

Week 2 & 3 - Learn About Spring Boot

Project Links:

- GitHub Repository: <https://github.com/Yee152/CS-406-Learning-Spring-Boot>

Introduction

Many people use Spring Boot to build REST microservices. Some actions you can use Spring Boot for are GET, POST, PUT, and DELETE. With my personal project I will mainly be focusing on GET and POST using Postman. Using Spring Boot, a programmer can easily start an application and connect to databases, configure a project and get started almost immediately. Spring Boot is used to build web and back end applications.

In general, spring boot will have a client request, it will go through each of the following layers: presentation layer, business layer, persistence layer and the database layer and then send a response back to the client in the form of JSON, status, code, payload or image.

Steps to Setup Project:

1. Go to start.spring.io and generate a spring boot project.
2. Build project using Maven, Java 3.1.3.
3. Add dependencies to the project.
4. Started project up in IntelliJ
5. Open the generated spring folder in IntelliJ
6. Open the Pom.xml as a project.
7. Hit the play button to run spring boot on the demo folder after using spring initializer.

Issues & Solutions:

1. Project 'org.springframework.boot:spring-boot-starter-parent:3.1.3' not found, resolved by installing maven
2. "Brew install maven"
3. mvn clean - cleans the project and removes all files generated by the previous build
4. mvn package - creates JAR or WAR files for the project, this also solves the problem of spring framework not being found. In addition, select file then invalidate caches "clear downloaded shared indexes and invalidate and restart"
5. Needed to install JDK 11
6. If indexes are not downloading reload the page and allow maven to prepopulate in intellij

Resources:

<https://stackoverflow.com/questions/64953515/project-org-springframework-bootspring-boot-starter-parent2-4-0-not-found>

<https://stackoverflow.com/questions/63521181/java-file-outside-of-source-root-intellij#:~:text=To%20Solve%3A%20%22Java%20file%20outside%20of%20source%20root%22&text=Select%20Modules%20in%20Project%20Settings,same%20steps%20for%20multiple%20folders>.

<https://stackoverflow.com/questions/37774282/intellij-cannot-resolve-symbol-springframework>

<https://www.oracle.com/java/technologies/data-access-object.htm>

<https://www.interviewbit.com/blog/spring-boot-architecture/>

<https://www.kellton.com/kellton-tech-blog/spring-and-data-access-object-dao-part-1#:~:text=It's%20a%20design%20pattern%20in,exposing%20details%20of%20the%20database>.