

SETHONDE MAURICE 24299

RealEstate Application Documentation

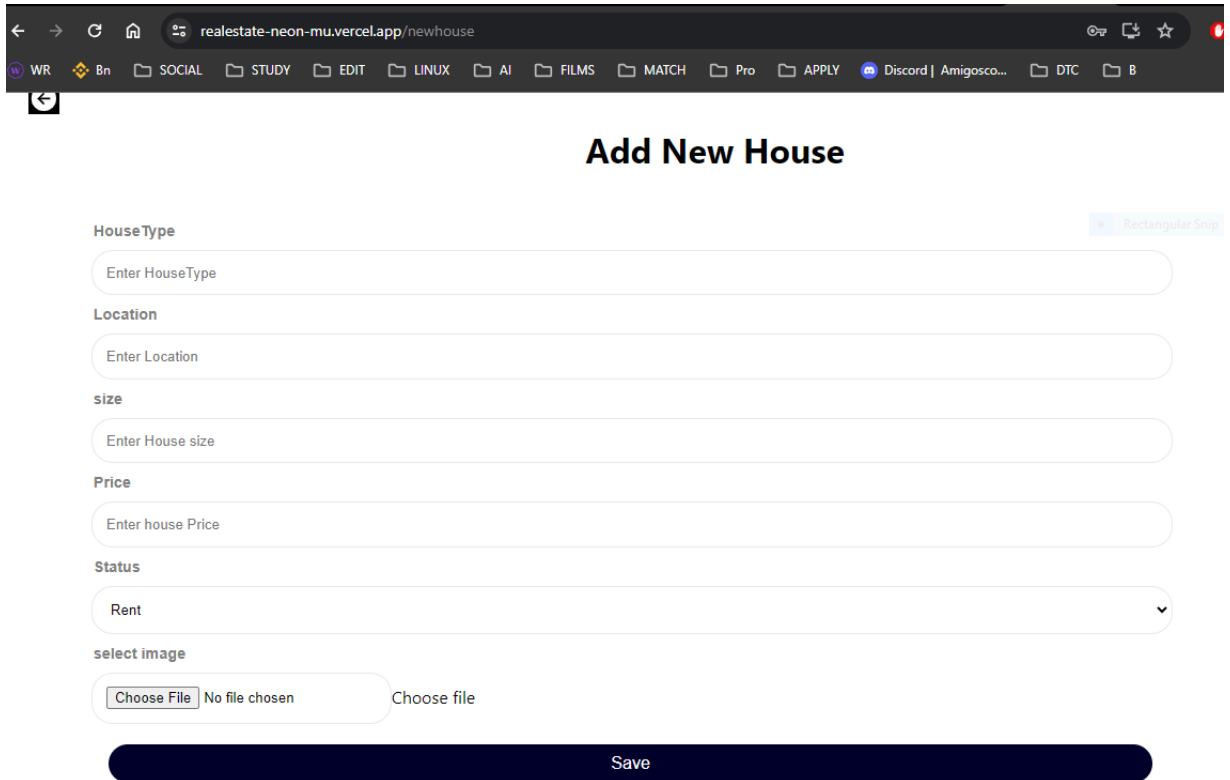
<https://realestate-neon-mu.vercel.app/>

Project Overview

RealEstate is a web-based application designed for buying and renting houses. The application facilitates house listing by administrators, allows users to view available houses, and enables them to book houses. Admins can manage houses, manage bookmarks and view user details.

Project Requirements

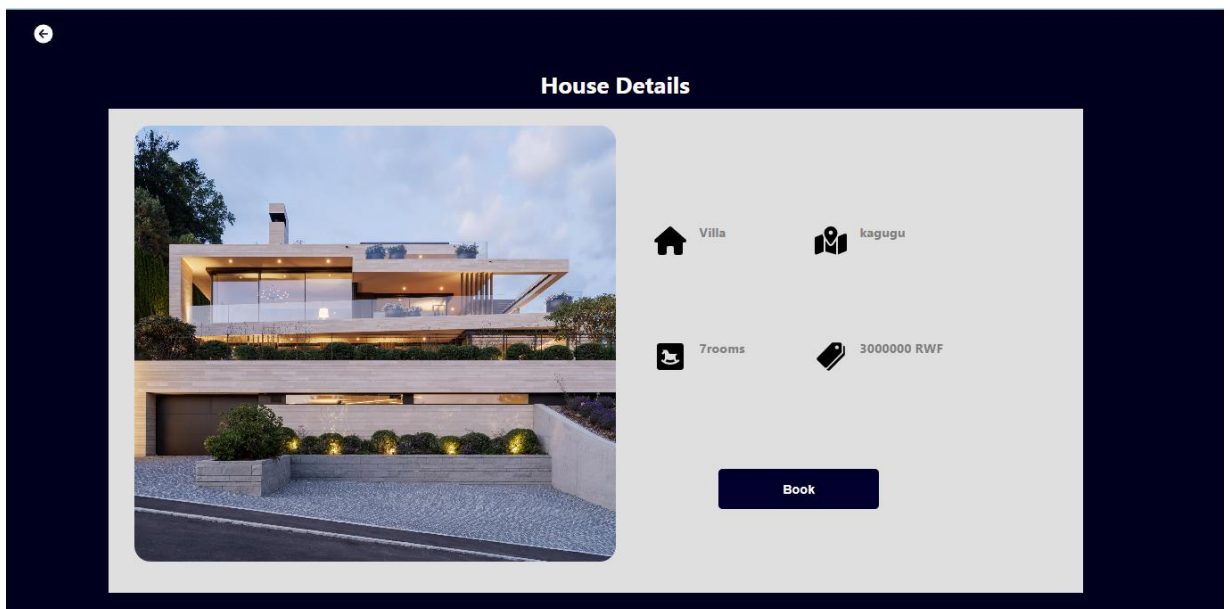
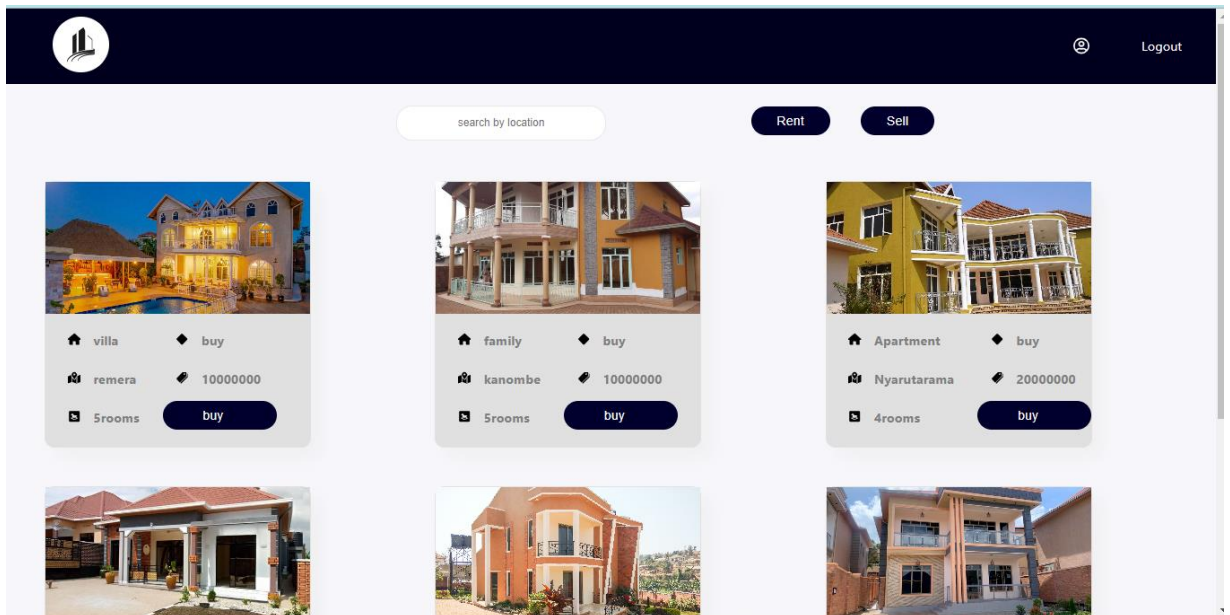
- House Listing: Admins can create, read, update, and delete house listings.



The screenshot shows a web browser window with the URL `realestate-neon-mu.vercel.app/newhouse`. The browser's address bar and tabs are visible. Below the browser window, the 'Add New House' form is displayed. The form includes the following fields and controls:

- HouseType**: A text input field with the placeholder 'Enter HouseType'.
- Location**: A text input field with the placeholder 'Enter Location'.
- size**: A text input field with the placeholder 'Enter House size'.
- Price**: A text input field with the placeholder 'Enter house Price'.
- Status**: A dropdown menu with 'Rent' selected.
- select image**: A file upload section with a 'Choose File' button, the text 'No file chosen', and a 'Choose file' link.
- Save**: A large, dark blue button at the bottom of the form.

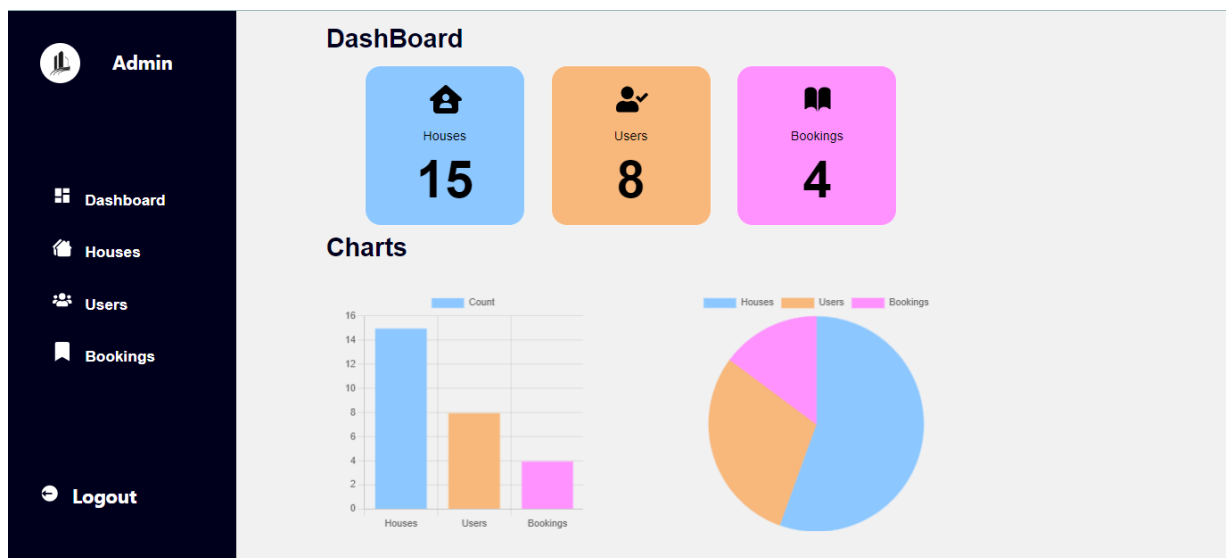
- User Bookings: Users can view available houses and book them, searching for houses(location), and contacting the admin for any suggestion.

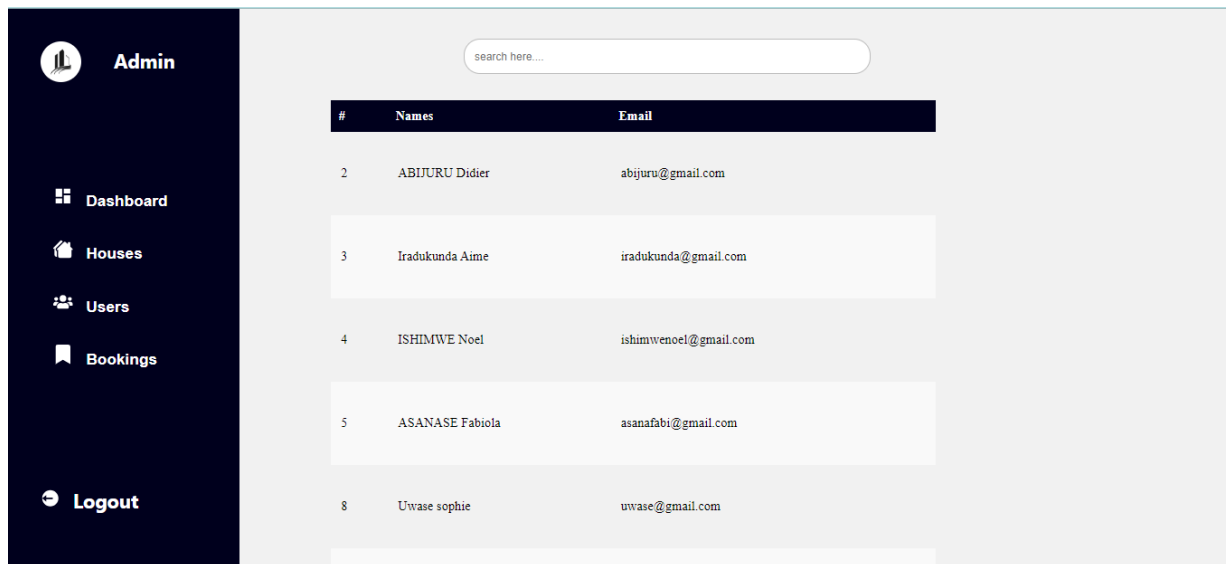


- Admin House Management: Admins can view booked houses and cancel bookings if possible.

#	Client Names	Client email	House ID	House Type	Location	Status	
6	ABUURU Didier	abijuru@gmail.com	16	gikondo	apartment	rent	<button>delete</button>
7	Uwase sophie	uwase@gmail.com	7	remera	familyHouse	rent	<button>delete</button>
9	sophie	uwase@mail.com	13	kacyiru	family	rent	<button>delete</button>

- User Authentication: Users and admins can log in and log out.
- Admin Manage his Dashboard: Check available bookings, Available houses in the system, Available users in the system.





Project Plan

Project Name: RealEstate

Project Scope:

- Develop a web application for buying and renting houses.
- Implement user authentication and authorization.
- Provide functionality for admins to manage house listings, users(customers), and bookings.
- Optimize application performance.

Project Timeline

Phase 1: Planning and Requirements Gathering (2 days)

- Identify similar apps and potential competition.
- Define project requirements and prioritize features.
- Develop a project plan, and timeline.

Phase 2: Design (2 days)

- Develop wireframes and prototypes of the app's user interface.
<https://www.figma.com/file/TvjxSVoAVbj3V2KywqqagA/Real-Estate?type=design&node-id=3-2&mode=design>
- Conduct user testing and incorporate feedback.
- Design the app's visual branding.

Phase 3: Development (3 days)

- Develop the app's front-end using React and JavaScript.
- Develop the app's back-end using the Spring framework and PostgresDB.
- Implement user authentication and authorization.
- Conduct testing and debugging.

Phase 4: Deployment and Launch (1 day)

- Deploy the app using render

Application(backend) and Versel(frontend).

- Launch the app.

Project Resources

- Project Manager
- UX/UI Designer
- Developer (Frontend, Backend & Database)
- Quality Assurance Tester

Project Constraints

- App development for web browsers.
- Compliance with applicable privacy laws and regulations.
- User-friendly and accessible design.

Source Code

The source code for the backend is available on GitHub:
<https://github.com/Sethmaurice/RealEstate.git>

<https://github.com/Sethmaurice/RealEstate.git>

The source code for the frontend is available on GitHub:
<https://github.com/Sethmaurice/frontend.git>

Database Schema

The database is named [realestateinstance](#). Entities include houses and users with relationships for house bookings.

User Documentation

Welcome to RealEstate! This powerful web-based application helps you find and book houses. Follow these steps to get started:

1. Open your web browser and go to <https://realestate-neon-mu.vercel.app/>
2. Explore the home page for information.
3. Click "Login" to log in or "Register" if you don't have an account.
4. If you want to login as an admin, use these credentials

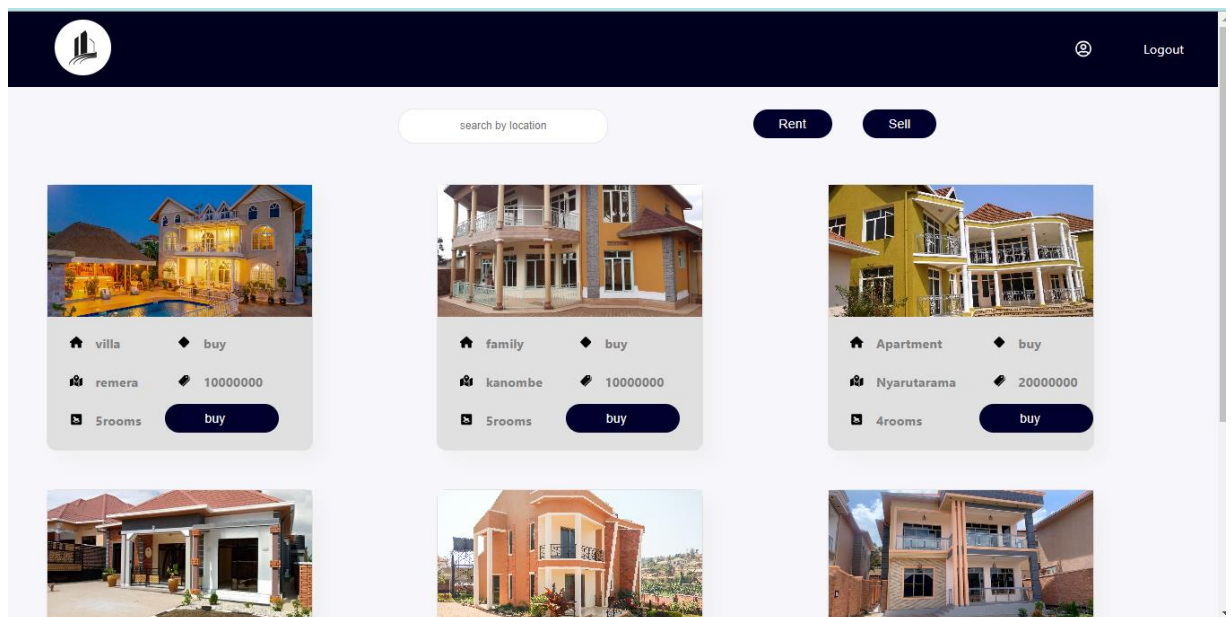
ADMIN: Username: **admin@gmail.com**

Password: **admin1**

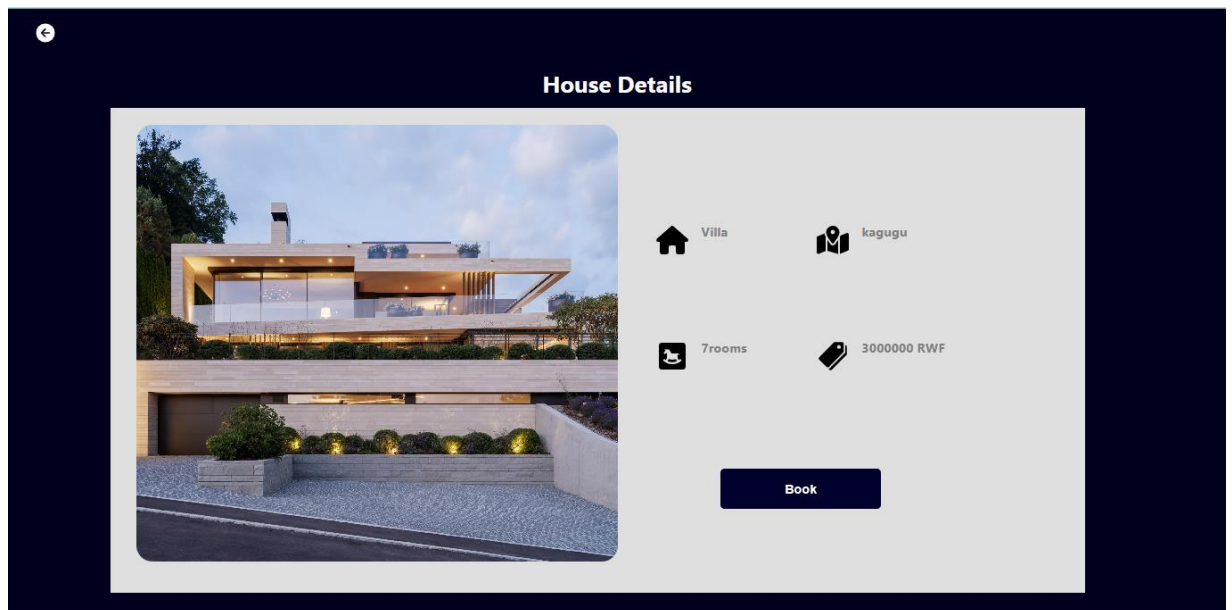
And then reach here: <https://realestate-neon-mu.vercel.app/admin>

Viewing and Booking Houses

- Explore available houses on the homepage when logged in as a **USER(CUSTOMER)**. explore the filters (RENT, SELL)



- Click on a house to view details.



- Click "Book" to reserve a house.

Managing Bookings (Admin)

- Admins can log in to manage house listings.
- View booked houses and cancel bookings.
 - View the statistics on the dashboard

Technical Documentation

Architecture Overview

RealEstate follows a **client-server architecture**. The frontend is built with React and JavaScript(deployed on versel), communicating with the Java Spring framework and PostgresDB on the backend(deployed on render).

Implementation Details

- Front-end: React, JavaScript
- Back-end: Java, Spring framework, PostgresDB
- Server-side code structure: Model-View-Controller (MVC) design pattern.

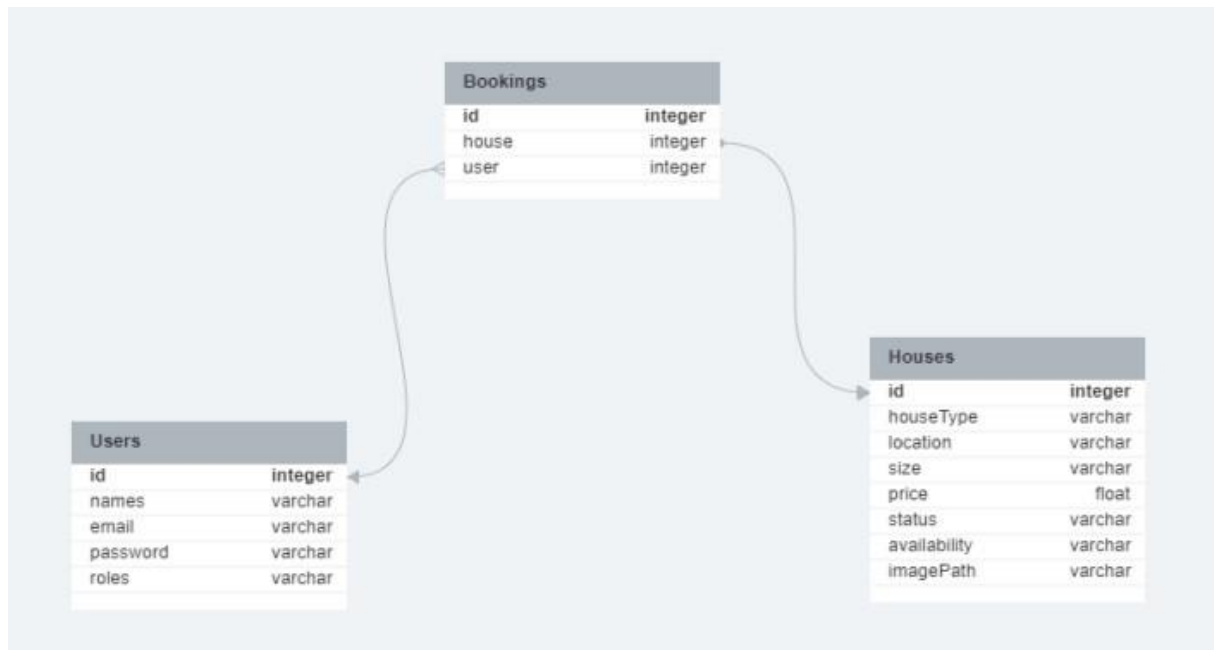
Endpoints

- <https://realestate-neon-mu.vercel.app/> Accessing homepage
- <https://realestate-neon-mu.vercel.app/admin> – Accessing admin dashboard
- <https://realestate-neon-mu.vercel.app/login> - Logging in

- <https://realestate-neon-mu.vercel.app/signup> - Registering a new user
- <https://realestate-neon-mu.vercel.app/logout> - Logging out

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Conclusion

In conclusion, RealEstate is a web application that simplifies the process of buying and renting houses.

It provides essential functionalities for users and administrators, ensuring a seamless experience for both parties. The application is built using modern web development technologies, making it scalable and adaptable for future enhancements.

THANK YOU