## Selenium :-Selenium is an open-source and a portable automated software testing tool for testing web applications. It has capabilities to operate across different browsers and operating systems. Selenium is not just a single tool but a set of tools that helps to automate web-based applications more efficiently. Benefits of selenium:-It has capability to execute scripts across different browsers. Can execute scripts on various operating systems. Can execute tests in parallel with the use of Selenium Grids. **Installation Steps:-**1] Download and install Java in your system Steps to install java:-**Step 1**: Download And Install Java/JDK In Windows i) Go to java download page and download the java latest version. (http://www.oracle.com/technetwork/java/javase/downloads/index.html) ii) Download and install jdk in the system. **Step 2**: Set JAVA\_HOME Variable In Windows. Locate JDK Installation folder path First of all you need to locate path of JDK installation folder. Go to C:\Program Files\Java.

There will be JDK folder with version number. Example: For eg: ("jdk1.8.0 101")

Double click on It.

**Selenium WebDriver Installation** 

| Copy folder path. Example: C:\Program Files\Java\jdk1.8.0_101  |
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| Step 3: Set JAVA_HOME Variable   |
| 1.Go to control panel  |
| 2.click on <b>System</b>   |
| 3.Click on Advanced System settings  |
| 4.Click on Advanced tab -> Click on Environment Variables button   |
| It will open Environment Variables dialog.   |
| 5.Under <b>System Variable</b> , Click on New button. It will open New System Variable   |
| dialogue box   |
| Set Variable name = JAVA_HOME.   |
| Set Variable Value = Path where JDK is located. For eg:( "C:\Program Files\Java \jdk1.8.0_101") which is located during previous step as described above. It depends on your own java installation path and installed version. |
| 2] Download webdriver jar files(Java) from the following link <a href="http://www.seleniumhq.org/download/">http://www.seleniumhq.org/download/</a>  |
| 3] Download and install Eclipse from the following link <a href="http://www.eclipse.org/downloads/eclipse-packages/">http://www.eclipse.org/downloads/eclipse-packages/</a>  |
| 4] Configure libraries with the Eclipse IDE  |
| Steps to create a project and configure libraries :-   |
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| 1. Create a New Project (File -> New -> Java Project)  |
| 2. Create a Package (Right click the created project -> New -> Package)  |
| 3. Create a Class (Right click the created package -> New -> Class)  |
| 4. Now configure the created java project. Right click the created project and select Java Build Path  |
| 5. Under the <b>libraries</b> folder select all the jar files.   |
| 5] Install TestNG in the Eclipse IDE   |
| Steps to install TestNG :-   |
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|  |

- 1. On top menu bar, Under Help Menu, Click on "Install new Software" in help window
- 2. Enter the URL (<a href="http://beust.com/eclipse/">http://beust.com/eclipse/</a>) at Work With field and click on "Add" button.
- 3. Once you click on "Add", it will display the screen, Enter the Name as "TestNG"
- 4. After clicking on "OK", it will scan and display the software available with the URL which is mentioned.
- 5. It will check for the requirement and dependencies before starting the installation.
- 6. Once the above step is done, it will ask to review the installation details. If ready or Ok to install TestNG, click on "Next" to continue.
- 7. Accept the Terms of the license agreement and Click on "Finish" button.

## 6] Get report from TestNg

## Steps to get report from TestNG:-

1. Convert the created class into TestNG (Right click Class -> TestNG ->Convert

**TestNG Class**)

- 2. Build.xml file is created after the conversion
- 3. Now run the xml file (Right Click Build.xml -> Run as -> Ant)
- 4. Note the location displayed in the console while running the xml file
- Go to that location and Double click the executable file, Generated report is displayed.

## Sample Report :-



