Rationale:

After carefully examining the client requirements and reviewing the market research findings, it is evident that the optimal solution for ZA would be a dynamic website. Considering the nature of their offerings and the diverse needs of their customers, a website would serve as the most suitable platform to fulfill their objectives effectively. This choice is rooted in thorough research and ensures that I can meet the client's requirements while delivering an exceptional user experience. With a dynamic website, I can seamlessly integrate features such as online ticket reservations, hotel bookings, account management, and accessibility options, thereby enhancing customer satisfaction and engagement. This approach aligns perfectly with ZA's goals and enables me to provide a digital solution that exceeds their expectations.

Justification:

The solution I have decided to create for client is the website. When users visit the website, they'll have different options to choose from based on whether they're just curious, thinking about visiting, or have already been there before.For users who haven't been to RZA yet, the website will be like a virtual tour guide. They'll be able to look at pictures, read about the animals in the zoo, check out the hotel rooms, and see what educational visits they offer.

For new users, I will create a registration page where they can create an account as this is one of the requirement from my client . This page will ask for basic information like name, email address, and password.Once registered, users can log in to their accounts anytime. This login page will have fields for entering their email and password. It's important to make the login process secure and user-friendly to ensure a smooth experience for users. I will also add error handling in both login and registration page such as if a user enters invalid information (such as an incorrectly formatted email address), the system should provide an error message with what they've inputted incorrect. Also if user forgets their password, the system should offer a "Forgot Password" option. This can trigger an email containing a secure password reset link, allowing the user to create a new password and regain access to their account. Additionally, I will create a page for "educational visits", offering "resources" and "materials" for teachers and school groups. This section will include information about curriculum-aligned educational programs, downloadable resources, and the ability to book educational visits directly through the website.

The booking page of the website will offer a user-friendly interface that allows users to "check availability", select preferred dates and times, and complete their bookings seamlessly online. For zoo tickets, users can choose their desired date of visit, specify the number of tickets needed, and select any additional options such as guided tours or special events. Similarly, for hotel stays, users can browse available room types, view room rates, and select their preferred dates of stay. To enhance user experience, the booking page provides real-time availability updates, ensuring that users have access to accurate information before finalizing their bookings.

In the "Attractions and Facilities" page, I will add a comprehensive guide to the wildlife zoo's offerings. Visitors will find detailed information about each animal habitat, accompanied by captivating descriptions and interactive maps for easy exploration. Alongside, I'll feature the zoo's facilities, highlighting dining options, rest areas, and souvenir shops, ensuring visitors have a seamless experience.

I'll also add a feature "Loyalty and Reward Scheme" on the ZA website! When visitors join, they'll earn points for doing fun stuff like buying zoo tickets or booking hotel rooms. These points can be traded for awesome rewards, like discounts on future visits or special tours. Plus, the more they engage, the more perks they'll unlock, like VIP treatment and early access to events.

This will be a special section of the website which I will integrate and will accessible to

registered users. Members can manage their bookings, view their loyalty points, and access exclusive offers and discounts.

## Functional Req

R Users must be able to create an account to access personalized features and services tailored to their preferences, including booking management and loyalty rewards.
J Account registration enables personalized services, booking management, and facilitates the implementation of loyalty and reward schemes.
R Users should be able to log in using their credentials to access personalized content, including educational materials and booking history.
:Logging in is crucial for users to access their saved preferences, learning materials, and booking information, ensuring a seamless and personalized experience.
Customers must be able to reserve and purchase tickets for zoo entry and educational programs through the digital platform.
Streamlining ticket reservations simplifies the booking process and ensures availability for visitors, improving customer satisfaction.
The solution must allow customers to check availability and book their stay at the on-site hotel online.
Offering online booking capabilities enhances convenience for customers and facilitates efficient hotel management for RZA.
Implement a loyalty and reward scheme where customers earn points for bookings and engagement, redeemable for discounts or exclusive offers.
A loyalty program incentivizes repeat visits, fosters customer loyalty, and enhances the organization's competitive edge in the market.

## Non Req

Website must keep users' personal data confidential
The website must ensure the protection of user's personal data. Protecting users' data is very important to build trust and comply with data protections regulations.
The website must be easy to understand and navigate
Website should be presented in a clear, and understandable way with all the instructions available for users to effectively use and manage website.
The website must provide fast responses
Without getting fast responses, users can get annoyed and wish to visit other website which provide fast responses
Website should be highly accessible
The website must provide accessibility features to ensures that users with disabilities can use the website effectively.
Each page of website must load in 2 seconds
Fast loading times and responsive interactions are essential for user satisfaction

## Key performance indicators (KPIs):

Maintain a record of 0 security incidents.
Respond to user questions submitted through the website's contact form within 24 hours.
50% of website traffic comes from mobile devices.
Within one month of the website loading, it will 100 users registered.
Maintain an average page load time of under 2 second.

## UAC

Users must be able to access detailed information about the wildlife zoo, hotel, and educational visits.

Users can seamlessly reserve and purchase tickets for zoo entry and educational programs.
Users can easily check hotel availability and make bookings online.
Users should be able to create accounts without difficulty and access features such as booking history, preferences, and loyalty rewards.

Target Audience
The target audience for RZA's digital solution comprises families, school groups, tourists, conservation enthusiasts, business travelers, the local community, and special interest groups interested in visiting the safari-style wildlife zoo, utilizing the on-site hotel, and participating in educational programs. These diverse individuals and groups seek recreational activities, educational experiences, and opportunities for wildlife conservation and environmental education. By understanding and addressing the unique needs and interests of each segment, RZA can effectively attract and engage a broad range of visitors and guests, ensuring the success and impact of their digital solution.

Accessibility features
In implementing accessibility features for RZA's website, we prioritize inclusivity and usability for users with diverse needs. This entails incorporating features such as screen reader compatibility, keyboard navigation support, and adjustable font sizes to ensure that individuals with visual impairments or motor disabilities can easily navigate and interact with the site. Additionally, providing alternative text for images and descriptive link text enhances comprehension for users relying on assistive technologies. We also commit to adhering to web accessibility standards such as WCAG (Web Content Accessibility Guidelines) to guarantee compliance and optimize usability for all users, regardless of their abilities.

Legislation and regulations:
Accessibility Laws: Compliance with accessibility laws and standards to ensure that the website is accessible to individuals with disabilities. This could include laws such as the Americans with Disabilities Act (ADA) in the United States or similar legislation in other countries.

Data Protection and Privacy Laws: Adherence to data protection and privacy laws governing the collection, processing, and protection of personal data of website users. This includes laws such as the General Data Protection Regulation (GDPR) in the European Union or similar data protection laws in other jurisdictions.

Consumer Protection Laws: Compliance with consumer protection laws to ensure transparency, fair practices, and protection of consumer rights in online transactions and interactions. This could include laws governing online advertising, pricing transparency, and terms of service agreements.

Copyright and Intellectual Property Laws: Respect for copyright and intellectual property laws governing the use of content, images, and multimedia on the website. This includes obtaining proper permissions or licenses for copyrighted material and avoiding

infringement of intellectual property rights.

E-Commerce Regulations: Compliance with e-commerce regulations, including laws governing online sales, payment processing, and consumer rights in online transactions. This could include requirements for clear product descriptions, pricing transparency, and secure payment processing.

Website Accessibility Guidelines: Adherence to web accessibility guidelines such as the Web Content Accessibility Guidelines (WCAG) to ensure that the website is usable and accessible to users with disabilities. This includes providing alternative text for images, keyboard navigation support, and compatibility with assistive technologies.

Risk Mitigation log:
There is a risk that assets used on the website, such as images, videos, or written content, may contain copyrighted material
Source original assets or validate that materials used are copyright-free. Implement robust procedures for content review and clearance.
The website is vulnerable to external threats, including cyberattacks such as DDoS attacks, hacking attempts, or data breaches, as well as natural disasters or physical security breaches.
Implement robust cybersecurity measures, such as firewalls, encryption, intrusion detection systems, and regular security audits. Store all files and documents with local and cloud-based copies to ensure data availability and integrity.
The website may not fully comply with data protection legislation, such as GDPR, resulting in potential legal action, fines, and reputational damage.
Ensure that the website meets data protection legislative guidelines by implementing measures such as obtaining user consent for data collection, ensuring data security, and providing transparency about data processing practices.
The website may not be fully accessible to individuals with disabilities, resulting in legal action, reputational damage, and exclusion of a significant portion of the audience.
Adhere to web accessibility guidelines such as WCAG, conduct regular accessibility audits, and involve users with disabilities in testing and feedback processes.
Insufficient backup and disaster recovery procedures may result in data loss, prolonged downtime, and inability to recover from disasters
Implement robust backup and disaster recovery procedures, including regular data backups, offsite storage, and contingency plans for various disaster scenarios.
The website may be vulnerable to SQL injection attacks, where malicious users exploit inadequately sanitized user inputs to execute unauthorized SQL queries, potentially leading to data breaches, data manipulation, or unauthorized access to sensitive information.
Implement secure coding practices, such as parameterized queries and input validation, to prevent SQL injection vulnerabilities. Regularly conduct security audits and penetration testing to identify and address potential vulnerabilities.