Maven Structure

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@bh5k
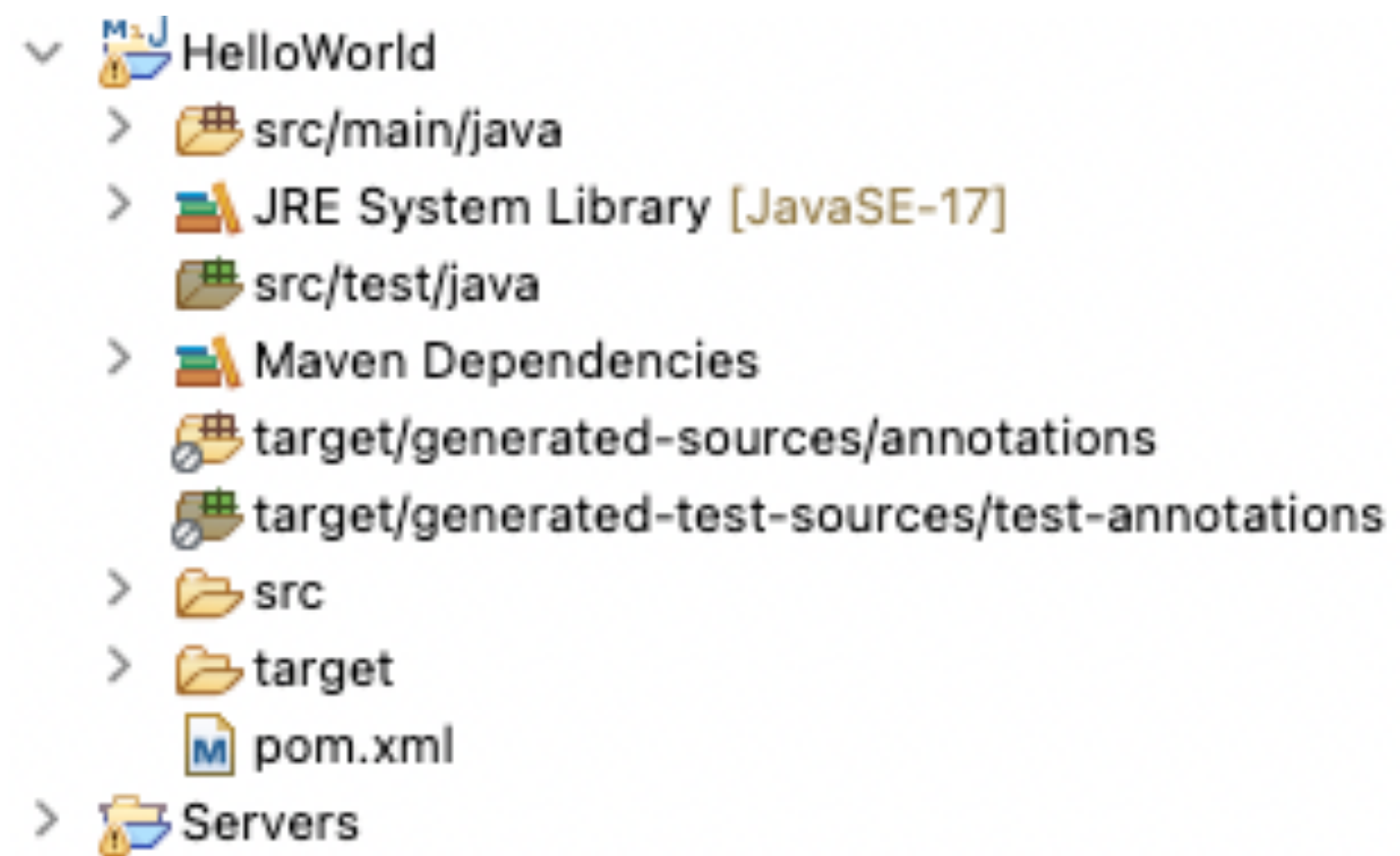
Outline

Folder Structure

POM File Basics

Basic Commands and Goals

Dependencies

Local Repo

HelloWorld
- src/main/java
- JRE System Library [JavaSE-17]
- src/test/java
- Maven Dependencies
- target/generated-sources/annotations
- target/generated-test-sources/test-annotations
- src
- target
- pom.xml
Servers

src/main/java

target

pom.xml

src/main/java

Java Code

Package Declaration

Other Languages

Testing

```
v  📂 target
     📂 generated-sources
     📂 generated-test-sources
   >  📂 maven-archiver
   >  📂 maven-status
     ☕ HelloWorld-1.0-SNAPSHOT.jar
```

Compilation Directory

Tests

Package Contents

pom.xml

```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/maven-v4_0_0.xsd">
  <groupId>com.pluralsight</groupId>
  <artifactId>HelloWorld</artifactId>
  <version>1.0-SNAPSHOT</version>
  <modelVersion>4.0.0</modelVersion>
  <packaging>jar</packaging>
</project>
```

Dependencies

Naming Convention

groupId, artifactId, version

Dependencies section

pom.xml with New Dependency

```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/maven-v4_0_0.xsd">
  <groupId>com.pluralsight</groupId>
  <artifactId>HelloWorld</artifactId>
  <version>1.0-SNAPSHOT</version>
  <modelVersion>4.0.0</modelVersion>
  <dependencies>
    <dependency>
        <groupId>org.apache.commons</groupId>
        <artifactId>commons-lang3</artifactId>
        <version>3.12.0</version>
    </dependency>
  </dependencies>
</project>
```

Goals

clean

compile

package

install

deploy

~/.m2/repository

Maven storage

~/.m2/repository

Stores artifact using info

<groupId>/<artifactId>/<version>

Avoids duplication

Summary

src/main/java

target

Pom sections

Dependency

Goals

~/.m2/repository