6.3 Code Coverage with Clover

This section will guide you to:

* Perform code coverage using Clover in Jenkins for a Maven application.

This guide has four subsections, namely:

6.3.1 Login to Jenkins

6.3.2 Add Clover in Jenkins and Maven project

6.3.3 Create Jenkins job for Maven

6.3.4 Push code to GitHub repositories

**Step 6.3.1:** Login to Jenkins

* Open your browser and navigate to **localhost:8081**
* Provide your username and password and click on **Login.**

**Step 6.3.2:** Add Clover in Jenkins and Maven project

* Create a basic Maven project in Eclipse.
* Add the below code in the **pom.xml** file at the plugin tags:

**<project>**

**...**

**<build>**

**<plugins>**

**<plugin>**

**<groupId>com.atlassian.maven.plugins</groupId>**

**<artifactId>clover-maven-plugin</artifactId>**

**<configuration>**

**...**

**<generatePdf>true</generatePdf>**

**<generateXml>true</generateXml>**

**<generateHtml>false</generateHtml>**

**<generateJson>false</generateJson>**

**</configuration>**

**<executions>**

**<execution>**

**<phase>generate-sources</phase>**

**<goals>**

**<goal>instrument</goal>**

**</goals>**

**</execution>**

**</executions>**

**</plugin>**

**</plugins>**

**</build>**

* Install the Clover plugin via **Manage Jenkins -> Manage Plugins**.

**Step 6.3.3:** Creating Jenkins job for Maven

* To, create a new job in Jenkins, open the Jenkins dashboard with your Jenkins URL. For example, http://localhost:8081/
* Click on **Create New Job**. Enter the item name, select **Maven Project** and click **OK**.
* Once you click **OK,**the page will be redirected to its project form. Here, you will need to enter the project information.
* Scroll to **Maven**option under **Source Code Management.**
* Enter the Git repository URL of project to pull the code from GitHub or provide the localtion of **pom.xml** file in your local system.
* Specify the following goals for Maven:

**install**

**-Dmaven.test.failure.ignore=true**

**|**

**clover:instrument**

**clover:aggregate**

**|**

**-N**

**clover:aggregate**

**clover:clover**

* Build the job.

**Step 6.3.4:** Push the code to your GitHub repositories

* Open your command prompt and navigate to the folder where you have created your files.

**cd <folder path>**

* Initialize your repository using the following command:

**git init**

* Add all the files to your Git repository using the following command:

**git add .**

* Commit the changes using the following command:

**git commit . -m “Changes have been committed.”**

* Push the files to the folder you initially created using the following command:

**git push -u origin master**