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**Objective:**

* It enables the experienced Microsoft .net web developers who wants to shift to java and spring boot framework.
* It gives the developer the entry key for mapping the ASP Core web terminologies to its equivalents in Spring boot to ease the shift smoothly.
* It doesn’t compare between Asp Core and Spring Boot.

**Expected Output:**

* We will build Restful APIs using Spring Boot with **Separation of concerns** structure approach.
* We will be able to develop **Secured** web **Restful** APIs that is connecting to **PostgreSQL** database using **Code first** approach in building the database.
* These APIs will implement Aspect Oriented Programming (**AOP**) in the **Logging** module and **Exception Handling** Modules.
* These APIs will be tested using **Unit Tests** which **mocks** the Controllers and DB Repositories.
* These APIs will be documented using **Swagger**.
* It also will show how to implement **microservices**.
* Bonus: we will **deploy** the APIs to the **Azure** Cloud and **Nginx**.

**Environment:**

* Java Development on Mac OS.
* Install Java from [here](https://docs.oracle.com/en/java/javase/11/install/installation-jdk-macos.html#GUID-C5F0BF25-3487-4F33-9275-7000C8E1C58C)
* Install Spring Boot CLI, Spring Boot Frameworks from [here](https://docs.spring.io/spring-boot/docs/2.0.0.M5/reference/html/getting-started-installing-spring-boot.html#getting-started-installing-the-cli) and [here](https://docs.spring.io/spring-boot/docs/2.0.8.RELEASE/reference/htmlsingle/#cli)
* Install Maven as building system from [here](https://maven.apache.org/install.html).

**IDE:**

* Visual Studio Code with many of handful extensions including the following:
* vscjava.vscode-spring-initializr
* adashen.vscode-tomcat
* developersoapbox.vscode-springboot-developer-pack
* developersoapbox.vscode-springboot-snippets
* donjayamanne.javadebugger
* DSnake.java-debug
* georgewfraser.vscode-javac
* gerane.Theme-Spring
* hbenl.vscode-test-explorer
* ithildir.java-properties
* Pivotal.vscode-boot-dev-pack
* Pivotal.vscode-spring-boot
* redhat.java
* sohibe.java-generate-setters-getters
* VisualStudioExptTeam.vscodeintellicode
* vivek-kasture.properties-validator
* vscjava.vscode-java-debug
* vscjava.vscode-java-dependency
* vscjava.vscode-java-pack
* vscjava.vscode-java-test
* vscjava.vscode-maven
* vscjava.vscode-spring-boot-dashboard
* You can import the above Extensions list in quickly one step using (VSC Export & Import) Extension.

**Inversion Of Control:**

**Annotations:**

**Rest Controller:**

**References:**

1. <https://www.javatpoint.com/spring-boot-tutorial>
2. <https://medium.com/the-resonant-web/spring-boot-2-0-project-structure-and-best-practices-part-2-7137bdcba7d3>
3. <https://www.javaguides.net/2019/01/standard-project-structure-for-spring-boot-projects.html>
4. <https://reflectoring.io/spring-boot-modules/>