**PROJECT DOCUMENT**

**TECHNOLOGIES USED**

1. **Frontend**: Angular, Bootstrap
2. **Backend:** Rest API using Spring Boot, JPA, Netflix Stack for microservices. JWT Rest API for authentication
3. **Database**: MySQL

**STEPS TO FOLLOW**

1. Design Database
2. Create Database Entities using Spring Boot
3. Create Rest API for different microservices using the defined entities and controllers
4. Test Rest API using Postman
5. Start working on Frontend using angular and bootstrap
6. Connect frontend and backend by calling rest api from typescript code in frontend.
7. Configure Build Pipelines in Jenkin

**MICROSERVICES**

1. **Company-Service: http://localhost:8084/company**
   1. Entity: Company, Sector, IPO, StockExchange, Address, Stock, StockPrice
   2. Controller:
      1. Get All Companies = /getCompany
      2. addCompany = /addCompany
      3. Get Company by Id = /getCompany/{id}
      4. Get Company by Pattern = /getCompanyByPattern/{pattern}
      5. Get Ipo by Company = getIpo/{id}
      6. Update Ipo = updateIpo/{id}
      7. getCompanyStockPrice = /getStockPrices/{companyId}/{exchangeId}/{from}/{to}
      8. Update Company = /updateCompany/{id}
      9. Delete Company = /deleteCompany/{id}
2. **Sector-Service: http://localhost:8083/sectors**
   1. Entity: Sector, Company
   2. Controller:
      1. Get All Sectors = /sector
      2. Add Sector = /sector
      3. Get Sector By Id = /sector/{id}
      4. Get Companies By Sector ID = /companies/{id}}

1. **Exchange-Service: http://localhost:8082/stockExchange**
   1. Entity: Address, StockExchange
   2. Controller:
      1. get All Exchanges = /exchanges
      2. addExchange = /exchanges
      3. Get exchange by id = /exchanges/{id}
      4. Get companies by Exchange = /company/{id}
2. **Excel-Service: http://localhost:8085/excel**
   1. Entity:
   2. Controller
      1. Upload Excel data = /uploadData
3. **Eureka-service**
4. **Config-server**
5. **API Gateway**

**FRONTEND - COMPONENTS NEEDED**

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

1. **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