

# SETHONDE MAURICE 24299

## RealEstate Application Documentation

### 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 and view user details.

### Project Requirements

- House Listing: Admins can create, read, update, and delete house listings.
- User Bookings: Users can view available houses and book them, searching for houses, and contacting the admin for any suggestion.
- Admin House Management: Admins can view booked houses and cancel bookings.
- User Authentication: Users and admins can log in and log out.

### 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 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, timeline.

Phase 2: Design (2 days)

- Develop wireframes and prototypes of the app's user interface.
- 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.
- 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 is available on GitHub: <https://github.com/Sethmaurice/RealEstate.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.

#### Viewing and Booking Houses

- Explore available houses on the homepage.
- 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

### Technical Documentation

#### Architecture Overview

RealEstate follows a client-server architecture. The front-end is built with React and JavaScript, communicating with the Java Spring framework and PostgresDB on the back-end.

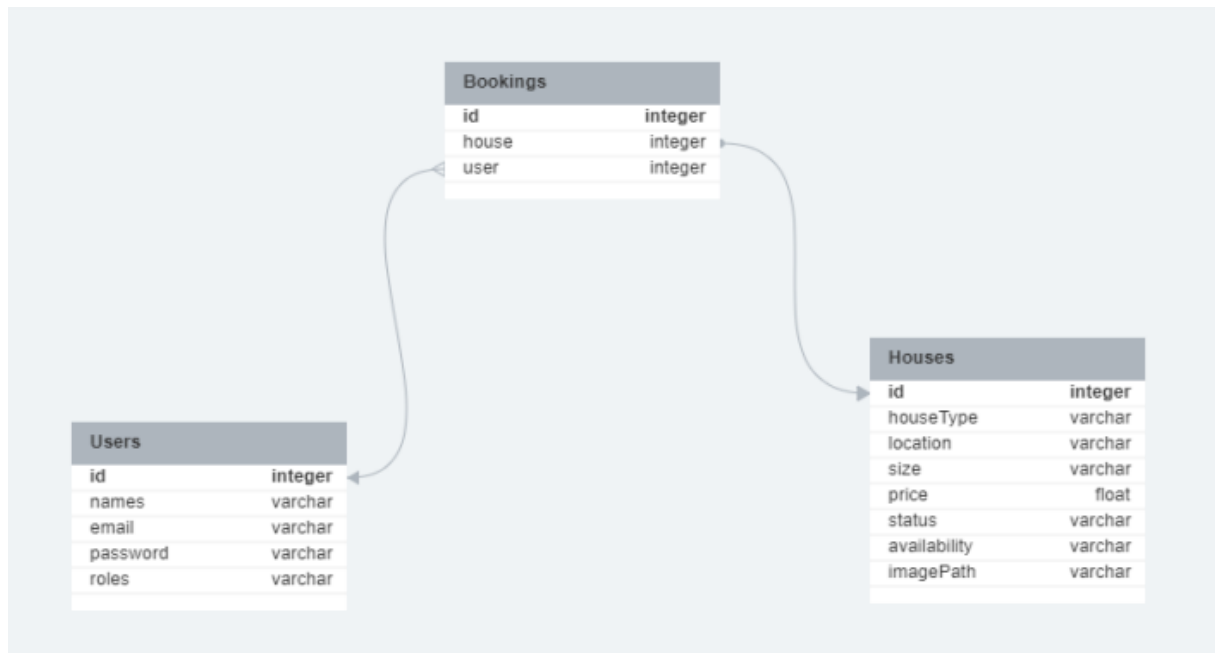
#### Implementation Details

- 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

### ERD



## 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.