How to set up Cucumber framework in Eclipse step by step

Pre requisite

- Download and Install eclipse Download Eclipse from https://eclipse.org/downloads/
- Download and Install Java Download and install the Java 8 on your system using link https://www.oracle.com/java/technologies/downloads/
- 3. Set the environment variable of javaas shown in the following .
 - ✓ Search environment variable in system search panne
 - ✓ Open it
 - ✓ Inside system variable click path.
 - ✓ Click on new button in bottom.
 - ✓ Enter variable name , path(paste here java folder path) and save it.
 - ✓ Click on ok and complete process.
- 4. Download cucumber plugin
 - ✓ For that go to Help in eclipse
 - ✓ Click on Eclipse marketplace .
 - ✓ In find type cucumber and click on search icon.
 - ✓ In results Cucumber Eclipse Plugin 1.0.0.202106240526 appear, click on install
- 5. Then install TestNG Plugin from eclipse marketplace
 - ✓ For that go to eclipse marketplace and type **TestNG** in search box
 - ✓ Click on Install
- 6. Then install Maven
 - ✓ For that go to eclipse marketplace and search for Maven and click on install

Create Project in eclipse

- 1. Go to File -> New -> Project
- 2. Select Maven Project and click on Next.
- 3. Select checkbox of Create a Simple Project.
- 4. Click on the **Next** button for the further process.
- 5. Enter GroupID and Artifact ID then click on Finish.
- 6. Click on Finish
- 7. After that add following dependency to pom.xml
 - ✓ Go to the package explorer on the left-hand side of Eclipse.
 - ✓ Expand the project Test1
 - ✓ Locate pom.xml file.
 - ✓ Right-click and select the option, Open with "Text Editor".
- 8. Add dependency for Selenium (Note : following dependancies are compatible with JAVA8)
 - ✓ Open pom.xml is in edit mode, create dependencies tag (<dependencies></dependencies>), inside the project tag.
 - ✓ Inside the dependencies tag, create dependency tag. (<dependency></dependency>)

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    Provide the following information within the dependency tag.

             <dependency>
                  <groupId>org.seleniumhq.selenium</groupId>
                  <artifactId>selenium-java</artifactId>
                  <version>3.141.59</version>
             </dependency>
9. Add dependency for Cucumber-Java
           <dependency>
                 <groupId>io.cucumber</groupId>
                 <artifactId>cucumber-java</artifactId>
                   <version>7.2.3</version>
          </dependency>
10. Add dependency for Cucumber-JUnit
          <dependency>
              <groupId>io.cucumber</groupId>
              <artifactId>cucumber-junit</artifactId>
              <version>7.2.3</version>
              <scope>test</scope>
          </dependency>
11. Add dependency for Junit
          <dependency>
              <groupId>junit</groupId>
              <artifactId>junit</artifactId>
              <version>4.13.2</version>
              <scope>test</scope>
          </dependency>
12. Add dependency for testng
          <dependency>
                 <groupId>org.testng</groupId>
                 <artifactId>testng</artifactId>
                 <version>7.4.0</version>
                 <scope>compile</scope>
          </dependency>
13. Add dependency for selenium chrome driver
          <dependency>
                 <groupId>org.seleniumhq.selenium</groupId>
                 <artifactId>selenium-chrome-driver</artifactId>
                 <version>2.50.0</version>
          </dependency>
14. Add dependency for Guice
          <dependency>
                 <groupId>com.google.inject</groupId>
                 <artifactId>guice</artifactId>
                 <version>4.1.0</version>
                 <classifier>no aop</classifier>
          </dependency>
15. Add dependency for guava
          <dependency>
                 <groupId>com.google.guava</groupId>
                 <artifactId>guava</artifactId>
                 <version>22.0</version>
          </dependency>
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16. Add dependency for google-api-client-appengine
         <dependency>
                <groupId>com.google.api-client</groupId>
                <artifactId>google-api-client-appengine</artifactId>
                <version>1.23.0</version>
                <exclusions>
                <exclusion>
                <groupId>com.google.guava</groupId>
                <artifactId>guava-jdk5</artifactId>
                </exclusion>
                </exclusions>
        </dependency>
17. Add dependency for gson
         <dependency>
                <groupId>com.google.code.gson</groupId>
                <artifactId>gson</artifactId>
                <version>2.2.4</version>
         </dependency>
18. Add dependency for cucumber-gherkin
         <dependency>
               <groupId>io.cucumber</groupId>
               <artifactId>cucumber-gherkin</artifactId>
               <version>7.2.3</version>
         </dependency>
19. Add dependency for hamcrest-all
         <dependency>
             <groupId>org.hamcrest</groupId>
             <artifactId>hamcrest-all</artifactId>
             <version>1.3</version>
             <scope>test</scope>
         </dependency>
20. Add dependency for cucumber-picocontainer
         <dependency>
             <groupId>io.cucumber</groupId>
             <artifactId>cucumber-picocontainer</artifactId>
             <version>7.2.3</version>
             <scope>test</scope>
         </dependency>
21. Add dependency for cucumber-core
         <dependency>
             <groupId>io.cucumber</groupId>
             <artifactId>cucumber-core</artifactId>
             <version>7.2.3</version>
         </dependency>
22. Add dependency for cucumber-testng
         <dependency>
             <groupId>io.cucumber</groupId>
             <artifactId>cucumber-testng</artifactId>
             <version>7.2.3</version>
         </dependency>
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23. Add dependency for cucumber-jvm
         <dependency>
                <groupId>io.cucumber</groupId>
                <artifactId>cucumber-jvm</artifactId>
                <version>7.2.3</version>
                <type>pom</type>
         </dependency>
24. Add dependency for extentreports-cucumber7-adapter
         <dependency>
               <groupId>tech.grasshopper</groupId>
               <artifactId>extentreports-cucumber7-adapter</artifactId>
               <version>1.1.0</version>
         </dependency>
25. Add dependency for extent-pdf-report
         <dependency>
                 <groupId>tech.grasshopper</groupId>
                 <artifactId>extent-pdf-report</artifactId>
                 <version>1.7.3</version>
         </dependency>
26. Add dependency for extentreports
         <dependency>
               <groupId>com.aventstack</groupId>
               <artifactId>extentreports</artifactId>
               <version>5.0.8</version>
         </dependency>
27. Add dependency for webdrivermanager
         <dependency>
             <groupId>io.github.bonigarcia</groupId>
             <artifactId>webdrivermanager</artifactId>
             <version>5.1.1</version>
         </dependency>
28. Add dependency for mail
         <dependency>
             <groupId>javax.mail</groupId>
             <artifactId>mail</artifactId>
             <version>1.4</version>
         </dependency>
29. Add dependency for commons-email
         <dependency>
             <groupId>org.apache.commons</groupId>
             <artifactId>commons-email</artifactId>
             <version>1.4</version>
         </dependency>
30. Add following compiler details under properties tag in pom.xml file
    <properties>
           <maven.compiler.source>1.8</maven.compiler.source>
           <maven.compiler.target>1.8</maven.compiler.target>
     </properties></properties>
```

- 31. Then press **ctrl+s** to save the pom.xml file.
- 32. Once we are done adding with the dependencies, we can see that all the jars file added in

the Maven Dependencies folder under the MavenProject.

33. Now create folder **featureFile** under **src/test/resources**

Steps to create Feature Folder

- ✓ Right click on src/test/resources
- ✓ Select New -> Folder
- ✓ Folder window will appear, mention folder name as featureFile and click on Finish
- 34. Now create feature file Login.feature under featureFile folder

Steps to create feature file

- ✓ Right click on featureFile folder
- ✓ Select New -> File
- ✓ Now File window appear, give file name Login.feature
- 35. Now create Step Definition file as LoginStepDefinition.java under src/test/java Steps to create Step Definition File
 - ✓ Create package **stepDefinition** under **src/test/java** for this right click on **src/ test/java**
 - ✓ Select New -> Package
 - ✓ Now Java Package window appear, mention package name as stepDefinition
 - ✓ Now package explorer will look as
 - ✓ Now right click on package stepDefinition
 - ✓ Select New -> Class
 - ✓ Now Java Class window will appear, mention Name as LoginStepDefinition and click on Finish

36. Now create runner file as TestRunner.java under src/test/java

Steps to create TestRunner File

- ✓ Create package **runnerFiles** under **src/test/java** for this right click on **src/ test/java**
- ✓ Select New -> Package
- ✓ Now Java Package window appear, mention package name as runnerFiles
- ✓ Click on Finish
- ✓ Now create class TestRunner.java under runnerFiles package
- ✓ Now right click on package runnerFiles
- ✓ Select New -> Class
- ✓ Now Java Class window will appear, mention Name as **TestRunner** and click on **Finish**