Package: Pages

Class: AddToCart

package pages;

import java.time.Duration;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;

```java
public class AddToCart {

        public void addintocart(WebDriver driver) {
                driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(5));
                driver.findElement(By.id("add-to-cart-button")).click();



        }


}
```

Class: HomePage

Package pages;

```java
import java.time.Duration;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;

public class HomePage {
    By search_bar = By.id("twotabsearchtextbox");
    By submit_button = By.id("nav-search-submit-button");

    //   WebElements

    public void SearchProduct(WebDriver driver) {

String URL = "https://www.amazon.in/";
driver.get(URL);
driver.manage().window().maximize();
driver.manage().timeouts().implicitlyWait(Duration.ofSeco
nds(5));
driver.findElement(search_bar).sendKeys("macbook");
driver.findElement(submit_button).click();

    }
}
```

Class: List_of_products

```java
package pages;
```

```java
import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.ArrayList;

import java.util.List;


import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.interactions.Actions;


public class List_of_products {

    //Webelements


    public String[] PrintFirst4Products_Name(WebDriver driver) {

            List<WebElement> macbookList = driver.findElements(By.xpath("//*[@class=\"a-size-
medium a-color-base a-text-normal\"]"));

            System.out.println(macbookList.size());

            String arrPro_name[] = new String[macbookList.size()];

            int cnt = 0;

                    for(WebElement rb : list_of_earpods) {



                            String strname = rb.getText();

                            String strname1 = strname.substring(0,20);

                            arrPro_name[cnt] = strname1;
```

```java
                    cnt++;

        }

            for (int indx = 0; indx < 4; indx++) {

                    System.out.println(arrPro_name[indx]);

            }


    return arrPro_name;


    }




    public String[] PrintFirst4Products_Price(WebDriver driver) {


    List<WebElement> list_of_price = driver.findElements(By.xpath("//*[@class=\"a-price-
whole\"]"));
                    System.out.println(list_of_price.size());

                    String arrPro_price[] = new String[list_of_price.size()];

                    int cont=0;

                    for(WebElement rb : list_of_price) {

                            String strname = rb.getText();

                            strname = strname.replace(",", "");

                            arrPro_price[cont] = strname;

                            cont++;

        }       System.out.println("priting price ");

                    for (int indx = 0; indx < 4; indx++) {

                    System.out.println(arrPro_price[indx]);

        }


                    return arrPro_price;


    }
```

```java
    public void ValidateListofProducts(WebDriver driver, String [] arrPro_name , String [] arrPro_price
) {


//        String[] arrPro_name = PrintFirst4Products_Name(driver);

//        String[] arrPro_price =



//                database connection
                String connstring = "jdbc:mysql://localhost:3306/project";
                String strquery = "select * from macbook ";



                System.out.println("...................");

                String arrPro_namefromDB[] = new String[4];

                String arrPro_pricefromDB[] = new String[4];



                try {

                        Connection conn = DriverManager.getConnection(connstring,"root","root");

                        Statement statement = conn.createStatement();

                        ResultSet rs = statement.executeQuery(strquery);
//                System.out.println(rs.next());

                        int x=0;

                        while(rs.next()) {

                        System.out.println(rs.getString(2)+" "+rs.getString(3)+" "+rs.getString(1));

                        arrPro_namefromDB[x] = rs.getString(2);
                        arrPro_pricefromDB[x] = rs.getString(3);

                        x++;


                        }

                        } catch (SQLException e) {

                // TODO Auto-generated catch block
```

```java
                    e.printStackTrace();

                }

                System.out.println("printing arr_price list");

//                  for (int indx = 0; indx < 4; indx++) {

//                          if (arrPro_name[indx].equals(arrPro_namefromDB[indx])  &&
(arrPro_price[indx].equals(arrPro_pricefromDB[indx]))) {

//                                  System.out.println(arrPro_name[indx]+ " "+"product
matches");

//

//

//                          }else {

//    System.out.println(arrPro_name[indx]+" "+"product doesnt matches");

//                          }

//

//              }


                for (int indx = 0; indx < 4; indx++) {

                        Boolean flag=false;

                        for(int j=0; j<4; j++) {


                                if (arrPro_name[indx].equals(arrPro_namefromDB[j])  &&
(arrPro_price[indx].equals(arrPro_pricefromDB[j]))) {

//                                  System.out.println(arrPro_name[indx]+ "
"+"product matches");

                                        flag=true;

                                        break;

                                }

//                          System.out.println(arrPro_name[indx]+" "+"product doesnt
matches");



                        }
```

```java
//                          boolean flag = false;

                    if (flag==true) {

                                    System.out.println(arrPro_name[indx]+ " "+"product
matches");
//                                  ClickOnProduct(driver);

                            }else {

                                    System.out.println(arrPro_name[indx]+" "+"product doesnt
matches");

                            }
                    }




            System.out.println("everything working and fine");




    }




    public void ClickOnProduct(WebDriver driver) {
//          Actions action = new Actions(driver);

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

//          action.keyDown(Keys.CONTROL).build().perform();
```

```java
        driver.findElement(By.xpath("//*[contains(text(),\"2020          Apple          MacBook
        A\")]")).click();
//      action.keyUp(Keys.CONTROL).build().perform();

        ArrayList<String>Win_List1   = new ArrayList<String>(driver.getWindowHandles());

        driver.switchTo().window(Win_List1.get(0));

        driver.close();

        driver.switchTo().window(Win_List1.get(1));




    }



}
```

Package:TestCase

Class:Testcases

package testCases;

import java.time.Duration;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import pages.AddToCart;

import pages.HomePage;

```java
import pages.List_of_products;

public class TestCases {

    public void TestPrintListOfProducts() {



//       driver
        List_of_products listPage = new List_of_products ();
        HomePage home = new HomePage();
 WebDriver driver = new ChromeDriver();
driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(5));


        home.SearchProduct(driver);
listPage.PrintFirst4Products_Name(driver);
listPage.PrintFirst4Products_Price(driver);




        driver.close();



    }



public void ValidateListOfProducts() {

//       driver
        List_of_products  listPage = new List_of_products ();
        HomePage home = new HomePage();
```

```java
 WebDriver driver = new ChromeDriver();

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(5));


    home.SearchProduct(driver);

    listPage.ValidateListofProducts(driver, listPage.PrintFirst4Products_Name(driver),
listPage.PrintFirst4Products_Price(driver));

//     listPage.ClickOnProduct(driver);

//     AddtoCart




    driver.close();



  }



public void clickonproducts() {
        WebDriver driver = new ChromeDriver();

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(5));


    HomePage home =new HomePage();

    List_of_products listpage = new List_of_products ();

     AddToCart cart = new AddToCart();


     home.SearchProduct(driver);

listpage.ClickOnProduct(driver);

cart.addintocart(driver);
```

```
//        cart.viewCart(driver);


          driver.close();
```

```
}
```

```
}
```

Class:TestExecutionn

```
package testCases;


public class TestExecutionn {
```

```java
public static void main(String[] args) {

TestCases testCases = new TestCases();

testCases.TestPrintListOfProducts();

testCases.ValidateListOfProducts();

testCases.clickonproducts();

    }


}
```