Workspace Set Up

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# Dictionary of Terms

|  |  |
| --- | --- |
|  |  |
| GitHub Project | https://github.com/voravuth/allureprototype |
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# Introduction

The objective of this document is to describe the workspace of test automation and how to set it up in a develop environment.

# Tools and Components

To set up your workspace for developing and implementing test cases in proposed POC, you need following:

* JDK 1.8
* [Apache Maven 3](#Maven).3.9
* [IntelliJ](#_Eclipse) as IDE
* [Selenium2](#_Selenium2)
* testng
* aspect
* mysql
* xmlunit
* Logback is intended as a successor to the popular log4j project
* Jackson Project, formerly known as the standard JSON library
* mavenSurefirePlugin
* restassured for webservicses
* [Allure](#_Thucydides) for reporting
* [Chromedriver](#_ChromeDriver)
* [Firefox browser, Firebug, Firepath](#_Firefox_browser,_Firebug,)

## JDK1.8 (Ignore if already configured)

Java is needed for this POC.

You can download JDK7 from [Java SE Development Kit 7u25](http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html). (Or the latest version)

JDK is used in both development machine and JVM.

Create an environment variable “JAVA\_HOME”. This environment variable should have the path to the maven.

java version "1.8.0\_60"

## Apache Maven 3.3 and above (Only works with 3.3 and above)

We use maven for building and executing test cases in POC. To install maven,

* Download the binary or zip file from [here](http://maven.apache.org/download.cgi)
* Install it.
* Create an environment variable called “M2\_HOME”. This environment variable should have the path to the maven.
* Configure the system path to include maven
* Open a terminal and enter *mvn –v*. It shows the version of maven, if it is installed and configured properly.

Following screenshots illustrates above steps.

Apache Maven 3.0.3 (r1075438; 2011-03-01 04:31:09+1100)

Maven home: C:\Program Files (x86)\maven

Java version: 1.8.0\_60, vendor: Oracle Corporation

## IntelliJ (Ignore if already configured)

Download and install the right version of eclipse from <http://www.eclipse.org/downloads/>.

Install maven plugin “m2eclipse”, if it is not installed. maven is used for building and executing Test Automation program. You can get m2eclipse from [here](http://eclipse.org/m2e/download/).

Or IntelliJ community Edition

**Plugins**:

Maven Integration

TestNG

## Selenium2

Selenium2 (WebDriver) is the main component for testing websites in the automated test system. There is no need to download Selenium2 as it will be downloaded by Thucydides and Jbehave plugins.

All necessary jar files will be downloaded by POM.xml.

## ChromeDriver

You need chromedriver in your path file, when you want to test using chrome browser. Get the latest version of [chromedriver](http://code.google.com/p/chromedriver/downloads/list) and put it in C:\Windows\System32.

## Firefox browser, Firebug, Firepath

Install [Mozilla Firefox](http://www.mozilla.org/en-US/firefox/new/) then install Firebug and Firepath Add-ons.

## Execution:

| **Purpose** | **Command** |
| --- | --- |
| Run all tests | mvn test |
| Run the allure reports | mvn site |
| Run a single maven test within a class | mvn -Dtest=TestObjects#ostiariusAddUserWithCancel test |
| where "TestObjects" is the test class name and "ostiariusAddUserWithCancel" is the test method. |  |
| Run all tests within a group | mvn test -Dgroups=slow test |
| Run all tests within a class | mvn -Dtest=com.amedia.qa.automation.testcases.testgoogle.TestGoogle test |
|  | mvn clean test -Dtest=xxxxTest |
| Only runs all the test classes ending in PerformanceTest. | mvn -Dtest=\*PerformanceTest clean test |
| To run test suite xml file | mvn test -DsuiteXmlFile=src/test/resources/testsuite/test.xml |

Mvn clean will download all the requisite jars. If the build fails, resolve the issues and re-run the command until you get BUILD SUCCESS

## Execution Through Jenkins:

* Create a new job, give any name for the project, Select "Freestyle project" among the project types and hit ok
* You should be in the configuration page. Click Advanced button.
* Check "Select Custom Workspace" and provide the location of Cucumber-Serenity-POC in your system. (We can also configure to read the project from an SCM tool)
* Click "Add Build step" and select "Execute windows batch command"
* Enter the name of the batch file in the command section "run\_Whisper.bat" and click Apply/Save

Click on "Build Now" to start the execution.

# Technology Stack

* Allure 1.4.23
  + allureMvnPluginSerenity Junit
* Maven – Dependency and build management
  + mavenCompilePlugin
  + mavenSurefirePlugin
* No – BDD
* Java 1.8
* Logback - successor to the popular log4j project-
* Jackson - best JSON parser for Java
* Testng / xmlunit– Unit testing framework
* restassured- Testing and validation of REST services in Java
* selenium
* aspectj- clean modularization of crosscutting concerns, such as error checking and handling, synchronization, context-sensitive behavior, performance optimizations, monitoring and logging, debugging support, and multi-object protocols
* mysql - open-source relational database management system (RDBMS)
* Folder Structure

Drivers

* Chrome
* InternetExplorer

Src

* Test

- java

- package

- db

- DatabaseManager – Connecting to DB etc sql

- tests

- web test files with @test

- webservices test files with @test

-BaseTest - @BeforeSuite @AfterClass @AfterSuite

- pageObjects

- Page object files

- WebDriver

- Framewrork – start webdriver etc

- PageInteraction – methods for page interactions

- WebServices – RestAssured Methods

- cucumber runner files (Test Suites)

- resources

- testsources.TestServices

- testxmls, expected xmls etc..

- testSuite

- suite xml runners testNG

- .feature file

-logger file

-pom.xml