

## Step-by-step guide for automating [www.demoblaze.com](http://www.demoblaze.com) using Selenium WebDriver with Java and TestNG:

### Step 1: Install Java and Set Up Environment Variables

1. Download **Java 8** from Google and install it.
2. Verify the installation by running the following command in the command prompt (java -version)
3. Download and install **Maven** (Apache Maven 3.8.8) from the official website.

Set up environment variables:

- **MAVEN\_HOME** → C:\apache-maven-3.8.8
  - **JAVA\_HOME** → C:\Program Files\Java\jdk-8
- Update the system Path variable:
- Add C:\apache-maven-3.8.8\bin
  - Add C:\Program Files\Java\jdk-8\bin

4. Verify Maven installation in command Prompt ( mvn -version)

### Step 2: Set Up Eclipse and Create a Maven Project

1. Download and install **Eclipse IDE**.
2. Open Eclipse and create a new **Maven Project**.
3. Open the pom.xml file and add the required dependencies.

### Step 3: Add Required Dependencies to pom.xml

Include the following dependencies in the pom.xml file:

- Selenium WebDriver (Version: 4.29.0)
- TestNG for test execution
- WebDriverManager for automatic browser driver setup
- Extent Reports for enhanced reporting

### Step 4: Install TestNG in Eclipse

1. Open **Eclipse** → Click **Help** → **Eclipse Marketplace**
2. Search for **TestNG** and install it.
3. Restart Eclipse.

### Step 5: Implement Test Cases Using TestNG and Page Object Model (POM)

Use **Page Factory** to manage web elements efficiently and handle **StaleElementReferenceException**.

- **Annotations Used:**
  - @BeforeClass: Set up initial browser configuration.
  - @Test: Execute test steps.

### **Test Steps to Automate:**

1. Click on **Phones**, select a random phone, add it to the cart, and get the phone price.
2. Click on **Laptops**, select a random laptop, add it to the cart, and get the laptop price.
3. Click on **Monitors**, select a random monitor, add it to the cart, and get the monitor price.
4. Navigate to the **cart page** and remove the selected **phone**.
5. Place an **order**, fill in the required details, and click on **Purchase**.
6. Verify the **success message** after purchase.
7. Capture the **Purchase ID**.
8. Verify the **total amount displayed**.

### **Step 6: Use Page Object Model (POM) with Page Factory**

- **Declare web elements as private** and access them using **getter methods** in a BlazeDemo class

### **Step 7: Execute Tests Using testng.xml**

1. Create a testng.xml suite file for execution.
2. Run tests using the TestNG framework.
3. Generate default TestNG reports (index.html, emailable-report.html).

### **Step 8: Generate Extent Reports for Better Visualization**

1. Add **Extent Reports** dependency in pom.xml.
2. Configure Extent Reports in the framework.
3. Generate an interactive report with test execution details.