

# **Web Application - Selenium Algorithm**

Step 1: Set up the project

Create a new Maven project in Eclipse.

Add the TestNG and Selenium WebDriver dependencies in the "pom.xml" file.

Set up the WebDriver and browser configurations.

Step 2: Create TestNG test class

Create a TestNG test class for the Flipkart scenario.

Step 3: Implement the test methods

Create a method to navigate to the Flipkart homepage and measure the page load

time using a performance test.

Create a method to search for a product (e.g., "iPhone 13") under the "Mobile" category.

Create a method to check if the images are loaded and visible until the screen height only.

Create a method to check if the page has a scroll feature.

Create a method to check the frequency at which the content will be refreshed while scrolling.

Create a method to verify that the image is downloaded just before the user scrolls to its position and gets displayed in time.

Create a method to verify that the page navigates to the bottom.

Step 4: Implement helper methods

Implement a helper method to check if an image is in the viewport.

Step 5: Implement cross-browser testing

Implement a method to perform cross-browser testing using different browsers and screen resolutions.

Step 6: Execute the tests

Run the TestNG test class and verify the test results.