**Selenium Tutorial**

This is a two part tutorial to get you familiar with features of Selenium. In this assignment you will first use Selenium IDE and then [WebDriver](http://selenium-rc.openqa.org/) to automate web application testing.

**Part 1 Selenium IDE**

In this first part of the tutorial, you will install and play with Selenium IDE to get a big picture idea of web application testing.

**Install Selenium IDE**

Selenium IDE is an extension for Firefox, therefore Firefox is required to work through this tutorial.

With Firefox, visit <http://seleniumhq.org/projects/ide/>, click on “Download Selenium” and follow the instructions. Firefox needs to be restarted for complete the installation.

**Record a Test Case**

Open Selenium IDE in Firefox, “Tools” -> “Selenium IDE”.

At this point Selenium is already starting to record your actions within the browser.

Create a test case:

* Visit [www.google.com](http://www.google.com)
* In the search box type in “fraunhofer”
* Click on “Google Search”
* Click on the first result
* Save the test case

**Examine the Test Case**

Open the saved test case with WordPad.

**Replay the Test Case**

* Restart Firefox and Selenium IDE
* Open the saved test case
* Set the speed to “Slow” and click on “Play entire test suite”

**Part 2 Selenium with WebDriver**

This part of the tutorial uses Selenium and WebDriver to write automated web application UI tests in the Java programming language against any HTTP website using Google Chrome browser.

**Setup**

1. Find and download “chromedriver.exe”
2. Add the location of “chromedriver.exe” to your computer’s PATH environment variable
3. Create a Java project in Eclipse
4. Create a “lib” directory in the newly created project
5. Find, download, and place the following jar files in the “lib” directory:

* commons-exec-X.X.jar
* commons-logging-X.X.X.jar
* gson-X.X.jar
* guava-XX.X.jar
* httpclient-X.X.X.jar
* httpcore-X.X.X.jar
* selenium-java-X.XX.X.jar

1. Add these jar files to the project’s classpath
2. Create a JUnit test case (add JUnit to classpath as well)
3. Copy and paste the following code into the JUnit test case

Note: X.X.X means the newest stable version of these libraries

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**private** **static** WebDriver *driver*;

@Before

**public** **void** setUp() **throws** Exception {

*driver* = **new** ChromeDriver();

}

@After

**public** **void** tearDown() **throws** Exception {

*driver*.quit();

}

…