BUILD AND RELEASE MANAGEMENT LAB FILE

Experiment 8

AIM :

Create Build profile using Maven in both project and user type.

SOLUTION :

- Project overview.

- Creating 'hello.txt' in 'src/main/resources' folder.

- Modifying 'POM.xml' by creating 'Himanshu' build profile.In which task is to copy 'Hello.txt' from 'src/main/resources/Hello.txt' to 'src/CopiedHello.txt' and print 'Copying file' message.

```
pom - Notepad
File  Edit  Format  View  Help
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3
https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <groupId>gfh</groupId>
  <artifactId>fgdf</artifactId>
  <version>0.0.1-SNAPSHOT</version>
   <profiles>
      <profile>
         <id>Himanshu</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>Copying file</echo>
                              <copy file="src/main/resources/Hello.txt"
                                 tofile="src/CopiedHello.txt"/>
                           </tasks>
                        </configuration>
                     </execution>
                  </executions>
               </plugin>
            </plugins>
         </build>
      </profile>
   </profiles>
</project>
```

- The 'src' folder before running the 'mvn test -PHimanshu' command.

Name	Date modified	Type
main	14-02-2021 21:27	File folder
test	14-02-2021 21:27	File folder

This PC › Acer (C:) › Users › Himanshu › eclipse-workspace › fgdf › src

- Running the 'mvn test -PHimanshu' in command prompt with path set to project.

```
C:\Users\Himanshu\eclipse-workspace\fgdf>mvn test -PHimanshu
[INFO] Scanning for projects...
[INFO]
[INFO] ------------------------------< gfh:fgdf >------------------------------
[INFO] Building fgdf 0.0.1-SNAPSHOT
[INFO] --------------------------------[ jar ]--------------------------------
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ fgdf ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e
[INFO] Copying 1 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ fgdf ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ fgdf
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e
[INFO] Copying 0 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ fgdf ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ fgdf ---
[INFO]
[INFO] --- maven-antrun-plugin:1.1:run (default) @ fgdf ---
[INFO] Executing tasks
    [echo] Copying file
    [copy] Copying 1 file to C:\Users\Himanshu\eclipse-workspace\fgdf\src
[INFO] Executed tasks
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  0.765 s
[INFO] Finished at: 2021-04-12T23:27:30+05:30
[INFO] ------------------------------------------------------------------------

C:\Users\Himanshu\eclipse-workspace\fgdf>
```

- The 'src' folder after running the 'mvn test -PHimanshu' command.

Name	Date modified	Type	Size
main	14-02-2021 21:27	File folder	
test	14-02-2021 21:27	File folder	
CopiedHello	12-04-2021 23:27	Text Document	1 KB

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- The .m2 folder containing 'settings.xml' file.

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Name	Date modified	Type	Size
repository	12-04-2021 22:45	File folder	
settings	12-04-2021 23:36	XML Document	1 KB

- Modifying 'settings.xml' file to create active build profiles 'Himanshu' and 'Ragnar'. 'Ragnar' profile is not defined in the 'POM.xml' file of the project.

```
|     <groupId>org.myco.myplugins</groupId>
|     <artifactId>myplugin</artifactId>
|
|     <configuration>
|       <tomcatLocation>${tomcatPath}</tomcatLocation>
|     </configuration>
|   </plugin>
|   ...
|
| NOTE: If you just wanted to inject this configuration wheneve
|       anything, you could just leave off the <value/> inside
|
    <profile>
      <id>env-dev</id>

      <activation>
        <property>
          <name>target-env</name>
          <value>dev</value>
        </property>
      </activation>

      <properties>
        <tomcatPath>/path/to/tomcat/instance</tomcatPath>
      </properties>
    </profile>
    -->
  </profiles>

  <!-- activeProfiles
   | List of profiles that are active for all builds.
   |
  <activeProfiles>
    <activeProfile>alwaysActiveProfile</activeProfile>
    <activeProfile>anotherAlwaysActiveProfile</activeProfile>
  </activeProfiles>
  -->
  <activeProfiles>
      <activeProfile>Himanshu</activeProfile>
      <activeProfile>Ragnar</activeProfile>
   </activeProfiles>
</settings>
```

- Running 'mvn test' in command prompt with path set to project.Notice,we don't need to use
  -P<profile> option for running the build profile and also the warning message of 'Ragnar'
  profile.

```
C:\Users\Himanshu\eclipse-workspace\fgdf>mvn test
[INFO] Scanning for projects...
[INFO] ...
[INFO] ----------------------------< gfh:fgdf >----------------------------
[INFO] Building fgdf 0.0.1-SNAPSHOT
[INFO] --------------------------------[ jar ]--------------------------------
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ fgdf ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build
[INFO] Copying 1 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ fgdf ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ fgdf ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build
[INFO] Copying 0 resource
[INFO] <tomcatPath>/path/to/tomcat/instance</tomcatPath>
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ fgdf ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ fgdf ---
[INFO]
[INFO] --- maven-antrun-plugin:1.1:run (default) @ fgdf ---
[INFO] Executing tasks
    [echo] Copying file
    [copy] Copying 1 file to C:\Users\Himanshu\eclipse-workspace\fgdf\src
[INFO] Executed tasks
[INFO] ----------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ----------------------------------------------------------------------
[INFO] Total time:  0.844 s
[INFO] Finished at: 2021-04-12T23:47:53+05:30
[INFO] ----------------------------------------------------------------------
[WARNING] The requested profile "Ragnar" could not be activated because it does not exist.

C:\Users\Himanshu\eclipse-workspace\fgdf>
```