

## **Automation Framework**

**This Framework is designed to be Modular and Maintainable, all input data is read from external files Json and Excel, the structure consists of three layers, The First layer is the Actions That contains all selenium methods and attributes, the second layer is The Pages as the design pattern is Page Object Model, the Third layer is The Test.**

- **Liberates and Tools:**
  - **This framework is built in java with:  
TestNG, Selenium, allure report, poi (For Excel File reader),  
com.googlecode.json-simple (For Json File reader)  
and io.github.bonigarcia (For Web driver manager).**
- **Reporting:**
  - **Allure Framework is used to document the result of the run, annotations like Description, Story, Description and Severity is used to describe the test in the report.**
  - **To run the report install allure configuration on your machine, set up the environment variables, and run The command  
“allure serve target/allure-results”**
- **Failure Recovery:**
  - **On Failure screenshot, is taken by using listener class and annotation attachment.**
- **Cross Browsing:**
  - **Web driver manager is used to choose the required browser and easily run the test.**
- **Future work:**
  - **More comments will be added to the code to describe it.**
  - **Adding the BDD and use the reporting for BDD.**
  - **Add APIs Section.**
  - **Enhance the maintainability of the framework to not depend on TestNG or Allure annotations.**
  - **Add xml to run multiple classes**
  - **Parallel execution.**