**Automation Framework**

In our test automation framework we use the following:

* Java as the programming language
* Page object model as a design pattern
* TestNG as the assertion framework
* Maven as the build tool
* Appium driver as the mobile automation tool
* IntelliJ as the IDE

Following is the framework detail:

src: It is the root directory of source code and test code.

* main: This directory is the root directory of the source code related to the application itself, not test code.
* java: This directories under main and test contains the Java code for the application itself which is under main and the Java code for the test which is under test.
* Login directory contains following classes:
* Login: This class contains the source code related to the sign in flow of the application
* LoginObjectRepository: This class contains the collection of mobile elements/locators present in the screens involved in sing in flow. ­­­­­
* PurchaseItem: Directory contains following classes:
* PurchaseItem: This class contains the source code related to the searching and purchasing an item. I am navigating only till purchase page. Haven't done payment process.
* PurchaseItemObjectRepository: This class contains the collection of mobile elements/locators present in the screens involved in search and navigate to payment page flow.
* Utils: This directory contains the Java classes which can be used throughout the application. In this framework, Utils directory contains the following java classes:
* Base: This class contains the reusable methods. All page classes will extend this Base class thus inheriting all the base methods.
* InitiateDriver: This class is used to initiate the driver based on configuration setup.
* Object\_Base: This is the base class for all the page object classes. All the page object classes will extend this object base class thus initializing the locators under it.
* PropertyReader: This class is to read the property files under resource folders.
* Pages.java: This class contains all the page references. All the difference page will be accessed through this references.
* resources: This directory contains the resources needed by the project. Project involves following property files.
* Config.properties: Contains the desired capabilities of Android device used in the application. Before running the project, use the desired capability of intended device.
* Credential.properties: Contains the credential used for login. Use the required credential needed for login.
* Purchase.properties: Contains the search Item. Here I am searching for - 65 inch TV
* test: This directory contains the test source code.
* Test Pages: This directory contains the following classes:
* LoginTest: This class contains the test source code related to the singIn flow of the application.
* PurchaseItemTest: This class contains the test source code related to the search and purchase an item flow of the application.
* TestBase.java: This is the base class of all the test class.
* testng.xml: This file is used to create and handle multiple test classes. This xml file is used to configure test run, set test dependency, include or exclude any test, method, class or package and set priority etc.
* target: This directory is created by the Maven. It contains all the output of the build (compiled classes, JAR files, test report etc).
* pom.xml: It is an XML file that contains information about the project and configuration details used by Maven to build the project. It contains default values for most projects.