**Practice Project:**

**Amazon Automation With Cucumber**

**Source Code:**

**buy\_physics\_books.feature**

Feature: Buy Mobile Phone

Scenario: A user must be able to buy physics books on Amazon

Given a user is on the landing page of Amazon

When he enters physics books in the search box

And he selects the 3rd option from the drop-down list

And he select rating 4star and above from left side bar

And he clicks on the first search result

And he switches focus on the new tab

And he clicks on Add to Cart button

And he verify the text - "Added to Cart" is displayed

And he clicks on Proceed to Buy button

Then he must be able to purchase the book successfully.

**BuyPhysicsBooksSteps.java**

**package** in.amazon.teststeps;

**import** java.util.ArrayList;

**import** org.testng.Assert;

**import** io.cucumber.java.en.Given;

**import** io.cucumber.java.en.Then;

**import** io.cucumber.java.en.When;

**public** **class** BuyPhysicsBooksSteps **extends** Driver{

@Given("a user is on the landing page of Amazon")

**public** **void** a\_user\_is\_on\_the\_landing\_page\_of\_amazon() {

}

@When("he enters physics books in the search box")

**public** **void** he\_enters\_physics\_books\_in\_the\_search\_box() {

*landingPage*.enterSearchBox("physics books");

}

@When("he selects the 3rd option from the drop-down list")

**public** **void** he\_selects\_the\_3rd\_option\_from\_the\_drop\_down\_list() {

*landingPage*.searchItem();

}

@When("he select rating 4star and above from left side bar")

**public** **void** he\_select\_rating\_4star\_and\_above\_from\_left\_side\_bar() {

*allBooksPage*.selectFourStarAndAbove();

}

@When("he clicks on the first search result")

**public** **void** he\_clicks\_on\_the\_first\_search\_result() {

*allBooksPage*.clickFirstItem();

}

@When("he switches focus on the new tab")

**public** **void** he\_switches\_focus\_on\_the\_new\_tab() {

ArrayList<String> tabs = **new** ArrayList<>(*driver*.getWindowHandles());

*driver*.switchTo().window(tabs.get(1));

}

@When("he clicks on Add to Cart button")

**public** **void** he\_clicks\_on\_add\_to\_cart\_button() {

*buyBookPage*.clickAddToCartBtn();

}

@When("he verify the text - {string} is displayed")

**public** **void** he\_verify\_the\_text\_is\_displayed(String string) {

String expectedText = "Added to Cart";

String actualText = *buyBookPage*.getAddedToCartText();

Assert.*assertEquals*(actualText, expectedText);

}

@When("he clicks on Proceed to Buy button")

**public** **void** he\_clicks\_on\_proceed\_to\_buy\_button() {

*buyBookPage*.clickproceedToBuyBtn();

}

@Then("he must be able to purchase the book successfully.")

**public** **void** he\_must\_be\_able\_to\_purchase\_the\_book\_successfully() {

String expectedText = "Sign in";

String actualText = *signin*.getSignInText();

Assert.*assertEquals*(actualText, expectedText);

}

}

**Tools.java**

**package** in.amazon.teststeps;

**import** org.openqa.selenium.WebDriver;

**public** **class** Tools {

**protected** **static** WebDriver *driver*;

}

**Driver.java**

**package** in.amazon.teststeps;

**import** org.openqa.selenium.chrome.ChromeDriver;

**import** in.amazon.pages.AllBooksPage;

**import** in.amazon.pages.BuyBookPage;

**import** in.amazon.pages.LandingPage;

**import** in.amazon.pages.signIn;

**public** **class** Driver **extends** Tools {

**protected** **static** LandingPage *landingPage*;

**protected** **static** AllBooksPage *allBooksPage*;

**protected** **static** BuyBookPage *buyBookPage*;

**protected** **static** signIn *signin*;

**public** **static** **void** init() {

*driver* = **new** ChromeDriver();

*driver*.manage().window().maximize();

*driver*.get("https://amazon.in");

*landingPage* = **new** LandingPage(*driver*);

*allBooksPage* = **new** AllBooksPage(*driver*);

*buyBookPage* = **new** BuyBookPage(*driver*);

*signin* = **new** signIn(*driver*);

}

}

**BeforeAfter.java**

**package** in.amazon.teststeps;

**import** io.cucumber.java.After;

**import** io.cucumber.java.Before;

**import** io.cucumber.java.Scenario;

**public** **class** BeforeAfter **extends** Tools{

@Before

**public** **void** setup(Scenario scenario) {

Driver.*init*();

}

@After

**public** **void** tearDown() {

*driver*.quit();

}

}

**TestRunner.java**

**package** in.amazon.teststeps;

**import** io.cucumber.testng.AbstractTestNGCucumberTests;

**import** io.cucumber.testng.CucumberOptions;

@CucumberOptions(

features = "Features",

glue = "in.amazon.teststeps"

)

**public** **class** TestRunner **extends** AbstractTestNGCucumberTests{

}

**LandingPage.java**

**package** in.amazon.pages;

**import** java.time.Duration;

**import** org.openqa.selenium.Keys;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.interactions.Actions;

**import** org.openqa.selenium.support.FindBy;

**import** org.openqa.selenium.support.PageFactory;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** LandingPage {

**private** Actions actions;

**private** WebDriverWait wait;

@FindBy(id = "twotabsearchtextbox")

**private** WebElement searchBox;

@FindBy(xpath = "//div[contains(@class,'autocomplete-results-container')]")

**private** WebElement autoCompleteBox;

**public** LandingPage(WebDriver driver) {

PageFactory.*initElements*(driver, **this**);

actions = **new** Actions(driver);

wait = **new** WebDriverWait(driver, Duration.*ofSeconds*(90));

}

**public** **void** enterSearchBox(String item) {

searchBox.sendKeys(item);

}

**public** **void** searchItem() {

wait.until(ExpectedConditions.*visibilityOfAllElements*(autoCompleteBox));

actions.sendKeys(Keys.***ARROW\_DOWN***).sendKeys(Keys.***ARROW\_DOWN***).sendKeys(Keys.***ARROW\_DOWN***).sendKeys(Keys.***ENTER***).build().perform();

}

}

**AllBooksPage.java**

**package** in.amazon.pages;

**import** java.time.Duration;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.support.FindBy;

**import** org.openqa.selenium.support.PageFactory;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** AllBooksPage {

**private** WebDriverWait wait;

@FindBy(xpath = "(//section)[1]")

**private** WebElement fourStarAndAbove;

@FindBy(xpath = "(//div[contains(@class, 's-image-fixed-height')])[1]")

**private** WebElement firstItem;

**public** AllBooksPage(WebDriver driver) {

PageFactory.*initElements*(driver, **this**);

wait = **new** WebDriverWait(driver, Duration.*ofSeconds*(90));

}

**public** **void** selectFourStarAndAbove() {

wait.until(ExpectedConditions.*visibilityOfAllElements*(fourStarAndAbove));

fourStarAndAbove.click();

}

**public** **void** clickFirstItem() {

wait.until(ExpectedConditions.*visibilityOfAllElements*(firstItem));

firstItem.click();

}

}

**BuyBookPage.java**

**package** in.amazon.pages;

**import** java.time.Duration;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.support.FindBy;

**import** org.openqa.selenium.support.PageFactory;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** BuyBookPage {

**private** WebDriverWait wait;

@FindBy(id = "add-to-cart-button")

**private** WebElement addToCartBtn;

@FindBy(id = "NATC\_SMART\_WAGON\_CONF\_MSG\_SUCCESS")

**private** WebElement addedToCartText;

@FindBy(xpath = "//input[contains(@name, 'proceedToRetailCheckout')]")

**private** WebElement proceedToBuyBtn;

**public** BuyBookPage(WebDriver driver) {

PageFactory.*initElements*(driver, **this**);

wait = **new** WebDriverWait(driver, Duration.*ofSeconds*(90));

}

**public** **void** clickAddToCartBtn() {

addToCartBtn.click();

}

**public** String getAddedToCartText() {

String text = addedToCartText.getText();

**return** text;

}

**public** **void** clickproceedToBuyBtn() {

wait.until(ExpectedConditions.*visibilityOfAllElements*(proceedToBuyBtn));

proceedToBuyBtn.click();

}

}

**signIn.java**

**package** in.amazon.pages;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.WebElement;

**import** org.openqa.selenium.support.FindBy;

**import** org.openqa.selenium.support.PageFactory;

**public** **class** signIn {

@FindBy(xpath = "//h1[contains(@class, 'small')]")

**private** WebElement signInText;

**public** signIn(WebDriver driver) {

PageFactory.*initElements*(driver, **this**);

}

**public** String getSignInText() {

String text = signInText.getText();

**return** text;

}

}