

2. You are given a project to work with groups attribute of @Test and perform parallel execution.

Step 1: Creating a simple Java project

- Open Eclipse.
- Go to the File menu and select New->Java Project.
- Enter the project name as Parallel Tests. Click on Next.
- This will create the project files in the Project Explorer.

Step 2: Downloading Selenium WebDriver jar, chromedriver.exe, and firefoxdriver.exe

- Selenium WebDriver is already installed in your Practice lab. Refer QA to QE lab guide for Phase 2 for more information.
- Go to <https://selenium.dev/thirdparty/>
- To download chromedriver.exe, click on Google ChromeDriver and select the appropriate version as per your Chrome version.
- To download firefoxdriver.exe, click on Microsoft GeckoDriver

Step 3: Adding the Web Driver dependency in the project

- In the Project Explorer, right-click on Parallel Tests.
- Select Properties. Select Java Build Path from the list. Go to Libraries.
- Click on Add External JARs and browse the location where you have downloaded the JAR files.
- Select JARs from the root folder and the libs folder.
- Click on Apply and Close.
- Copy the chromedriver.exe and geckodriver.exe, and paste it your project creating a resource folder.

Step 4: Installing TestNG

- TestNG is already installed in your Practice labs. To learn about its directory details you can refer to the lab guide for Phase 2.

Step 5: Adding TestNG libraries to the Class Path

- In the Project Explorer, right-click on Parallel Tests.
- Select Properties. Select Java Build Path from the list. Go to Libraries.
- Click on Add Library. Select TestNG. Click on Next. Now, click on Finish.

- Click on Apply and Close.

Step 6: Creating a Java class named ParallelTest.java

- In the Project Explorer, expand Parallel Tests->Java Resources.
- Right-click on src and select New->Class.
- In Class Name, enter ParallelTests and click on Finish. In Package Name, enter com.parallel and click on Finish.
- Enter the following code:

```
package com.parallel;
```

```
import org.openqa.selenium.By;
```

```
import org.openqa.selenium.WebDriver;
```

```
import org.openqa.selenium.chrome.ChromeDriver;
```

```
import org.openqa.selenium.firefox.FirefoxDriver;
```

```
import org.testng.annotations.Test;
```

```
public class ParallelTests {
```

```
    WebDriver driver;
```

```
    @Test(groups="Chrome")
```

```
    public void LaunchChrome() {
```

```
        System.setProperty("webdriver.chrome.driver", "./Resources/chromedriver.exe");
```

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

```
        driver.get("https://www.facebook.com");
```

```
        try {
```

```
            Thread.sleep(2000);
```

```
        } catch (Exception e) {
```

```
            e.printStackTrace();
```

```
        }
```

```
    }
```

```
    @Test(groups="Chrome", dependsOnMethods="LaunchChrome")
```

```
    public void TryFacebook1() {
```

```
        System.out.println(Thread.currentThread().getId());
```

```
        driver.findElement(By.id("email")).sendKeys("ravi10thstudent@gmail.com");
```

```
        driver.findElement(By.id("pass")).sendKeys("12345");
```

```
        driver.findElement(By.id("loginbutton")).click();
```

```
    }
```

```
    @Test(groups="Firefox")
```

```
    public void LaunchFirefox() {
```

```
        System.setProperty("webdriver.gecko.driver", "./Resources/geckodriver.exe");
```

```
        driver = new FirefoxDriver();
```

```
        driver.get("https://www.facebook.com");
```

```
        try {
```

```
            Thread.sleep(4000);
```

```
        } catch (Exception e) {
```

```
            e.printStackTrace();
```

```
        }
```

```
    }
```

```

@Test(groups="Firefox", dependsOnMethods="LaunchFirefox")
public void TryFacebook2() {
    System.out.println(Thread.currentThread().getId());
    driver.findElement(By.id("email")).sendKeys("ravi10thstudent@gmail.com");
    driver.findElement(By.id("pass")).sendKeys("ravi28394");
    driver.findElement(By.id("loginbutton")).click();
    System.out.println(Thread.currentThread().getId());
}
}

```

Step 7 Running the project

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

Step 8: 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