

JUnit 5 Dependencies

This lesson explains dependencies required to create and run JUnit 5 Test cases in Maven.

WE'LL COVER THE FOLLOWING ^

- Maven Dependencies

Maven Dependencies

Now, that our Java Maven project is created, we have to make a couple of changes in the pom.xml file. Expand **junit5-maven-starter** project and open the pom.xml file in IDE. Apply the changes as provided in below XML:-

XML pom.xml

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <groupId>com.hubberspot</groupId>
  <artifactId>junit5-maven-starter</artifactId>
  <version>0.0.1-SNAPSHOT</version>

  <properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>${maven.compiler.source}</maven.compiler.target>

    <junit.jupiter.version>5.3.2</junit.jupiter.version>
  </properties>

  <dependencies>

    <dependency>
      <groupId>org.junit.jupiter</groupId>
      <artifactId>junit-jupiter-api</artifactId>
      <version>${junit.jupiter.version}</version>
      <scope>test</scope>
    </dependency>

    <dependency>
      <groupId>org.junit.jupiter</groupId>
      <artifactId>junit-jupiter-engine</artifactId>
      <version>${junit.jupiter.version}</version>
      <scope>test</scope>
    </dependency>

  </dependencies>
</project>
```

```
</dependencies>

    <build>
        <plugins>
            <!-- JUnit 5 requires Surefire version 2.22.1 or higher -->
            <plugin>
                <artifactId>maven-surefire-plugin</artifactId>
                <version>2.22.1</version>
            </plugin>
        </plugins>
    </build>

</project>
```

In order to kick start JUnit 5 in Maven, following three dependencies/plugins are required -

- 1. junit-jupiter-api** - This dependency is required because it defines the API that we need to write JUnit 5 tests.
- 2. junit-jupiter-engine** - This dependency is required because it is the implementation of the junit-platform-engine API for JUnit 5. It is responsible for the discovery and execution of JUnit 5 tests.
- 3. maven-surefire-plugin** - This plugin is required because it is needed for tests to be executed during the maven build.

It also requires **Java 8** or higher versions.

There are few more dependencies required to run JUnit 4 test cases along with JUnit 5, also writing parameterized tests etc. We will discuss more on this in the respective lesson.