Day 7 – 27 Mar 2024

Spring Framework or Adv Spring Framework

40 hours training

Spring boot, Spring reactive modules, spring web client, spring with hibernate.

Spring transaction management, spring security etc.

<https://start.spring.io/>

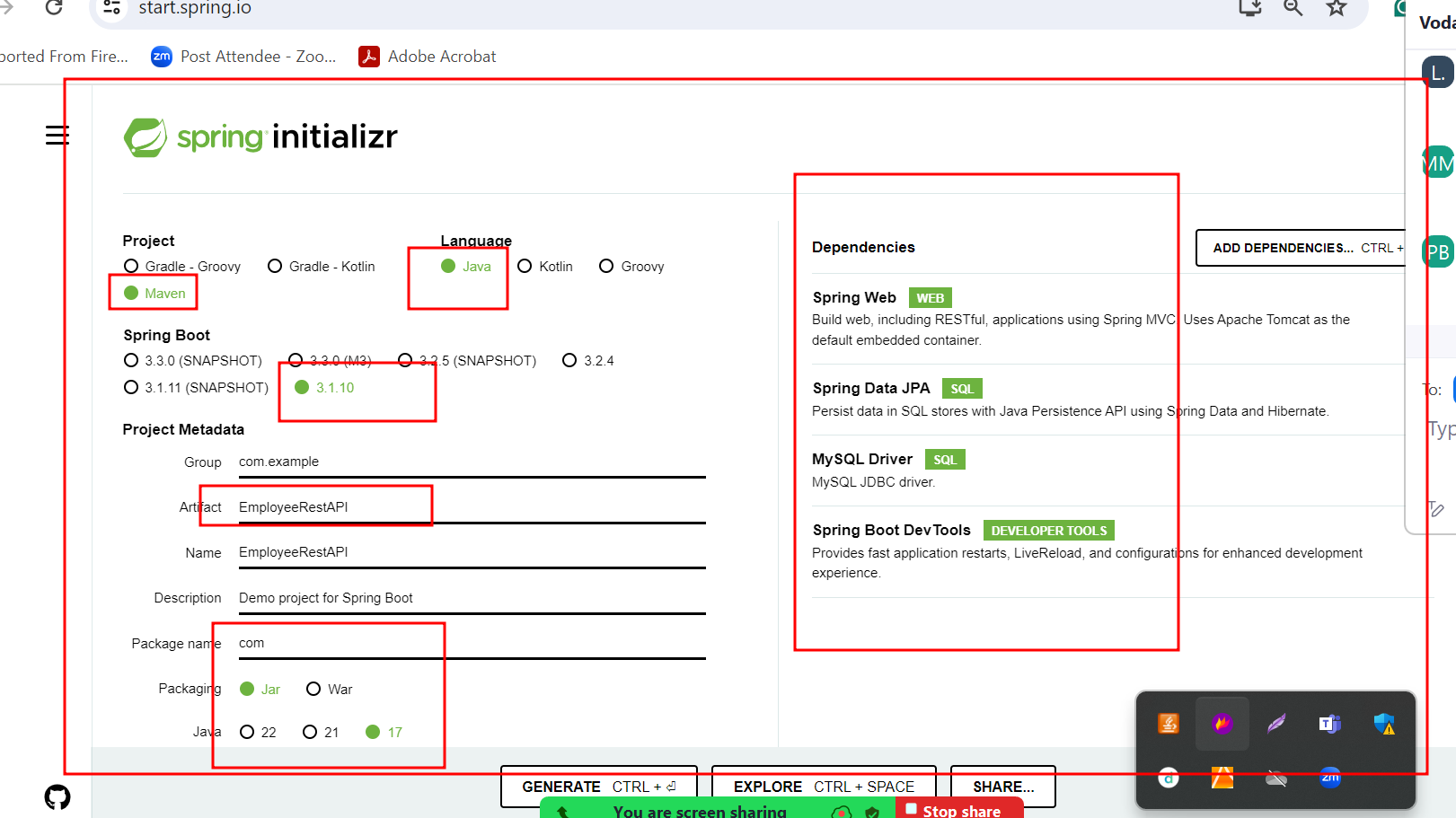
EmployeeRestAPI

Starter -🡪 Web Starter

MySQL 🡪 Dependencies

Starter -🡪 JPA

Starter 🡪Devtool 🡪 whenever we do any changes in application automatically refresh the project.



Description

**Project objective:**

As a Full Stack Developer, complete the features of the application by planning the development and pushing the source code to the GitHub repository. 

**Background of the problem statement:**

Sporty Shoes is a company that manufactures and sells sports shoes. They have a walk-in store, and now, they wish to launch their e-commerce portal sportyshoes.com.

You’re asked to develop a prototype of the application. It will be then presented to the relevant stakeholders for budget approval. Your manager has set up a meeting where you’re asked to do the following:

● Presenting the specification document which has the product’s capabilities, appearance, and user interactions  
● Setting up Git and GitHub account to store and track your enhancements of the prototype   
● Explaining the Java concepts used in the project   
● Discussing the generic features of the product:  
● There will be an admin to manage the website. An administrator login will be required to access the admin page.

**The admin should be able to change his password if he wants, he should be able to:**

● Manage the products in the store including categorizing them  
● Browse the list of users who have signed up and be able to search users  
● See purchase reports filtered by date and category

their e-commerce portal sportyshoes.com

you need to create Sprint boot project with starter as

starter 🡪 Web Starter

starer 🡪 thymeleaf -🡪view ,CSS or bootstrap

mysql 🡪 connector

jpa -🡪 starter

devtools🡪 refresh the project.

Login -🡪 table

Emailid (PK), password , typeofuser

[Admin@gmail.com](mailto:Admin@gmail.com), admin@123 admin

Actor -🡪 Admin

Singin no signup

Admin dashboard

Customer

Signin and signup

Customer dashboard

Index.html

Emailid

Password

Typeofuser

Signup.html

Emailid

Password

Typeofuser

Admin dashboard

Admin add product, view product, delete product , update product , can view all order details, can view all customer details.

Pid,pname,price,qty,image, description etc

Customer dashboard

View the product, place the order for particular product, view orders etc.

Login

Product

Order

Cart etc

Limitation of monolithic service ie Rest API Service

1. Employee Modules, Login Module, Customer Module, Product Module, Payment Module, Order Module etc.
2. Using git we push the code to remote repository etc.
3. We need to merge all developer code and make war file or jar file or ear file and need to deploy the application.
4. If any module has some issue the whole application can’t work.
5. We need to use same language to develop whole application.
6. We need to use same database.

Micro service : small service which work independently. We develop the smallest code using some language with database and deploy independently on server.



Micro service : in micro service architecture we can create n number of modules independently using same language or different language with same database or different database. We can develop jar or war file independently in production environment.

More than one micro service can communicate using rest api call.

Dev1

Dev2 shared repository merge the code and re-build it and

Pass to other team ie testing server or production server

Dev3

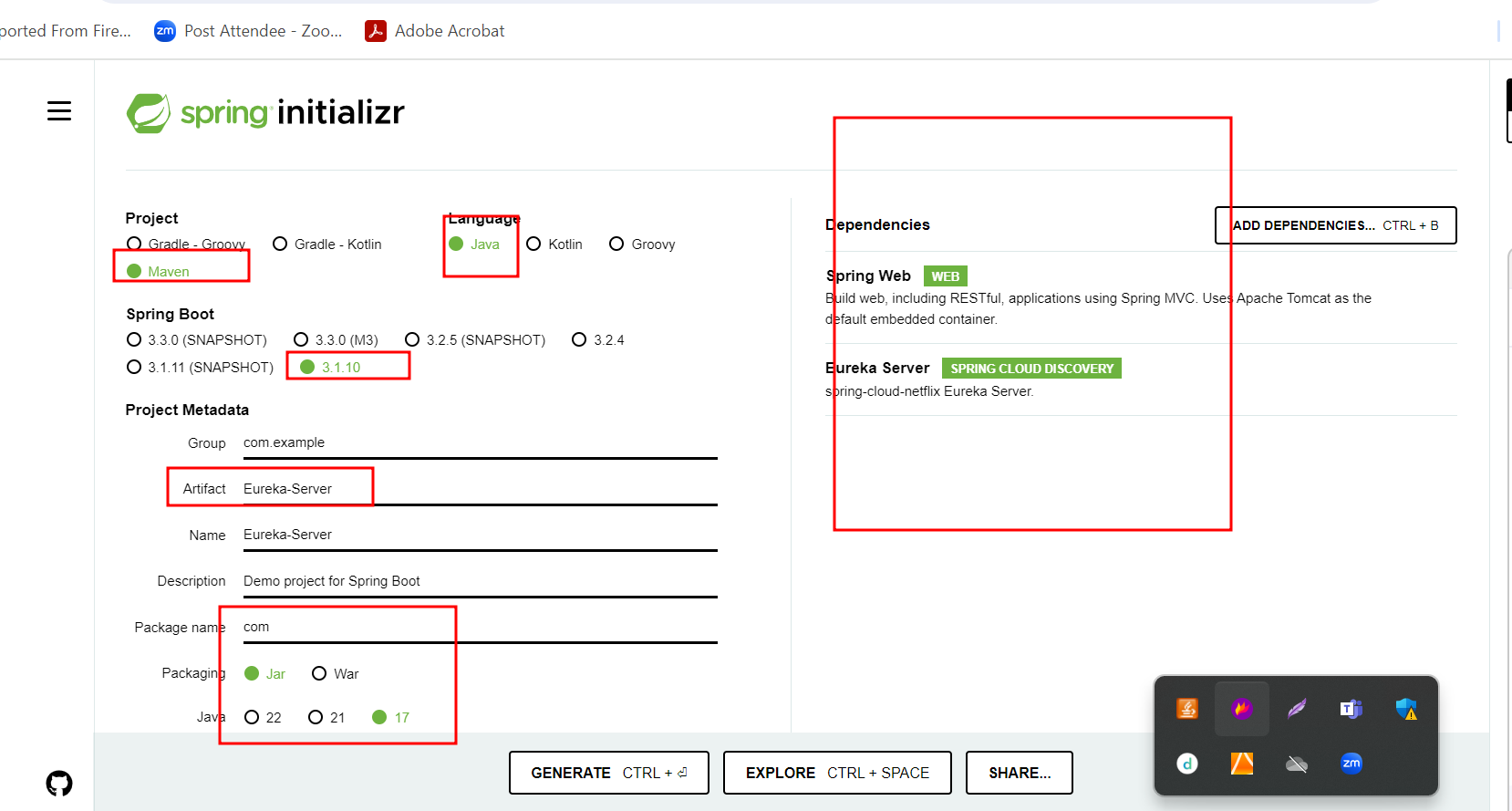
Spring framework provide two modules

1. Spring cloud
2. Spring micro service

Spring boot provide an open source Server ie Eureka Server which help to deploy more than one micro service project.

Eureka server mainly use to check the health of micro service projects.

First we create Eureka Server project

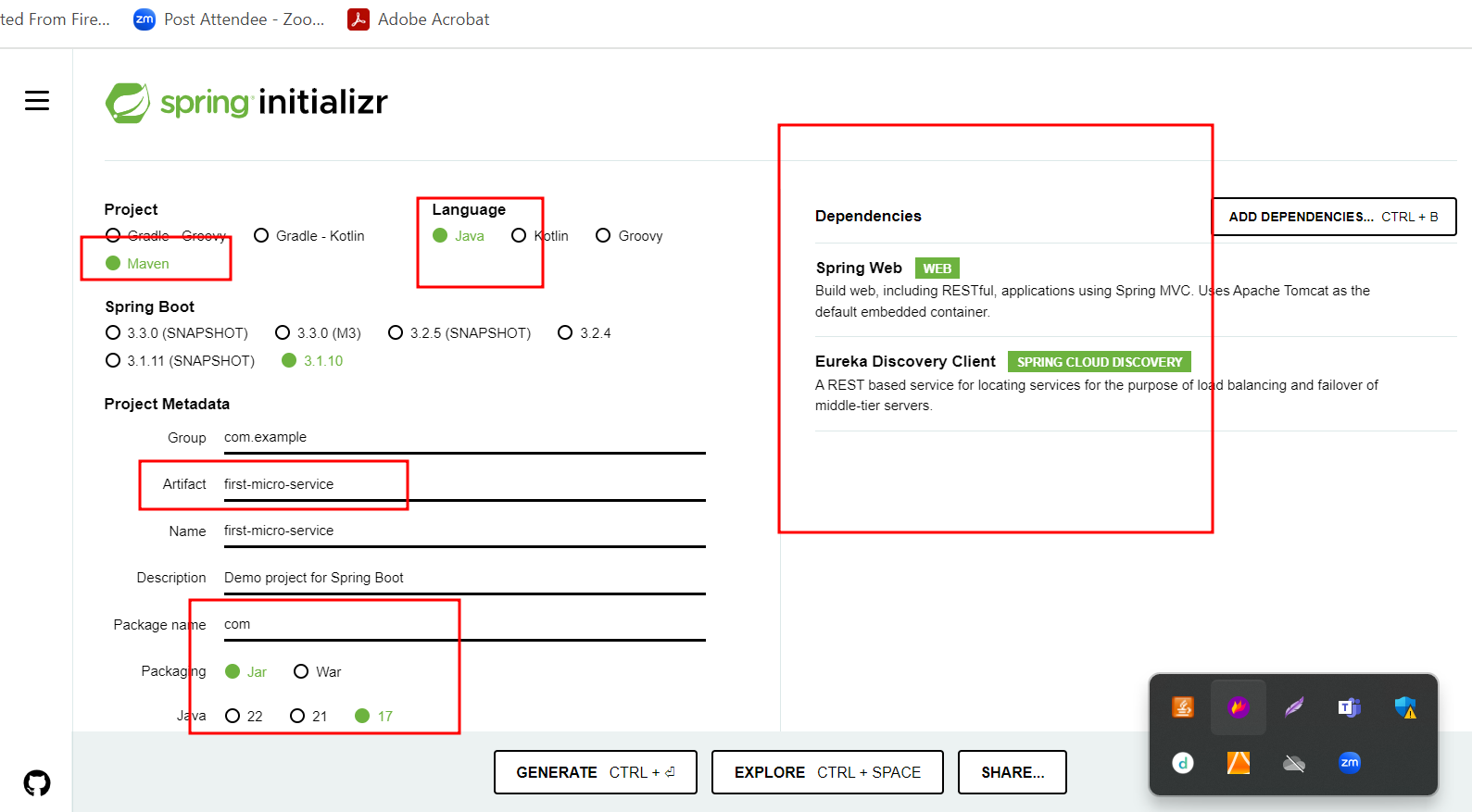


First Micro Service project

Starter 🡪 Web Starter 🡪 Expose simple rest api

Eureka Client -🡪 Starter

Port number 8080



Second Micro Service project

Starter 🡪 Web Starter 🡪 Expose simple rest api

Eureka Client -🡪 Starter

Port number 8081

