# How to Set Up and Run the Selenium TestNG Script

## Prerequisites

Before running the script, ensure the following software and configurations are in place:  
1. \*\*Java Development Kit (JDK)\*\*:  
 - Install JDK (version 8 or above).  
 - Set up the `JAVA\_HOME` environment variable and add `bin` to the system's PATH.  
   
2. \*\*Eclipse IDE or IntelliJ IDEA\*\* (Optional):  
 - Install an IDE for ease of editing and running the script.  
  
3. \*\*Apache Maven\*\* (Optional but recommended):  
 - Install Maven for dependency management.  
  
4. \*\*Selenium WebDriver\*\*:  
 - Download the latest version of the Selenium WebDriver.  
 - Ensure the GeckoDriver binary (for Firefox) is compatible with your browser version.  
 - Download GeckoDriver from GeckoDriver Releases.  
 - Add the GeckoDriver executable to your system's PATH.  
  
5. \*\*TestNG\*\*:  
 - Install TestNG via Maven (recommended) or manually add its JAR file to your project.  
  
6. \*\*Browser\*\*:  
 - Ensure Firefox is installed and updated to a compatible version.

## Project Setup

1. \*\*Create a New Java Project\*\*:  
 - Open your IDE and create a new Maven project (or Java project if you are not using Maven).  
  
2. \*\*Add Dependencies\*\*:  
 - For Maven, add the following dependencies to the `pom.xml` file:

<dependencies>  
 <dependency>  
 <groupId>org.seleniumhq.selenium</groupId>  
 <artifactId>selenium-java</artifactId>  
 <version>4.14.0</version>  
 </dependency>  
 <dependency>  
 <groupId>org.testng</groupId>  
 <artifactId>testng</artifactId>  
 <version>7.9.1</version>  
 <scope>test</scope>  
 </dependency>  
</dependencies>

3. \*\*Set Up the `fitpeo` Script\*\*:  
 - Copy the provided script into a new class file (`fitpeo.java`) under the `src/test/java/Build001` package.

## Running the Script

1. \*\*Via IDE\*\*:  
 - Right-click the class file (`fitpeo.java`) and select `Run As > TestNG Test`.  
  
2. \*\*Via Command Line\*\*:  
 - Navigate to your project directory.  
 - Compile the project:  
 ```  
 mvn clean compile  
 ```  
 - Run the TestNG suite:  
 ```  
 mvn test  
 ```

## Expected Workflow

1. \*\*Setup Phase\*\*:  
 - Initializes the browser (Firefox).  
 - Opens `https://fitpeo.com` and verifies it is accessible.  
  
2. \*\*Test Execution\*\*:  
 - Automates interaction with the homepage, revenue calculator page, sliders, and checkboxes.  
 - Validates the functionality of the slider and reimbursement calculations.  
  
3. \*\*Teardown Phase\*\*:  
 - Deletes cookies and closes the browser.

## Output

Logs will be displayed in the console, indicating success or failure for each test step.  
If an error occurs, the stack trace will help identify the issue.

## Troubleshooting

1. \*\*Browser Not Opening\*\*:  
 - Ensure GeckoDriver is correctly set up in your PATH.  
 - Verify that the Firefox version is compatible with the installed GeckoDriver.  
  
2. \*\*XPath Issues\*\*:  
 - Check if the website structure has changed.  
 - Update the XPaths in the script to match the current website DOM.  
  
3. \*\*TestNG Installation\*\*:  
 - Verify that TestNG is properly installed and configured in your IDE or Maven project.