Build and Release Management Lab Experiment 8
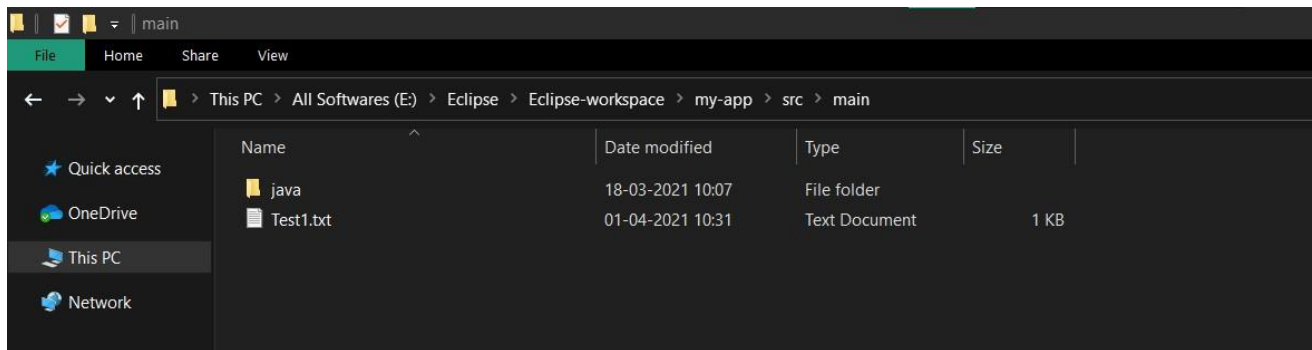
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Aim: Create a maven project using Build Profile.

<u>Step 1:</u> Create simple maven project using CLI or Eclipse IDE and add a text file in the "\src\main" folder of the project.

<u>Step 2:</u> Now open the "pom.xml" file of the project and add the following Build Profile:

```xml
<profiles>
    <profile>
        <id>coping</id>
        <build>
            <plugins>
                <plugin>
                        <groupId>org.apache.maven.plugins</groupId>
                    <artifactId>maven-antrun-plugin</artifactId>
                    <version>1.1</version>
                    <executions>
                        <execution>
                            <phase>test</phase>
                            <goals>
                                <goal>run</goal>
                            </goals>
                            <configuration>
                                <tasks>
                                    <echo>Copied Test1.txt</echo>
                                    <copy file="src/main/Test1.txt"
                                        tofile="src/Test1.txt"/>
                                </tasks>
                            </configuration>
                        </execution>
                    </executions>
                </plugin>
            </plugins>
        </build>
    </profile>
</profiles>
```

Step 2: Now open the CLI, go the project folder containing the pom.xml and execute the following mvn command.
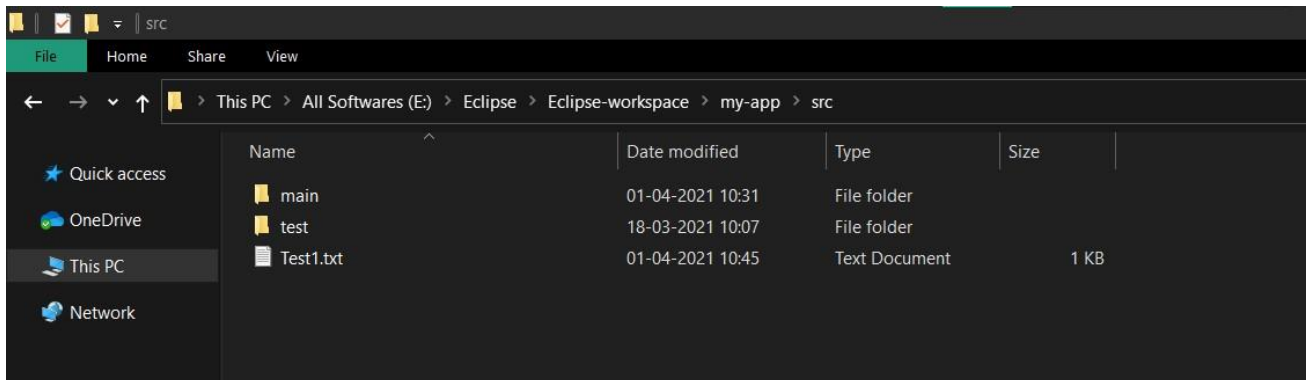
mvn test -Pcopying

```
C:\WINDOWS\system32\cmd.exe

C:\Users\aryan>E:

E:\>cd E:\Eclipse\Eclipse-workspace\my-app

E:\Eclipse\Eclipse-workspace\my-app>mvn test -Pcoping
[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:3.0.2:resources (default-resources) @ my-app ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory E:\Eclipse\Eclipse-workspace\my-app\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.8.0:compile (default-compile) @ my-app ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:3.0.2:testResources (default-testResources) @ my-app ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory E:\Eclipse\Eclipse-workspace\my-app\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.8.0:testCompile (default-testCompile) @ my-app ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.22.1:test (default-test) @ my-app ---
[INFO]
[INFO] -------------------------------------------------------
[INFO]  T E S T S
[INFO] -------------------------------------------------------
[INFO] Running com.mycompany.app.AppTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.051 s - in com.mycompany.app.AppTest
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO]
[INFO] --- maven-antrun-plugin:1.1:run (default) @ my-app ---
[INFO] Executing tasks
    [echo] Copied Test1.txt
    [copy] Copying 1 file to E:\Eclipse\Eclipse-workspace\my-app\src
[INFO] Executed tasks
[INFO] -------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] -------------------------------------------------------------
[INFO] Total time: 3.314 s
[INFO] Finished at: 2021-04-01T10:45:54+05:30
[INFO] -------------------------------------------------------------

E:\Eclipse\Eclipse-workspace\my-app>
```
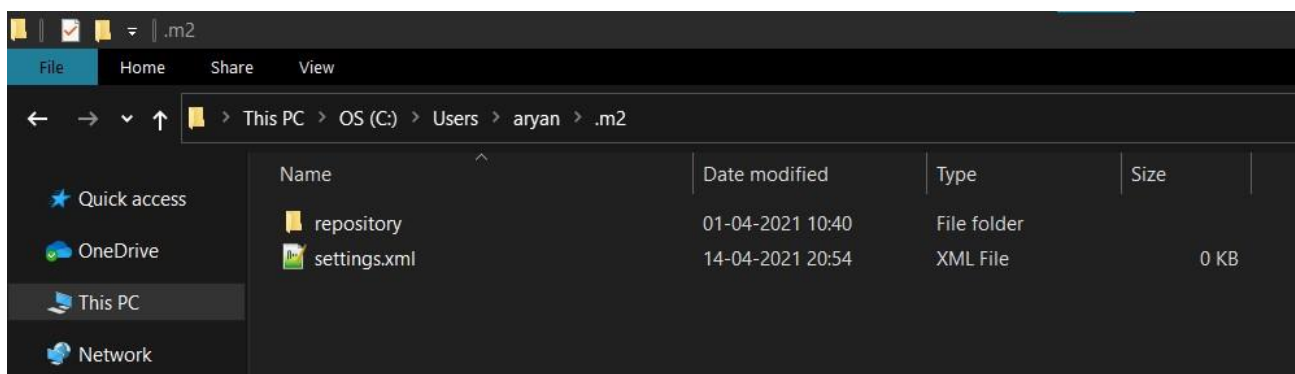
Step 3: Now open the "\src" folder of the project and we can find the text file we created in "\src\main" folder copied into "\src" folder.

Step 4: We can also add Active Profiles in "settings.xml" file in which is present in C:\Users\<user_name>\.m2 folder. Open the file and add the following active profile:

```
<activeProfiles>
        <activeProfile>copying</activeProfile>
</activeProfiles>
```


Now run we can run the above mvn command without the help of the argument -P<profile> and simply write the following:

```
mvn test
```

Result: Hence we successfully created and build a maven project with Build Profiles.