

# Page Object Design Pattern

## LandingPage.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 LandingPage {

    @FindBy(linkText = "Mobiles")
    private WebElement mobiles;

    public LandingPage(WebDriver driver) {
        PageFactory.initElements(driver, this);
    }

    public void clickMobiles() {
        mobiles.click();
    }
}
```

## AllMobileBrands.java

```
package in.Amazon.Pages;

import java.time.Duration;
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 AllMobileBrands {
    private Actions actions;
    private WebDriverWait wait;

    @FindBy(linkText = "Mobiles & Accessories")
    private WebElement mobilesAndAccessories;

    @FindBy(linkText = "Apple")
    private WebElement apple;

    public AllMobileBrands(WebDriver driver) {
        PageFactory.initElements(driver, this);
        actions = new Actions(driver);
        wait = new WebDriverWait(driver, Duration.ofSeconds(60));
    }

    public void hoverOverMobilesAndAccessories() {
        actions.moveToElement(mobilesAndAccessories).build().perform();
    }

    public void clickApple() {
        wait.until(ExpectedConditions.visibilityOf(apple));
        apple.click();
    }
}
```

### ApplePhones.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 ApplePhones {

    @FindBy(xpath = "(//div[contains(@class, 'card-container')])[1]")
    private WebElement firstMobile;

    public ApplePhones(WebDriver driver) {
        PageFactory.initElements(driver, this);
    }

    public void clickFirstMobile() {
        firstMobile.click();
    }

}
```

### BuyMobilePhoneTest.java

```
package in.Amazon.TestScripts;

import java.util.ArrayList;
import org.testng.Assert;
import org.testng.annotations.Test;
import in.Amazon.Pages.AllMobileBrands;
```

```
import in.Amazon.Pages.ApplePhones;

import in.Amazon.Pages.BuyPhone;

import in.Amazon.Pages.LandingPage;

import in.Amazon.Pages.SignIn;


public class BuyMobilePhoneTest extends BaseTest {

    @Test

    public void BuyMobile() {

        // 4. Click on 'Mobiles' in the navigation bar

        LandingPage landingPage = new LandingPage(driver);

        landingPage.clickMobiles();


        // 5. Hover the pointer over the 'Mobiles & Accessories'

        AllMobileBrands allMobileBrands = new AllMobileBrands(driver);

        allMobileBrands.hoverOverMobilesAndAccessories();


        // 6. Click on 'Apple' in the sub-menu

        allMobileBrands.clickApple();


        // 7. Click first available phone

        ApplePhones applePhones = new ApplePhones(driver);

        applePhones.clickFirstMobile();


        // 8. Switch focus on new tab

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

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


        // 9. Click on 'Buy Now' button

        BuyPhone buyPhone = new BuyPhone(driver);

        buyPhone.clickBuyNowBtn();

    }

}
```

```
        // 10. Verify user sees the text 'Sign in' on the page
        SignIn signIn = new SignIn(driver);
        String expectedText = "Sign in";
        String actualText = signIn.getSignInText();
        Assert.assertEquals(actualText, expectedText);
    }

}
```