

Flipkart algorithm

1. Start
2. Import required libraries and packages for TestNG, Selenium WebDriver, and Java AWT.
3. Define the "flipkart" class within the "com" package.
4. Define class variables "driver" and "fDriver" of type WebDriver to represent Chrome and Firefox WebDriver instances, respectively.
5. Define the `setUp()` method with `@BeforeTest` and `@BeforeMethod` annotations to set up the Chrome WebDriver instance.
6. Maximize the browser window in the `setUp()` method.
7. Define test methods with `@Test` annotations for various functionalities like navigation, page load time, searching, image loading, browser change, scrolling, content refresh, resolution, and screen height.
8. Implement the test methods with specific functionality for each scenario.
 - a. **Navigation():** Open the Flipkart homepage, click on any pop-up if present, and assert the URL to verify successful navigation.
 - b. **LoadingPage():** Record the start time, open the Flipkart homepage, click on any pop-up if present, record the finish time, and calculate the page load time. Compare it with the expected time to determine if the page load is successful.
 - c. **Search():** Open the Flipkart homepage, click on any pop-up if present, perform a search for "iPhone 13", and verify successful search.
 - d. **LoadingImage():** Open a specific Flipkart URL, check if an image is present, scroll down using `JavaScriptExecutor`, and verify that the image is still present.
 - e. **Browser():** Create a new Firefox WebDriver instance, maximize the window, navigate to the Flipkart homepage, and then close the Firefox browser.
 - f. **ScrollPage():** Open the Flipkart homepage, click on any pop-up if present, and verify if scrolling is successful.
 - g. **Refresh():** Open a specific Flipkart URL, scroll to a specific element, and measure the time taken to refresh the content.
 - h. **Bottom():** Open the Flipkart homepage, click on any pop-up if present, scroll to the bottom of the page using `JavaScriptExecutor`, and verify successful scrolling.
 - i. **Resolution():** Open the Flipkart homepage, click on any pop-up if present, set a specific window size using `JavaScriptExecutor`, perform actions, change the window size, perform actions, and verify successful resolution handling
 - j. **ScreenHeight():** Open the Flipkart homepage, click on any pop-up if present, get the screen resolution, get the image resolution, and verify if images are fully loaded and visible within screen height.

9. Use assertions (e.g., `AssertJUnit.assertEquals`) to validate the expected results in each test method.

10. In the `quitbrowser()` method, use `@AfterTest` and `@AfterMethod` annotations to perform cleanup tasks like waiting for a few seconds and then closing the Chrome WebDriver instance using the `driver.quit()` method.

11. End.