Build and Release Management Lab Experiment 5

Name: Aryan Mukerji

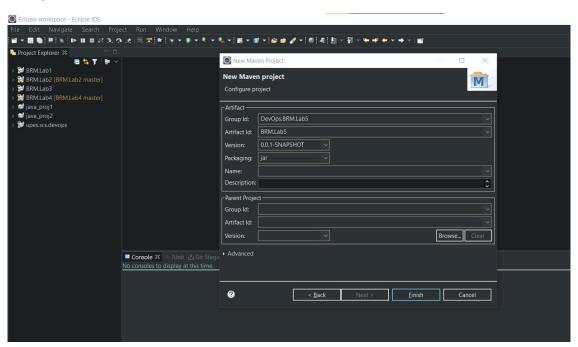
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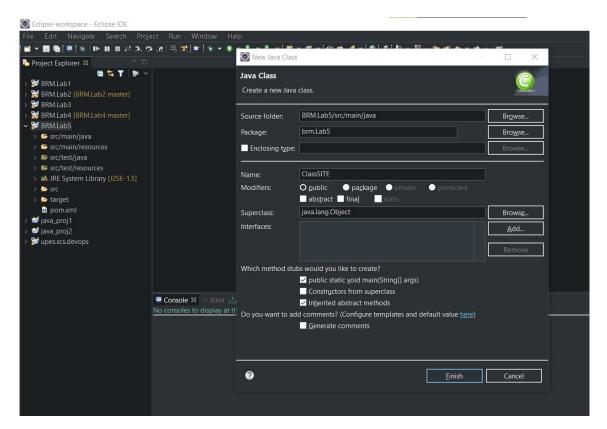
SAP ID.: 500075964

Branch: B.Tech-CSE-DevOps

Aim: Create a maven project with a java class & a junit test case and run the project with the goal site to generate a web documentation of the project.

Step 1: Create a Maven project and a Java Class in it and add some java code in the class file.





Step 2: Now add the following dependencies and plugins in the "prom.xml" file in the project folder.

```
<build>
      <plu><pluginManagement>
            <plugins>
                   <plugin>
                         <groupId>org.apache.maven.plugins
                         <artifactId>maven-site-plugin</artifactId>
                         <version>3.7.1
                   </plugin>
            </plugins>
      </pluginManagement>
 </build>
<dependencies>
      <dependency>
            <groupId>junit
            <artifactId>junit</artifactId>
            <version>4.13</version>
            <scope>test</scope>
      </dependency>
</dependencies>
```

```
Eclipse-workspace - BRM.Lab5/pom.xml - Eclipse IDE
   Edit Navigate Search Project Run Window
□ □ ClassSITE.java MBRM.Lab5/pom.xml 🛭
BRM.Lab1
 BRM.Lab2 [BRM.Lab2 master]
 BRM.Lab3
 BRM.Lab4 [BRM.Lab4 master]
 BRM.Lab5
  src/main/java

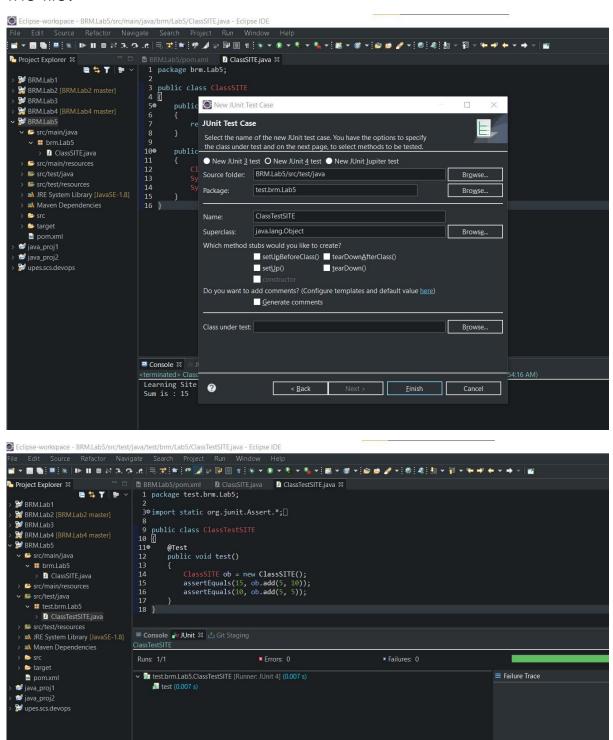
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B brm.Lab5

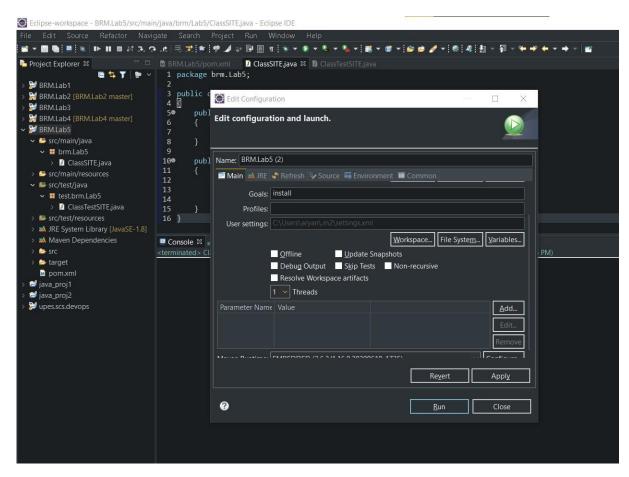
   > ① ClassSITE.java

# src/main/resources
                     10 <br/>
specific
10 <br/>
spluginManagement>
12 splugins>
                      130 <plugin>
  > 🗁 src
                       17 </plugin>
                      18 </plugins>
19 </pluginManagement>
  > 🥟 target
   M pom.xml
                      20 </build>
 java_proj1
                      210 <dependencies>
 📂 java_proj2
                           wpes.scs.devops
                      27 </dependenc
28 </dependencies>
                      Overview Dependencies Dependency Hierarchy Effective POM pom.xml
```

<u>Step 3:</u> Now create a JUnit Test Case and add some test cases in the file.



Step 4: Now right click on the project folder, go to "Run As", then click on "Maven build...", a dialog box will open. In that, set the "goal" as "install" (shown below).



A console will pop up as given below.

```
Project Explorer ≅

☑ ClassSITE.java 
☒ □ ClassTestSITE.java
                                                                                                                        BRMLabSypomant D Class

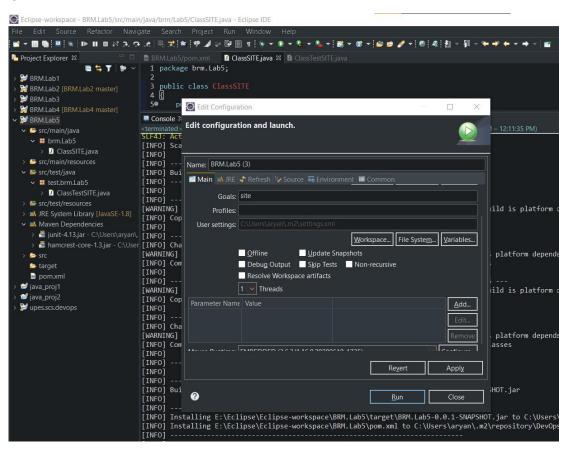
1 package brm.Lab5;

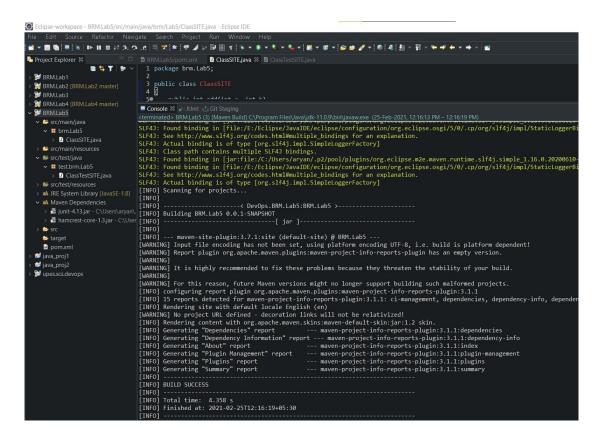
2 public class ClassSITE

4 public int add(int
                BRM.Lab2 [BRM.Lab2 master]
                BRM.Lab4 [BRM.Lab4 master]
                                                                                                                                                                                                                            ■ Console N pr || Print | _ _ _ | English | _ _ _ | _ _ _ | _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ | _ _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ | _ _ _ _ | _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ _ | _ _ _ | _ _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ _ | _ _ | _ _ | _ _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ | _ _ | _ _ | _ | _ _ | _ | _ _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ |
                              src/main/java
                                src/main/resources
src/test/java
                                                                                                                                                                                                                                  [INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ BRM.Lab5 ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] Copying 0 resource
                                                              ☑ ClassTestSITE.java
                                Maven Dependencies

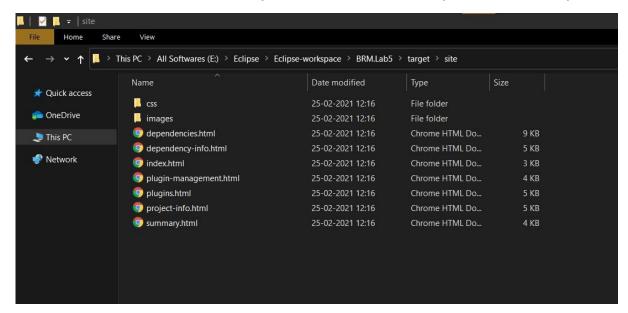
ightharpoonup in the second of the sec
                                                                                                                                                                                                                                [INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ BRM.Lab5 ---
[INFO] Changes detected - recompiling the module!
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to E:\Eclipse\Eclipse\workspace\BRM.Lab5\target\classes
[INFO] Compiling 1 source file to E:\Eclipse\Eclipse\workspace\BRM.Lab5\target\classes
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ BRM.Lab5 ---
[INRO] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] Copying 0 resource
                                              hamcrest-core-1.3.iar - C:
                iava proi1
                                                                                                                                                                                                                                                                  o]
0] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ BRM.Lab5 ---
0] Changes detected - recompiling the module!
UING] File encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!
0] Compiling 1 source file to E:\Eclipse\Eclipse-workspace\BRM.Lab5\target\test-classes
                                                                                                                                                                                                                                                                            --- maven-jar-plugin:2.4:jar (default-jar) @ BRM.Lab5 ---
Building jar: E:\Eclipse\Eclipse-workspace\BRM.Lab5\target\BRM.Lab5-0.0.1-SNAPSHOT.jar
                                                                                                                                                                                                                                                                                --- maven-install-plugin:2.4:install (default-install) @ BRM.Lab5 ---
Installing E:\Eclipse\Eclipse-workspace\BRM.Lab5\target\BRM.Lab5-0.0.1-SNAPSHOT.jar to C:\Users\aryan\.m2\repository\DevOps\BRM\Lab5\Installing E:\Eclipse\Eclipse-workspace\BRM.Lab5\pom.xml to C:\Users\aryan\.m2\repository\DevOps\BRM\Lab5\BRM.Lab5\BRM.Lab5\DevOps\BRM.Lab5\DevOps\BRM.Lab5\DevOps\BRM.Lab5\DevOps\BRM.Lab5\DevOps\BRM.Lab5\DevOps\BRM.Lab5\DevOps\BRM.Lab5\DevOps\BRM.Lab5\DevOps\DevOps\BRM.Lab5\DevOps\DevOps\BRM.Lab5\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOps\DevOp
                                                                                                                                                                                                                                                                              BUILD SUCCESS
                                                                                                                                                                                                                                    [INFO] Total time: 2.384 s
[INFO] Finished at: 2021-02-25T12:11:35+05:30
```

Step 5: Repeat Step 4 again but now set the "goal" as "site". This goal will automatically generate a web documentation of your project.

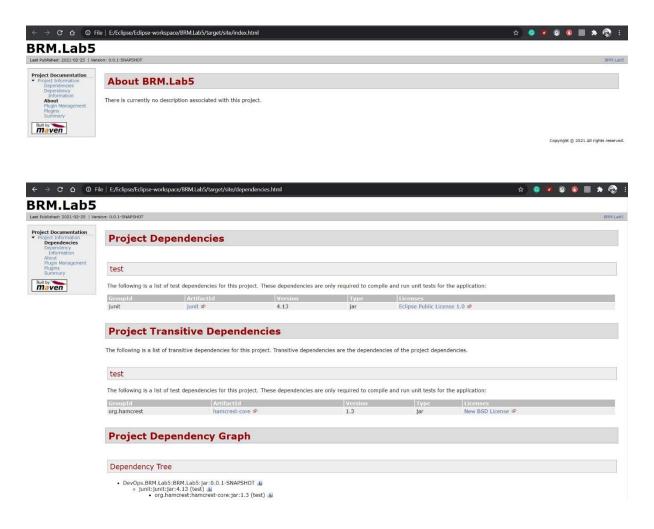


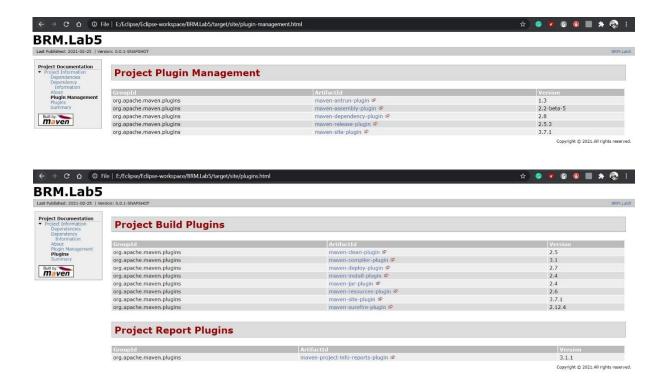


Step 6: Now open the target folder of the project in your workspace and open the site folder which will have the web documentation of your project written in HTML (shown below).



Step 7: Now click on index.html to open the web documentation.





Result: Hence we successfully created a web documentation of a project using the goal site for a maven project.