

4. Booking process:

Select number of travelers and accommodation options (tent, lodges).

Secure payment processing with different currencies.

Confirmation email and travel documents generation.

5.Cancellation and modification:

Modify booking dates or add additional services before departure.

Cancel booking with different notification periods and refund policies.

Handle emergency situations and trip disruptions.

6. Itinerary and logistics:

View detailed daily schedule of game drives, meals, and other activities.

Access park permits and necessary documentation.

Communicate with guides and tour operators during the trip.

7. Accommodation and meals:

Confirm room preferences and dietary restrictions.

Manage special requests (early check-in, late check-out).

Report any issues with facilities or services.

8. Game viewing and wildlife encounters:

Record animal sightings and share photos within the app.

Learn about species encountered through interactive guides.

Report any concerns about animal welfare or ethical practices.

9. Reviews and feedback:

Rate your overall safari experience and specific aspects (guides, accommodation).

Share photos and videos from the trip with other users.

Respond to tour operator's feedback requests.

10. Recommendations and loyalty programs:

Receive personalized trip recommendations based on past preferences.

Gain access to exclusive deals and discounts through loyalty programs.

Participate in referral programs and earn rewards.

11.Offline functionality:

Access essential information and itinerary details without internet connection.

12. Multilingual support:

Cater to a diverse audience with language options.

13. Accessibility features:

Ensure the platform is accessible to users with disabilities.

14. Payment security:

Implement robust security measures for financial transactions.

15.Data privacy:

Comply with data protection regulations and user privacy preferences.

16. Emergency response protocols:

Handle medical emergencies and safety concerns during the trip.

17. Environmental sustainability:

Promote responsible tourism practices and eco-friendly initiatives.

18.Integration with external services:

Connect with flight booking platforms, local attractions, etc.

19.Performance and scalability:

Ensure smooth system performance under high user load and data volume.

20. Bug testing and user feedback:

Continuously gather user feedback and address technical issues promptly.

➢ References

➢ Final Conclusion

In conclusion, this SRS document outlines the requirements for the Safari Trip Management System. The system is designed to streamline safari trip operations, enhancing planning, reservations, and tracking. Stakeholders are encouraged to refer to this document as the definitive guide during development. We are committed to delivering a high-quality system on time and within budget, anticipating a positive impact on the safari tourism industry.

END