amazon-bdd-framework/

├── pom.xml # Maven dependencies and build config

├── testng.xml # TestNG suite configuration

├── src/

│ ├── main/

│ │ └── java/

│ │ └── com.amazon.framework/

│ │ ├── base/

│ │ │ ├── DriverFactory.java # Manages WebDriver setup/teardown

│ │ │ └── BaseTest.java # Base test class for common setup

│ │ ├── pages/

│ │ │ ├── LoginPage.java # Page Object Model (POM) for login page

│ │ │ ├── HomePage.java # POM for home/search page (product selection)

│ │ │ ├── ProductPage.java # POM for product details & add to cart

│ │ │ ├── CartPage.java # POM for cart page

│ │ │ ├── PaymentPage.java # POM for payment page

│ │ │ └── LogoutPage.java # POM for logout functionality

│ │ ├── utils/

│ │ │ ├── ConfigReader.java # Reads config properties (browser, url)

│ │ │ └── WaitUtils.java # Helper methods for waits (explicit wait etc.)

│ │ └── config/

│ │ └── config.properties # Configuration file (URLs, credentials)

│ └── test/

│ ├── java/

│ │ └── com.amazon.tests/

│ │ ├── stepdefinitions/

│ │ │ ├── LoginSteps.java # Step definitions for login.feature

│ │ │ ├── ProductSteps.java # Step definitions for product selection

│ │ │ ├── CartSteps.java # Step definitions for cart actions

│ │ │ ├── PaymentSteps.java # Step definitions for payment page

│ │ │ └── LogoutSteps.java # Step definitions for logout steps

│ │ └── runners/

│ │ └── TestRunner.java # Cucumber runner integrating with TestNG

│ └── resources/

│ ├── features/

│ │ ├── login.feature # Gherkin feature file for login

│ │ ├── product.feature # Feature file for product selection

│ │ ├── cart.feature # Feature file for cart

│ │ ├── payment.feature # Feature file for payment

│ │ └── logout.feature # Feature file for logout

│ └── config/

│ └── testdata.properties # Test data or environment configs

└── target/

└── cucumber-reports/ # Generated test reports

**1. pom.xml**

* This file manages your project’s dependencies, like Selenium, Cucumber, TestNG, etc.
* It also controls how your project is built and run with Maven (a build tool).

**2. testng.xml**

* Configuration file for TestNG.
* It tells TestNG which tests to run, and how (parallel execution, groups, etc.).
* Used to run Cucumber tests with TestNG integration.

**3.1 src/main/java/com.amazon.framework/**

Contains your **main application code** (automation framework classes).

**3.1.1 base/**

* Contains setup classes that help initialize and manage browser drivers.
* Example files:
  + **DriverFactory.java** — Creates and configures browser drivers like ChromeDriver or FirefoxDriver.
  + **BaseTest.java** — Parent test class that opens and closes browsers before/after tests.

**3.1.2 pages/**

* Contains Page Object Model (POM) classes.
* Each class represents one page on Amazon’s website and contains methods to interact with page elements.
* Example:
  + **LoginPage.java** — Handles login page elements and actions (enter username, password, click login).
  + **HomePage.java** — Handles search and product selection features.
  + **ProductPage.java** — Handles adding products to cart.
  + **CartPage.java** — Manages cart operations.
  + **PaymentPage.java** — Manages payment actions.
  + **LogoutPage.java** — Handles logout operation.

**3.1.3 utils/**

* Utility/helper classes to support your framework.
* Example:
  + **ConfigReader.java** — Reads configuration like browser name, URLs from properties files.
  + **WaitUtils.java** — Contains methods for waits (wait for element to be visible, clickable, etc.) to handle page loading delays.

**3.1.4 config/**

* Contains configuration files like **config.properties** which store values such as:
  + User credentials (can be stored here or in separate files)

**3.2 src/test/java/com.amazon.tests/**

Contains your **test-related code**.

**3.2.1 stepdefinitions/**

* Classes that “glue” your Gherkin feature steps to actual Java code.
* Each method corresponds to a step in your .feature files.
* Example files:
  + **LoginSteps.java** — Implements login steps like entering username, password.
  + **ProductSteps.java** — Implements steps for searching/selecting products.
  + **CartSteps.java** — Implements steps for adding/removing products in cart.
  + **PaymentSteps.java** — Implements payment processing steps.
  + **LogoutSteps.java** — Implements logout steps.

**3.2.2 runners/**

* Contains test runner classes to start your Cucumber tests.
* **TestRunner.java** integrates Cucumber with TestNG and specifies where feature files and step definitions are located.

**3.3 src/test/resources/**

Contains resource files needed for tests.

**3.3.1 features/**

* Contains your **Gherkin .feature files** which describe test scenarios in simple English.
* Example:
  + **login.feature** — Contains login scenarios.
  + **product.feature** — Contains product selection scenarios.
  + **cart.feature**, **payment.feature**, **logout.feature** — Similarly for other scenarios.

**3.3.2 config/**

* Stores test-specific config or test data files.
* For example:
  + **testdata.properties** — Stores test data like user details, product names.

**4. target/**

* Automatically created by Maven after tests run.
* Contains generated reports, compiled code, and logs.
* **cucumber-reports/** folder inside contains reports of test executions with detailed pass/fail info.

**Summary for Beginners**

| **Folder/File** | **What it Does** |
| --- | --- |
| **pom.xml** | Manage dependencies like Selenium, Cucumber. |
| **testng.xml** | Configure and run tests with TestNG. |
| **base/** | Browser driver setup and test initialization. |
| **pages/** | Represent website pages (POM classes). |
| **utils/** | Helper classes for config and waits. |
| **config/** | Config files for URLs, browser, credentials. |
| **stepdefinitions/** | Maps Gherkin steps to Java code. |
| **runners/** | Starts the Cucumber tests with TestNG. |
| **features/** | Test scenarios written in plain English. |
| **testdata.properties** | Test data like usernames, passwords, etc. |
| **target/** | Contains reports and compiled files after run. |