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"Wonderlust an AirBNB Clone"

Disha Badgujar[1], Anjali Tiwari[2], Saroj Kumar[3], Prof. Rajdeep Shrivastava[4]

[1,2,3]*Students,* [4]*Associate Professor, Department of Electronics and Communication Engineering, Lakshmi Narain College of Technology Excellence, Bhopal (M.P.)*

***Abstract*-- Tourism and accommodation booking platforms have become essential as travelers prefer a seamless online experience when planning trips. Wanderlust – A Full Stack Airbnb Clone is a web-based application designed to provide users with a secure and interactive platform to explore, list, and book accommodation facilities. The system acts as a bridge between hosts and travelers where hosts can upload property details while travelers can view listings, check amenities, compare pricing, and make bookings easily.**

This manuscript is developed using the MERN (MongoDB, Express.js, React.js, Node.js) stack, ensuring a scalable, modern, and production-ready architecture.Wanderlust demonstrates practical knowledge of full-stack development, including front-end and back-end integration, API design, state management, and cloud deployment. With its real-life relevance and advanced features, this project can be extended further into a commercial-grade solution supporting payment integration and personalized trip recommendations. It serves as a strong technical foundation for real-world internship and career opportunities in web development and software engineering.

***Keywords*--MongoDB, Express.js, React.js, Node.js, Cloudinary, Java, Full Stack.**

I. INTRODUCTION

Online property rental systems have transformed the travel and tourism sector by providing instant access to accommodations across cities and countries. Digital booking platforms such as Airbnb, Booking.com, and MakeMyTrip have simplified the entire process, allowing travelers to find affordable lodgings that suit their comfort and budget. Inspired by this technological shift, Wanderlust is developed as a functional Airbnb-like booking platform to explore the architecture, workflow, and user experience of a global accommodation marketplace.

The primary objective of Wanderlust is to help hosts upload their properties and allow travelers to discover and book rentals from any location. The application enables users to register as a traveler or a host, build their profile, add accommodation listings with images and descriptions, and check updated availability. The platform provides an intuitive and visually interactive interface where users can explore property locations through an integrated map for improved decision-making.

From a technological perspective, Wanderlust is powered by the MERN full-stack architecture, making it suitable for large-scale deployment. The front end, developed using React.js and Tailwind CSS, ensures an attractive and responsive UI. The back-end server powered by Node.js and Express.js handles routing, authentication, and database operations. MongoDB stores all accommodations, bookings, and user data securely with flexible document-based modeling.

This minor project gives hands-on experience in building production-style applications involving CRUD operations, dynamic content management, cloud deployment, and state management. By designing Wanderlust, we have successfully built a real-time booking application environment that elevates our engineering and problem-solving skills and prepares us for future challenges in the software development industry.

II. PROBLEM FORMULATION

The problem in developing a clone website is to create a platform that replicates the key features, functionalities, and user experience of an existing successful website, while ensuring originality in design, performance, and scalability. The objective is to analyze the core components such as user interface, backend processes, security protocols, and database structure of the reference site, and then develop a cost-effective and efficient solution that provides similar services to users. The clone must maintain legal and ethical boundaries by avoiding copyright violations and protected content, while also offering improvements like enhanced performance, custom features, and optimized user interaction. The ultimate goal is to deliver a reliable, secure, and user-friendly web application that meets business needs and user expectations.

III. LITERATURE SURVEY

The increasing growth of digital booking platforms has transformed tourism, allowing users to book accommodation from anywhere in the world. Several studies and existing systems demonstrate that travelers prefer a secure, user-friendly interface where they can compare prices, amenities, and reviews before booking.

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Well-known examples include Airbnb, Booking.com, OYO Rooms, and MakeMyTrip, all of which provide real-time property listings and support instant online reservations.

Airbnb's business model, introduced in 2008, demonstrated that shared accommodation can be monetized efficiently by connecting hosts and guests on a centralized digital system. Multiple research papers based on such models highlight features like:

- Online accommodation search & filtering
- Cloud-based scalable architecture
- Secure payment and authentication
- Interactive location-based services using maps
- Review and rating systems for user trust- Web development approaches have evolved from traditional server-rendered pages to modern single-page applications (SPAs) using frameworks such as React.js, Angular, and Vue.js. These enable faster navigation and dynamic content updates without page reloads.
- An Investigation of Cloning in Web Applications (Damith C. Rajapakse& Stan Jarzabek, 2005) — This conference paper studies cloning (duplication ofdesign/code) in web applications, measuring how much cloning occurs and the implications for maintenance.
- PhishClone: Measuring the Efficacy of Cloning Evasion Attacks (Arthur Wong et al., 2022) — Focuses on aggressive website cloning in phishing attacks, which gives insight into cloning techniques, detection issues and risks.
- HowTo Clone A Website (Codecademy blog, 2022) — A practitioner-oriented step-by-step guide that explains how one might clone an existing website, including technical steps.
- Cloning Website with its features (PrakashDsouza, Medium, 2022) — A developer's reflection on what it takes to clone a website (UI/UX, responsiveness, learning by cloning) and the challenges faced.
- Unraveling Code Clone Dynamics in Deep Learning Frameworks (MaramAssi et al., 2024) — Although this is about code clones in deep-learning frameworks rather than full website cloning, it gives useful theoretical insight into cloning, reuse, maintainability and evolution of duplicated code—a concept very much relevant when cloning websites.

By reviewing these advancements, Wanderlust has been strategically designed to include strong security, modern UI, a NoSQL database for scalability, cloud-based image handling, and map-based navigation.This literature review helped in identifying the best practices for building a commercial-grade hotel rental web application using the MERN Stack.

IV. METHODOLOGY

Wanderlust bridges the gap between property owners (hosts) and travelers (users). Hosts upload accommodation details while travelers explore properties and book stays. The application handles:

A. Design Applications

In this section, the prototype of clone website design system is presented, in which it consists of many design applications

- CRUD operations on listings
- Database storage of bookings
- Map-based property search
- Secure session handling

B. Block Diagram

The block diagram illustrates the primary data flow in Wanderlust. A traveler interacts with the client-side Single Page Application built with React and Tailwind CSS. The frontend communicates with the Node.js + Express backend via RESTful APIs for all operations — searching listings, viewing property details, and initiating bookings. The backend persists data to MongoDB (hosted on a cloud provider). For media, the backend integrates with Cloudinary to upload and serve property images. Mapbox API is used to render and query geolocation data inside the frontend. Payment flows are simulated via Stripe or Razorpay test mode coordinated by the backend. Authentication is implemented with JWT ensuring protected endpoints for hosts and travelers.

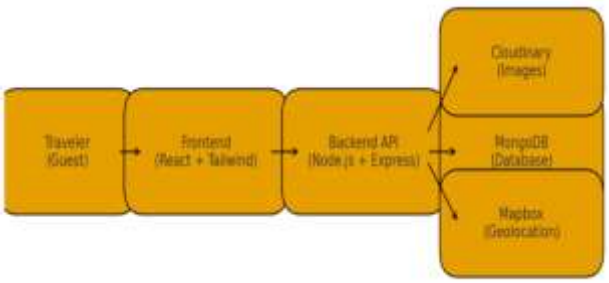

Fig 1: Prototype Model

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C. System Architecture

Wanderlust's architecture is layered to separate concerns and ensure scalability. The presentation layer (React.js) provides user-facing UI and performs client-side routing and state management. The API layer (Node.js + Express) exposes RESTful endpoints consumed by the frontend and external services. The service layer encapsulates authentication (JWT), business logic, and validation routines.

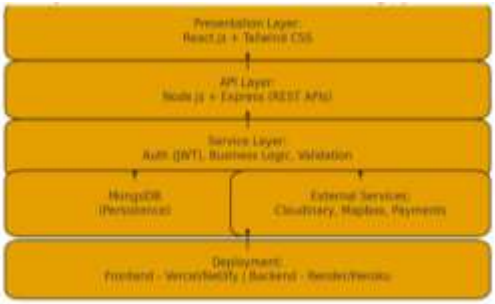


Fig 2: System Architecture

V. Flow Chart

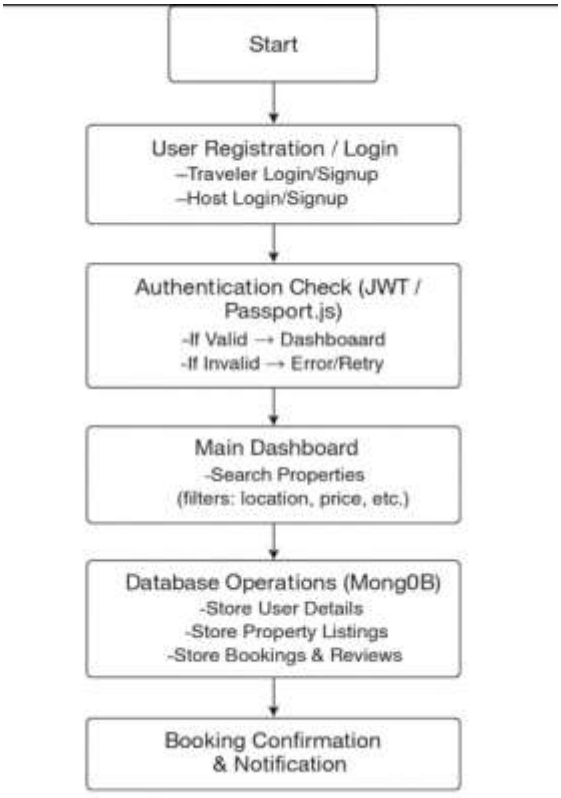
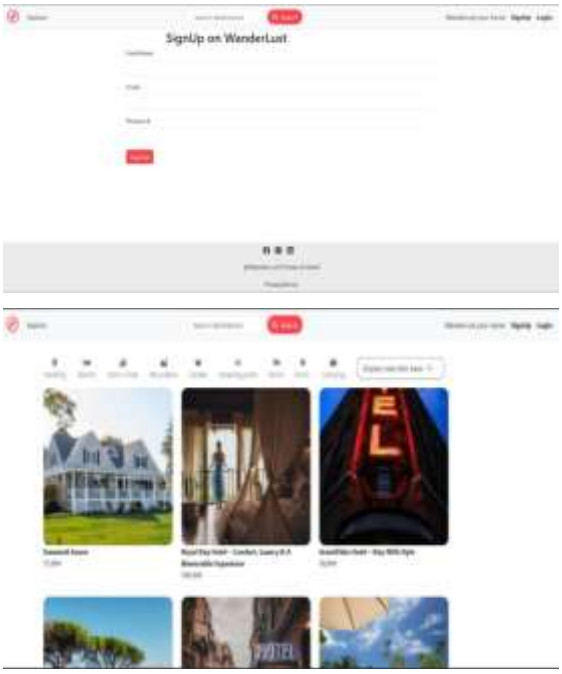


Fig 3: Flow chart

VI. Results

The development of the clone website successfully achieved replication of the essential features, interface structure, and user experience of the original platform while incorporating customized improvements. The system demonstrated smooth navigation, responsive design, secure authentication, and efficient database management. Testing outcomes confirmed that the clone offers stable performance and usability comparable to the reference site.



VII. Conclusion

Wanderlust is a fully functional MERN-based hotel booking application developed to replicate the core features of Airbnb. The project improves skills in modern web technologies, database design, authentication systems, cloud deployment, and UI/UXdevelopment. It serves as a strong portfolio project showcasing team capability in full-stack development.

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