FROIL NO: 67 NAME: HERAMB . R. PAWAR Class: DITAD SUB: SEPM EPRACTICAL: 7 AIM: TO SETUP and FRUN SCIENTUM TEST IN JENKINS CONCUEN, Froblem STATEMENT: The problem is to configure a Jenkins build job that uses Mauch and Selenium to run automated tests for web application. Theroy: Scienium is an open Source automation testing tool that Is widely used to automate web browsers for testing web applications. It supports a range OF Programming languages such as Java, python, C# and Ruby and can run on different Os like windows, mac and Linux Scienium gravides a suite of tools that enables developers and testers to write autom -ated test Scripts which can then be executed against a web application. FOR EDUCATIONAL USE Sundaram

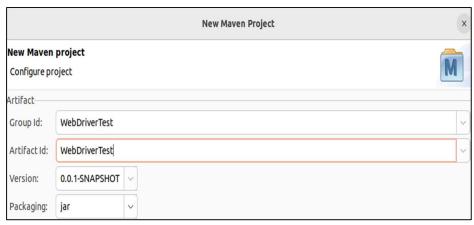
Solentum Consist OF Soveral Components: I) Solenum JDE: A FIREFOX add-on that records user action and generate test scripts 2) Serenum Heb Driver A library that provides a programming Interface to control the browser and perform operations such as Clicking buttons / Filling out Forms and varidating petmeen badies. 3) Selenum and: A tool that allows users to run tests on multiple browser and splatform Smaltenously. Scientim is popular among Developers and testers due to its versatility Flexibility and ease of use It can be used for functional testing regress, - 100 testing and load testing OF web applications Scientify allows developers to write test Scripts in their preferred programming language and can be integrated with testing frameworks like Junit, Testing, Overall Selenium is a pawerful tool that holps to ensure the quality and reliability of web applications. Conclusion: Thus we have locant about Selenium iles benefits and how to use it with a strang sprenger in Jenkins For automated testing. Sundaram

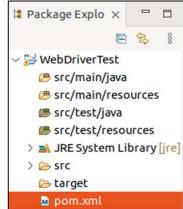
Name: Heramb Pawar Subject: SEPM Roll: 67

# **Practical Output:**

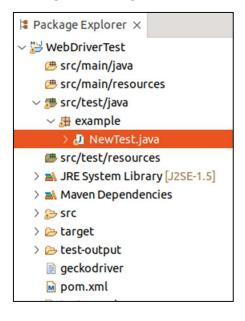
Pre-Requsite: Eclipse With M2E & TestNg plugin, geckoDriver

### Creating A Maven Project in Eclipse:





### Creating A Package And Creating A Java File In It:

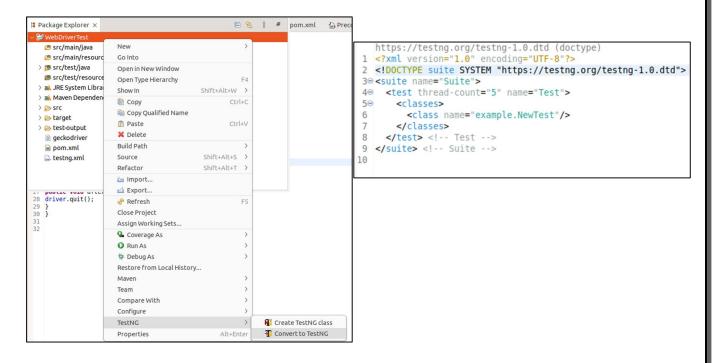


```
package example;

§ 3⊕ import org.testng.annotations.Test;

11
   Run All
12 public class NewTest {
13 private WebDriver driver;
14⊖ @Test
   Run | Debug
15 public void testEasy() {
16 driver.get("http://demo.guru99.com/test/guru99home/");
17 String title = driver.getTitle();
18 AssertJUnit.assertTrue(title.contains("Demo Guru99 Page"));
19 }
20⊖@BeforeTest
21 public void beforeTest() {
22 System.setProperty("webdriver.gecko.driver",
23 "/home/heramb/eclipse-workspace/WebDriverTest/geckodriver");
24 driver = new FirefoxDriver();
25 }
26⊖ @AfterTest
27 public void afterTest() {
28 driver.quit();
29 }
30 }
```

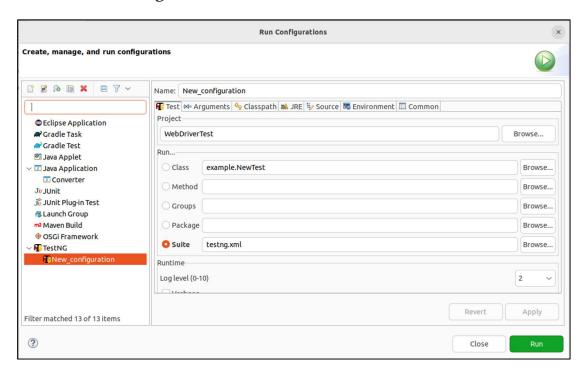
#### Creating A TestNg.xml File:



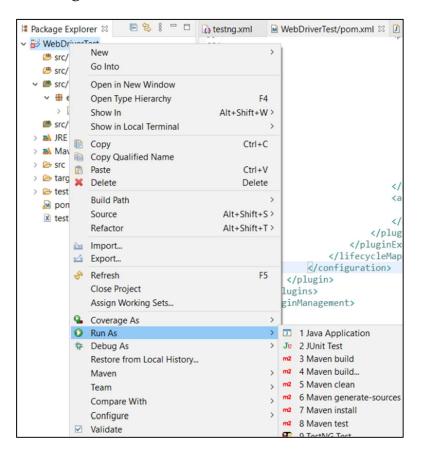
#### Pom.Xml:

```
MebDriverTest/pom.xml x ₽ NewTest.java
                                                                                                              Lestng.xml
                                                                                                                           Pre Pre
MebDriverTest/pom.xml x ₽ NewTest.java
                                             🔜 testng.xml
    https://maven.apache.org/xsd/maven-4.0.0.xsd (xsi:schemaLocatio
                                                                                          <version>2.12</version>
  1⊖ oroject xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="h
                                                                         41
                                                                                          <inherited>true</inherited>
      <modelVersion>4.0.0</modelVersion>
                                                                         426
                                                                                          <configuration>
      <groupId>WebDriverTest</groupId>
                                                                                              <suiteXmlFiles>
                                                                         43⊖
      <artifactId>WebDriverTest</artifactId>
                                                                                                 <suiteXmlFile>testng.xml</suiteXmlFile>
                                                                         44
      <version>0.0.1-SNAPSHOT
                                                                         45
                                                                                              </suiteXmlFiles>
      <dependencies>
                                                                         46
                                                                                          </configuration>
        dependency>
                                                                                       </plugin>
                                                                         47
 8
             <groupId>junit</groupId>
                                                                         48
                                                                                   </plugins>
             <artifactId>junit</artifactId>
                                                                         49
 10
             <version>3.8.1
                                                                         50€
                                                                                   <pluginManagement>
11
             <scope>test</scope>
                                                                         51⊝
                                                                                       <plugins>
        </dependency>
12
                                                                         52
                                                                                       <!--This plugin's configuration is used to store Eclipse m2e settings only
139
        <dependency>
                                                                         53⊝
             <groupId>org.seleniumhq.selenium
14
                                                                                              <groupId>org.eclipse.m2e
             <artifactId>selenium-java</artifactId>
15
                                                                          55
                                                                                              <artifactId>lifecycle-mapping</artifactId>
             <version>3.14.0
16
                                                                          56
                                                                                              <version>1.0.0
17
        </dependency>
                                                                          57G
                                                                                              <configuration>
18⊖
        <dependency>
                                                                                                 fecycleMappingMetadata>
                                                                          58⊖
19
             <groupId>org.testng</groupId>
                                                                         59⊝
                                                                                                    <pluginExecutions>
             <artifactId>testng</artifactId>
20
                                                                         60⊖
                                                                                                        <pluginExecution>
21
             <version>7.4.0
                                                                                                           <pluginExecutionFilter>
                                                                         619
22
             <scope>test</scope>
                                                                                                               <groupId>org.apache.maven.plugins
                                                                         62
23
        </dependency>
                                                                                                               <artifactId>maven-compiler-plugin</artifactId>
                                                                         63
24
      </dependencies>
                                                                                                               <versionRange>[3.8.2,)
                                                                         64
259
      <build>
                                                                         65€
                                                                                                               <qoals>
26⊖
             <plugins>
                                                                                                                  <goal>testCompile</goal>
                                                                         66
279
                 <plugin>
                                                                                                               </goals>
                                                                         67
28
                     <groupId>org.apache.maven.plugins</groupId>
                                                                         68
                                                                                                           </pluginExecutionFilter>
29
                     <artifactId>maven-compiler-plugin</artifactId>
                                                                         69€
                                                                                                           <action>
30
                     <version>3.8.1
                                                                          70
                                                                                                               <ignore></ignore>
31⊖
                     <configuration>
                                                                          71
                                                                                                           </action>
32
                         <source>7.1</source>
                                                                          72
                                                                                                        </pluginExecution>
33
                         <target>7.1</target>
                                                                          73
                                                                                                    </pluginExecutions>
34
                     </configuration>
                                                                         74
                                                                                                 </lifecycleMappingMetadata>
35
                 </plugin>
                                                                          75
                                                                                              </configuration>
36
                                                                          76
                                                                                          </plugin>
37€
                                                                                       </plugins>
                     <groupId>org.apache.maven.plugins
38
                                                                         78
                                                                                   </pluginManagement>
39
                     <artifactId>maven-surefire-plugin</artifactId>
                                                                         79
                                                                                </build>
                     <version>2.12</version>
                     <inherited>true</inherited>
```

## Run>> Run Configuration>> Run



#### **Running As Maven Test:**

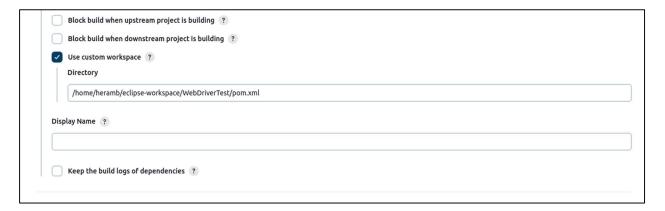


## Setting Up Selenium on Jenkins:



## Configure>> General >> Advance>> Use Custom Workspace

<add path to pom.xml in Directory option>



#### **Build Now:**

