



NAAN MUDHALVAN
MERN STACK POWERED BY MONGODB

PROJECT TITLE: HOUSE RENT APP

TEAM MEMBERS:

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Abstract:

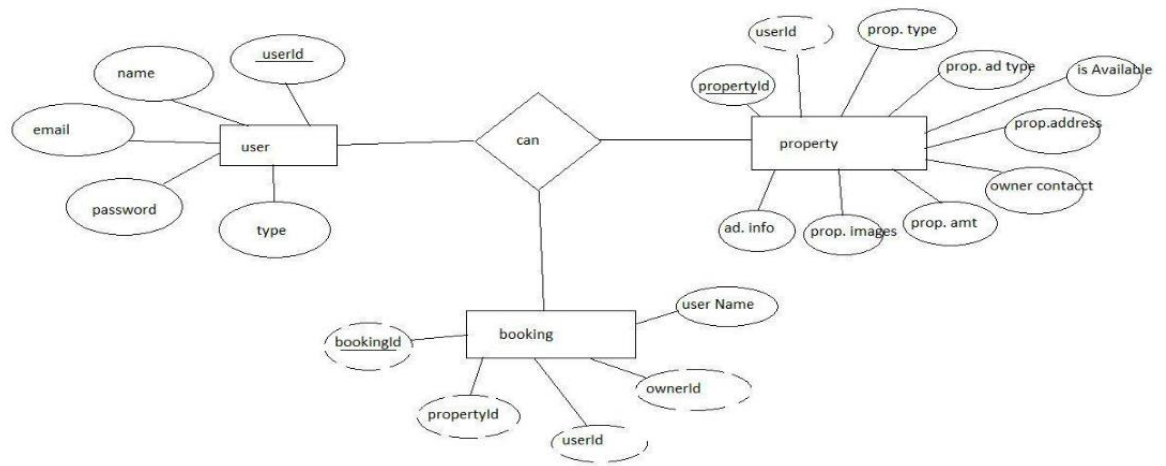
This **House Rent Management Application** is a comprehensive MERN stack-based project designed to streamline the process of renting properties by connecting Renters, Owners, and an Admin for governance. The application provides seamless functionalities for property listing, booking, and approval processes. Renters can explore available properties, inquire about them, and track booking statuses. Owners can manage their properties by performing CRUD operations, while the Admin ensures the legitimacy of users and monitors platform policies.

The project employs modern technologies such as MongoDB for data storage, Express.js for server-side logic, React.js for a dynamic user interface, and Node.js for backend operations. By incorporating robust authentication mechanisms, efficient routing, and an interactive UI, the application offers an optimized, secure, and user-friendly experience for all stakeholders involved.

Key Features:

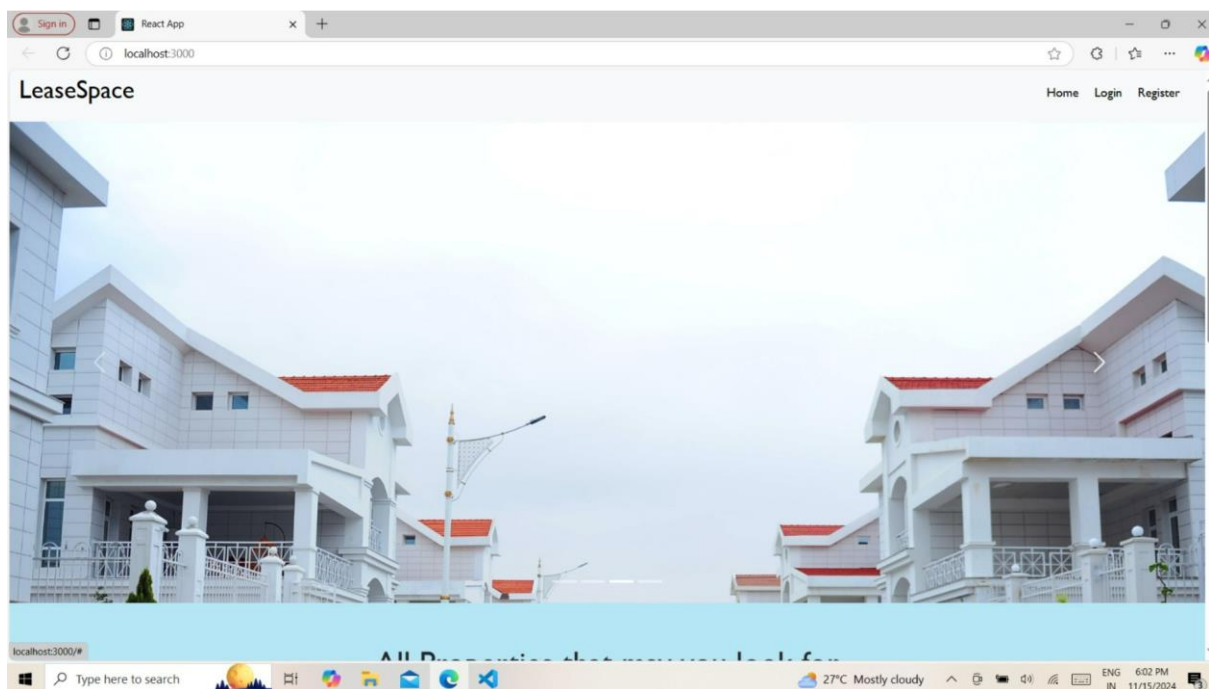
- **Property Listings:**
The app showcases a database of available properties with detailed descriptions, photos, location, rent amount, and other relevant details.
- **Search Filters:**
Users can refine their searches using filters based on location, rent range, property type, number of bedrooms, and amenities.
- **Contact Landlords/Property Managers:**
Users can connect with property owners or managers through an integrated messaging or email feature, facilitating inquiries and communication.
- **User Roles:**
 - ❖ **Admin:** Oversees user registrations, property approvals, and platform governance.
 - ❖ **Owner:** Manages property listings and booking approvals.
 - ❖ **Tenant:** Browses properties, makes inquiries, and books rentals.
- **Booking and Approval Workflow:**
Tenants can book properties, which owners approve. The admin monitors and verifies all activities for security and policy adherence.
- **Database Management:**
MongoDB ensures secure and efficient data storage, handling user profiles, property details, and booking transactions seamlessly.

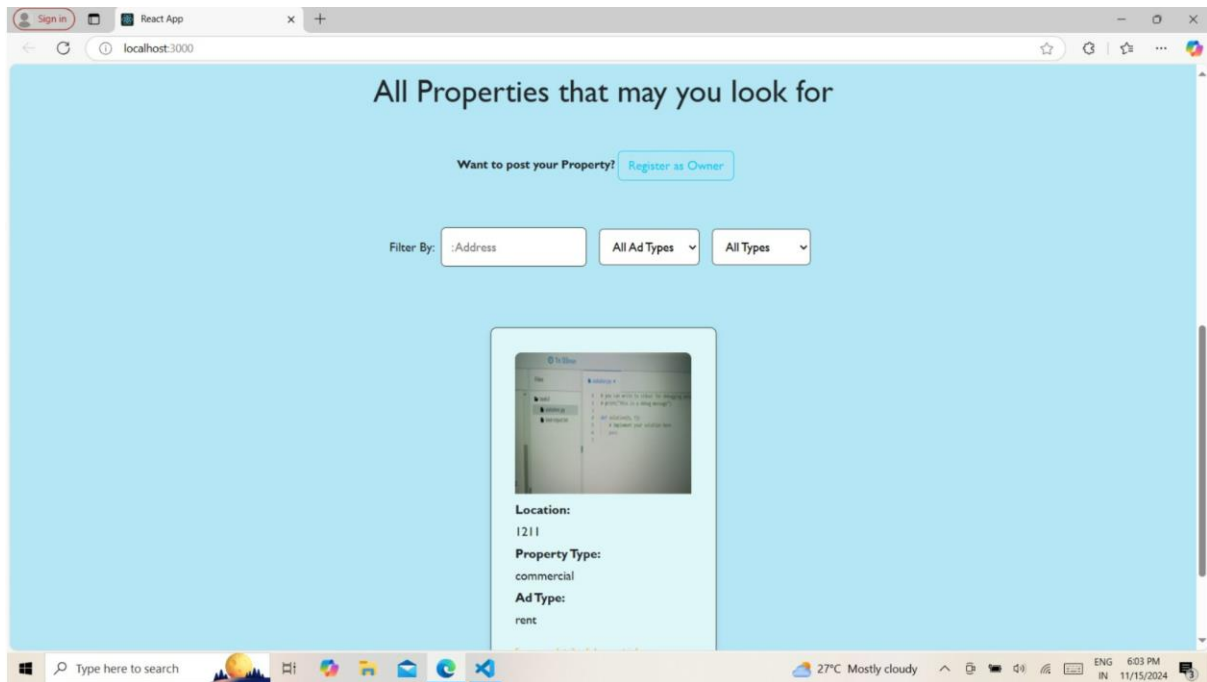
ER Diagram:



Feature Descriptions:

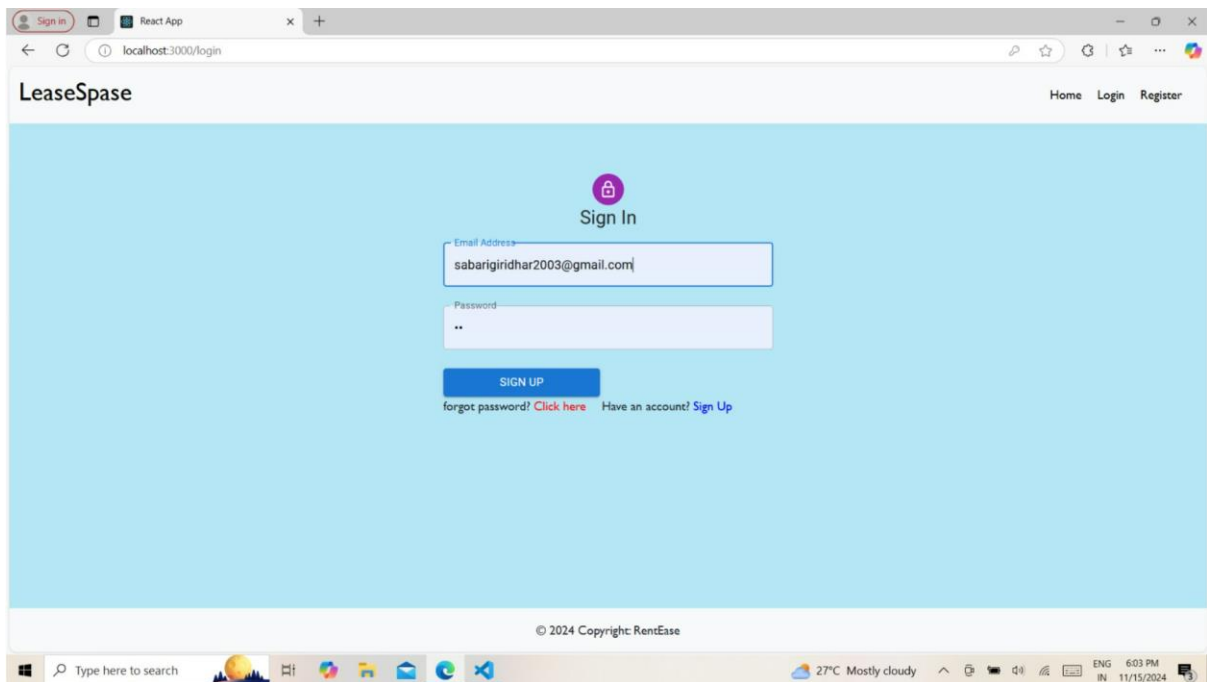
- **Home:**
The home page serves as the application's entry point, offering easy navigation to login, sign-up, and property browsing options





- **Login:**

This page enables users to securely log in to their accounts using verified credentials, with options to reset forgotten passwords.



- **Sign up:**

The registration page allows new users to create accounts by entering necessary details, validated for accuracy and completeness.

LeaseSpace

Home Login Register

Sign up

Renter Full Name/Owner Name

Email Address
sabarigiridhar2003@gmail.com

Password
..

User Type

SIGN UP

Have an account? [Sign In](#)

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- **3 user type:**

The platform supports three distinct user roles: Admin, Owner, and Tenant, each with specific features tailored to their needs.

LeaseSpace

Home Login Register

Sign up

Renter Full Name/Owner Name

Email Address
sabarigiridhar2003@gmail.com

Password
..

User Type

Select User

- Admin
- Renter
- Owner

SIGN UP

Have an account? [Sign In](#)

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- **Forget pass:**

Users can reset their credentials securely through the forgot password option, ensuring account recovery without compromising security.

LeaseSpace

Home Login Register

Forgot Password?

Email Address

New Password

Confirm Password

CHANGE PASSWORD

Don't have an account? [Sign Up](#)

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- **Admin Login and Requests:**

Admins have a dedicated panel to review and approve new owner access requests, maintaining the integrity of the platform.

RentEase

Hi Sabari Log Out

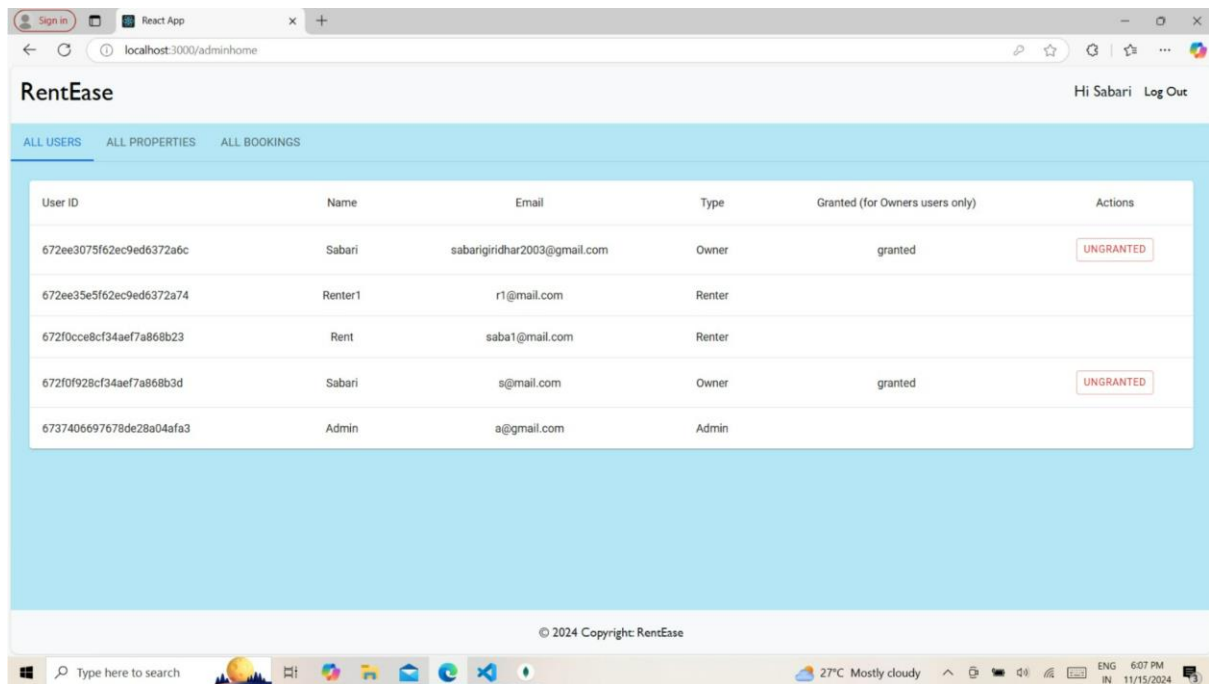
ALL USERS ALL PROPERTIES ALL BOOKINGS

User ID	Name	Email	Type	Granted (for Owners users only)	Actions
672ee3075f62ec9ed6372a6c	Sabari	sabarigiridhar2003@gmail.com	Owner	ungranted	GRANTED
672ee35e5f62ec9ed6372a74	Renter1	r1@mail.com	Renter		
672f0cce8cf34aef7a868b23	Rent	saba1@mail.com	Renter		
672f0f928cf34aef7a868b3d	Sabari	s@mail.com	Owner	ungranted	GRANTED
6737406697678de28a04afa3	Admin	a@gmail.com	Admin		

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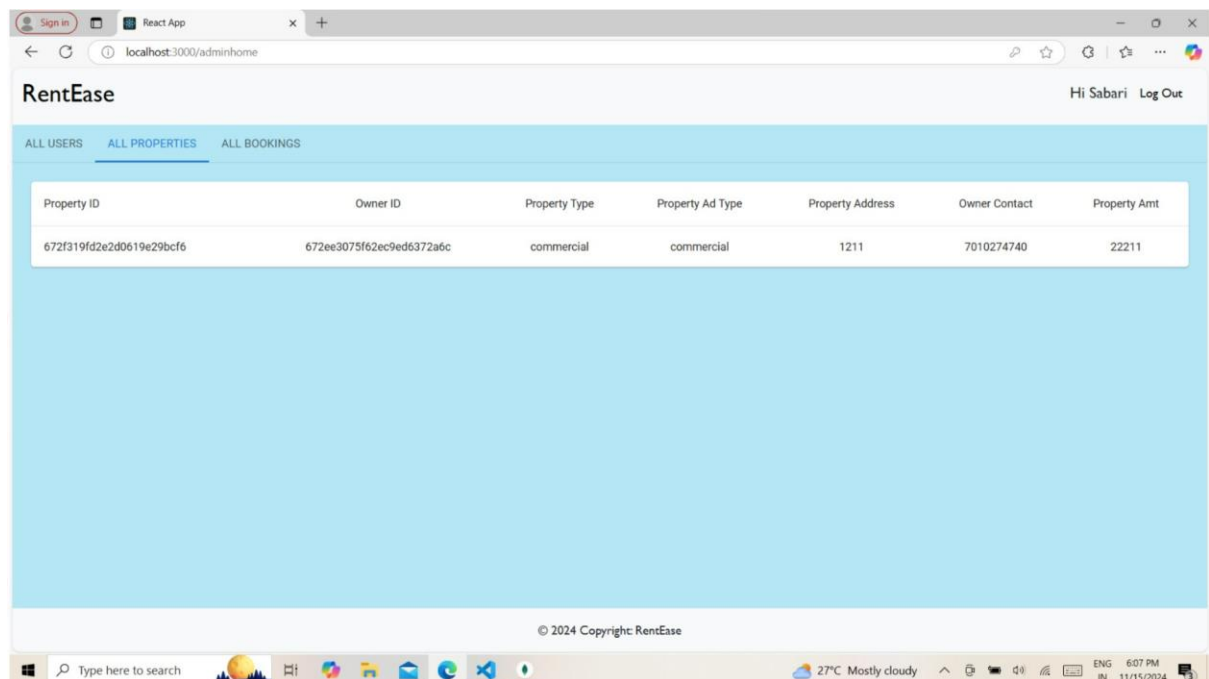
- ***Admin Grants Permission:***

Once an owner request is verified, the admin grants permission, enabling the owner to access their panel and start listing properties.



- ***Owner Panel: View Properties:***

Owners can view all the properties they have added to the platform, along with the status and activity of each listing.



- **Owner Panel: Add Properties:**

The platform provides a user-friendly interface for owners to add new property details, including images, descriptions, and pricing.

Sign in React App land photo - Search land photo - Search Images localhost:3000/ownerhome

RentEase New Property has been stored Hi Sabari Log Out

ADD PROPERTY ALL PROPERTIES ALL BOOKINGS

Property type Land/Plot Property Ad type Sale Property Full Address 1211

Property Images Choose Files OIPJfif Owner Contact No. 7010274740 Property Amt. 100000

Additional details for the Property Good land

Submit form

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- **Owner Panel: Edit Properties:**

Owners can edit property details to keep the listings updated and relevant for potential tenants.

Sign in React App land photo - Search land photo - Search Images localhost:3000/ownerhome

RentEase Hi Sabari Log Out

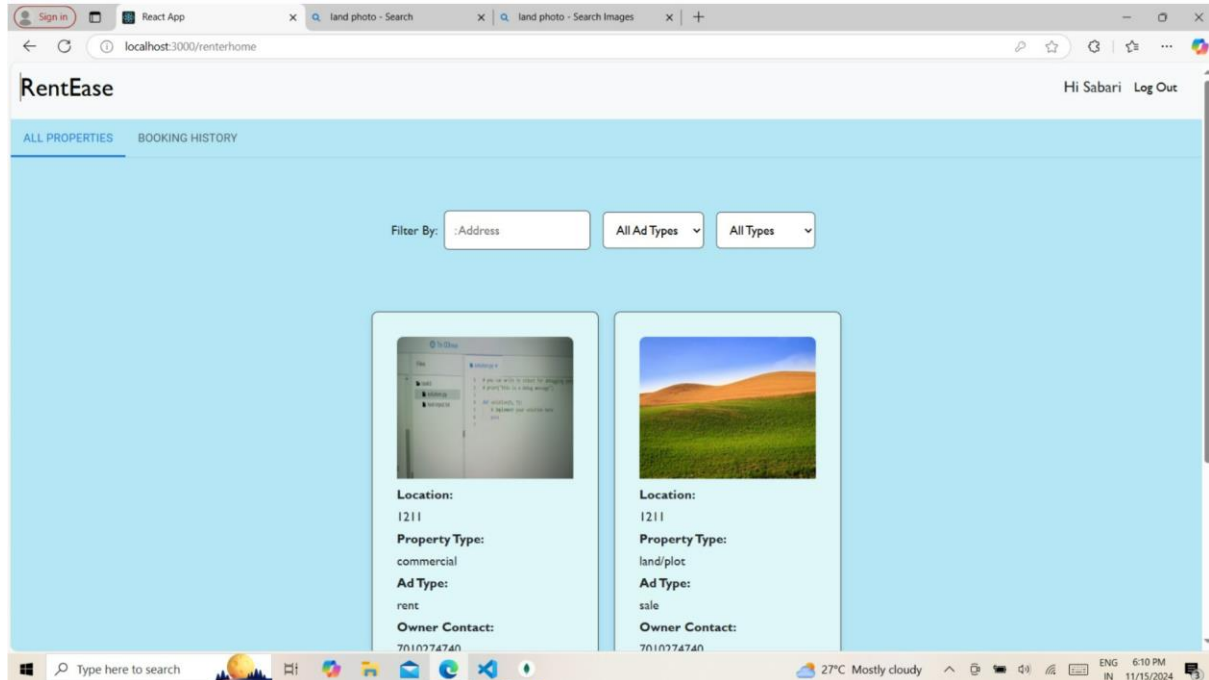
ADD PROPERTY ALL PROPERTIES ALL BOOKINGS

Property ID	Property Type	Property Ad Type	Property Address	Owner Contact	Property Amt	Property Availability	Action
672f319fd2e2d0619e29bcf6	commercial	rent	1211	7010274740	22211	Available	<button>Edit</button> <button>Delete</button>
6737410797678de28a04afb4	land/plot	sale	1211	7010274740	100000	Available	<button>Edit</button> <button>Delete</button>

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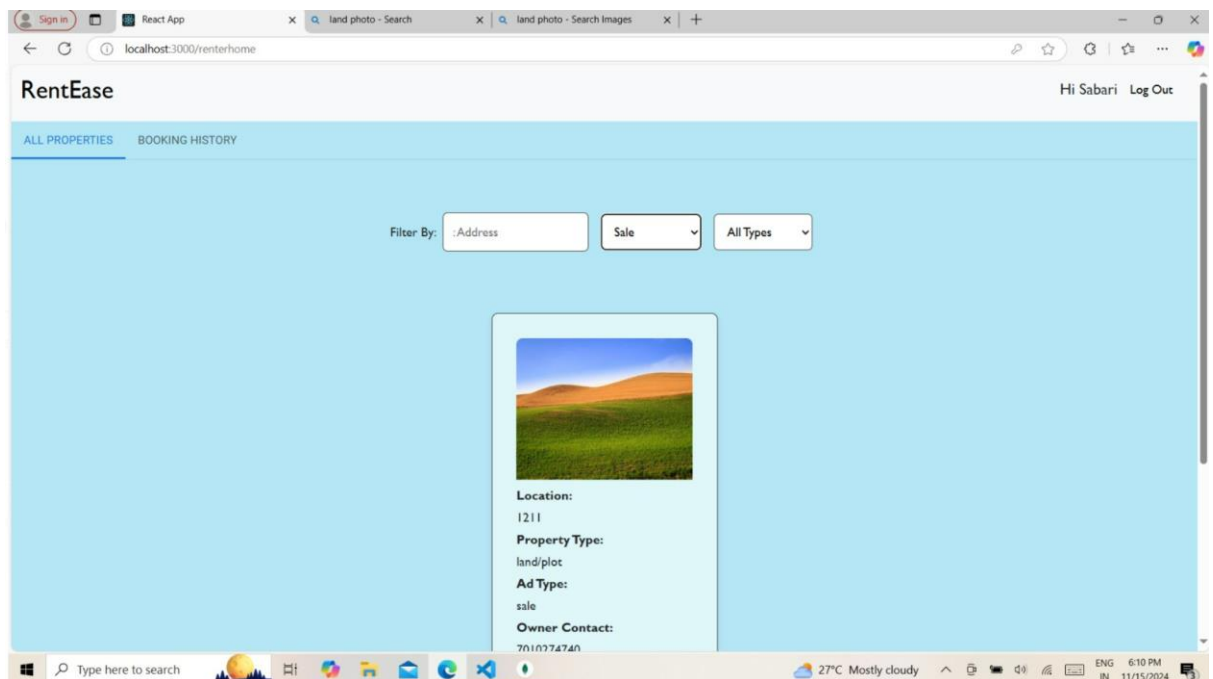
- **User Login: View Properties:**

Tenants can log in to browse available properties listed by various owners, with detailed descriptions and images.



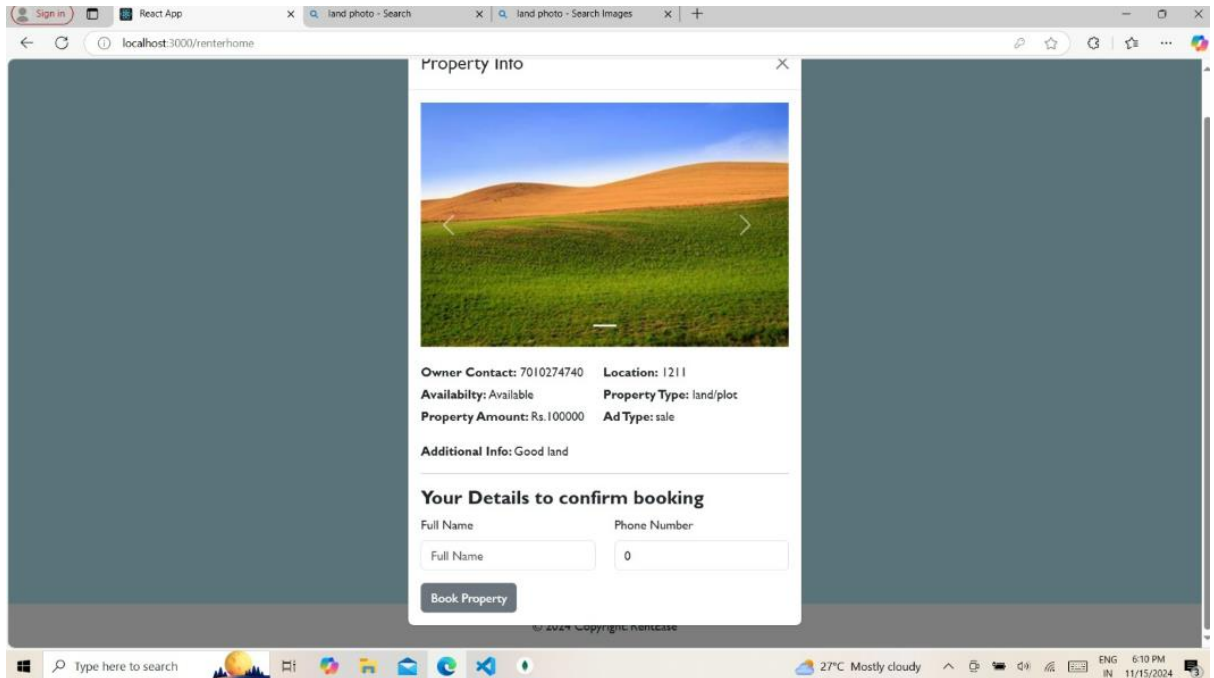
- **Applied Filters:**

The search functionality includes filters such as location, price range, and property type, allowing tenants to narrow down their options.



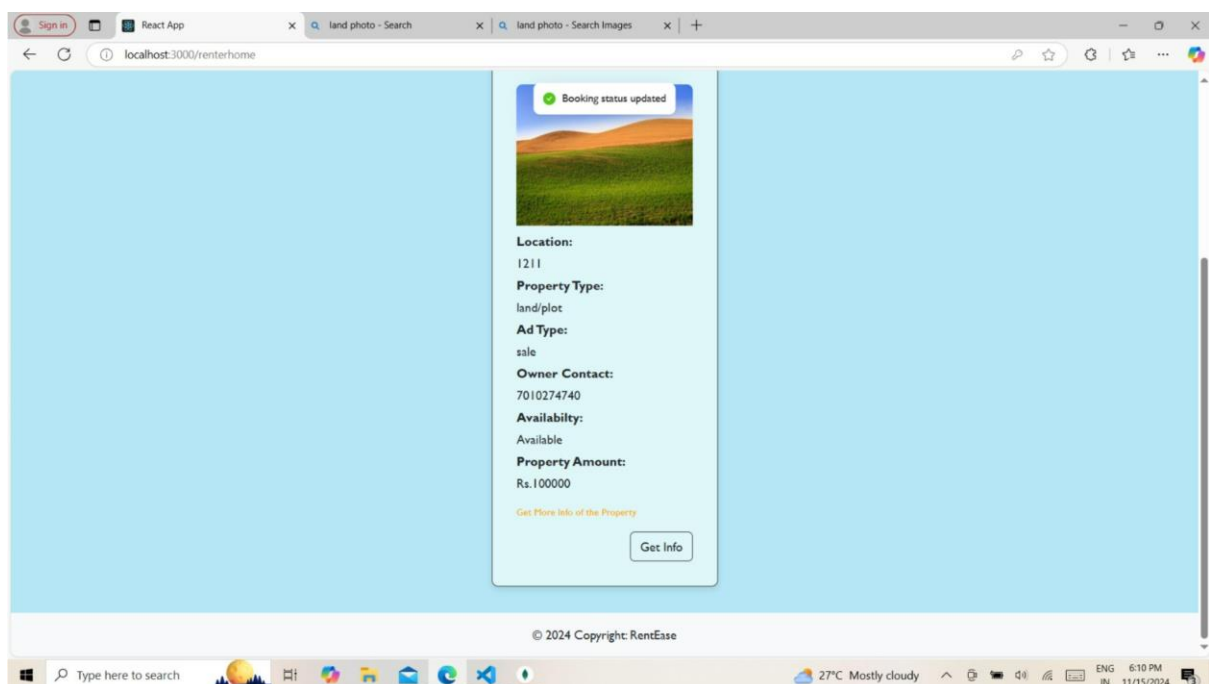
User Can Book the Properties:

Tenants can select a property and submit a booking request, which is stored with a "Pending Owner Approval" status.



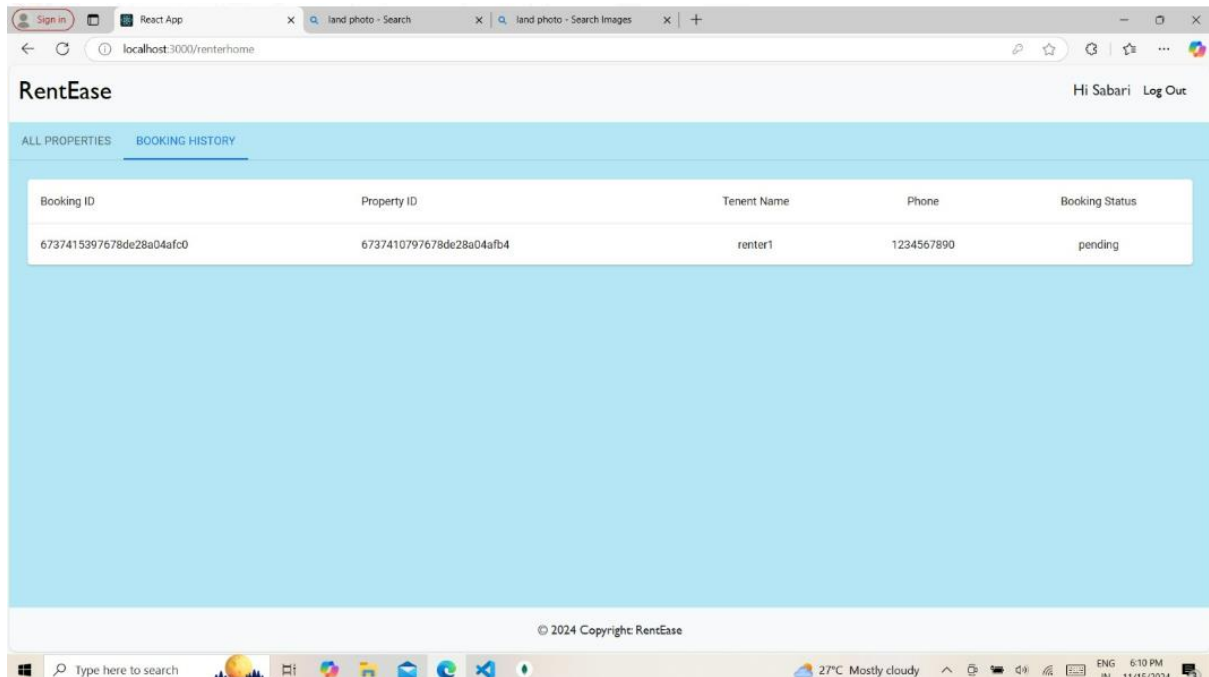
- **Booking Properties:**

Tenants can book a property by selecting a listing and confirming the booking, with the details stored securely in the database.



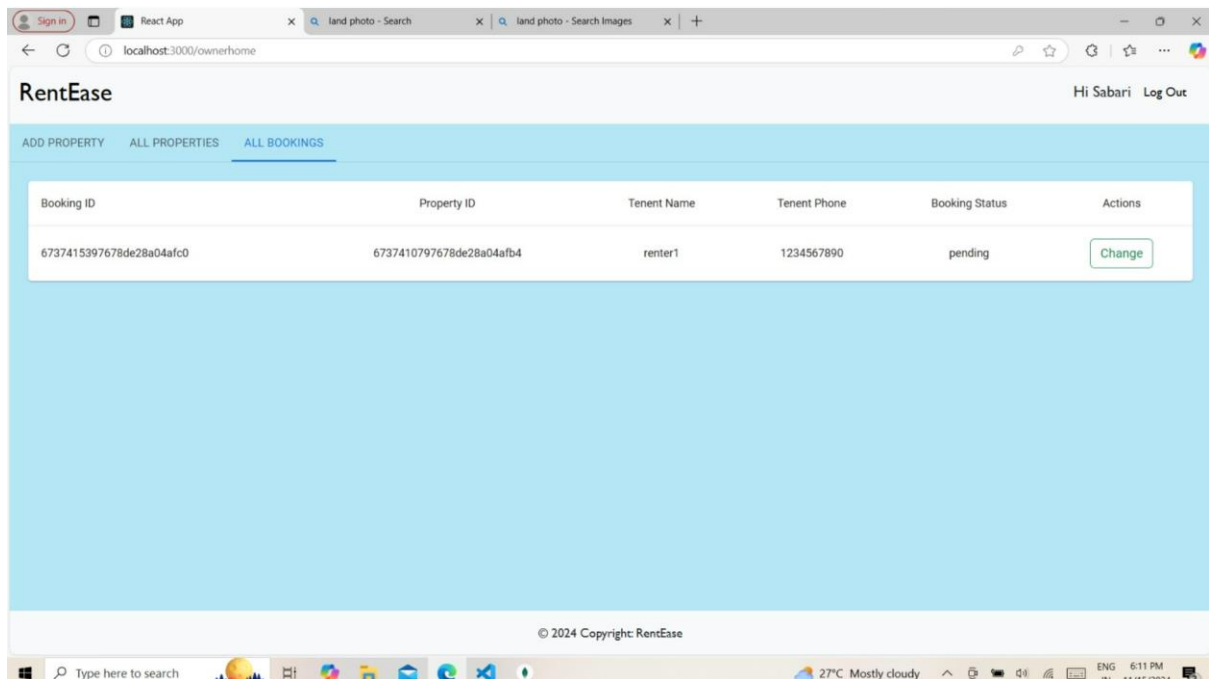
- ***View Booking Status:***

Users can track the status of their bookings, including pending approvals and confirmed rentals, via their account dashboard.



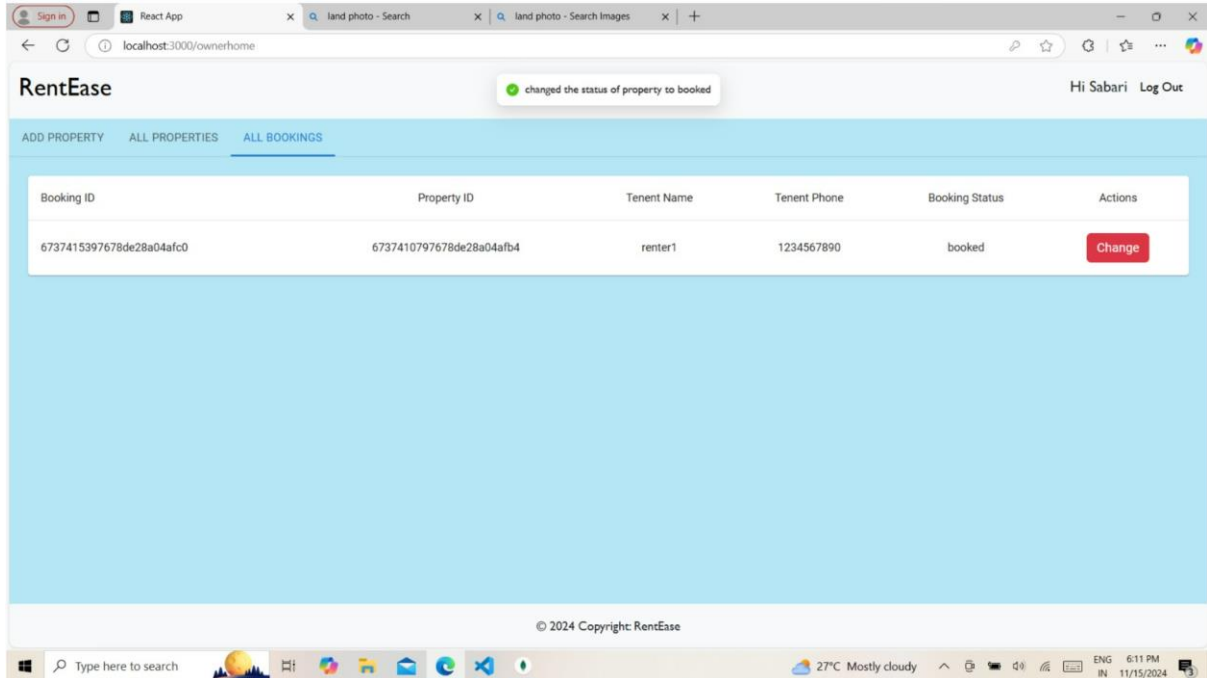
- ***Owner Approves Bookings:***

Owners review and approve booking requests, ensuring a smooth communication channel between themselves and tenants.



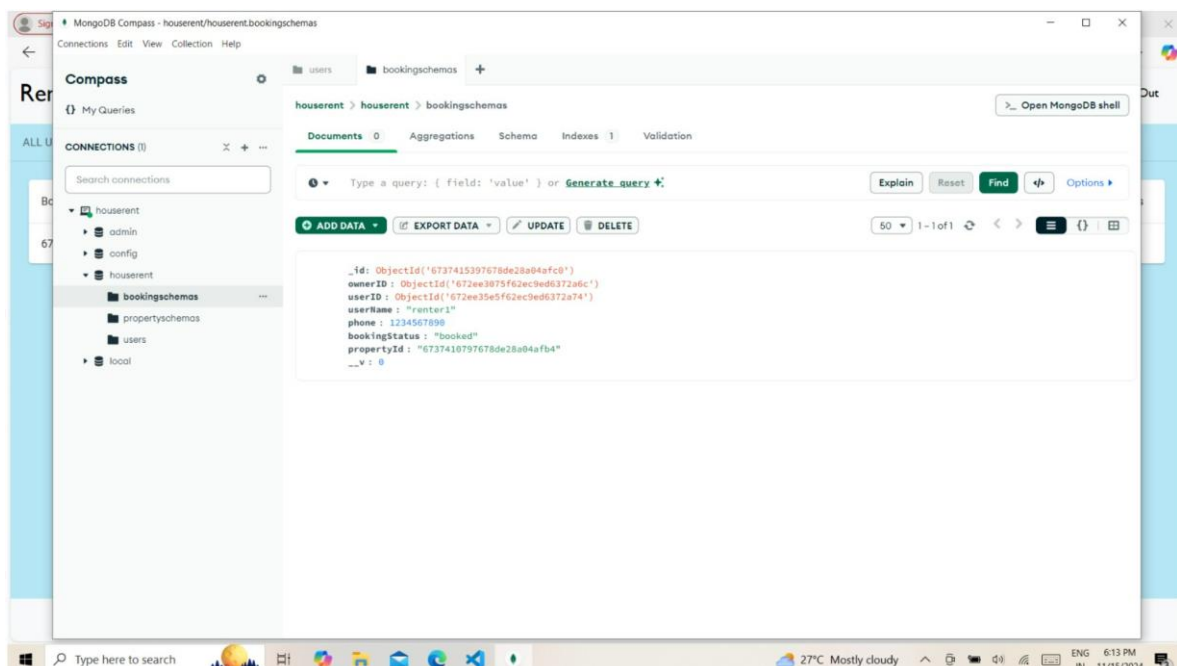
- ***Access Updated: Pending to Booked:***

Once approved by the owner, the booking status changes from “Pending” to “Booked,” notifying the tenant.



- ***Database Management with MongoDB Compass:***

MongoDB and MongoDB Compass are used to store and manage all application data, ensuring efficient and secure handling of user information, property details, and transactions.



Conclusion

We have successfully developed the **House Rent Application** as a team, providing a complete solution for managing property rentals. The app simplifies the interactions between Renters, Owners, and Admins, offering an efficient and user-friendly platform for all stakeholders. Through the **House Rent App**, renters can explore properties, send booking requests, and track their booking statuses seamlessly. Owners are empowered to manage their property listings, update availability, and respond to renter inquiries effectively. Admins ensure the smooth functioning of the platform by approving legitimate owners, monitoring activity, and enforcing platform policies.

Our team utilized cutting-edge technologies, including MongoDB, Express.js, React.js, and Node.js, to create a secure, scalable, and feature-rich application. The implementation of authentication, role-based access control, and CRUD operations ensures reliability and usability for all users. This project allowed our team to collaborate effectively, gain deep insights into full-stack development, and deliver a solution that addresses real-world challenges in the property rental space. It stands as a testament to our collective efforts and technical expertise.