

SCTR's Pune Institute of Computer
Technology Dhankawadi, Pune

A.Y. 2023-24

WADL MINI PROJECT REPORT ON

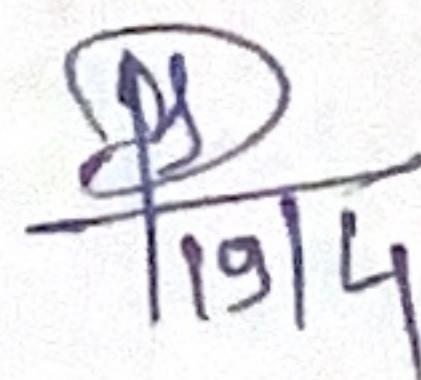
"Hotel Booking Website"

Submitted By

| | |
|------------------|-------|
| Devraj Thakkar - | 33385 |
| Samir Thokal - | 33387 |
| Sahil Tiwade - | 33388 |
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Under the guidance of

Mrs. Deepali Salapurkar


1914



DEPARTMENT OF INFORMATION TECHNOLOGY
ACADEMIC YEAR 2023-24

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ABSTRACT

The Hotel Booking Management System is an innovative web-based application catering to the dynamic needs of the hospitality industry. With a focus on user convenience and seamless hotel reservation experiences, the system offers a user-friendly platform for guests to explore, select, and book hotel rooms. The application employs robust security measures to ensure the integrity of user data and transactions. Real-time updates on room availability provide customers with accurate information, while integrated online payment options facilitate secure and hassle-free transactions.

The system also includes a comprehensive administrative dashboard, empowering hotel staff to efficiently manage bookings, track reservations, and monitor overall occupancy. Through strategic use of technology, the Hotel Booking Management System contributes to the optimization of hotel operations, enhancing overall efficiency and resource utilization. The platform embraces the digital era by providing a centralized hub for hotel administrators to monitor and respond to customer bookings promptly. As the hospitality landscape evolves, this system stands at the forefront, offering an intelligent solution to meet the demands of both hoteliers and guests.

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1. INTRODUCTION

A hotel booking website serves as a traveler's trusted companion in the digital age, simplifying the intricate task of securing accommodations during a journey. These platforms offer a plethora of features designed to enhance the travel experience, including comprehensive search and filtering options that allow users to fine-tune their hotel preferences. Real-time availability, combined with detailed listings, empowers users to make well-informed decisions about their lodging. User reviews and ratings provide valuable insights, ensuring that travelers can choose accommodations that align with their expectations. Secure booking processes and flexible payment options offer peace of mind while completing reservations.

In addition to convenience and choice, hotel booking websites contribute significantly to the evolution of the travel industry. Their impact extends to both travelers and hoteliers, promoting a seamless and efficient booking experience for the former and enhancing the visibility and accessibility of accommodations for the latter. As technology continues to advance, these platforms are poised to play an even more pivotal role in the travel landscape, offering users access to exclusive deals and discounts. Furthermore, their mobile accessibility and commitment to customer support create a holistic ecosystem that redefines the way we plan and enjoy our journeys, ensuring that the world of travel remains readily accessible and accommodating for all.

2. SCOPE

Our Hotel Booking Management System is a comprehensive solution that aims to revolutionize the hospitality industry by offering a seamless and user-friendly platform for customers to book hotel rooms effortlessly. The system provides Realtime updates on room availability, ensuring accurate information for users during the booking process. It incorporates secure online payment options, enhancing the overall user experience by facilitating safe and efficient financial transactions.

On the administrative front, the project includes a robust dashboard for hotel staff, empowering them to efficiently manage bookings, track reservations, and monitor overall occupancy. By optimizing hotel operations, the system contributes to increased efficiency and resource utilization. Embracing the digital era, it serves as a centralized hub for administrators to promptly respond to customer bookings, aligning with the ongoing digital transformation in the hospitality industry. The system is designed to adapt to emerging industry trends and technological advancements, making it a forward-looking solution for the evolving needs of the hospitality sector. Overall, your project's scope spans from improving the user experience for customers to providing powerful tools for hotel administrators, contributing to the ongoing digital transformation in the hospitality industry.

3. SYSTEM REQUIREMENTS

3.1 Hardware Requirements

64-bit OS with Internet Connectivity

3.2 Software Requirements

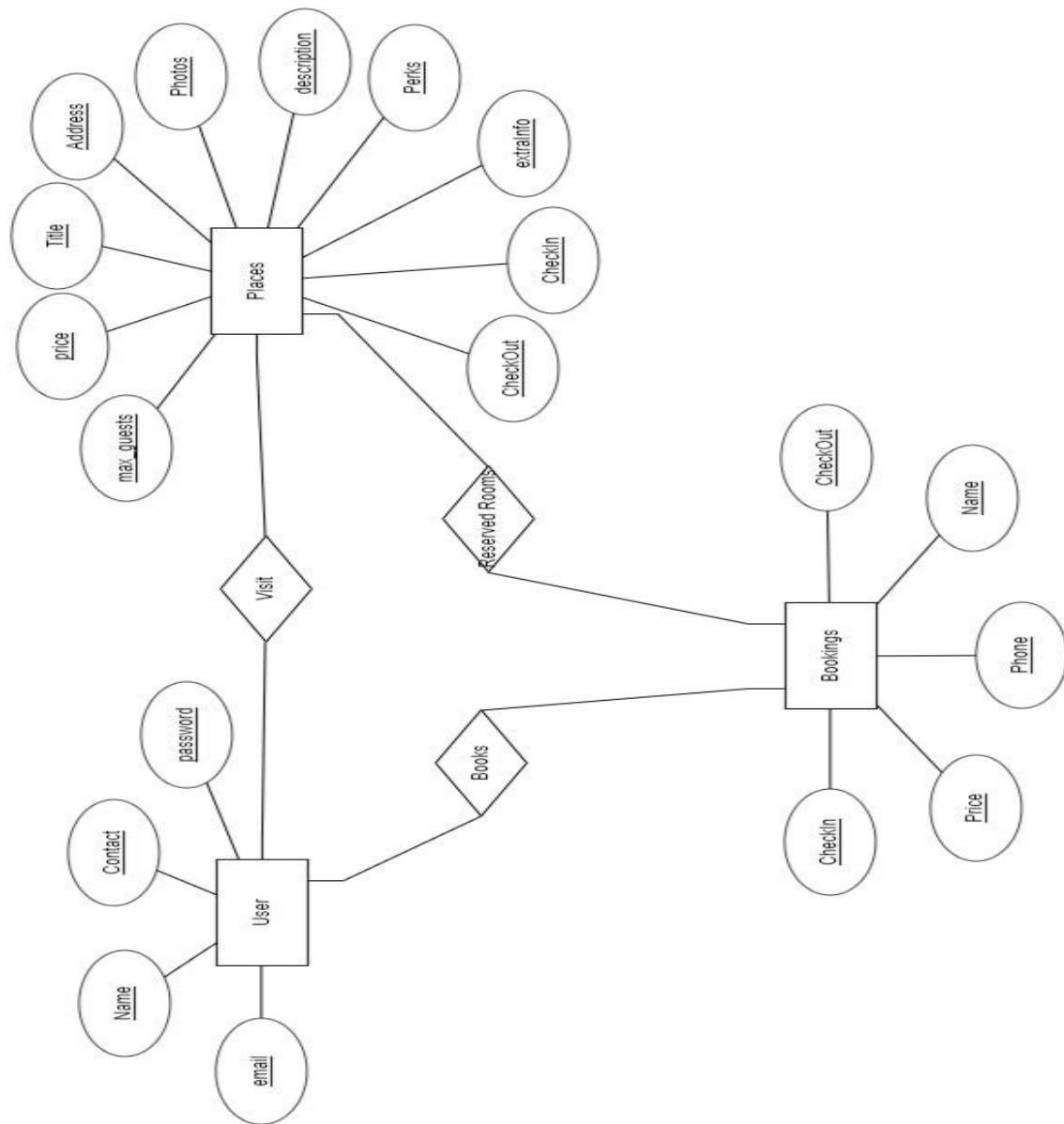
- Front-end: React, CSS, JavaScript
- Back-end: Node JS, Express, JavaScript
- Databases: MongoDB

4. SYSTEM FUNCTIONALITIES/ FEATURES

The Hotel Booking Management System aims to offer a comprehensive solution for streamlined hotel reservations and efficient management. Users can seamlessly register, access personalized accounts, and explore hotels based on their preferences, including location, price range, and amenities. The system provides real-time information on room availability, allowing users to make secure online bookings and manage reservations effortlessly. With a secure payment gateway, users can confidently complete transactions.

Administrators benefit from a centralized dashboard for efficient reservation management, occupancy tracking, and overall hotel administration. The platform encourages user engagement through reviews and ratings, fostering a community driven approach. Automated email notifications keep users informed about booking confirmations and updates. Responsive design ensures accessibility across various devices, enhancing the user experience. Reports and analytics provide valuable insights into booking trends and revenue, supporting data-driven decision-making. The system emphasizes security, integrating robust measures to safeguard user data and transactions. With scalability in mind, the platform is poised for future growth and potential feature expansions.

5. DATABASE DESIGN



5.1 ER Diagram

6. RELATIONAL DATABASE DESIGN

6.1 User

- Name
- Contact
- Username -Password

6.2 Bookings

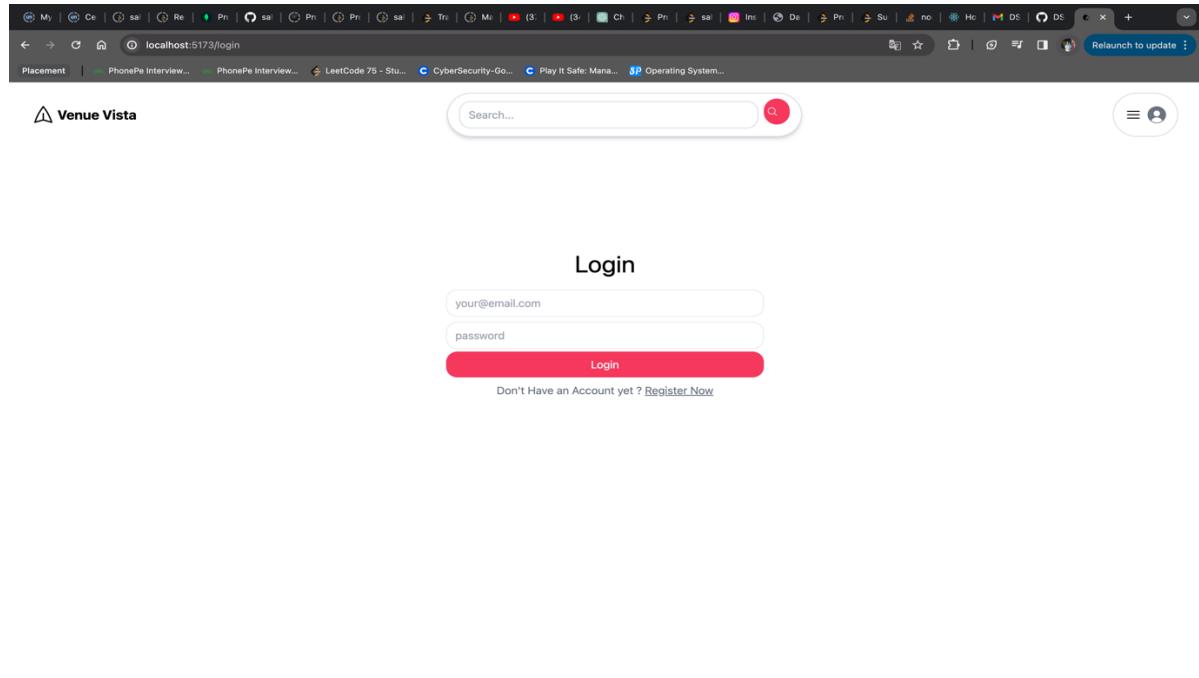
- Place
- Check in date
- Check out date
- Price
- Contact Details

6.3 Places

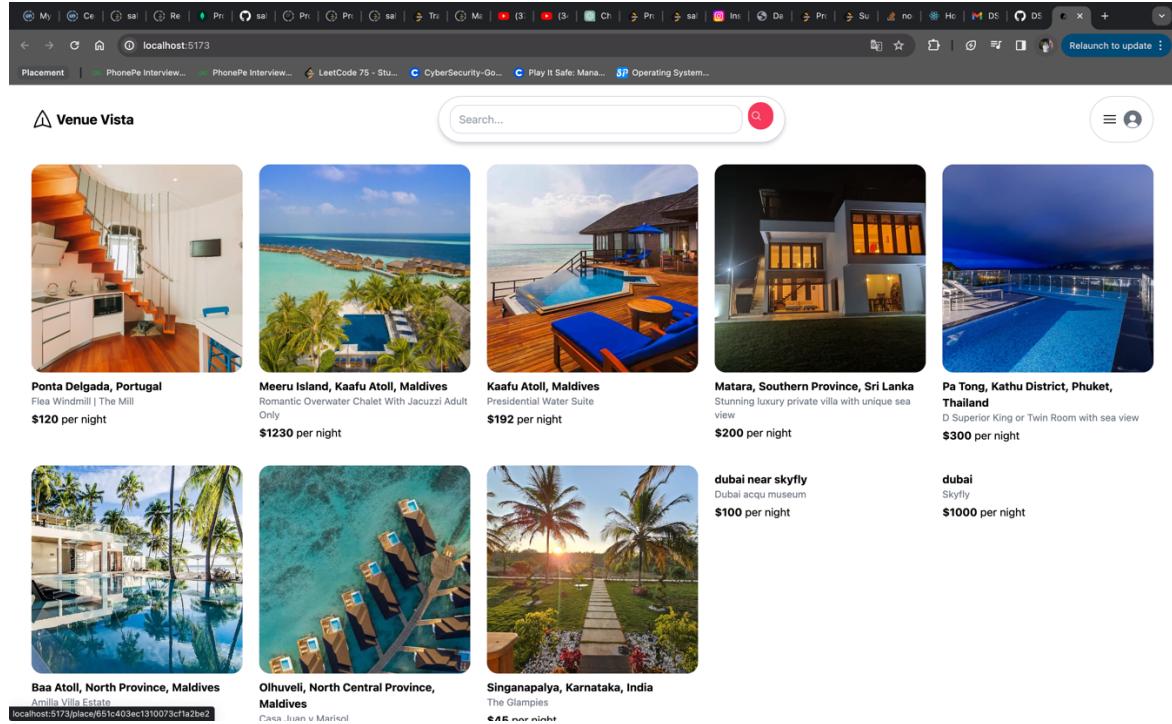
- owners
- title
- photo
- address
- description

7. GRAPHICAL USER INTERFACE

7.1 Login Page:



7.2 Home Page:



7.3 Booking Page:

The screenshot shows a booking page for a vacation rental. At the top, there are five thumbnail images of the property: a kitchen area with orange shelving, a bedroom with a king-size bed, a view from a balcony over a green landscape, the exterior of a modern building with red and white panels, and another bedroom view. Below the images, a section titled "Description" provides details: "Built in the 19th century, with a 360 degrees view over the sea and surroundings on the top floor. It features a Bedroom with a king size bed, a very well-decorated living room with kitchenette, and a WC. Free WiFi, air conditioning, Led TV and DVD player." To the right, availability information is listed: "Check-In:14", "Check-Out:10", and "Max number of Guests:3". A price box indicates "Price:\$120 / per night". Below this, a form allows users to enter their check-in date (12/12/2023), check-out date (14/12/2023), and the number of guests (2). The guest's name is listed as "Samir" and the phone number as "1234567890". A prominent red button at the bottom says "Book This Place At \$240".

7.4 Booking Confirmation Page:

The screenshot shows a booking confirmation page for "The Glampies" located in Singanapalya, Karnataka, India. The header includes the venue logo, a search bar, and a user profile for "Sahil". The main section displays "Your Booking Information" for a stay of 21 nights from December 12, 2023, to April 01, 2024. A red box on the right shows the "Total Price" as "\$945". Below this, four large thumbnail images show the exterior of the wooden cabin, its interior at dusk, and its exterior during the day. A "Show More Photos" button is visible.

8. CONCLUSION

In conclusion this HOTEL MANAGEMENT SYSTEM project plays a vital role in streamlining hotel booking processes, enhancing user experience, and ensuring efficient management of hotel-related data. By leveraging robust database design principles such as normalization, relationships, and structured tables, the system achieves optimal data organization and integrity. The user-friendly front-end provides a seamless interface for users to browse, select and book hotels based on their preferences.

9. REFERENCES

- [1] ReactJS documentation <https://react.dev/reference/react>
- [2] MongoDB Mongoose documentation <https://www.mongodb.com/docs/>
- [3] NextJS documentation <https://nextjs.org/docs>
- [4] HTML documentation <https://developer.mozilla.org/en-US/docs/Web/HTML>
- [5] CSS documentation <https://developer.mozilla.org/en-US/docs/Web/CSS>
- [6] NodeJS documentation
<https://nodejs.org/docs/latest/api/documentation.html>