Automate an E-Commerce Web Application

DESCRIPTION

To automate a real-world web application

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Flipkart is an e-commerce platform, and they have launched a new feature to search for a product in a particular category. Once the product is searched, Flipkart displays it as a list of product items. To enhance the performance of the application, Flipkart has implemented lazy loading. It displays only a few products that can come on the screen.

To display or load more products, the user must scroll down.

As a Test Engineer, you are expected to test this feature end-to-end.

Detailed Scenario:

- **Navigate to the Flipkart homepage (https://www.flipkart.com/)**
- **Determine a page load time with a performance test**
- **Search for a product, say, "iPhone 13" under the "Mobile" category**
- **Check if the images are loaded and visible till the screen height only**
- **Check if the page has a scroll feature**
- **Check the frequency at which the content will be refreshed while scrolling**

- **Verify that the image is downloaded just before the user scrolls to its position and gets displayed in time**
- **Verify that it navigates to the bottom of the page**
- **Check whether different browsers and screen resolutions render it the same way**

Tools Required:

1. **Selenium Library**
2. **Eclipse IDE**
3. **TestNG Library**
4. **Maven**