

## **System Architecture Overview**

### **1. Backend Services**

The system consists of multiple microservices built using Spring Boot.

Each service communicates via REST APIs.

### **2. Database**

PostgreSQL is used as the primary database.

Redis is used for caching frequently accessed data.

### **3. Authentication**

Authentication is handled via JWT tokens issued by an API Gateway.

### **4. Scalability**

The system supports horizontal scaling using Kubernetes and Docker containers.

### **5. Monitoring**

Application logs are monitored using ELK stack.

Metrics are captured using Prometheus and visualized in Grafana.