**Maven Project :**

Maven provides a comprehensive model for projects which is reusable, maintainable, and easier to comprehend plugins or tools that interact with this declarative model.

Maven project structure and contents are declared in a xml file, pom.xml, which is the fundamental unit of the entire Maven system.

**src/main/java**

**com.upgrade.qa.restapi.base**

**RestClient.java :** This is a java class which contains generic Http-client methods like (GET,POST,PUT and DELETE)(Get in this Use-case) which takes service URL as input and

returns closebaleHttpResponse.

**TestBase.java** : This is a java class which contains the initialization of config .properties file

**com.upgrade.qa.restapi.config**

**Config.Properties** : This is a property file that contains Environmental variables in a key value pair format(so that variables can be handled and maintained properly in a repository)

**com.upgrade.qa.restapi.util**

**TestUtil.java :**This java class contains all utility methods declared in static so that the test cases can easily access the most commonly used methods/variables/constants

**Src/test/java**

**com.upgrade.qa.restapi.data**

**State.java :** This class declares below properties of all states

1.label

2.Abbreviation

3.minimum loan amount

4.minimum age

**StateDataResponse.java :** This class contains an Array List with getter and setter methods.

**UnitedStateCodes.java :** This class contains a Hash Map which stores all valid US States and their Abbreviations in Key value pair(Key - State name , Value - Abbreviation )

**com.upgrade.qa.restapi.test**

**GetApiTest.java :** This class contains the actual test case scenario execution - stores the JSON Response in an object and validates below 3 conditions

1. Validates the status code of the response

2. Validates all the state names returned are valid US states or not, and total state count is 48 or not

3. Validates the state label and abbreviation are mapped correctly or not

4. Validates only one state has a min age of 19, and output the name of that state

5. Validates that Georgia is the only state with min loan amount requirement of $3,005

**Test-output**

TestNG generates report in this folder automatically, where we can verify the execution status in detailed HTML format.

**Application.log**

This is a log file generated using Apache log4j and gives the details execution log for debug purpose

**Log4j.properteis :**

**POM.xml**

A Project Object Model or **POM** is the fundamental unit of work in **Maven**. It is an **XML** file that contains information about the project and configuration details used by **Maven** to build the project in the form of dependencies.

Below are the list of dependencies used for this project

1.JSON

2.TestNg

3.Log4j

4.Jackson-databind

5.Http-Client

**Execution Process:**

**Using Eclipse:**

You can run GetApiTest.java class from eclipse

**NOTE\*\*\***

**Below is the local path used from which the test data sheet is being referred, kindly update the TEST\_SHEET\_PATH variable in the config.properties accordingly while executing in your local.**

"/Users/alekhya/eclipse-workspace/UpgradeLoanRestApiTest/src/main/java/com/upgrade/qa/restapi/config/config.properties”