Source code- Automate a Web Application (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 https://maven.apache.org/xsd/maven-4.0.0.xsd">
 <modelVersion>4.0.0</modelVersion>
 <groupId>coms</groupId>
 <artifactId>PracticeProject2</artifactId>
 <version>0.0.1-SNAPSHOT</version>
 <packaging>jar</packaging>

	<name>PracticeProject2</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>

	<!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java -->
		<dependency>
			<groupId>org.seleniumhq.selenium</groupId>
			<artifactId>selenium-java</artifactId>
			<version>3.141.59</version>
		</dependency>

		<!-- https://mvnrepository.com/artifact/io.github.bonigarcia/webdrivermanager -->
		<dependency>
			<groupId>io.github.bonigarcia</groupId>
			<artifactId>webdrivermanager</artifactId>
			<version>5.4.0</version>
		</dependency>
```

```xml
<!-- https://mvnrepository.com/artifact/org.testng/testng -->
        <dependency>
            <groupId>org.testng</groupId>
            <artifactId>testng</artifactId>
            <version>7.8.0</version>
            <scope>test</scope>
        </dependency>
    </dependencies>

</project>
```

CombinedTests.java

```java
package com.example;

import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.Test;
import java.util.concurrent.TimeUnit;
import java.time.Duration;

public class CombinedTests {
        private WebDriver wd;

        @BeforeMethod
        public void beforeMethod() {
                System.setProperty("webdriver.chrome.driver","C:\\Users\\surya\\Documents\\phase5
WorkSpace\\chromedriver-win64\\chromedriver.exe");
                wd = new ChromeDriver();
        }

        @Test(priority = 1)
        public void googleSearchTest() {
                wd.get("https://google.com");
                wd.manage().window().maximize();
                wd.manage().timeouts().implicitlyWait(Duration.ofMinutes(2).getSeconds(),
TimeUnit.SECONDS);
                WebElement textField = wd.findElement(By.name("q"));
                textField.sendKeys("What is Testing?");
                WebElement btnRef = wd.findElement(By.name("btnK"));
```

```java
            btnRef.sendKeys(Keys.ENTER);
            try {
            Thread.sleep(6000);
            }
            catch (Exception e) {
                    // TODO: handle exception
            }
    }

    @Test(priority = 2)
    public void loginTest() throws InterruptedException {
            // Open the website
            wd.get("https://www.saucedemo.com/");

            // Perform login
            wd.findElement(By.name("user-name")).sendKeys("standard_user");
            wd.findElement(By.id("password")).sendKeys("secret_sauce");

    wd.findElement(By.xpath("/html/body/div/div/div[2]/div[1]/div/div/form/input")).click();
            Thread.sleep(6000);
    }

    @Test(priority = 3)
            public void registrationTest() throws InterruptedException {
            wd.get("https://nxtgenaiacademy.com/demo-site/");

            // Registration form
            wd.findElement(By.id("vfb-5")).sendKeys("Pramod");
            wd.findElement(By.id("vfb-7")).sendKeys("Surya");
            wd.findElement(By.name("vfb-31")).click();

            // Address
            wd.findElement(By.cssSelector("input#vfb-13-address")).sendKeys("Yelahanka");
            wd.findElement(By.cssSelector("input#vfb-13-address-2")).sendKeys("Bangalore");
            wd.findElement(By.cssSelector("input#vfb-13-state")).sendKeys("India Karnataka");
            wd.findElement(By.cssSelector("input#vfb-13-zip")).sendKeys("India");

            // Country
            WebElement dropdownElement = wd.findElement(By.className("select2-
selection__arrow"));
            dropdownElement.click();
            WebElement option = wd.findElement(By.xpath("//li[contains(text(),'India')]"));
            option.click();

            // Email

    wd.findElement(By.xpath("/html/body/div[2]/div[2]/div[2]/div[1]/div/section/div/div[1]/div/div/
div/div/div/form/fieldset[1]/ul/li[5]/input")).sendKeys("surya621@gmail.com");
```

```java
// Date
WebElement dateInput = wd.findElement(By.id("vfb-18"));
dateInput.clear();
String desiredDate = "08/20/23";
dateInput.sendKeys(desiredDate);

// Phone
wd.findElement(By.xpath("//*[@id=\"vfb-19\"]")).sendKeys("2545478545");

// Checkboxes
WebElement checkbox1 = wd.findElement(By.id("vfb-20-0"));
if (!checkbox1.isSelected()) {
        checkbox1.click();
}

WebElement checkbox2 = wd.findElement(By.id("vfb-20-3"));
        if (!checkbox2.isSelected()) {
        checkbox2.click();
}

        // Additional Info

wd.findElement(By.xpath("/html/body/div[2]/div[2]/div[2]/div[1]/div/section/div/div[1]/div/div/
div/div/div/form/fieldset[1]/ul/li[10]/div/textarea")).sendKeys("I am your Best Friend okey!");

                // Age
                wd.findElement(By.id("vfb-3")).sendKeys("99");
                wd.findElement(By.xpath("//*[@id=\"vfb-4\"]")).click();
                Thread.sleep(6000);
        }

        @AfterMethod
        public void afterMethod() throws InterruptedException {
                if(wd!=null) {
                        wd.quit();
                }
        }
}
```