Spring Boot Starter Web as Single Dependency

In this lesson, we'll look at how the Spring Boot starter web can serve as a single web dependency.

WE'LL COVER THE FOLLOWING ^

- Spring cloud
- The Maven plugin

The application has a dependency on the library spring-boot-starter-web. This dependency integrates the Spring framework, the Spring web framework, and an environment for the processing of HTTP requests.

The **default** for the processing of the HTTP requests is a **Tomcat server** which runs *embedded as part of the application*.

Thus, the dependency on spring-boot-starter-web would be enough as a sole dependency for the application!

The dependency on spring-boot-starter-test is necessary for tests.

Note: The code for the test is not part of this course.



Spring cloud

Spring Cloud is a collection of extensions for Spring Boot which are useful for cloud applications and for microservices.

Spring Cloud contains **additional starters**. To be able to use the Spring Cloud starters, an entry has to be inserted into the dependency-management section in the <code>pom.xml</code> for importing the information about the Spring Cloud starter.

The pom.xml files in the examples already contain the required import for this.



The Maven plugin

The Maven plugin spring-boot-maven-plugin is necessary to build a **Java JAR** that starts an environment with the Tomcat server and the application.

mvn clean package

The above command deletes the old build results and builds a new JAR.

JAR is a Java file format which contains **all the code** for an application.

Maven gives this JAR file a name that is derived from the project name. It can be started with:

java -jar simplest-spring-boot-0.0.1-SNAPSHOT.jar

Spring Boot can also generate **WARs** (web archives) which can be deployed on a Java web server like Tomcat or a Java application server.

QUIZ

Why is **Tomcat server** NOT considered to be a dependency of our application?

In the *next lesson*, we'll look at how Spring Boot fulfills the communication requirement.