Software Requirements Specification

Project Overview

PropEase - Property Rental System is a full-stack web application designed to facilitate rental transactions between property owners and tenants. It will allow users to register, login, search properties, make payments, and manage their property rental listings. The system will be developed using a microservices architecture for scalability and maintainability.

Team Members

1) Tarun Sabharwal
2) Lakshay Kamboj
3) Aryan Raj
4) Tarun Sri Sai Pinnamaneni

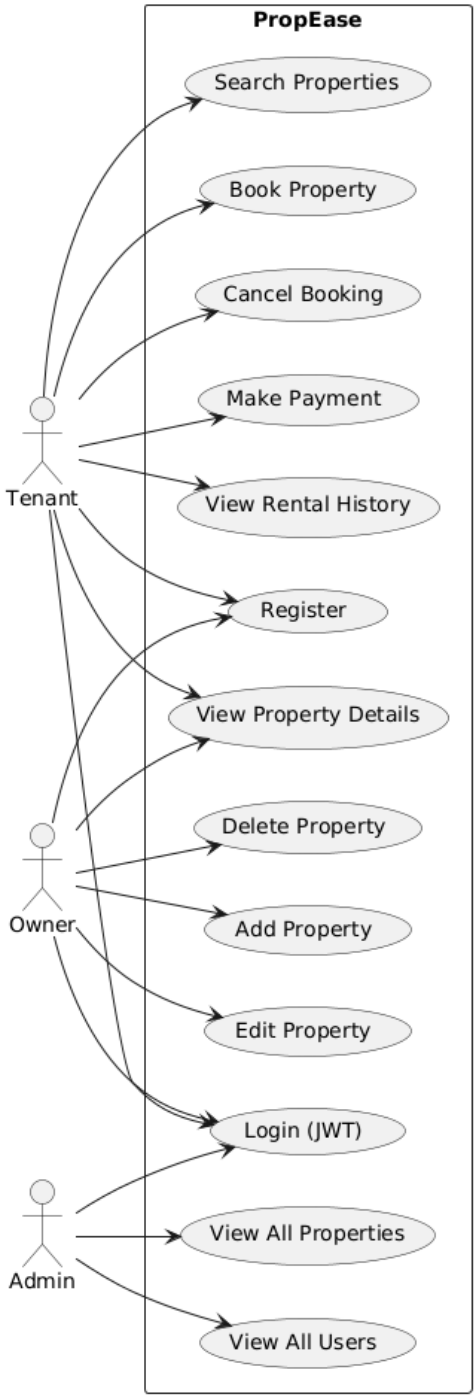
Technologies Used

1. **Front-End**: Angular 15+
2. **Back-End**: Spring Boot, Spring Cloud, Spring Data JPA
3. **Database**: MySQL
4. **Authentication**: JWT (JSON Web Tokens)
5. **Service Discovery**: Eureka Server
6. **API Gateway**: Spring Cloud Gateway
7. **Logging**: Java Util Logging + Logback
8. **Testing**: JUnit, Mockito
9. **Build Tool**: Maven
10. **Version Control**: Git + Sonar Cube

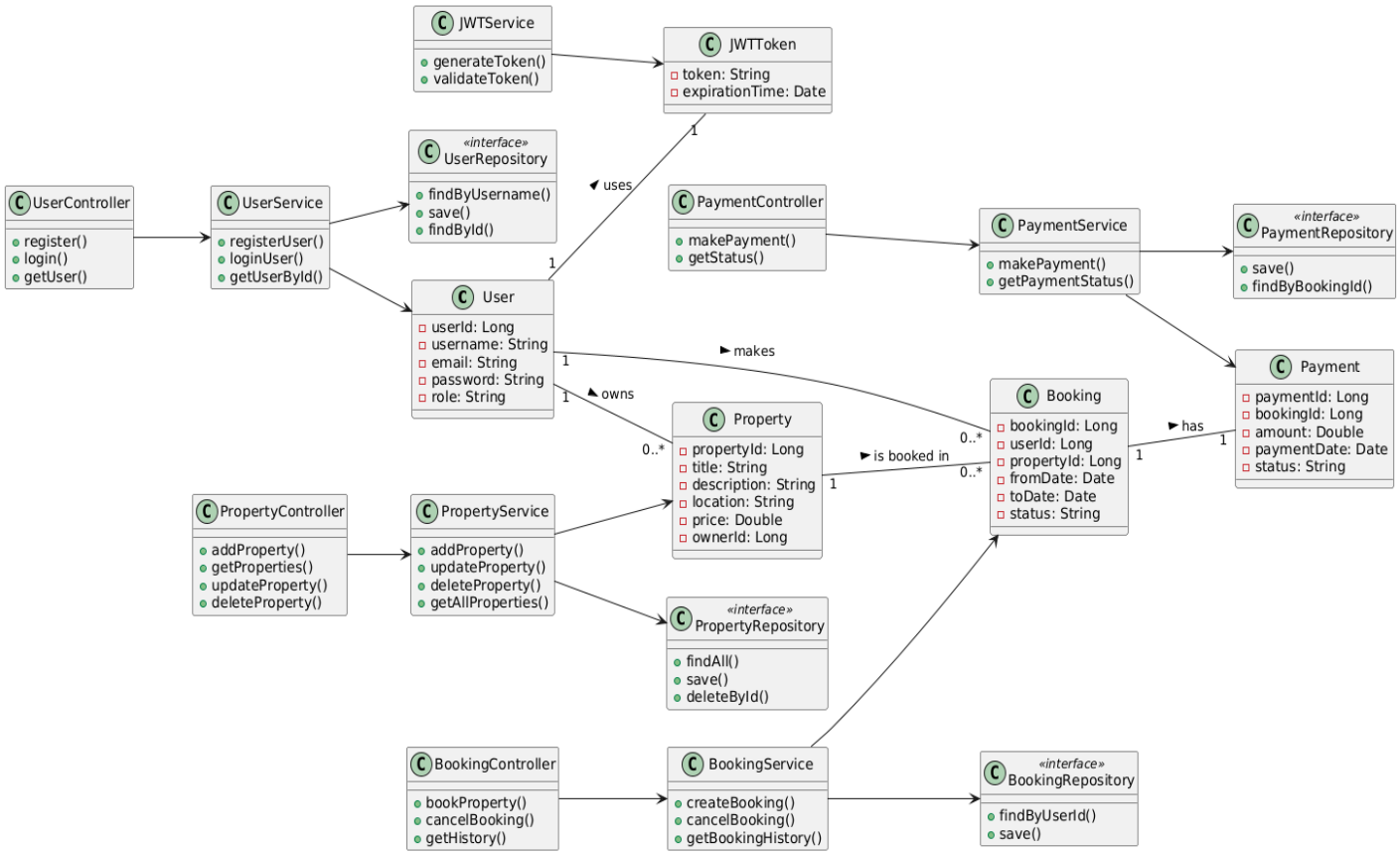
Microservices Architecture

S No.	Service Name	Summary	Contribution
1	Eureka Discovery Service	Eureka Server for discovering/registering all the services	Lakshay, Tarun Sabharwal
2	Gateway API Service	For accessing all the services through Gateway Api port no	Aryan, Tarun Sri Sai
3	Registration Service	For registering user as a tenant, owner or an admin	Lakshay, Tarun Sabharwal
4	Login Service	For user authentication and authorization (with JWT auth filter)	Lakshay, Tarun Sabharwal
5	Property Management Service	To list, add, edit, delete properties	Lakshay, Tarun Sabharwal
6	Rental Service	For booking, availability check etc.	Aryan, Tarun Sri Sai
7	Payment Service	Integrating payment gateway using Stripe/Razorpay Api	Aryan, Tarun Sri Sai
8	Bookings Service	To manage your bookings	Aryan, Tarun Sri Sai

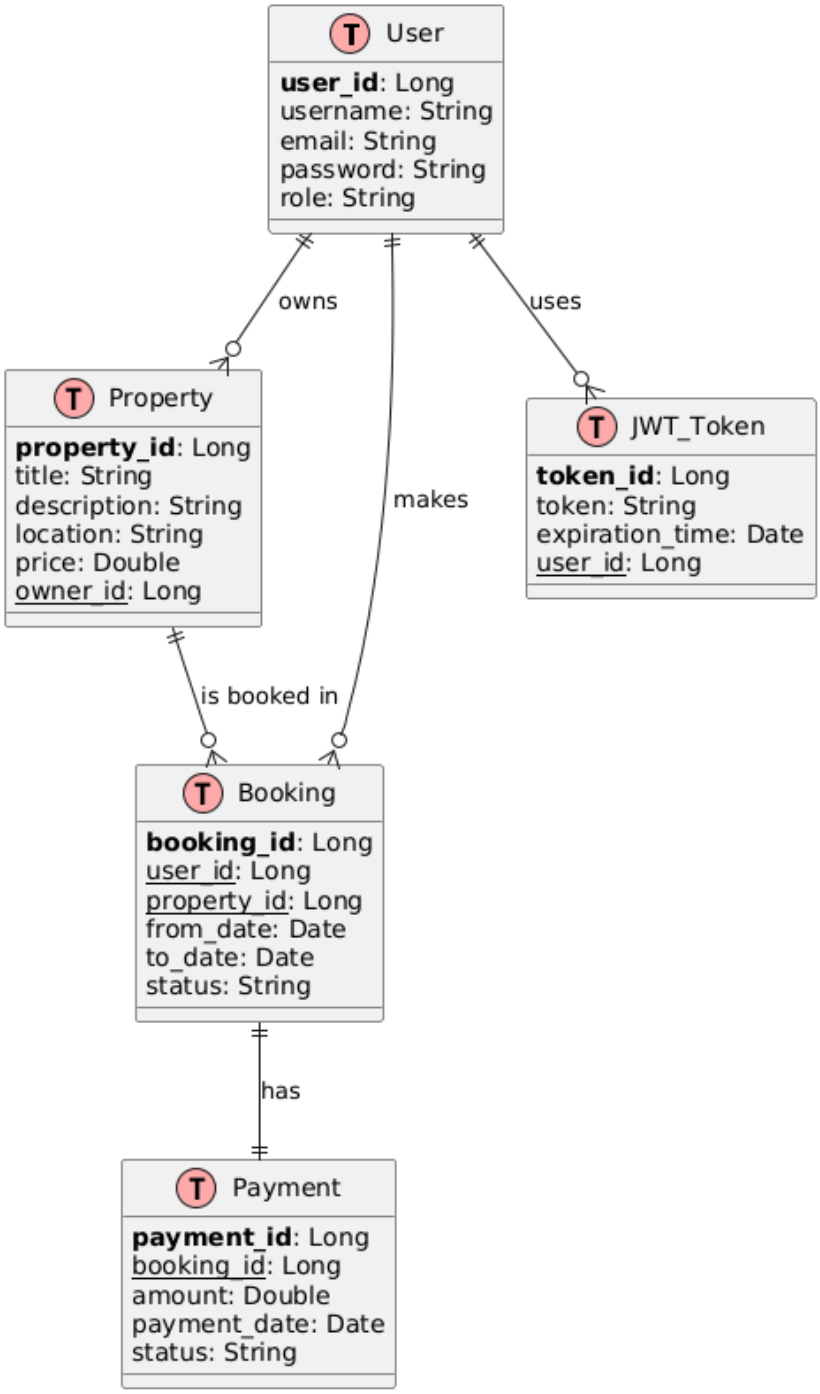
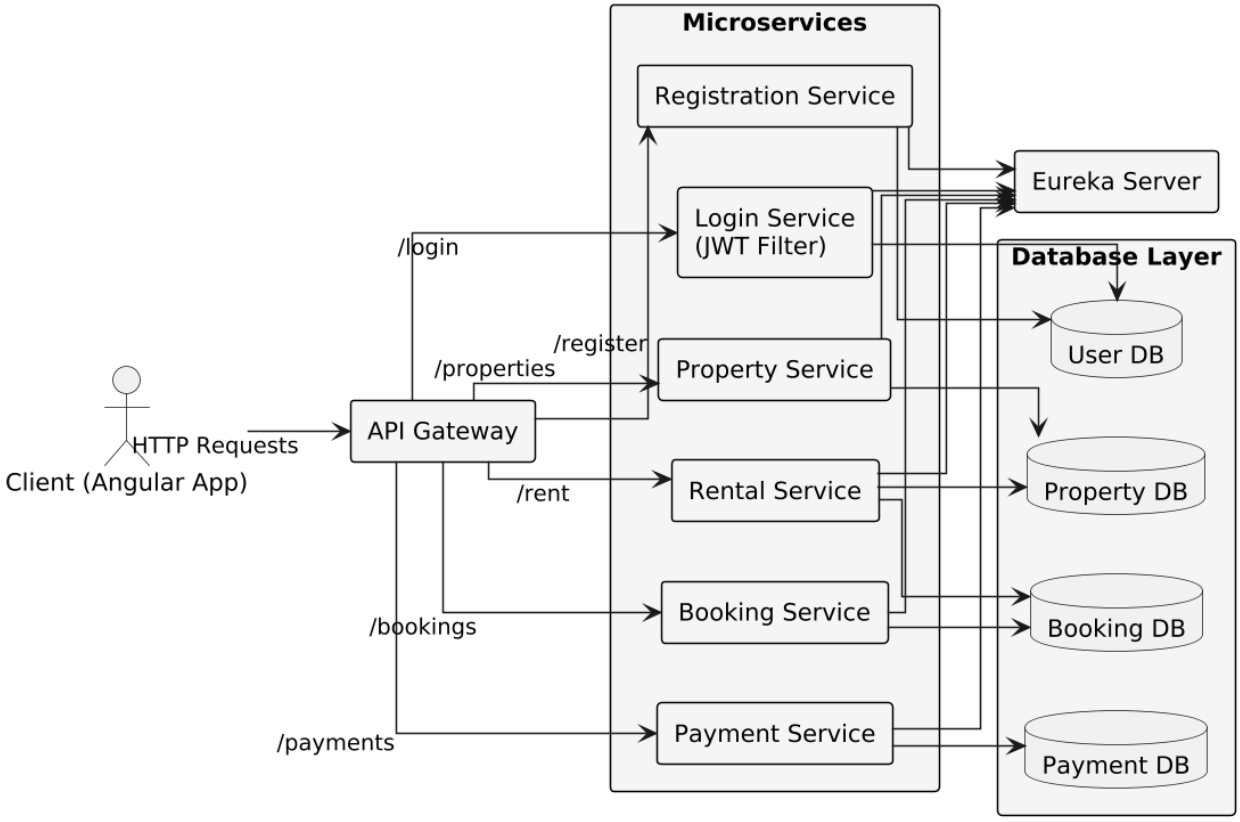
Use Case Diagram



Class Diagram



Entity Relationship Diagram (ERD)



Architectural Diagram