Project: Automate Web Application Using Test-Ng

Pom.xml-

```xml
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <groupId>com.testng.demo</groupId>
  <artifactId>AutomateWebApplicationTestNg</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <packaging>jar</packaging>

  <name>AutomateWebApplicationTestNg</name>
  <url>http://maven.apache.org</url>

  <properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>3.8.1</version>
      <scope>test</scope>
    </dependency>
    <dependency>
        <groupId>org.seleniumhq.selenium</groupId>
        <artifactId>selenium-java</artifactId>
        <version>3.141.59</version>
    </dependency>
    <dependency>
            <groupId>org.testng</groupId>
            <artifactId>testng</artifactId>
            <version>6.14.3</version>
            <scope>test</scope>
        </dependency>
  </dependencies>
</project>
```

LoginTest.java-

```java
package com.login.demo;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;


public class LoginTest {

    WebDriver driver;
    public void launchBrowser() {
        System.setProperty("webdriver.chrome.driver", "E:\\Mphasis Phase
5\\chromedriver_win32\\chromedriver.exe");
        driver = new ChromeDriver();
        driver.manage().window().maximize();

    }

    public void closeBrowser() {

        driver.quit();

    }

    public void performTest() throws InterruptedException {
        Thread.sleep(2000);
        driver.get("https://leetcode.com/accounts/login/");
        WebElement username = driver.findElement(By.id("id_login"));
        WebElement password = driver.findElement(By.id("id_password"));
        WebElement login = driver.findElement(By.id("signin_btn"));
        // Entering credentials
        System.out.println("Login Automation Started....");
        username.clear();// clear id_login field if any filled
        username.click();
        username.sendKeys("gauravmishra@gmail.com");// use your email id
        System.out.println("Username is Entered.");

        password.clear();// clear id_password field if any filled
        password.click();
```

```java
        password.sendKeys("gaurav@1234");// use your password
        System.out.println("Password is Entered");
        Thread.sleep(2000);
        login.click();
        Thread.sleep(2000);
        System.out.println("Clicked On Login Button");

    }

    @Test
    public void loginTest() {

        LoginTest obj = new LoginTest();
        try {
            obj.launchBrowser();
            obj.performTest();
            obj.closeBrowser();
        } catch (InterruptedException e) {
            e.printStackTrace();
        }
    }

    @BeforeTest
    public void beforeTest() {
        System.out.println("Testing is Going to start..");

    }

    @AfterTest
    public void afterTest() {
        System.out.println("Testing is Done!");
    }


}
```

RegistrationTest.java-

```java
package com.registration.demo;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;


public class RegistrationTest {

    WebDriver driver;

    public void launchBrowser() {
        System.setProperty("webdriver.chrome.driver", "E:\\Mphasis Phase
5\\chromedriver_win32\\chromedriver.exe");
        driver = new ChromeDriver();
        driver.manage().window().maximize();

    }

    public void closeBrowser() {

        driver.quit();

    }

    public void performTest() throws InterruptedException {
        Thread.sleep(2000);
        driver.get(
                "https://www.facebook.com/reg/?privacy_mutation_token=eyJ0eXBlIjo
wLCJjcmVhdGlvbl90aW1lIjoxNjY0NTIxNTM2LCJjYWxsc2l0ZV9pZCI6MzYzOTY5MDQ0ODc4OTI4fQ%3
D%3D");
        System.out.println("Facebok Opened in Browser");
        Thread.sleep(3000);
        driver.findElement(By.name("firstname")).sendKeys("Gaurav");
        System.out.println("First Name Entered");
        driver.findElement(By.name("lastname")).sendKeys("Mishra");
        System.out.println("Last Name Entered");
        driver.findElement(By.name("reg_email__")).sendKeys("gauravmishra@gmail.c
om");
        System.out.println("Email id Entered");
```

```java
        driver.findElement(By.name("reg_email_confirmation__")).sendKeys("gauravm
ishra@gmail.com");
        System.out.println("Reentered Email Id");
        driver.findElement(By.id("password_step_input")).sendKeys("gaurav@0143");
        System.out.println("Password Entered");
        driver.findElement(By.name("birthday_day")).sendKeys("04");
        System.out.println("Birth Day Selected");
        driver.findElement(By.name("birthday_month")).sendKeys("10");
        System.out.println("Birth Month Selected");
        driver.findElement(By.name("birthday_year")).sendKeys("2000");
        System.out.println("Birth Year Selected");
        driver.findElement(By.xpath("//label[contains(.,'Male')]")).click();
        System.out.println("Sex Selected");
        Thread.sleep(3000);
        driver.findElement(By.name("websubmit")).click();
        Thread.sleep(3000);
        System.out.println("Clicked On SignUp Button");

    }

    @Test
    public void registrationTest() {
        RegistrationTest obj = new RegistrationTest();

        try {
            obj.launchBrowser();
            obj.performTest();
            obj.closeBrowser();
        } catch (InterruptedException e) {
            e.printStackTrace();
        }
    }

    @BeforeTest
    public void beforeTest() {
        System.out.println("Testing is Going to start..");

    }

    @AfterTest
    public void afterTest() {
        System.out.println("Testing is Done!");
    }

}
```

SearchTest.java-

```java
package com.search.demo;

import java.util.List;
import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;


public class SearchTest {

    WebDriver driver;

    public void launchBrowser() {
        System.setProperty("webdriver.chrome.driver", "E:\\Mphasis Phase
5\\chromedriver_win32\\chromedriver.exe");
        driver = new ChromeDriver();
        driver.manage().window().maximize();

    }

    public void closeBrowser() {

        driver.quit();

    }

    @SuppressWarnings("deprecation")
    public void performTest() throws InterruptedException {
        Thread.sleep(2000);
        driver.get("https://www.amazon.in/");
        Thread.sleep(2000);

        driver.findElement(By.id("twotabsearchtextbox")).sendKeys("charger");
```

```java
        driver.manage().timeouts().implicitlyWait(4, TimeUnit.SECONDS);
        driver.findElement(By.id("nav-search-bar-form")).submit();
        driver.findElement(By.id("a-autoid-0-announce")).click();
        driver.findElement(By.id("s-result-sort-select_2")).click();
        List<WebElement> resultsList =
driver.findElements(By.xpath(".//span[@class='a-size-medium a-color-base a-text-
normal']"));
        int size = resultsList.size();
        System.out.println("Size of list = " + size);
        resultsList.get(2).click();
        System.out.println("The title of the page is :" + driver.getTitle());
        //Add to cart
         driver.findElement(By.cssSelector("#add-to-cart-button")).click();


    }

    @Test
    public void searchTest() {
        SearchTest obj = new SearchTest();
        try {
            obj.launchBrowser();
            obj.performTest();
            //obj.closeBrowser();
        } catch (InterruptedException e) {
            e.printStackTrace();
        }
    }

    @BeforeTest
    public void beforeTest() {
        System.out.println("Testing is Going to start..");

    }

    @AfterTest
    public void afterTest() {
        System.out.println("Testing is Done!");
    }


}
```