# Automation Framework Structure

Automation Framework is structured by following a simple framework concept which is explained below:

1. We have created one project folder for all entire Test Cases.
2. Inside the **Automation Framework** another 5 folders and 1 .vbs file have been created and named as:

**test, Suite, csv, lib, Results folder and QCProcessor.vbs.**

1. Inside the **test (Automation Framework\test)** folder we have different packages like **or, procedure and processor.**
2. Inside **or package**, we have one main java file ’**OR.java**’ where all the web page properties or Objects will be stored.
3. Inside **procedure package**, we have number of main java file where all implementation of each procedure are being stored.
4. Inside **processor package**, we have **CommonSeleniumActions**, **ExecuteProcedure**, **Processor** and **ReportGenerator** java file.

a. **CommonSeleniumActions** contains common selenium commands like click, type, select etc and which is used by Procedures.

b. **ExecuteProcedure** will retrieve all procedures to be run from Test Case csv file.

c. **Processor** will perform following process

1. Launch the selenium server (startseleniumserver).

2. Retrieving All Test data for all procedure of Test case (readCSVFile).

3. Retrieving respective Test data for respective procedure (datagenerator).

4. Taking screenshot for failed procedure (failurescreenshot).

5. Shut down the selenium server (shutdownseleniumserver) and write the Test case status in the Test Case csv file.

6. **ReportGenerator** is used to generate the report named as **customized-report.html**.

1. Inside the **Suite (Automation Framework\Suite)** folder we have

**DriverSuite.xml**

a. **DriverSuite.xml** is a driver is used to run the respective Test case.

1. Inside the **csv (Automation Framework\csv)** folder we have number of test data file. Each Test case has its own test data file .
2. Inside the **lib (Automation Framework\lib)** folder having **selenium-server-standalone-2.20.0** and **testng-6.5beta**.
3. Inside the **Results (Automation Framework\ Results)** folder where all the test case results folder are being stored.

# Automation Framework Workflow:

1. As per framework, calling ‘**DriverSuite.xml’** from command prompt using following command

a.In Command Prompt, Moving to ‘Automation Framework’ folder.

Eg . cd\

cd Automation Framework

b. ‘**java -classpath bin;lib/\*; org.testng.TestNG Suite/DriverSuite.xml -d Results/Testcasename -usedefaultlisteners false’**

2. Once ‘**DriverSuite.xml’** was called.

3. **DriverSuite.xml** will call ‘@BeforeSuite’ Annotation Method (**Processor -startseleniumserver**) where the selenium server is started and **retrieving all Test data**.

4. Then goes to ‘**ExecuteProcedure.java**’ which retrieves all the procedure of Test case from Test case csv file and starts executing procedure in an order.

5. Then goes to ‘@BeforeMethod’ Annotation (**Processor -datagenerator**) where to retrieve respective Test data for respective procedure.

6. Then goes to ‘@Test’ Annotation then it will start executing respective procedure with provided Test data.

7. Then goes to ‘@AfterMethod’ Annotation (**Processor -failurescreenshot**) which will take entire screenshot if failure happens.

8.After completion of all procedure then goes to ‘@AfterSuite’ Annotation (**Processor** -**shutdownseleniumserver**) where Selenium server is shut down and **writing Test case status** (Pass or Fail) in the Test case csv file.

9. Then goes to ‘**ReportGenerator.java**’ where entire test result is generated as report named as ‘**customized-report.html**’.