

Prerequisite

1. Programming Language: Java 1.8 or above.
2. Build Management: Maven 3.6.1
3. IDE
 - IntelliJ IDEA (Community) - In the terminal run `mvn idea:idea` to create project files or just open pom.xml file as a project
 - Eclipse - In the terminal run `mvn eclipse:eclipse` to create project files then open the project

Frameworks:

1. Cucumber (BDD)
2. Selenium WebDriver (Chrome [windows & mac])
3. JUnit (Unit Testing)

Design:

- BDD - Scenarios, Data Tables, Scenario Outline, Examples
- Pages - Page Factory Pattern, Page Objects
- Parallel Execution “maven-surefire-plugin and JUnit (4 threads)”.
- State Management - Dependency Injection (DI) with PicoContainer.
- Utilities - Lombok and log4j for logger management

Reports:

1. Default - target/cucumber-html-reports/default.html (Single page and emailable)
2. MasterThought - target/cucumber-html-reports/feature-overview.html (Pretty formatted for hosting)
3. JSON - target/cucumber-html-reports/json/cucumber.json (Further report generation)
4. Timeline - target/cucumber-html-reports/timeline/index.html (measure scenario execution times)
5. Logs - target/logs/main.log and scenario-based logs (analyse runtime failures and progress)

Test Execution:

- In a terminal navigate to project root directory and run `mvn clean test`