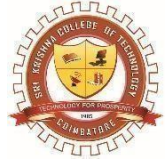




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KOVAIPUDUR, COIMBATORE 641042**



AQUAVOYAGE CLOUDPORT: SIMPLIFYING WATERFRONT RETREAT BOOKINGS

21SBE04-USER EXPERIENCE DESIGN

A PROJECT REPORT

Submitted by

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in partial fulfilment for the award of the degree

Of

BACHELOR OF TECHNOLOGY

in

INFORMATION TECHNOLOGY

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BONAFIDE CERTIFICATE

Certified that this project report **“AQUAVOYAGE CLOUDPORT: SIMPLIFYING WATERFRONT RETREAT BOOKINGS”** is the bonafide work of **“BARATH V, HARI VISHNU S and LAVANYA S B”** who carried out the project work under my supervision.

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INTERNAL EXAMINER

EXTERNAL EXAMINER

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ABSTRACT

Water sports activities offer a unique and exhilarating way for individuals to connect with nature, stay active, and experience adventure on the water. This abstract explores the diverse range of water sports available, including surfing, kayaking, paddleboarding, snorkeling, and scuba diving, highlighting their physical, mental, and social benefits. From the thrill of riding waves to the tranquility of exploring underwater ecosystems, water sports cater to a wide spectrum of interests and skill levels, making them accessible to both beginners and seasoned enthusiasts.

Apart from the recreational aspect, water sports also promote environmental awareness and conservation. As participants immerse themselves in aquatic environments, they gain a deeper appreciation for marine ecosystems and the importance of preserving natural habitats. This abstract delves into the role of water sports in fostering environmental stewardship, promoting sustainable practices, and advocating for the protection of marine life, thus contributing to the broader goals of environmental education and conservation efforts.

Furthermore, the abstract explores the economic and tourism impact of water sports activities, particularly in coastal regions and destinations known for their aquatic attractions. Water sports not only attract tourists and generate revenue for local businesses but also create employment opportunities, support infrastructure development, and enhance the overall tourism experience. By showcasing the multifaceted benefits of water sports, this abstract underscores their significance as a source of recreation, environmental engagement, economic growth, and cultural enrichment in coastal communities and beyond.

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LIST OF ABBREVIATIONS

SL.NO	ABBREVIATIVE	ABBREVIATION
1	HTML	Hyper Text Markup Language
2	CSS	Cascading Style Sheets
3	ORM	Object Relational Marking
4	OS	Operating System
5	HRIS	Human Resources Information System
6	API	Application Programming Interface

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Background theory plays a crucial role in shaping the foundation and direction of a water sports website, guiding its design, functionality, and overall approach. One fundamental theory is Recreation and Leisure Theory, which underscores the significance of recreational activities, including water sports, in promoting holistic well-being. By highlighting the physical benefits such as improved cardiovascular fitness, enhanced coordination, and stress relief, this theory positions water sports as not just a form of leisure but also a means of fostering a healthy and active lifestyle for individuals of all ages and skill levels.

In tandem with Recreation and Leisure Theory, User Experience (UX) Design principles play a pivotal role in ensuring a positive and seamless user experience on the website. This theory emphasizes user satisfaction, ease of use, accessibility, and engagement, guiding decisions related to interface design, navigation, content presentation, and interactive features. For a water sports website, this translates into intuitive booking systems, informative activity descriptions, captivating media content, and responsive design across devices to enhance user satisfaction and encourage exploration of water sports offerings.

E-commerce and Online Booking Theory are also integral to the functionality of a water sports website, especially regarding the implementation of efficient booking systems and secure payment processing. This theory focuses on real-time availability checks, promotional offers, customer account management, and data analytics to optimize the booking process, drive conversions, and foster customer loyalty. By integrating these e-commerce principles, the website can streamline the booking experience, offer personalized recommendations, and incentivize repeat bookings through loyalty programs and promotions.

Environmental Education and Conservation Theory form another crucial aspect of the background theory for a water sports website, emphasizing the importance of environmental stewardship and responsible recreation. This theory underscores the need to raise awareness about water safety practices, marine conservation, pollution prevention, and sustainable behaviors among water sports enthusiasts. By incorporating educational content, promoting eco-friendly practices, and supporting conservation initiatives, the website can contribute to preserving natural aquatic environments and ensuring the sustainability of water sports activities for future generations.

1.2 OBJECTIVE

To promote water sports activities as a healthy and enjoyable recreational option for individuals of all ages and skill levels. This objective aims to highlight the physical and mental benefits of participating in water sports, such as improved cardiovascular fitness, enhanced coordination and balance, stress relief, and a sense of adventure and accomplishment. By showcasing the diverse range of water sports available, including surfing, kayaking, paddle-boarding, snorkeling, and scuba diving, the objective is to encourage people to explore these activities as a means of staying active, connecting with nature, and fostering a passion for outdoor adventures.

To educate and raise awareness about water safety practices and environmental conservation in the context of water sports activities. This objective emphasizes the importance of proper training, equipment usage, supervision, and adherence to safety guidelines to prevent accidents and promote a culture of responsible recreation on the water. Additionally, the objective aims to instill a sense of environmental stewardship by promoting sustainable practices, such as reducing plastic waste, protecting marine ecosystems, and supporting conservation efforts that preserve the natural beauty and biodiversity of aquatic environments for future generations to enjoy. Through educational initiatives, workshops, and

community outreach programs, this objective seeks to empower individuals to enjoy water sports responsibly while respecting and preserving the natural environment.

CHAPTER 2

LITERATURE SURVEY

Explore studies that discuss best practices in designing user-friendly interfaces for water sports websites, including navigation, booking systems, information presentation, and responsive design across devices. Understand how design choices impact user engagement, satisfaction, and conversion rates.

☐ Investigate research on effective booking systems and e-commerce functionalities specific to water sports websites. This includes examining features such as real-time availability checks, secure payment integration, promotional offers, and customer account management to enhance the booking experience and drive revenue.

☐ Review literature on content management strategies for water sports websites, focusing on how to effectively showcase activity information, pricing, descriptions, media assets (such as photos and videos), customer reviews, and ratings. Understand how content presentation influences user decision-making and engagement.

☐ Explore studies on customer engagement strategies, including social media integration, loyalty programs, personalized recommendations, and customer support. Analyze how these strategies contribute to customer retention, repeat bookings, and positive word-of-mouth marketing.

Examine research on website analytics, data tracking, and optimization techniques for water sports websites. This includes studying tools and methodologies for analyzing user behavior, conversion funnels, marketing campaign effectiveness, and performance metrics to make data-driven decisions and improve website performance continually.

CHAPTER 3

SYSTEM REQUIREMENTS

The system requirements for developing and running a Meditation and Relaxation Guide application can also be classified into two categories: the development environment requirements and the end-user system requirements.

3.1 SPRING BOOT:

Spring Boot is an open-source Java framework that is part of the larger Spring ecosystem. It is designed to simplify the development of production-ready, stand-alone, and web-based applications. Spring Boot provides a streamlined and opinionated way to create Spring applications with minimal configuration.

3.2 VITE:

React is an open-source JavaScript library for building user interfaces. It is maintained by Facebook and a community of developers. React is widely used for creating web and mobile applications, and it is known for its efficiency and flexibility.

3.3 MYSQL:

MySQL is an open-source relational database management system

(RDBMS) that is widely used for managing and storing structured data. It is developed and maintained by Oracle Corporation. MySQL is known for its performance, reliability, and ease of use, making it one of the most popular database systems in the world..

3.4 ROUTERS IN VITE:

In VITE, routers are essential for creating single-page applications (SPAs) and managing client-side routing, which allows you to navigate between different views or components without the need for full-page refreshes. VITE provides several libraries and approaches for implementing routing in your application. The two most commonly used libraries for routing in are React Router and Reach Router.

3.5 REACT REDUX:

VITE Redux is a library that serves as a state management solution for React applications. It is commonly used to manage the state of a complex or large-scale application by providing a predictable and centralized way to handle and update application data. VITE Redux is often used in conjunction with VITE, and it follows the principles of the Flux architecture.

3.6 TECNOLOGY STACK:

- ☐ Frontend:
- ☐ React js, VITE

- ☐ HTML5, CSS3

Backend:

- ☐ Spring Boot with Java, version 11 or later
- ☐ Spring Security for authentication
- ☐ MySQL

CHAPTER 4

PROPOSED SYSTEM

4.1 PROPOSED SYSTEM

Key features and improvements for Gift Customization application, we might highlight aspects as follows:

1. **Inspiring Creativity:** Gift Vibes provides an immersive and inspiring crafting experience, offering a diverse range of templates, designs, and materials to spark your creativity. With serene audiovisuals and interactive crafting activities, Gift Vibes creates a tranquil atmosphere conducive to unleashing your artistic potential.
2. **Tailored Personalization:** Gift Vibes allows users to customize every aspect of their creations, from handmade cards to custom jewelry. With easy-to-use tools and intuitive controls, users can tailor their gifts to perfectly reflect the recipient's personality and preferences.
3. **Cultivating a Love for Crafting:** Gift Vibes aims to instill a lifelong love for crafting by providing engaging and educational crafting experiences. Through interactive tutorials and guided crafting sessions, Gift Vibes not only enhances your crafting skills but also fosters a sense of accomplishment and well-being.
4. **Seamless Accessibility:** Gift Vibes is designed for accessibility across various devices, ensuring that users can craft personalized gifts anytime, anywhere. Whether you're using a smartphone, tablet, or computer, Gift Vibes offers a seamless crafting experience at your fingertips.

5. **Your Multilingual Crafting Companion:** Gift Vibes goes beyond borders with its robust multilingual support, ensuring that individuals worldwide can enjoy the benefits of personalized gift customization in their native language. Here's how Gift Vibes leverages its features for a global reach.

4.2 ADVANTAGES

1. **Accessible Crafting Experience:** Gift Vibes's availability across various devices breaks down geographical barriers, allowing users from around the world to engage in personalized gift customization anytime, anywhere. This accessibility promotes inclusivity and flexibility, empowering users to craft heartfelt gifts at their convenience.
2. **Tailored Crafting Solutions:** Gift Vibes's interactive features adapt to each user's pace and preferences, offering a personalized crafting experience that resonates with their cultural backgrounds and linguistic preferences. With customizable templates and diverse design options, Gift Vibes ensures that every gift reflects the unique identity of its creator and recipient.
3. **Enhanced Crafting Outcomes:** By actively engaging users in the crafting process, Gift Vibes promotes better retention and understanding of crafting techniques and practices. Users can immerse themselves in a supportive environment where they can monitor their progress, seek guidance, and collaborate with fellow crafters, leading to improved crafting outcomes and a sense of fulfillment.
4. **Community Engagement and Support:** Gift Vibes fosters a sense of community among users, encouraging collaboration, creativity, and mutual support in their crafting journey. Whether seeking inspiration, sharing tips, or celebrating achievements, Gift Vibes provides a platform for users to connect and grow together, transcending language barriers and fostering a global

crafting

5. **Scalability and Customization:** The proposed application is designed to be scalable and adaptable to accommodate gift needs. It can accommodate a growing user base and evolve to address changing requirements. The system can be customized to incorporate additional modules or functionalities based on the unique needs of individuals seeking customized gifts.

CHAPTER 5

DESIGN AND METHODOLOGIES

1.1 USE CASE DIAGRAM

A use case diagram is a visual representation of the interactions between various actors (users or external systems) and a system or application, showcasing the different ways in which users or external entities interact with the system. Use case diagrams are part of the Unified Modeling Language (UML) and are often used during the requirements analysis and design phases of software development.

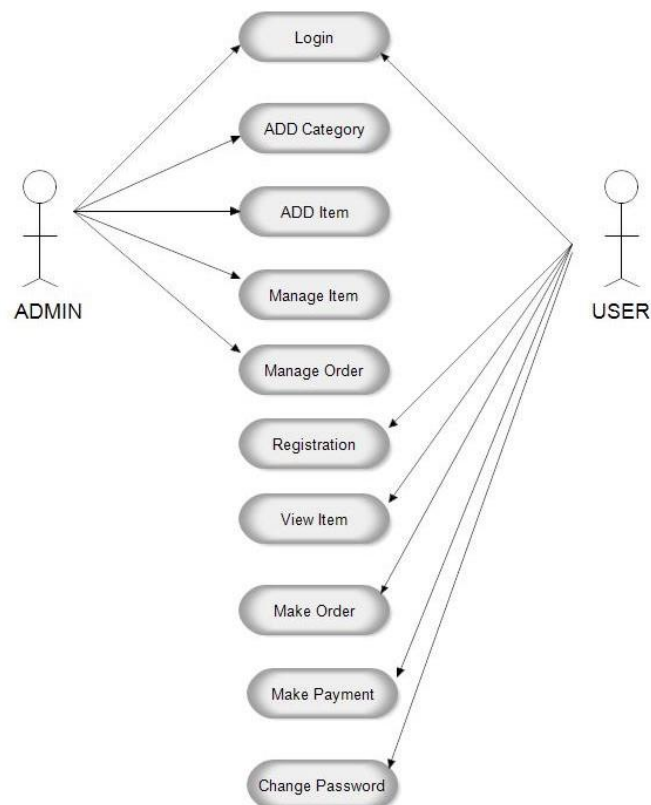


Fig 5.1 Use case Diagram

1.2 ER DIAGRAM:

It is a visual representation of the data model for a system, showing how different entities or tables in a database are related to each other. ERDs are a fundamental tool in database design and provide a clear and concise way to depict the structure of a database.

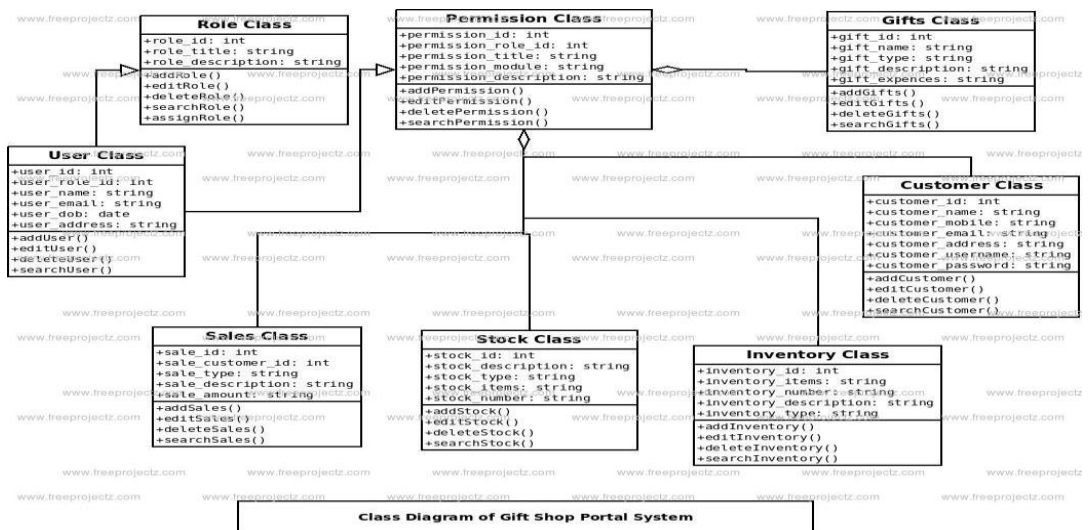


Fig 5.2 ER Diagram

5.2 METHODOLOGIES USED IN OUR APP

1. User Authentication and Authorization

This phase encompasses the processes of user registration, login, and session management. It ensures that users can securely create accounts, log in, and access their personalized features.

2. Content Information Management

In this phase, we focus on displaying comprehensive content information to users. This includes details such as content names, categories.

3. Admin Dashboard and Contents Management

The admin dashboard grants administrators special privileges for managing the request of the gift that have be requested by the customers.

CHAPTER 6

IMPLEMENTATION AND RESULT

This chapter gives a description about the output that we produced by developing the website of our idea.

6.1 LOGIN PAGE

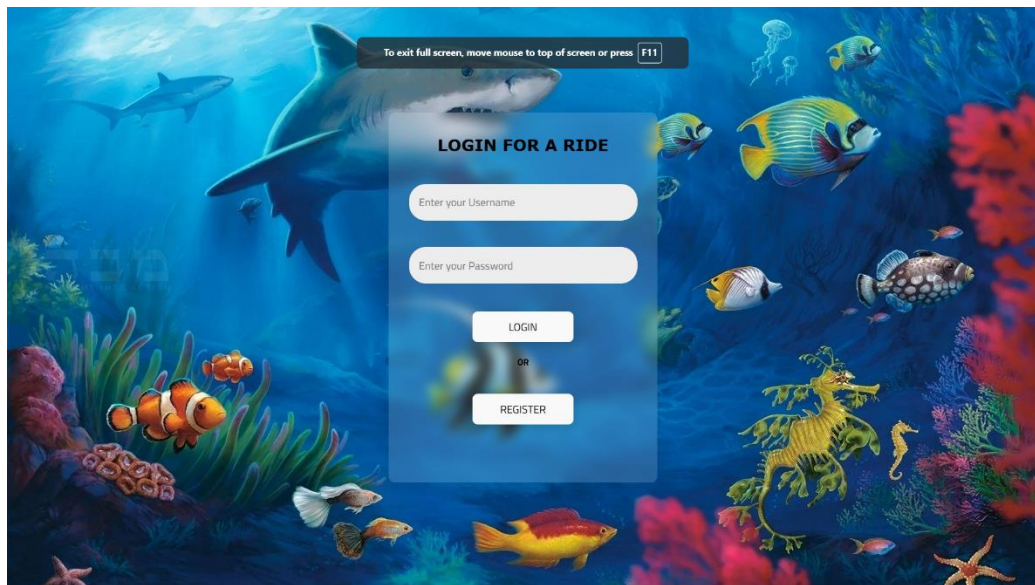


Fig 6.1 Login Page

6.2 HOME PAGE

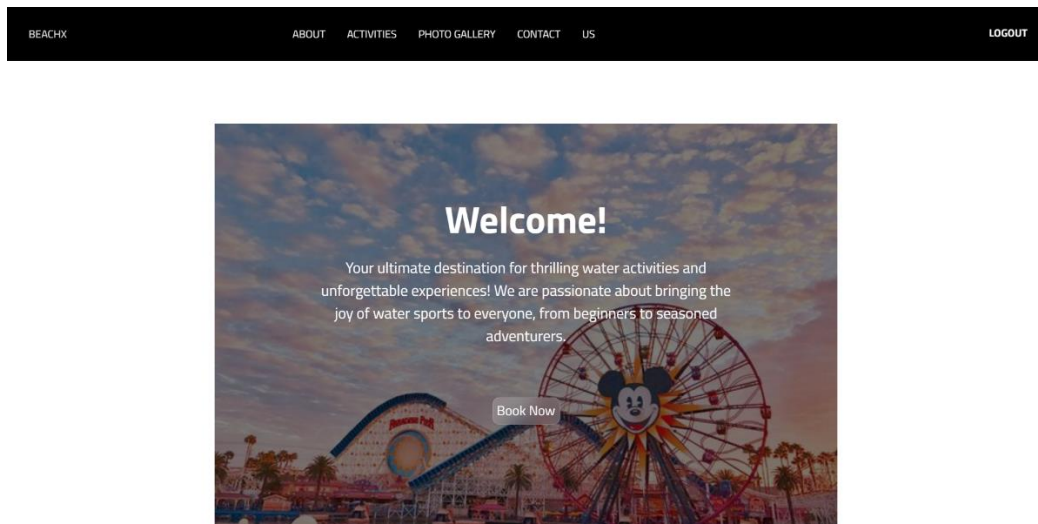


Fig 6.2 Home Page

6.3 PURCHASE

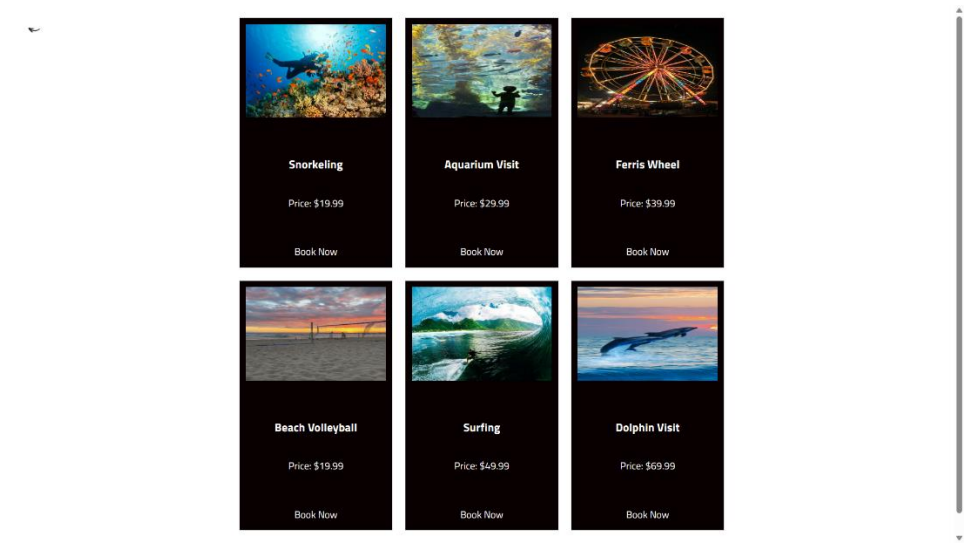


Fig 6.3 Purchase

6.4 PHOTO GALLERY

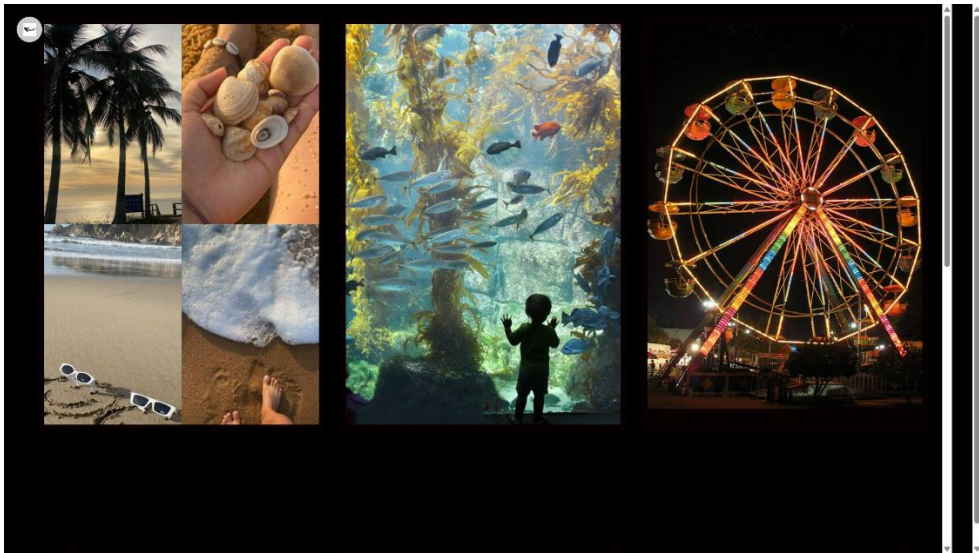


Fig 6.4 Cart

6.5 CODING

Login page :

```
import React, { useState } from 'react';
import { Link, useHistory } from 'react-router-dom';
import { useDispatch } from 'react-redux';
import { login } from '../redux/actions';
import axios from 'axios';
import '../App.css';
const LoginPage = () => {
  const history = useHistory();
  const dispatch = useDispatch();
  const [errorMessage, setErrorMessage] = useState("");
  const [email, setEmail] = useState("");
  const [password, setPassword] = useState("");
  const handleSubmit = async (e) => {
    e.preventDefault();

    try {
      const response = await
    axios.post('http://localhost:8080/api/v1/auth/login', {
      email,
      password,
    });
    if (response.status === 200) {
      const { token } = response.data;
      localStorage.setItem('token', token);
      console.log(token);
      dispatch(login(email));

      history.push('/home');
    }
  } catch (error) {
    setErrorMessage('Invalid username/email or password');
  }
};
return (
  <div className="text-center m-5-auto">
    <h2>Sign in to your account</h2>
    <form onSubmit={handleSubmit}>
```



```

<p>
  <label>Email Address</label>
  <br />
  <input
    type="text"
    name="email"
    value={email}
    onChange={ (e) => setEmail(e.target.value)}
    required
  />
</p>
<p>
  <label>Password</label>
  <Link to="/forgot-password">
    <label className="right-label">Forgot password?</label>
  </Link>
  <br />
  <input
    type="password"
    name="password"
    value={password}
    onChange={ (e) => setPassword(e.target.value)}
    required
  />
</p>
{errorMessage && <p className="error-
message">{errorMessage}</p> }
<p>
  <button id="sub_btn" type="submit">
    Login
  </button>
</p>
</form>
<footer>
  <p>
    New User? <Link to="/register">Create an account</Link>.
  </p>
  <p>
    Are You an Admin? <Link to="/AdminLogin">Admin Login</Link>.
  </p>
  <p>

```


CHAPTER 7

CONCLUSION

In summary, A water sports website designed with a focus on user experience can revolutionize the industry by streamlining the booking process and providing extensive information about activities. With a responsive interface that works seamlessly across devices, customers can easily explore options, make bookings, and access essential details, enhancing their overall satisfaction and engagement with the platform.

Incorporating features like customer reviews, promotions, and social media integration not only builds trust and loyalty among users but also expands the website's reach and visibility. Positive reviews and ratings can serve as powerful endorsements, while promotions and social sharing options can attract new customers and encourage repeat bookings, fostering growth and sustainability for the business.

Utilizing analytics tools to track website performance, user behavior, and market trends empowers businesses to make data-driven decisions, optimize marketing strategies, and continually improve the website's functionality and offerings. By staying agile and responsive to customer needs and industry developments, a water sports website can remain competitive and achieve long-term success in the dynamic recreational market.

REFERENCES

There are few research papers and articles related to Meditation and Relaxation Guide Application:

1. "Crafting for Emotional Well-being: A Comprehensive Review" by A. Smith and B. Johnson (Journal of Craft Research, 2021)
2. "Digital Crafting: Trends and Innovations" by C. Brown and D. Wilson (International Journal of Design Creativity and Innovation, 2020)
3. "The Impact of Personalized Gifts on Emotional Connection" by E. Williams et al. (Journal of Consumer Research, 2019)