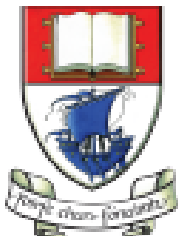


Maven Example & Labs

Produced
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Installing the tool

Installing Maven

Maven is a Java tool, so you must have Java installed in order to proceed.

1. Download Maven (Binary archive): <http://maven.apache.org/download.html>

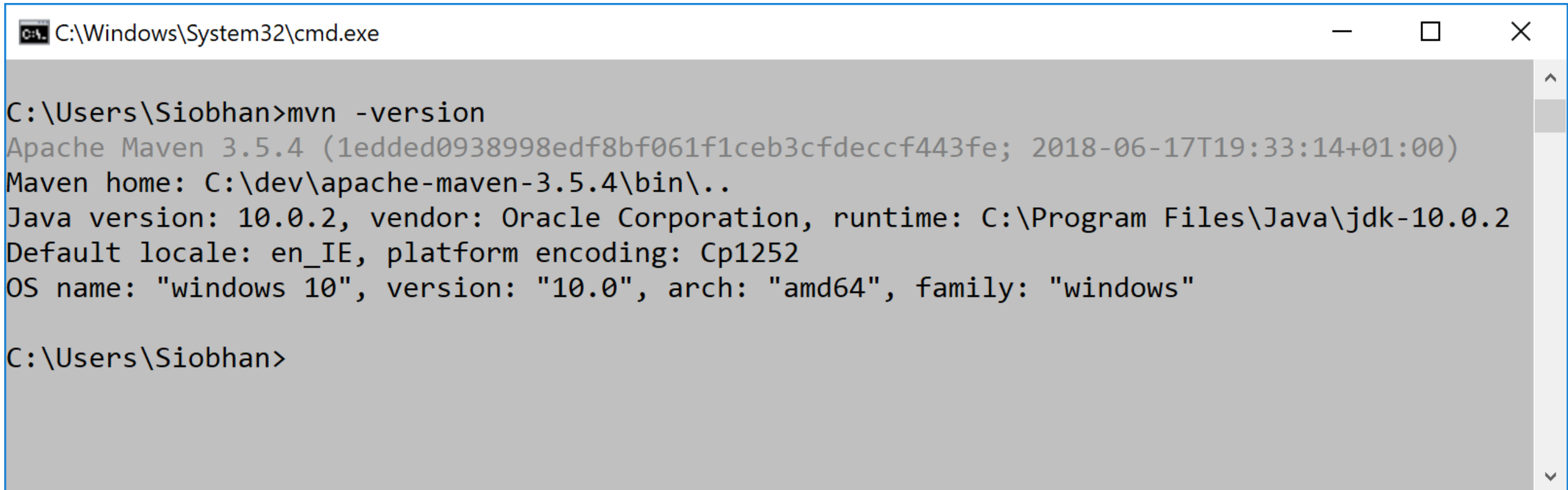
Binary tar.gz archive	apache-maven-3.5.0-bin.tar.gz
Binary zip archive	apache-maven-3.5.0-bin.zip

2. Install Maven: <http://maven.apache.org/install.html>

The installation of Apache Maven is a simple process of extracting the archive and adding the `bin` folder with the `mvn` command to the `PATH`.

Verifying the Install

mvn -version

A screenshot of a Windows command prompt window. The title bar shows 'C:\Windows\System32\cmd.exe'. The command prompt shows the command 'mvn -version' being executed. The output displays the Apache Maven version (3.5.4), its home directory, the Java version (10.0.2), the default locale (en_IE), platform encoding (Cp1252), and the operating system details (Windows 10, amd64 architecture).

```
C:\Windows\System32\cmd.exe

C:\Users\Siobhan>mvn -version
Apache Maven 3.5.4 (1edded0938998edf8bf061f1ceb3cfdeccf443fe; 2018-06-17T19:33:14+01:00)
Maven home: C:\dev\apache-maven-3.5.4\bin\..
Java version: 10.0.2, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jdk-10.0.2
Default locale: en_IE, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "windows"

C:\Users\Siobhan>
```



Creating a Java Archetype Project

Creating a Java Project (using Archetypes)

```
mvn archetype:generate
```

```
-DgroupId=com.mycompany.app
```

```
-DartifactId=my-app
```

```
-DarchetypeArtifactId=maven-archetype-quickstart
```

```
-DinteractiveMode=false
```

C:\Windows\System32\cmd.exe

```
C:\Users\Siobhan\eclipse-workspace>mvn archetype:generate -DgroupId=com.mycompany.app -DartifactId=my-app -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false
[INFO] Scanning for projects...
[INFO]
[INFO] -----< org.apache.maven:standalone-pom >-----
[INFO] Building Maven Stub Project (No POM) 1
[INFO] -----[ pom ]-----
[INFO]
[INFO] >>> maven-archetype-plugin:2.4:generate (default-cli) > generate-sources @ standalone-pom >>>
[INFO]
[INFO] <<< maven-archetype-plugin:2.4:generate (default-cli) < generate-sources @ standalone-pom <<<
[INFO]
[INFO] --- maven-archetype-plugin:2.4:generate (default-cli) @ standalone-pom ---
[INFO] Generating project in Batch mode
[INFO]
[INFO] -----
[INFO] Using following parameters for creating project from Old (1.x) Archetype: maven-archetype-quickstart:1.0
[INFO] -----
[INFO] Parameter: basedir, Value: C:\Users\Siobhan\eclipse-workspace
[INFO] Parameter: package, Value: com.mycompany.app
[INFO] Parameter: groupId, Value: com.mycompany.app
[INFO] Parameter: artifactId, Value: my-app
[INFO] Parameter: packageName, Value: com.mycompany.app
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] project created from Old (1.x) Archetype in dir: C:\Users\Siobhan\eclipse-workspace\my-app
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 3.993 s
[INFO] Finished at: 2018-10-03T14:36:03+01:00
[INFO] -----

C:\Users\Siobhan\eclipse-workspace>
```

If you've only just installed Maven, this may take a while to run; Maven is downloading the most recent artifacts into your local repo.

Creating a Java Project (using Archetypes)

Folder structure for
'quickstart' archetype,
which is the Java
sample project.

```
my-app
|-- pom.xml
`-- src
    |-- main
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- App.java
    |-- test
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- AppTest.java
```

mvn archetype:generate

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=**maven-archetype-quickstart**
- DinteractiveMode=false

Creating a Java Project (using Archetypes)

The base directory name is taken from artifactid.

```
my-app
|-- pom.xml
`-- src
    |-- main
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- App.java
    |-- test
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- AppTest.java
```

mvn archetype:generate

- DgroupId=com.mycompany.app
- DartifactId=**my-app**
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false

Creating a Java Project (using Archetypes)

```
package com.mycompany.app;  
  
public class App  
{  
    public static void main( String[] args )  
    {  
        System.out.println( "Hello World!" );  
    }  
}
```

```
my-app  
|-- pom.xml  
`-- src  
    |-- main  
    |   |-- java  
    |       |-- com  
    |           |-- mycompany  
    |               |-- app  
    |                   |-- App.java  
    |-- test  
    |   |-- java  
    |       |-- com  
    |           |-- mycompany  
    |               |-- app  
    |                   |-- AppTest.java
```

mvn archetype:generate

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false

Creating a Java Project (using Archetypes)

DinteractiveMode:

If set to true, maven will ask confirmation on each step of the project generation.

```
my-app
|-- pom.xml
`-- src
    |-- main
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- App.java
    |-- test
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- AppTest.java
```

`mvn archetype:generate`

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false

Creating a Java Project (using Archetypes)

A minimal POM is included in base directory.

```
my-app
|-- pom.xml
`-- src
    |-- main
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- App.java
    |-- test
    |   |-- java
    |       |-- com
    |           |-- mycompany
    |               |-- app
    |                   |-- AppTest.java
```

`mvn archetype:generate`

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false

Maven™

The logo for Apache Maven, featuring the word "Maven" in a bold, italicized, black sans-serif font. The letter "v" is replaced by two crossed feathers. The feathers have a gradient from orange at the tips to purple at the base. A small "TM" trademark symbol is to the right of the word. A thin horizontal line is positioned below the word.

`pom.xml`

pom.xml

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://maven.apache.org/POM/4.0.0" 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.mycompany.app</groupId>
  <artifactId>my-app</artifactId>
  <version>1.0-SNAPSHOT</version>
  <packaging>jar</packaging>

  <properties>
    <maven.compiler.source>1.10</maven.compiler.source>
    <maven.compiler.target>1.10</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.12</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```

pom.xml

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://maven.apache.org/POM/4.0.0" 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.mycompany.app</groupId>
  <artifactId>my-app</artifactId>
  <version>1.0-SNAPSHOT</version>
  <packaging>jar</packaging>

  <properties>
    <maven.compiler.source>1.10</maven.compiler.source>
    <maven.compiler.target>1.10</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.12</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```

mvn archetype:generate

- DgroupId=**com.mycompany.app**
- DartifactId=**my-app**
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false

pom.xml

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://maven.apache.org/POM/4.0.0" 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.mycompany.app</groupId>
  <artifactId>my-app</artifactId>
  <version>1.0-SNAPSHOT</version>
  <packaging>jar</packaging>

  <properties>
    <maven.compiler.source>1.10</maven.compiler.source>
    <maven.compiler.target>1.10</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.12</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```



mvn archetype:generate

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=**maven-archetype-quickstart**
- DinteractiveMode=false

pom.xml

SNAPSHOT indicates that the version is still in development (i.e. not released).


Unlike regular versions, **Maven** checks for a new **SNAPSHOT** version in the repository for every build.

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://maven.apache.org/POM/4.0.0" 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.mycompany.app</groupId>
  <artifactId>my-app</artifactId>
  <version>1.0-SNAPSHOT</version>
  <packaging>jar</packaging>

  <properties>
    <maven.compiler.source>1.10</maven.compiler.source>
    <maven.compiler.target>1.10</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.12</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```



mvn archetype:generate

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false

pom.xml

Compiler properties both source and target have been included.



```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://maven.apache.org/POM/4.0.0" 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.mycompany.app</groupId>
  <artifactId>my-app</artifactId>
  <version>1.0-SNAPSHOT</version>
  <packaging>jar</packaging>

  <properties>
    <maven.compiler.source>1.10</maven.compiler.source>
    <maven.compiler.target>1.10</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.12</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```

mvn archetype:generate

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false

pom.xml

One
dependency,
JUnit 4.12 has
been included
with the sample
project.

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://maven.apache.org/POM/4.0.0/xsi:schemaLocation" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/POM/4.0.0/xsi:schemaLocation">
  <modelVersion>4.0.0</modelVersion>

  <groupId>com.mycompany.app</groupId>
  <artifactId>my-app</artifactId>
  <version>1.0-SNAPSHOT</version>
  <packaging>jar</packaging>

  <properties>
    <maven.compiler.source>1.10</maven.compiler.source>
    <maven.compiler.target>1.10</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.12</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```

mvn archetype:generate

- DgroupId=com.mycompany.app
- DartifactId=my-app
- DarchetypeArtifactId=maven-archetype-quickstart
- DinteractiveMode=false



Building the Project

RECAP – Build LifeCycle

- When user invokes a lifecycle phase, all its predecessors are also executed, if necessary, e.g.

mvn package

(invokes validate, compile & test also).

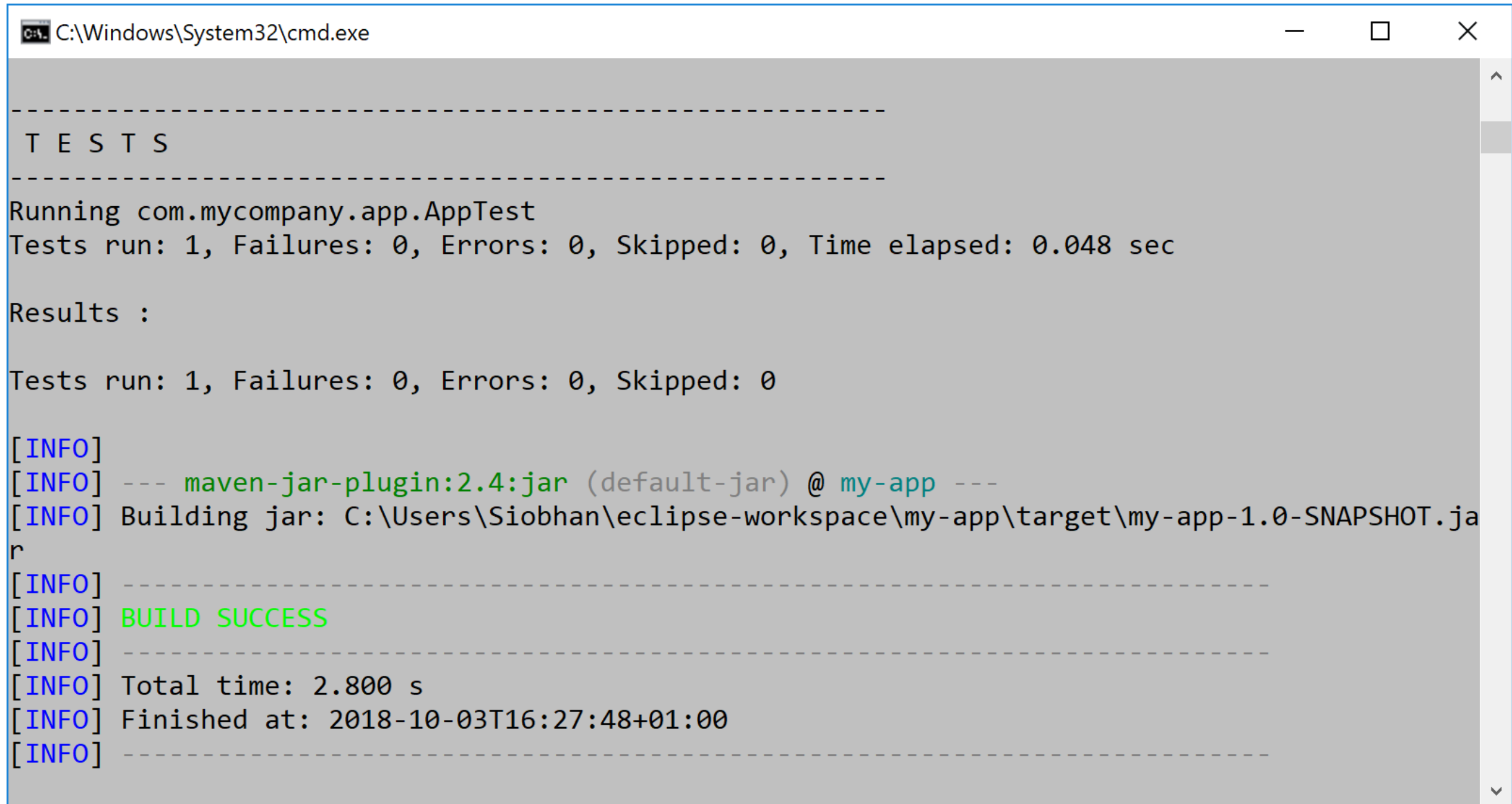
validate
compile
test
<i>package</i>
verify
install
deploy

Build the Project (1 of 2) mvn package

```
C:\Windows\System32\cmd.exe

C:\Users\Siobhan\eclipse-workspace\my-app>mvn package
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.mycompany.app:my-app >-----
[INFO] Building my-app 1.0-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ my-app ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Siobhan\eclipse-workspace\my-app\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ my-app ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ my-app ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Siobhan\eclipse-workspace\my-app\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ my-app ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ my-app ---
[INFO] Surefire report directory: C:\Users\Siobhan\eclipse-workspace\my-app\target\surefire-reports
```

Build the Project (2 of 2) mvn package



```
C:\Windows\System32\cmd.exe

-----
T E S T S
-----
Running com.mycompany.app.AppTest
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.048 sec

Results :

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

[INFO]
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ my-app ---
[INFO] Building jar: C:\Users\Siobhan\eclipse-workspace\my-app\target\my-app-1.0-SNAPSHOT.jar
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 2.800 s
[INFO] Finished at: 2018-10-03T16:27:48+01:00
[INFO] -----
```

- ▼ my-app
 - ▼ src
 - ▼ main
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ test
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ target
 - > classes
 - maven-archiver
 - > maven-status
 - surefire-reports
 - > test-classes

Build the Project – target directory

workspace > my-app > target

<input type="checkbox"/>	Name
	classes
	maven-archiver
	maven-status
	surefire-reports
	test-classes
	my-app-1.0-SNAPSHOT

**Jar
package**

- ▼ my-app
 - ▼ src
 - ▼ main
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ test
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ target
 - > classes
 - maven-archiver
 - > maven-status
 - surefire-reports
 - > test-classes

Build the Project – target directory

workspace > my-app > target > classes > com > mycompany > app	
<input type="checkbox"/> Name	Date modified
<input type="checkbox"/> App.class	13/10/2017 22:34


**Compiled
Java
Classes**


- ▼ my-app
 - ▼ src
 - ▼ main
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ test
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ target
 - > classes
 - maven-archiver
 - > maven-status
 - surefire-reports
 - > test-classes


Build the Project – target directory

workspace > my-app > target > surefire-reports

☐ Name

 com.mycompany.app.AppTest

 TEST-com.mycompany.app.AppTest

 com.mycompany.app.AppTest - Notepad

File Edit Format View Help

Test set: com.mycompany.app.AppTest

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.008 sec

Results of JUnit Tests (they were
also printed to the console)

- ▼ my-app
 - ▼ src
 - ▼ main
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ test
 - ▼ java
 - ▼ com
 - ▼ mycompany
 - app
 - ▼ target
 - > classes
 - maven-archiver
 - > maven-status
 - surefire-reports
 - > test-classes

Build the Project – target directory

workspace > my-app > target > test-classes > com > mycompany > app	
<input type="checkbox"/> Name	Date modified
<input type="checkbox"/> AppTest.class	13/10/2017 22:34

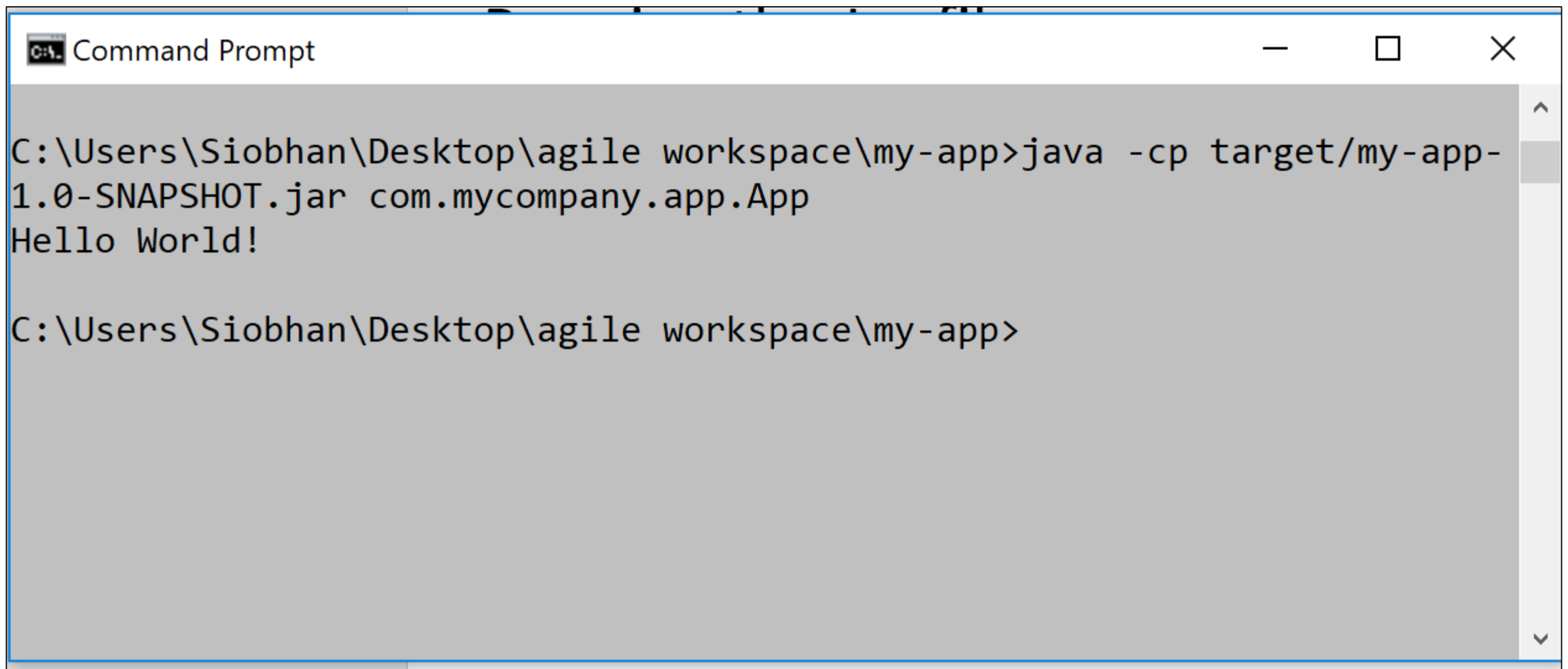
**Compiled
JUnit
Classes**



Running the Project

Running the Jar file

```
java -cp target/my-app-1.0-SNAPSHOT.jar com.mycompany.app.App
```

A screenshot of a Windows Command Prompt window. The title bar reads "C:\. Command Prompt". The command prompt shows the following sequence of text: the directory path "C:\Users\Siobhan\Desktop\agile workspace\my-app", a prompt character ">", the command "java -cp target/my-app-1.0-SNAPSHOT.jar com.mycompany.app.App", the output "Hello World!", another prompt character ">", and the directory path "C:\Users\Siobhan\Desktop\agile workspace\my-app". The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

```
C:\Users\Siobhan\Desktop\agile workspace\my-app>java -cp target/my-app-1.0-SNAPSHOT.jar com.mycompany.app.App
Hello World!

C:\Users\Siobhan\Desktop\agile workspace\my-app>
```



Generating the Site

Generating a Site for the App

mvn site

generates a site based upon
information on the project's pom.

If you get an error like this when generating your site...

```
C:\Windows\System32\cmd.exe

at org.apache.maven.DefaultMaven.doExecute (DefaultMaven.java:192)
at org.apache.maven.DefaultMaven.execute (DefaultMaven.java:105)
at org.apache.maven.cli.MavenCli.execute (MavenCli.java:954)
at org.apache.maven.cli.MavenCli.doMain (MavenCli.java:288)
at org.apache.maven.cli.MavenCli.main (MavenCli.java:192)
at jdk.internal.reflect.NativeMethodAccessorImpl.invoke0 (Native Method)
at jdk.internal.reflect.NativeMethodAccessorImpl.invoke (NativeMethodAccessorImpl.java:62)
at jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke (DelegatingMethodAccessorImpl.java:43)
at java.lang.reflect.Method.invoke (Method.java:564)
at org.codehaus.plexus.classworlds.launcher.Launcher.launchEnhanced (Launcher.java:289)
at org.codehaus.plexus.classworlds.launcher.Launcher.launch (Launcher.java:229)
at org.codehaus.plexus.classworlds.launcher.Launcher.mainWithExitCode (Launcher.java:415)
at org.codehaus.plexus.classworlds.launcher.Launcher.main (Launcher.java:356)
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 4.954 s
[INFO] Finished at: 2018-10-03T16:37:37+01:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-site-plugin:3.3:site (default-site) on project my-app: Execution default-site of goal org.apache.maven.plugins:maven-site-plugin:3.3:site failed: A required class was missing while executing org.apache.maven.plugins:maven-site-plugin:3.3:site: org/apache/maven/doxia/siterenderer/DocumentContent
[ERROR] -----
[ERROR] realm = plugin>org.apache.maven.plugins:maven-site-plugin:3.3
[ERROR] strategy = org.codehaus.plexus.classworlds.strategy.SelfFirstStrategy
[ERROR] urls[0] = file:/C:/Users/Siobhan/.m2/repository/org/apache/maven/plugins/maven-site-plugin/3.3/maven-site-plugin-3.3.jar
[ERROR] urls[1] = file:/C:/Users/Siobhan/.m2/repository/org/apache/maven/plugins/maven-site-plugin/3.3/maven-site-plugin-3.3.jar
```


Just update your pom to include the following build plugin...

```
<build>
  <plugins>
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-site-plugin</artifactId>
      <version>3.7.1</version>
    </plugin>
  </plugins>
</build>
```

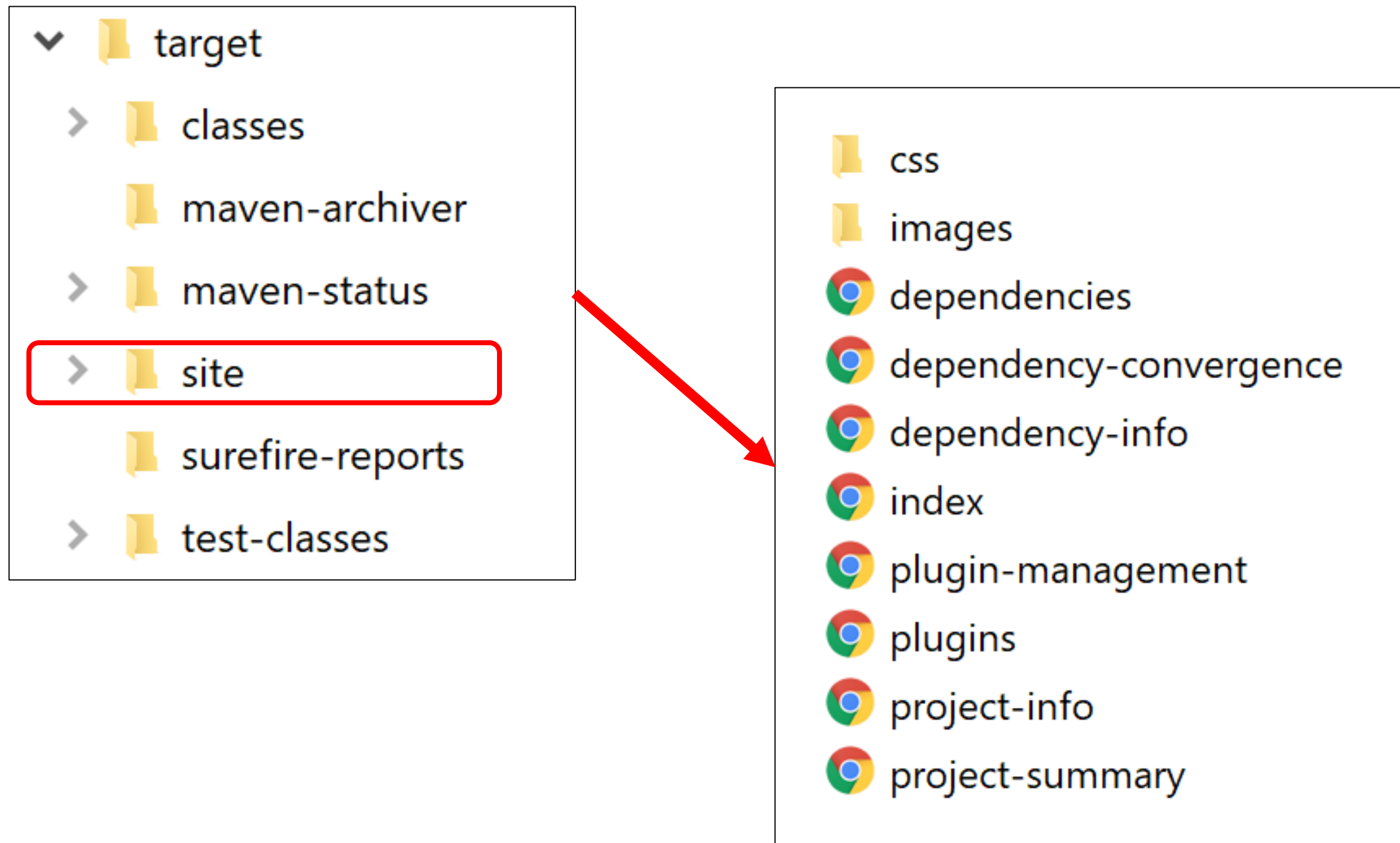
Run the command again....success!

```
C:\Windows\System32\cmd.exe

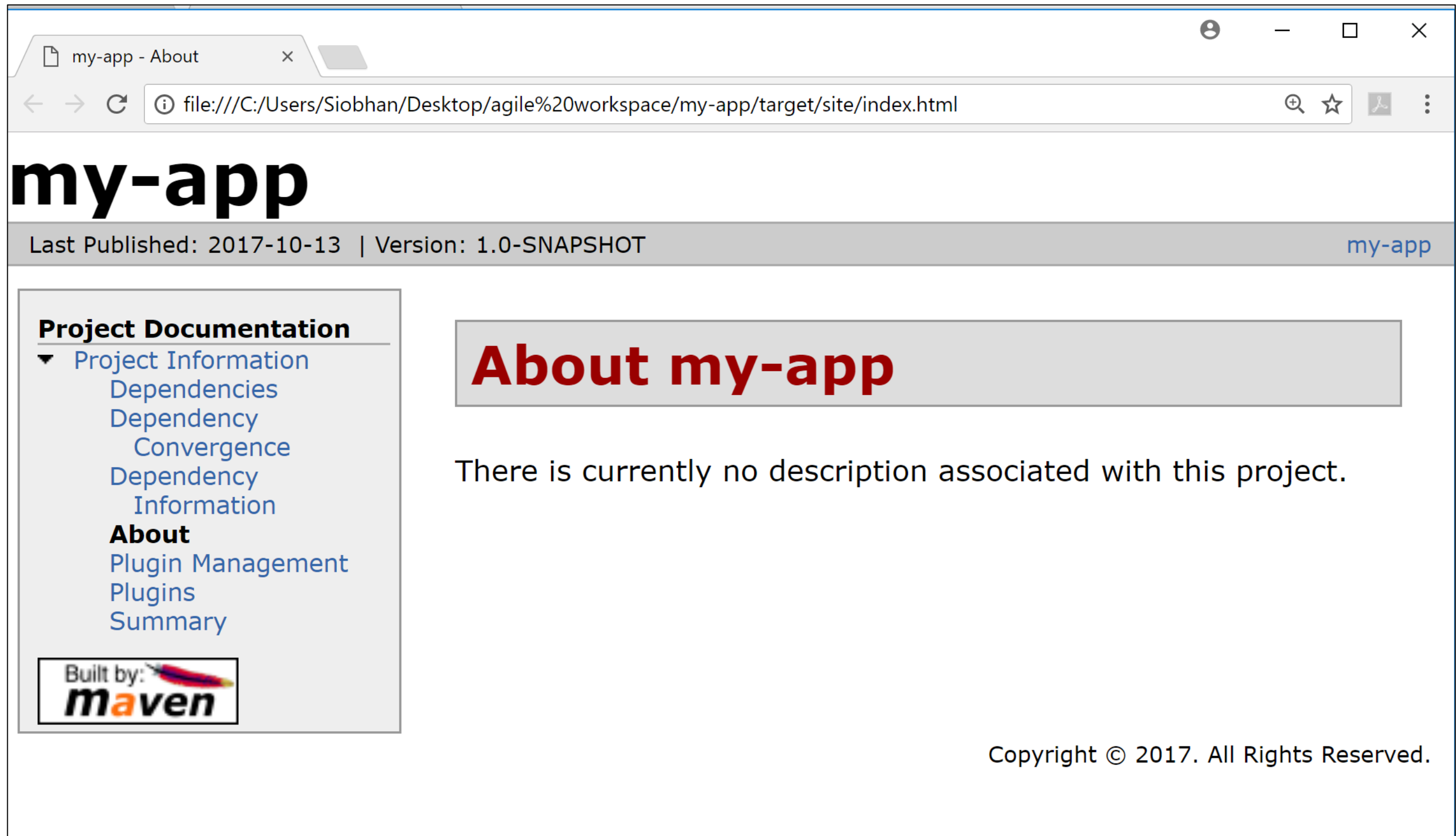
[INFO] configuring report plugin org.apache.maven.plugins:maven-project-info-reports-plugin:3.0.0
[INFO] 15 reports detected for maven-project-info-reports-plugin:3.0.0: ci-management, dependencies, dependency-info, dependency-management, distribution-management, index, issue-management, licenses, mailing-lists, modules, plugin-management, plugins, scm, summary, team
[INFO] Rendering site with default locale English (en)
[WARNING] No project URL defined - decoration links will not be relativized!
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/skins/maven-default-skin/1.2/maven-default-skin-1.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/skins/maven-default-skin/1.2/maven-default-skin-1.2.jar (14 kB at 128 kB/s)
[INFO] Rendering content with org.apache.maven.skins:maven-default-skin:jar:1.2 skin.
[INFO] Generating "Dependencies" report --- maven-project-info-reports-plugin:3.0.0:dependencies
[INFO] Generating "Dependency Information" report --- maven-project-info-reports-plugin:3.0.0:dependency-info
[INFO] Generating "About" report --- maven-project-info-reports-plugin:3.0.0:index
[INFO] Generating "Plugin Management" report --- maven-project-info-reports-plugin:3.0.0:plugin-management
[INFO] Generating "Plugins" report --- maven-project-info-reports-plugin:3.0.0:plugins
[INFO] Generating "Summary" report --- maven-project-info-reports-plugin:3.0.0:summary
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 24.817 s
[INFO] Finished at: 2018-10-03T16:50:52+01:00
[INFO] -----

C:\Users\Siobhan\eclipse-workspace\my-app>
```

Generating a Site for the App



Generating a Site for the App



The screenshot shows a web browser window with a single tab titled 'my-app - About'. The address bar displays the file path: `file:///C:/Users/Siobhan/Desktop/agile%20workspace/my-app/target/site/index.html`. The page content includes a large heading 'my-app', a status bar with 'Last Published: 2017-10-13 | Version: 1.0-SNAPSHOT' and a 'my-app' link, a left sidebar with a 'Project Documentation' menu, a main content area with a red 'About my-app' header and a message stating 'There is currently no description associated with this project.', and a footer with a copyright notice.

my-app - About


file:///C:/Users/Siobhan/Desktop/agile%20workspace/my-app/target/site/index.html

my-app

Last Published: 2017-10-13 | Version: 1.0-SNAPSHOT my-app

Project Documentation

- ▼ Project Information
 - Dependencies
 - Dependency
 - Convergence
 - Dependency
 - Information
- About**
- Plugin Management
- Plugins
- Summary

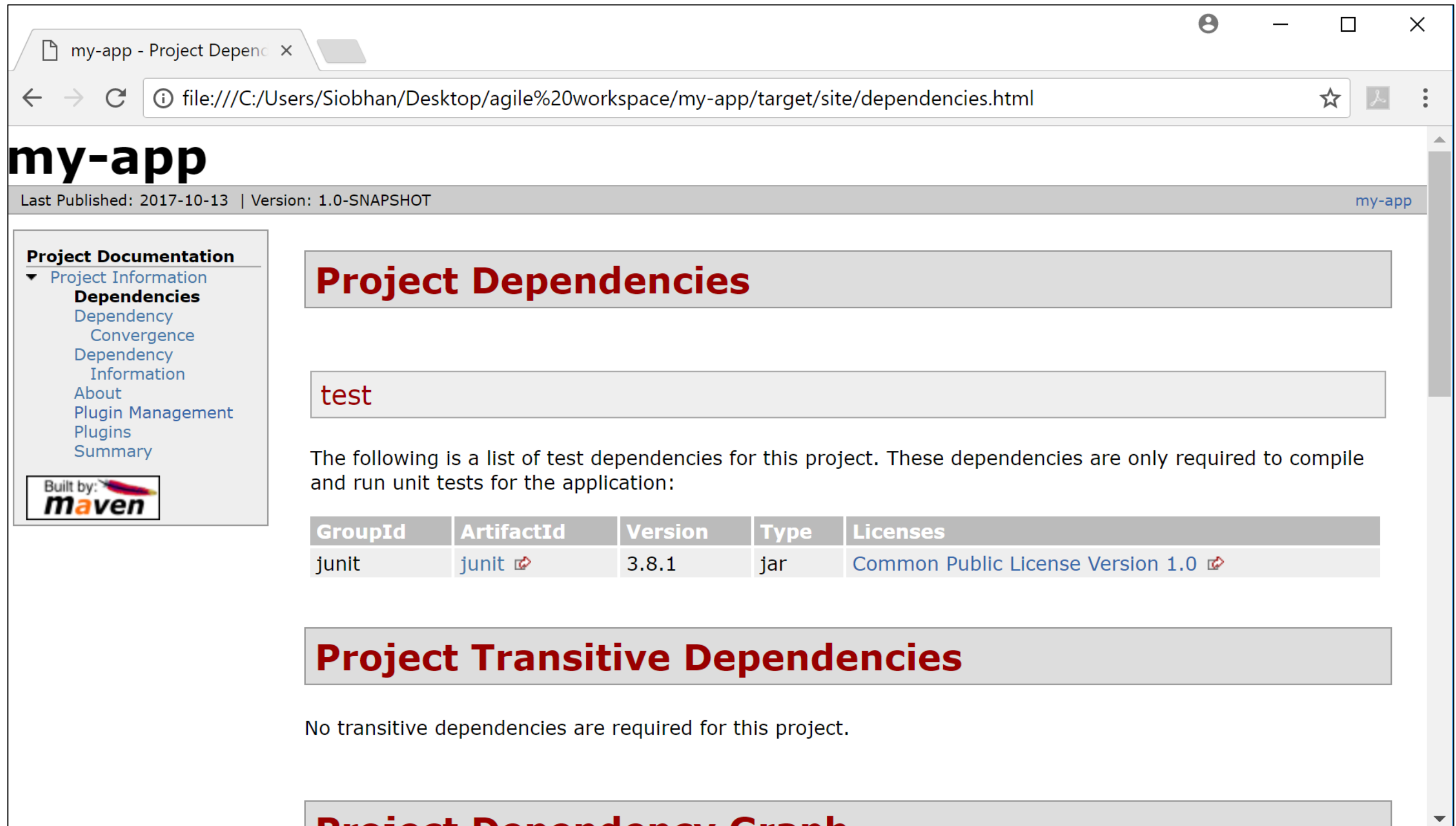
Built by:  **maven**

About my-app



There is currently no description associated with this project.

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Generating a Site for the App



The screenshot shows a web browser window displaying the Maven project site for 'my-app'. The browser's address bar shows the file path: `file:///C:/Users/Siobhan/Desktop/agile%20workspace/my-app/target/site/dependencies.html`. The page title is 'my-app' and it includes a header with 'Last Published: 2017-10-13 | Version: 1.0-SNAPSHOT' and a 'my-app' link. A sidebar on the left contains 'Project Documentation' links: 'Project Information', 'Dependencies' (selected), 'Dependency Convergence', 'Dependency Information', 'About', 'Plugin Management', 'Plugins', and 'Summary'. Below these links is a 'Built by: maven' logo. The main content area features a large red heading 'Project Dependencies'. Below this, the word 'test' is displayed in red. A paragraph explains that the following is a list of test dependencies for this project, required only for compilation and unit tests. A table lists the dependencies:

GroupId	ArtifactId	Version	Type	Licenses
junit	junit 	3.8.1	jar	Common Public License Version 1.0 

Below the table, another large red heading 'Project Transitive Dependencies' is shown, followed by the text: 'No transitive dependencies are required for this project.' At the bottom, a partially visible red heading 'Project Dependency Graph' is shown.



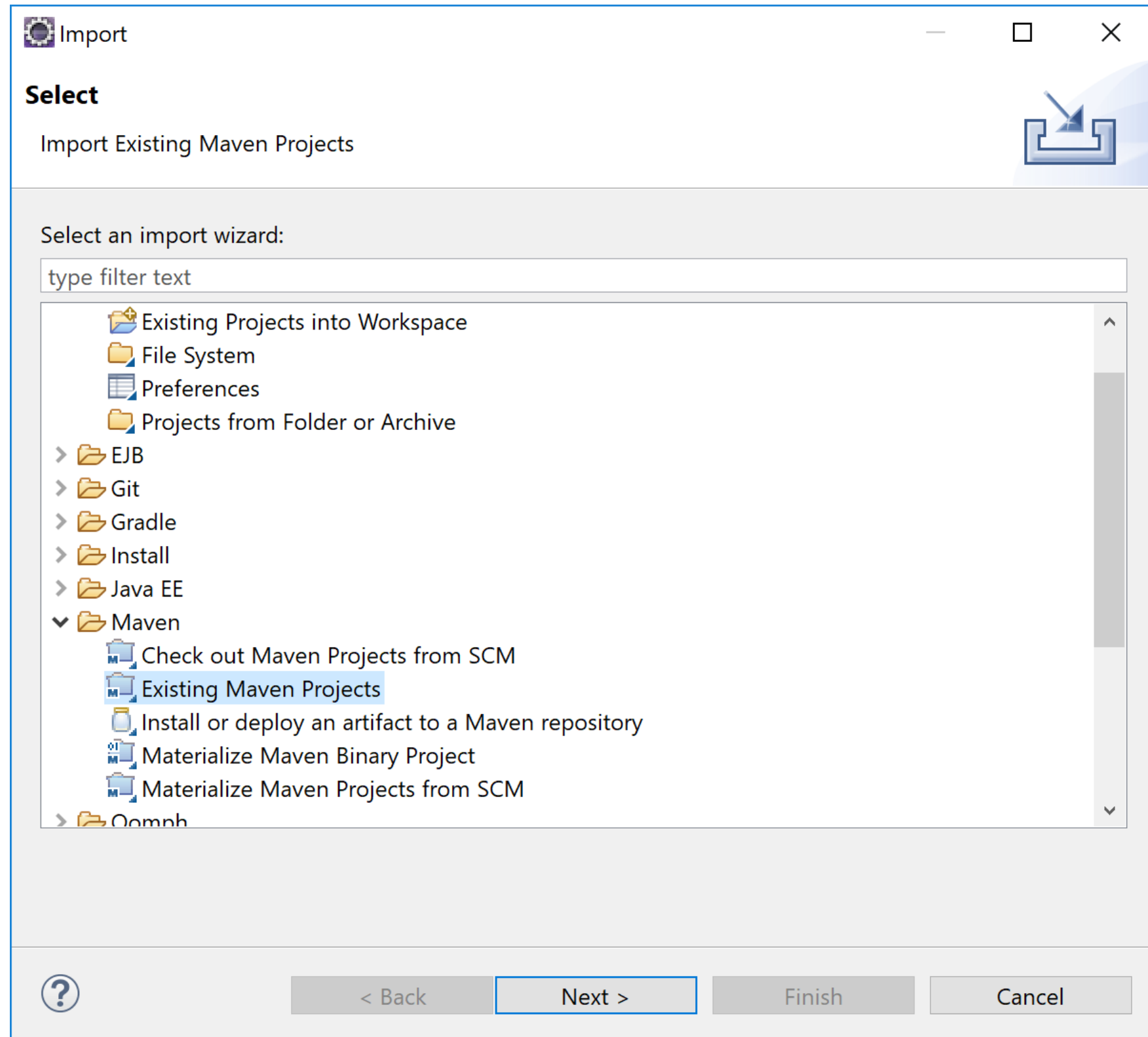
Importing into Eclipse

Import into Eclipse

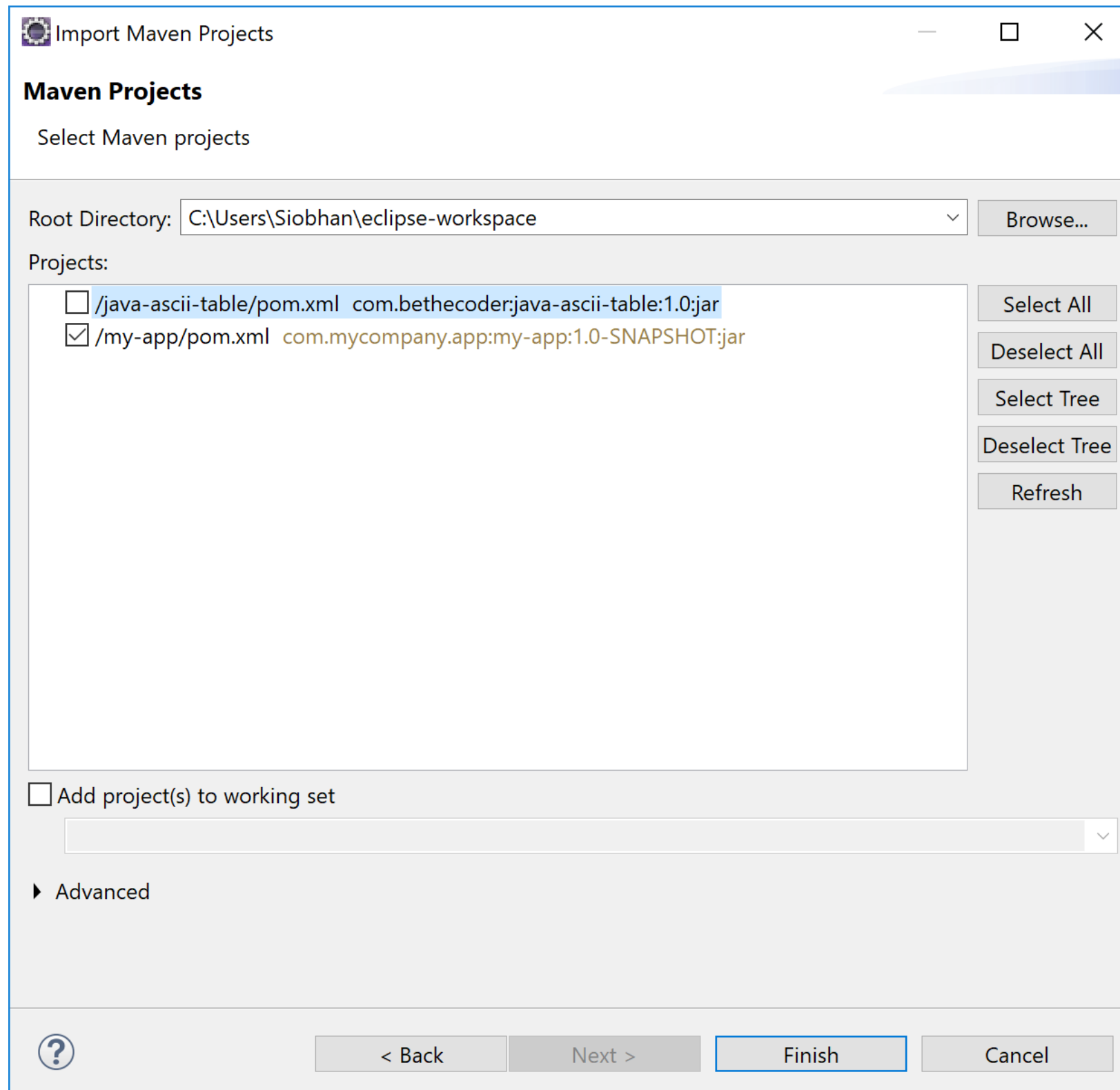
Menu Items:

→ File

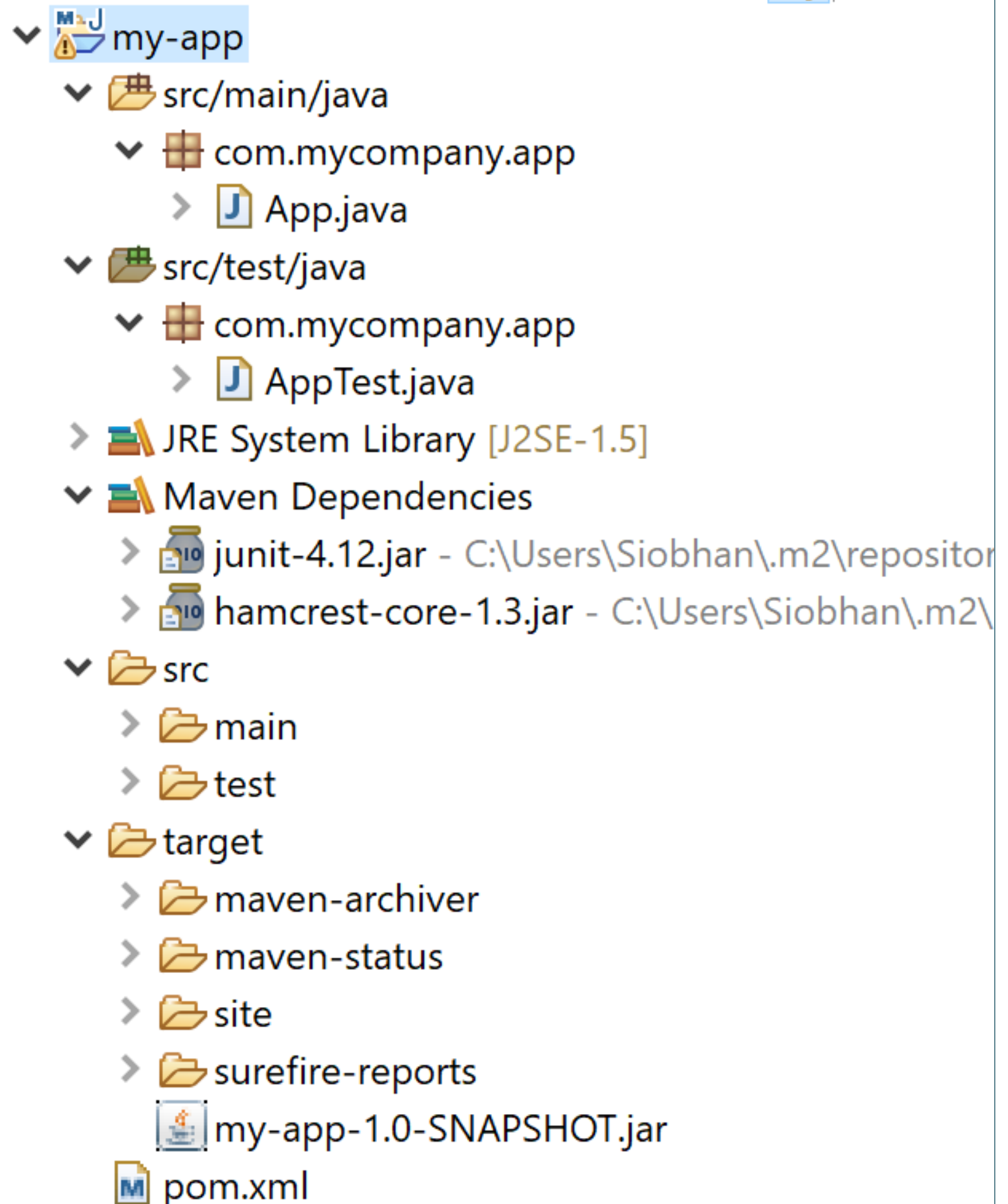
→ Import...



Import into Eclipse



Eclipse Maven Project Structure





Labs this week

Maven Labs

- Verify your Maven Installation is ok (installed in the previous lab)
- Build the **my-app** Java Project we just looked at.
- Pacemaker-console:
 - Create an empty Maven Java Project called **pacemaker-console-maven**.
 - Copy the existing pacemaker files into the pacemaker-console-maven project.
 - Edit pom.xml to incorporate required dependencies (both remote and local).
 - Build, package and run pacemaker-console-maven.
 - Write a script to simply run pacemaker-console-maven.
 - Include both JUnit4 and JUnit5 capabilities into the one app.



Any questions?