HOUSE RENT APP USING MERN

TEAM MEMBERS

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ABSTRACT

- The demand for innovative solutions to simplify the home search and rental experience has been driven by the real estate sector's increasing interest in digital platforms.
- This project involves creating a House Rent Application utilizing the MERN stack, which includes Mongo DB, Express.js, React.js, and Node.js.
- The application provides a contemporary and efficient platform for listing and renting properties, promoting seamless communication between landlords and tenants.

INTRODUCTION

- The House Rent App is a user-friendly tool designed to simplify the process of renting and managing properties.
- ➤ This application offers a straightforward and efficient way for both tenants and landlords to list properties or search for new homes.
- ➤ With advanced search filters, secure payment options, and real-time communication features, the app streamlines the matching of renters with rental homes that meet their specific needs.

EXISTING SYSTEM

- ➤ There are several limitations associated with this system that could affect its overall performance and user experience, especially if the app attracts a large user base; the MERN stack may struggle to handle high traffic and large databases without significant optimization.
- The implementation of real-time features like chat and notifications may lead to performance issues if not properly managed.
- ➤ Tenants can search for apartments based on location, price, and preferences on traditional rental websites, which usually enable property owners to display available rentals.

PROPOSED SYSTEM

> The proposed system will be built using the MERN stack

> User-friendly interface:

The app offers a responsive design, easy navigation, and personalized dashboards.

> Real-time scheduling:

The platform offers real-time availability, instant booking, live notifications, and messaging for efficient rental management.

> Secure User Authentication and Authorization :

The platform uses JWT for secure user access and role-based authorization for landlords and tenants.

> Payment Integration :

The platform integrates Stripe or PayPal for secure payments and allows users to track their transaction history.

> Reviews and Ratings :

Tenants can leave reviews for properties and rate landlords, fostering transparency and informed decisions.

> Admin Panel and Management :

The admin panel enables system management, user monitoring, and dispute resolution for landlords and tenants.

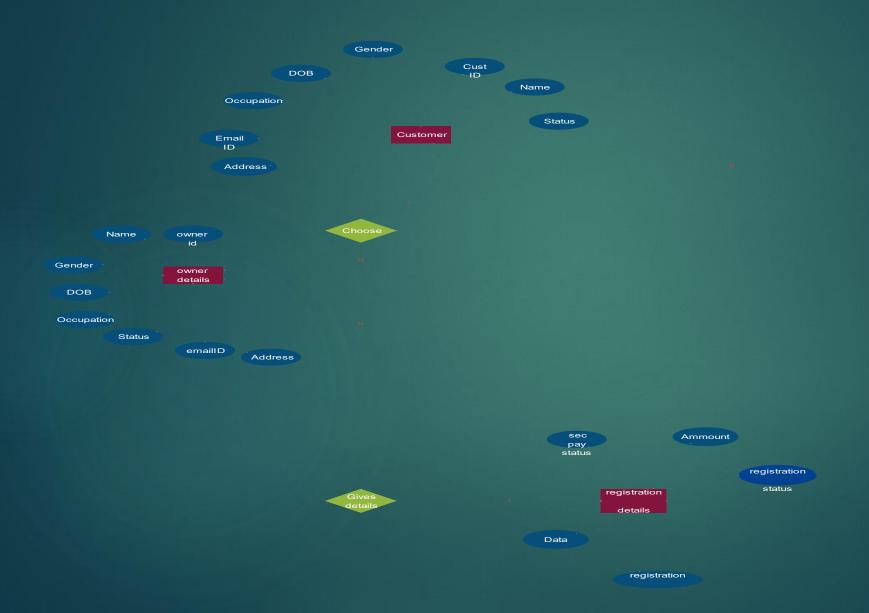
> Scalability and Performance:

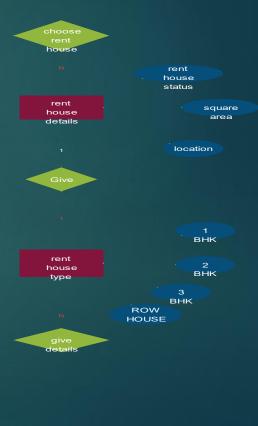
The platform uses MongoDB for scalable data storage and a Node.js backend for fast, efficient API services.

FUTURE IMPLEMENTATIONS

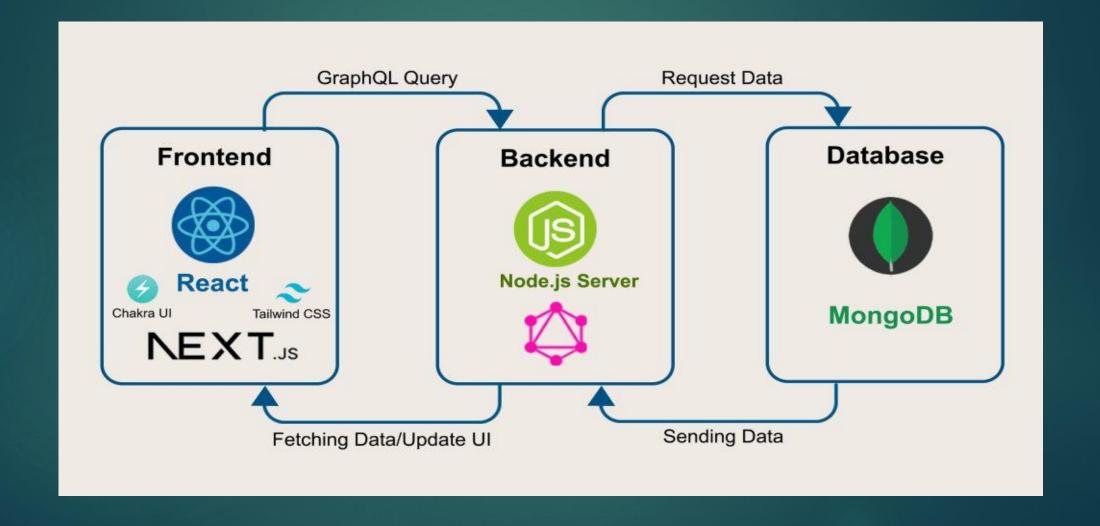
- > Advanced Search and Filtering
- User Profile Customization
- ➤ Mobile Application
- > Multilingual Support
- ➤ Automated Booking and Payment Systems

ER DIAGRAM

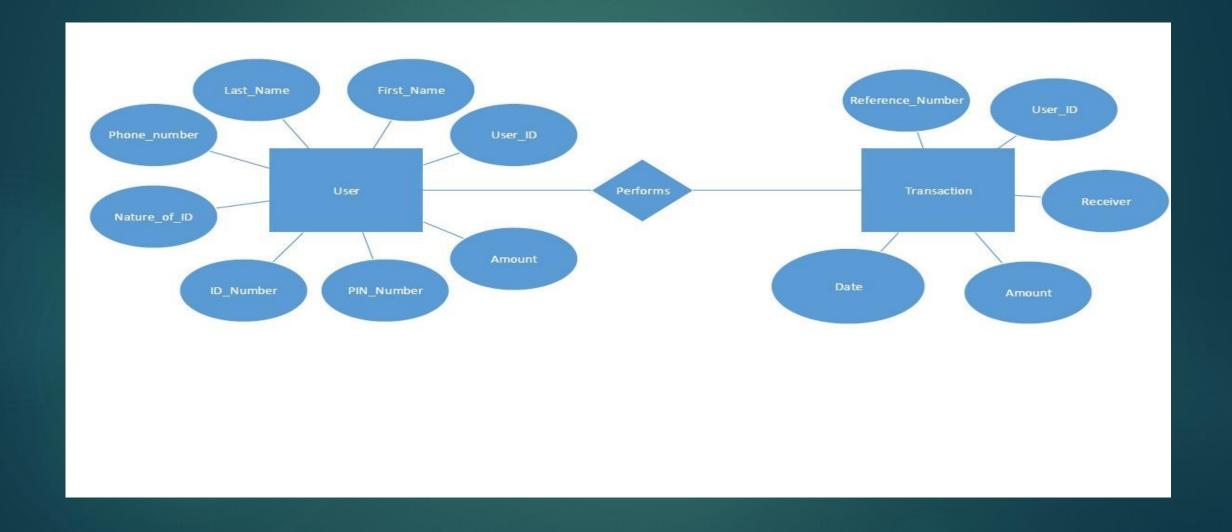




ARCHITECTURE



FLOW DIAGRAM



TECHNOLOGIES USED

FRONT END DEVELOPMENT

- > HTML
- > CSS
- > Java Script
- > React js

BACK END DEVELOPMENT

- > Express js
- > Node js

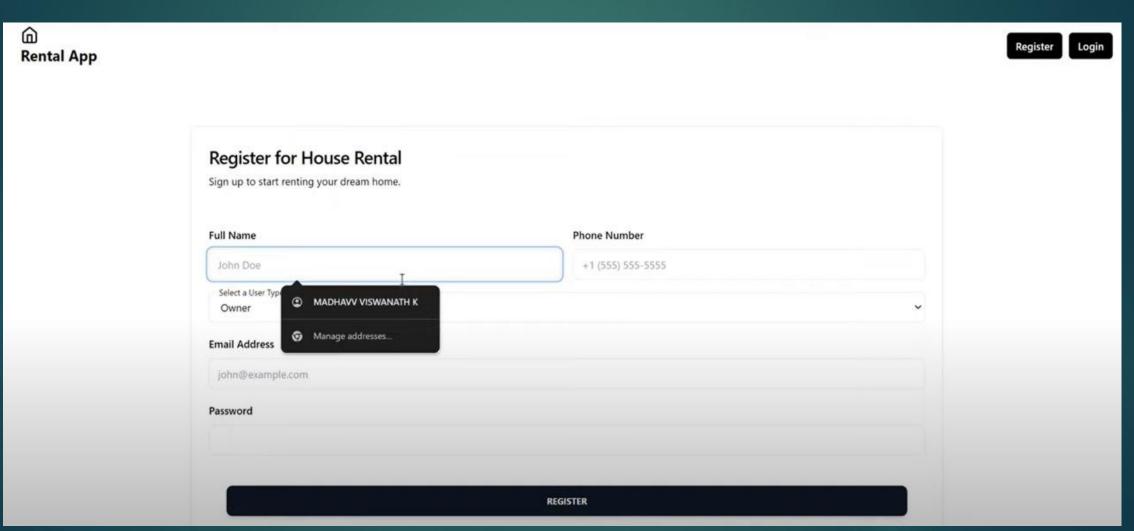
DATABASE

> Mango DB

INTEGRATION

- The frontend (React.js) interacts with the backend through **RESTful APIs**. React makes **GET** and **POST** requests to the server, which processes data and returns appropriate responses.
- ➤ The backend communicates with **MongoDB** using **Mongoose** for managing user profiles, house listings, bookings and reviews. API requests fetch and update this data in real-time.
- ➤ The backend uses **JWT tokens** for secure user authentication. When users log in or sign up, their credentials are validated, and a token is returned to allow access to protected routes.

SAMPLE OUTPUT REGISTERATION PAGE



HOME PAGE







Find Your Perfect Rental

Our rental app makes it easy to discover and book the ideal property for your needs.





LOGIN PAGE

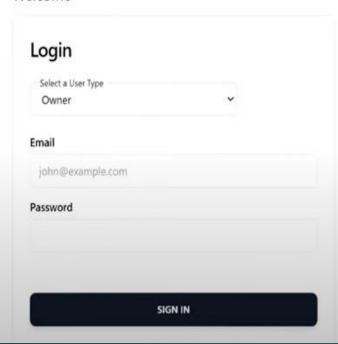






Login to Your Account

Welcome





HOUSE DETAILS



Address Rooms

123,Queens,USA 2 Bedrooms, 2Bathroom, Kitchen, 1 Living Room

Owner Availability

Madhavv Vishwanath Available now

Description

This cozy 2-bedroom, 1-bathroom apartment is located in the heart of the city. It features hardwood floors, a modern kitchen, and a spacious living room. The building has a shared laundry room and a small backyard. Perfect for a single person or a couple.oom apartment is located in the heart of the city. It features hardwood floors, a modern kitchen, and a spacious living room. The building has a

Owner Details



Madhavv Vishwanath

Superhost

About the Owner

Meet Madhavv Vishwanath, the proud and attentive owner of this delightful home. With a background in hospitality and over five years of hosting experience, Jane has transformed this residence into a cozy haven for her guests. His attention to detail and commitment to excellence are evident in every corner of the house. Madhavv is not only a superhost but also a passionate gardener and a culinary enthusiast, often sharing tips and local insights with her guests. He is known for his warm and friendly demeanor, always going the extra mile to ensure a comfortable and enjoyable stay. Whether it's a quick response to inquiries or personalized recommendations for exploring the area, Madhavv's dedication to her guests makes every visit truly special

Contact

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CONCLUSION

- This project, "HOUSE RENT APPLICATION USING MERN," offers a robust solution to modernize the house rental process.
- ➤ It is built using scalable web technologies that enhance the user experience for both tenants and landlords while streamlining property management workflow.
- The application exemplifies how the MERN stack can be used to develop responsive and efficient web applications in the real estate sector.
- ➤ With features such as user registration, house listings, booking management, and secure authentication, it addresses the needs of users in a digital marketplace, making the house rental experience more accessible and efficient

THANK YOU