**PROJECT PLAN**

**TECH STACK:**

**Frontend**: Angular 9, Bootstrap

**Backend**: Spring Boot, Eureka, Load Balancer, Zuul API gateway

**Authentication:** JWT Authentication

**Database**: mySQL

**CI/CD**: Git, Jenkins, Docker

**Plan:**

1. Create the Database Architecture
2. Finalize the required backend services.
3. Create backend microservices using Spring Boot
4. Create the authentication services using JWT
5. Finalize the required Components
6. Develop the components using Angular
7. Deploy the frontend build files and backend files using Jenkins on Docker.

**MICROSERVICES:**

1. **User-Service**
   1. Entity:
   2. Controller:
2. **Company-Service: 8082**
   1. Entity: Company, Director, Sector, IPO, Stock, Stock Price, Exchange, Address
   2. Controller: getCompany, addCompany, getCompany/{id}, getPatternCompany/{pattern}, getCompanyIPODetails/{id}, getCompanyStockPrice, updateCompany/{id}
3. **Sector-Service: 9091**
   1. Entity: Sector, Company
   2. Controller: getSector, addSector, getSector/{id}, listOfCompanies/{id}
4. **Exchange-Service: 8081**
   1. Entity: Address, Exchange
   2. Controller: getExchange, addExchange, getExchange/{id} , listOfCompanies/{id}
5. **Excel-Service: 8086**
   1. DTO: ExcelDataServiceDTO
   2. Controller: addStockPrice
6. **Eureka: 8761**
7. **API-gateway: 9191**
8. **Config-server: 9296**

**FUNCTIONALITY**

1. **admin**
   1. Add excel data
      1. **Add data from excel**
   2. Company
      1. **Add**
      2. **View all with search bar**
      3. Edit
      4. Deactivate
   3. Exchange
      1. **Add**
      2. **View all**
      3. **Add company to exchange - addStock**
   4. IPO
      1. **Add**
      2. **View ipo**
      3. Edit
2. **User**
   1. IPO
      1. View all by chronological order
      2. Get IPO by company(using dropdown)
   2. Company
      1. **View all companies comparison**
   3. Sector
      1. **Get companies by sector**