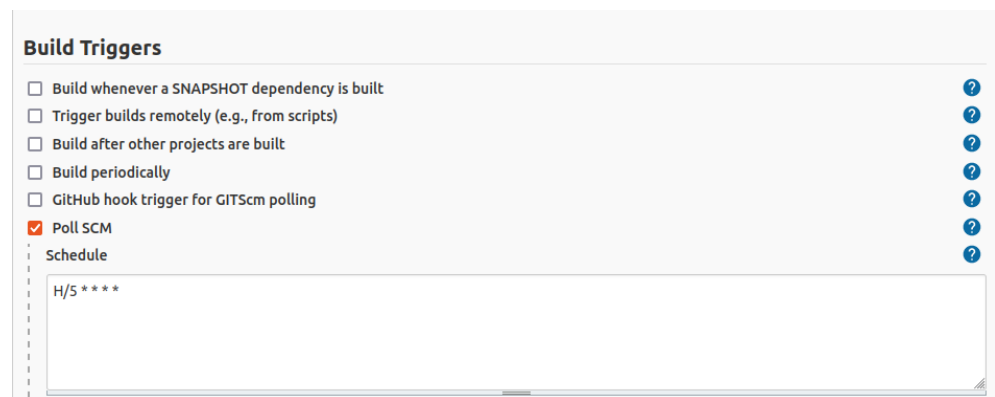HeReview 1

Implement Maven build script for sample project. Task 1

1. Install Maven

2. Create GitHub project

3. Create your own branch based on master by pattern: First char of name + surname

Example: The name of student - Serhei Ivanou. The branch will be sivanou.

4. Implement pom.xml script to clean, compile, test, create jar file and distribution artifact. (source code in 'src' repo).

5. All changes should be tracked by commits to own branch

6. Push to GitHub

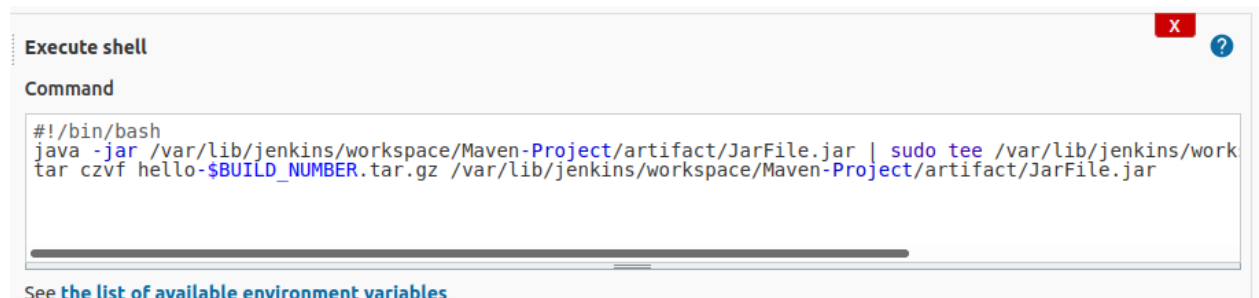7. Setup Jenkins job:

    a) build from repository (poll SCM)

    b) use maven plugin

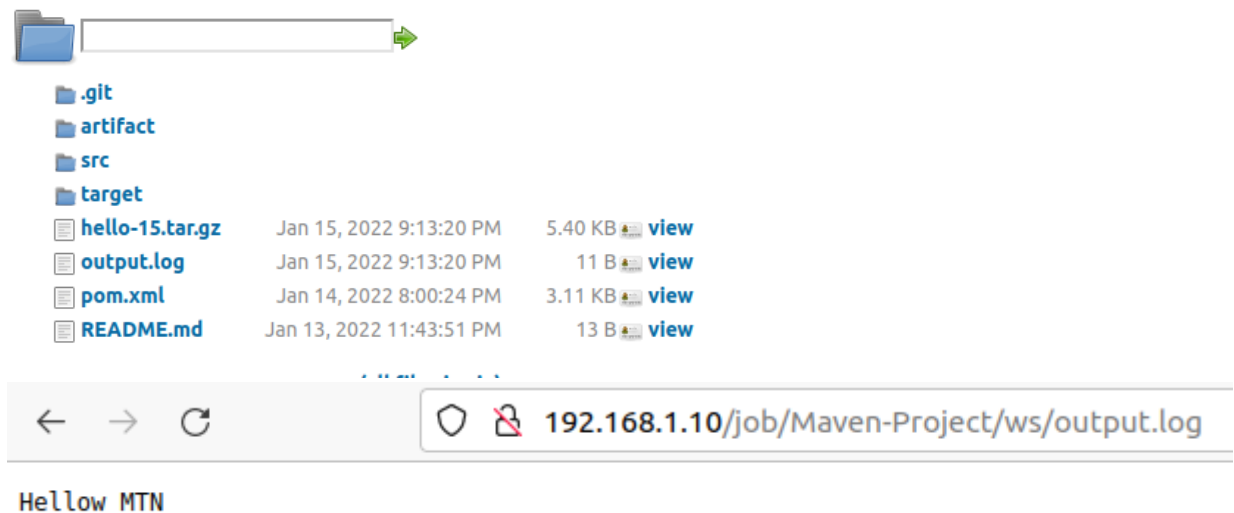   c) run jar and output save to file 'output.log'

    d) archive and attach jar file

ARTEFACT_NAME=hello-$BUILD_NUMBER.tar.gz

c) attach log file to build

Workspace of Maven-Project on Built-In Node

📁 [_____] ➡

📁 **.git**
📁 **artifact**
📁 **src**
📁 **target**
📄 **hello-15.tar.gz**   Jan 15, 2022 9:13:20 PM   5.40 KB 🔲 **view**
📄 **output.log**   Jan 15, 2022 9:13:20 PM   11 B 🔲 **view**
📄 **pom.xml**   Jan 14, 2022 8:00:24 PM   3.11 KB 🔲 **view**
📄 **README.md**   Jan 13, 2022 11:43:51 PM   13 B 🔲 **view**

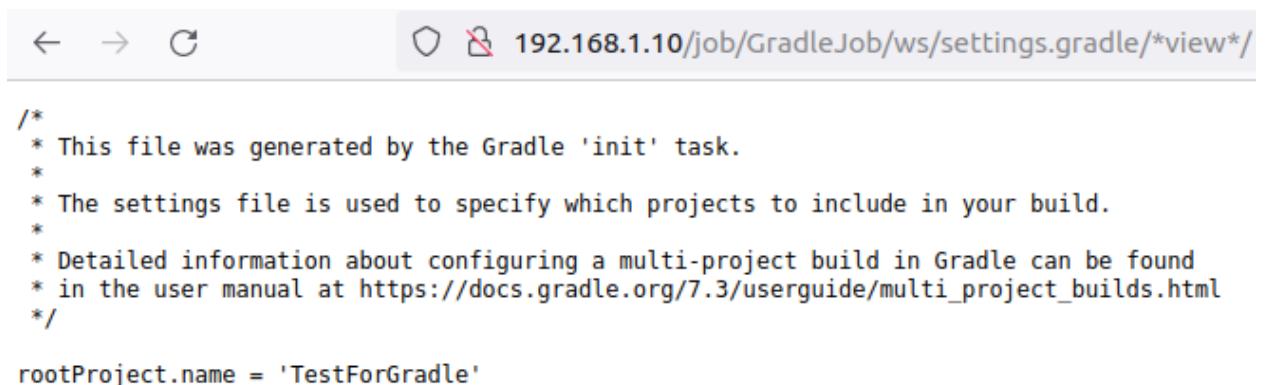← → C   ⊘ 🔓 **192.168.1.10**/job/Maven-Project/ws/output.log

Hellow MTN

Review 2

Implement Gradle build script for sample project. Task 2

1. Install Gradle

2. Create GitHub project

3. Create your own branch based on master by pattern: First char of name + surname

Example: The name of student - Serhei Ivanou. The branch will be sivanou.

4. Implement build.gradle script to clean, compile, test, create jar file and distribution artifact. (source code in 'src' repo).

5. Build file should contain

     a) Tasks: 'build', 'test' and 'hello'

   b) "hello" should depend on "test", "test" should depend on "build"

   c) setting custom artifact name

← → C   ⊘ 🔓 **192.168.1.10**/job/GradleJob/ws/settings.gradle/*view*/

```
/*
 * This file was generated by the Gradle 'init' task.
 *
 * The settings file is used to specify which projects to include in your build.
 *
 * Detailed information about configuring a multi-project build in Gradle can be found
 * in the user manual at https://docs.gradle.org/7.3/userguide/multi_project_builds.html
 */

rootProject.name = 'TestForGradle'
```

4. All changes should be tracked by commits to own branch

5. Push to GitHub

6. Setup Jenkins job:

    a) build from repository (poll SCM)

    b) use maven plugin

    c) run jar and output save to file 'output.log'

    d) archive and attach jar file

ARTEFACT_NAME=hello-$BUILD_NUMBER.tar.gz

    b) attach log file to build

```
> Configure project :
Hello World

> Task :clean UP-TO-DATE
> Task :compileJava
> Task :processResources
> Task :classes
> Task :jar
> Task :assemble
> Task :compileTestJava
> Task :processTestResources NO-SOURCE
> Task :testClasses
> Task :test
> Task :check
> Task :build
> Task :hello

BUILD SUCCESSFUL in 16s
6 actionable tasks: 5 executed, 1 up-to-date
Build step 'Invoke Gradle script' changed build result to SUCCESS
[GradleJob] $ /bin/bash /tmp/jenkins5081162847639651535.sh
Hellow MTN
tar: Removing leading `/' from member names
/var/lib/jenkins/workspace/GradleJob/build/libs/GradleJob-1.0.jar
Finished: SUCCESS
```

📁 .git
📁 .gradle
📁 build
📁 src

📄 build.gradle	Jan 19, 2022 6:20:10 PM	705 B	📄 view
📄 hello-17.tar.gz	Jan 19, 2022 6:20:14 PM	875 B	📄 view
📄 output.log	Jan 19, 2022 6:20:14 PM	11 B	📄 view
📄 README.md	Jan 19, 2022 6:20:10 PM	13 B	📄 view
📄 settings.gradle	Jan 19, 2022 6:20:10 PM	361 B	📄 view

Additional Practice: install gradle wrapper and try to manipulate by tasks/commands

Build

Invoke Gradle script   ✕ ?

○ Invoke Gradle ?

◉ Use Gradle Wrapper ?

☑ Make gradlew executable

Wrapper location ?

```
[                                                                         ]
```

Tasks ?

```
clean build test hello                                              ▼
```

Advanced...

```
[GradleJob] $ /var/lib/jenkins/workspace/GradleJob/gradlew clean build test hello
Downloading https://services.gradle.org/distributions/gradle-7.3-bin.zip
............10%...........20%...........30%...........40%...........50%...........60%...........70%...........80%
.......90%...........100%

Welcome to Gradle 7.3!

Here are the highlights of this release:
 - Easily declare new test suites in Java projects
 - Support for Java 17
 - Support for Scala 3

For more details see https://docs.gradle.org/7.3/release-notes.html

Starting a Gradle Daemon (subsequent builds will be faster)

> Configure project :
Hello World

> Task :clean UP-TO-DATE
> Task :compileJava
> Task :processResources
> Task :classes
> Task :jar
> Task :assemble
> Task :compileTestJava
> Task :processTestResources NO-SOURCE
> Task :testClasses
> Task :test
> Task :check
> Task :build
> Task :hello

BUILD SUCCESSFUL in 1m 4s
6 actionable tasks: 5 executed, 1 up-to-date
Build step 'Invoke Gradle script' changed build result to SUCCESS
[GradleJob] $ /bin/bash /tmp/jenkins3687009221705820489.sh
Hellow MTN
tar: Removing leading `/' from member names
/var/lib/jenkins/workspace/GradleJob/build/libs/TestForGradle-1.0.jar
Finished: SUCCESS
```