**Assisted Practice: 2.1 Perform All Test Annotations**

This section will guide you to:

* Implement @Test and other related Annotations

**Development Environment**

* Eclipse IDE for Enterprise Java Developers v2019-03 (4.11.0)
* JRE: OpenJDK Runtime Environment 11.0.2
* TestNG

This lab has six subsections, namely:

* + 1. Creating a simple Java project
    2. Installing TestNG
    3. Adding TestNG libraries to the Class Path
    4. Creating a class file named TestAnnotations
    5. Running the project as TestNG
    6. Pushing the code to your GitHub repositories

**Step 2.1.1:** Creating a simple Java project

* Open Eclipse
* Go the **File** menu. Choose **New->Java Project**
* Enter the project name as **Annotations**. Click on **Next**
* This will create the project files in the Project Explorer

**Step 2.1.2:** Installing TestNG

* TestNG is installed as an eclipse plugin in your practice lab. (Refer FSD: Lab Guide - Phase 5)

**Step 2.1.3:** Adding TestNG libraries to the Class Path

* In the Project Explorer, right click on **Annotations**
* Select **Properties**. Select **Java Build Pat**h from the list. Go to **Libraries**
* Click on **Add Library.** Select **TestNG**. Click on **Next**. Click on **Finish**
* Click on **Apply and Close**

**Step 2.1.4:** Creating a class file named TestAnnotations

* In the Project Explorer, expand **Annotations->Java Resources**
* Right click on **src** and choose **New->Class**
* In **Class Name,** enter **TestAnnotations**. In **Package Name,** enter **com.testannotations** and click on **Finish**
* Enter the following code:

**package** com.testannotations;

**import** org.testng.annotations.\*;

**public** **class** TestAnnotations {

@Test

**public** **void** Test1() {

System.***out***.println("Test1 Executed");

}

@Test

**public** **void** Test2() {

System.***out***.println("Test2 Executed");

}

@BeforeTest

**public** **void** beforeTest() {

System.***out***.println("BeforeTest Executed");

}

@AfterTest

**public** **void** AfterTest() {

System.***out***.println("AfterTest Executed");

}

@BeforeMethod

**public** **void** beforeMethod() {

System.***out***.println("BeforeMethod Executed");

}

@AfterMethod

**public** **void** afterMethod() {

System.***out***.println("AfterMethod Executed");

}

@BeforeClass

**public** **void** beforeClass() {

System.***out***.println("BeforeClass Executed");

}

@AfterClass

**public** **void** afterClass() {

System.***out***.println("AfterClass Executed");

}

}

**Step 2.1.5:** Running the project as TestNG

* Right click on **TestAnnotations** class. Click on **TestNG->Convert to TestNG**
* Click on **Finish.** It will create a **TestNG.xml** file. Open that file
* Right click. Select **Run As ->TestNG Suite**

**Step 2.1.6:** Pushing the code to your GitHub repositories

* Open your command prompt and navigate to the folder where you have created your files.

**cd <folder path>**

* Initialize your repository using the following command:

**git init**

* Add all the files to your git repository using the following command:

**git add .**

* Commit the changes using the following command:

**git commit . -m “Changes have been committed.”**

* Push the files to the folder you initially created using the following command:

**git push -u origin master**