
Project Folder Structure

```
amazon-bdd-framework/  
├── pom.xml  
├── testng.xml  
├── src/  
│   ├── main/  
│   │   └── java/  
│   │       └── com.amazon.framework/  
│   │           ├── base/      # Base classes (e.g., WebDriver setup)  
│   │           ├── pages/     # Page Object Model (POM) classes  
│   │           ├── utils/     # Utility classes (e.g., config readers)  
│   │           └── config/    # Configuration files  
│   └── test/  
│       ├── java/  
│       │   └── com.amazon.tests/  
│       │       ├── stepdefinitions/ # Step definition classes  
│       │       └── runners/        # Test runner classes  
│       └── resources/  
│           ├── features/      # Gherkin feature files (*.feature)  
│           └── config/        # Test data, environment configs, etc.  
└── target/  
    └── cucumber-reports/    # Generated test reports
```

Feature File (Gherkin Syntax)

Located at `src/test/resources/features/amazon_shopping.feature`:
Feature: Amazon Shopping Flow

Scenario: Complete shopping process on Amazon
 Given User launches the Amazon application
 When User logs in with username "testuser@example.com" and password "password123"
 And User searches for "Wireless Mouse"
 And User selects the first product from the search results
 And User adds the product to the cart
 And User proceeds to the payment page
 Then User logs out of the application

Step Definitions

Located at
`src/test/java/com/amazon/tests/stepdefinitions/AmazonShoppingSteps.java`:
`package com.amazon.tests.stepdefinitions;`

```

import com.amazon.framework.base.BaseTest;
import com.amazon.framework.pages.*;
import io.cucumber.java.en.*;
import org.openqa.selenium.WebDriver;

public class AmazonShoppingSteps extends BaseTest {

    WebDriver driver = getDriver();
    HomePage homePage;
    LoginPage loginPage;
    SearchResultsPage searchResultsPage;
    ProductPage productPage;
    CartPage cartPage;
    PaymentPage paymentPage;

    @Given("User launches the Amazon application")
    public void launchApplication() {
        driver.get("https://www.amazon.com");
        homePage = new HomePage(driver);
    }

    @When("User logs in with username {string} and password {string}")
    public void userLogsIn(String username, String password) {
        loginPage = homePage.clickSignIn();
        loginPage.enterUsername(username);
        loginPage.clickContinue();
        loginPage.enterPassword(password);
        loginPage.clickSignIn();
    }

    @When("User searches for {string}")
    public void userSearchesFor(String product) {
        homePage.enterSearchTerm(product);
        searchResultsPage = homePage.clickSearch();
    }

    @When("User selects the first product from the search results")
    public void selectFirstProduct() {
        productPage = searchResultsPage.selectFirstProduct();
    }

    @When("User adds the product to the cart")

```

```

public void addProductToCart() {
    productPage.clickAddToCart();
}

@When("User proceeds to the payment page")
public void proceedToPayment() {
    cartPage = productPage.goToCart();
    paymentPage = cartPage.proceedToCheckout();
}

@Then("User logs out of the application")
public void userLogsOut() {
    homePage.logout();
    driver.quit();
}
}

```

Test Runner Class

Located at `src/test/java/com/amazon/tests/runners/TestRunner.java`:

```
package com.amazon.tests.runners;
```

```
import io.cucumber.testng.AbstractTestNGCucumberTests;
import io.cucumber.testng.CucumberOptions;
```

```

@CucumberOptions(
    features = "src/test/resources/features",
    glue = {"com.amazon.tests.stepdefinitions"},
    plugin = {"pretty", "html:target/cucumber-reports"},
    monochrome = true
)
public class TestRunner extends AbstractTestNGCucumberTests {
}

```

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- **Parallel Execution:** Configure parallel test execution using TestNG to speed up test runs.
 - **Error Handling:** Implement proper exception handling and logging to make debugging easier.