```
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
                                   # Step definitions for cart actions
            — CartSteps.java
            — 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
                                  # Feature file for cart
         — cart.feature
         — payment.feature
                                     # Feature file for payment
                                  # Feature file for logout
        └─ logout.feature
        — config/
        └─ testdata.properties
                                   # Test data or environment configs
 – target/
 ucumber-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.
  - o **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:
  - o 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.