Technical Tutorial

Maven build tool

Maven is a Java build tool that can be used to build and manage any Java-based project.

Prerequisites: JDK 11+ and some Java experience.

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Install Maven

1. Navigate to maven.apache.org

- 2. Download a binary archive and exapand in a convienient place (e.g., C:\maven).
- 3. Add Maven's bin directory to your path (e.g., C:\maven\bin).
- 4. Test your installation by typing the following into a new cmd prompt window: mvn --version

Create a Maven Project¹

- 1. Create a "test" folder on your Desktop.
- 2. From the cmd prompt inside of the new "test" folder, enter:

```
mvn archetype:generate -DgroupId=com.mycompany.app -DartifactId=my-
app -DarchetypeArtifactId=maven-archetype-quickstart
-DarchetypeVersion=1.4 -DinteractiveMode=false
```

- 3. Change into your new project directory (my-app).
- 4. Review the pom.xml file.
- 5. Build the project: mvn package
- 6. Investigate the source code.
- 7. Run the newly compiled and packaged JAR with:

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

- 8. Clean the project: mvn clean
- 9. Create the documentation: mvn site

¹ Source: https://maven.apache.org/guides/gettingstarted/maven-in-five-minutes.html retrieved 3/17/2023