Automating the Amazon application using Selenium Web driver

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Introduction

- This is the project report for the Project 1: Automating the Amazon application using Selenium Web driver for “Implement software development and database fundamentals through agile” course of Simplilearn.
- Project submitted by : Krishnaveni Rajan
- Email Id: krishnaveni07.rajan@gmail.com
- Submission Date: 21-June-2021
- Language/Tools Used : Core Java with Selenium Web driver and JDBC of MySQL. Project written in Eclipse.

Problem Statement

To automate the Amazon application using Selenium WebDriver with Java.
Background of the problem statement:
Automating the Amazon application to get the list of types of a particular product.

The following requirements should be met:

- Create a Java class for an Amazon application
- Open the browser and locate web elements using Locators.
- Write an automation script using page object design pattern class to store the web elements of a web page.
- Manage Transactions using Selenium and JDBC.

Project Details

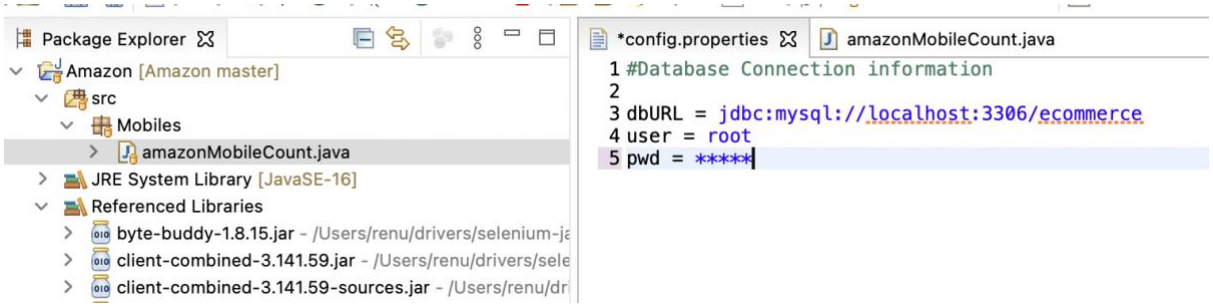
This is the project has been provides the automation code to do the following using Core Java in Eclipse tool.

- Connect to MySQL database by reading the connection properties from config.properties files
- Create a table named ecommerce.amazon with Id, categoryName, productName and Date added using the ‘execute’ command
- Add a row with categoryName as Electronic and productName as Mobiles.
- Get Category Name and Product name from table ecommerce.amazon table and store as variables.
- Open Amazon India Home page.

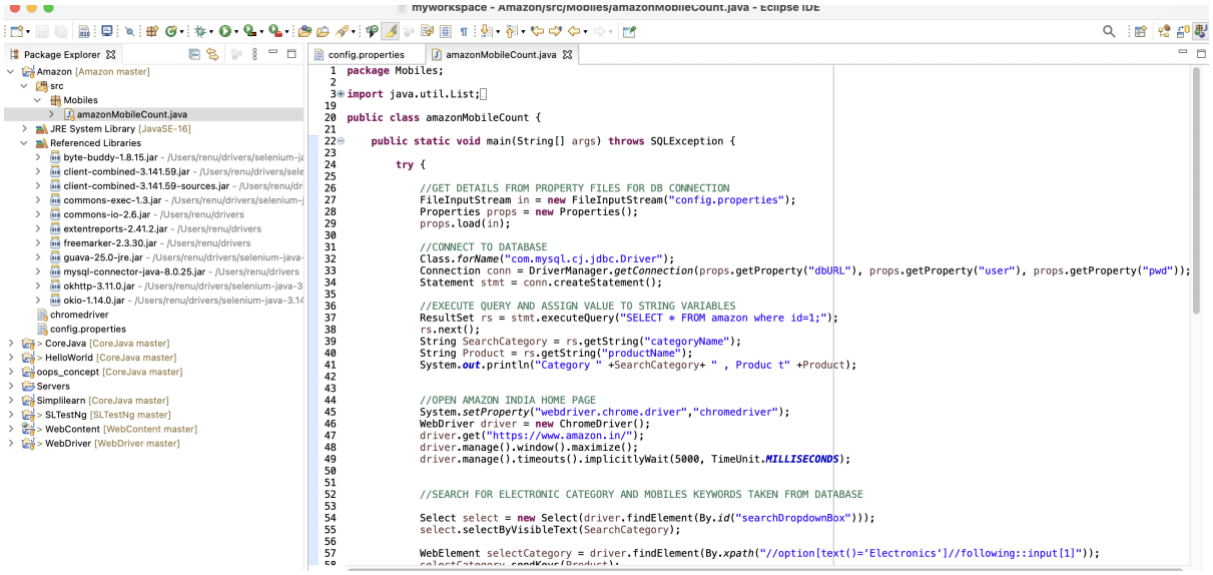
- Using XPath, select the category by using the Category Name taken from MySQL table and stored as variable.
- Using XPath, provide ‘Mobiles’ by using the Product Name taken from MySQL table and stored as variable.
- Search for the Mobiles.
- Get the count of Mobiles listed using XPath
- Compare the count of Mobile with the Search details present in the Amazon site
- Do comparison of count with the search details and print message accordingly.
- Print ‘Name’ of the mobiles from the searched page.
- Close the browser and SQL connection made.
- Push the code to GitHub @ https://github.com/krajan07/Amazon

Snapshot

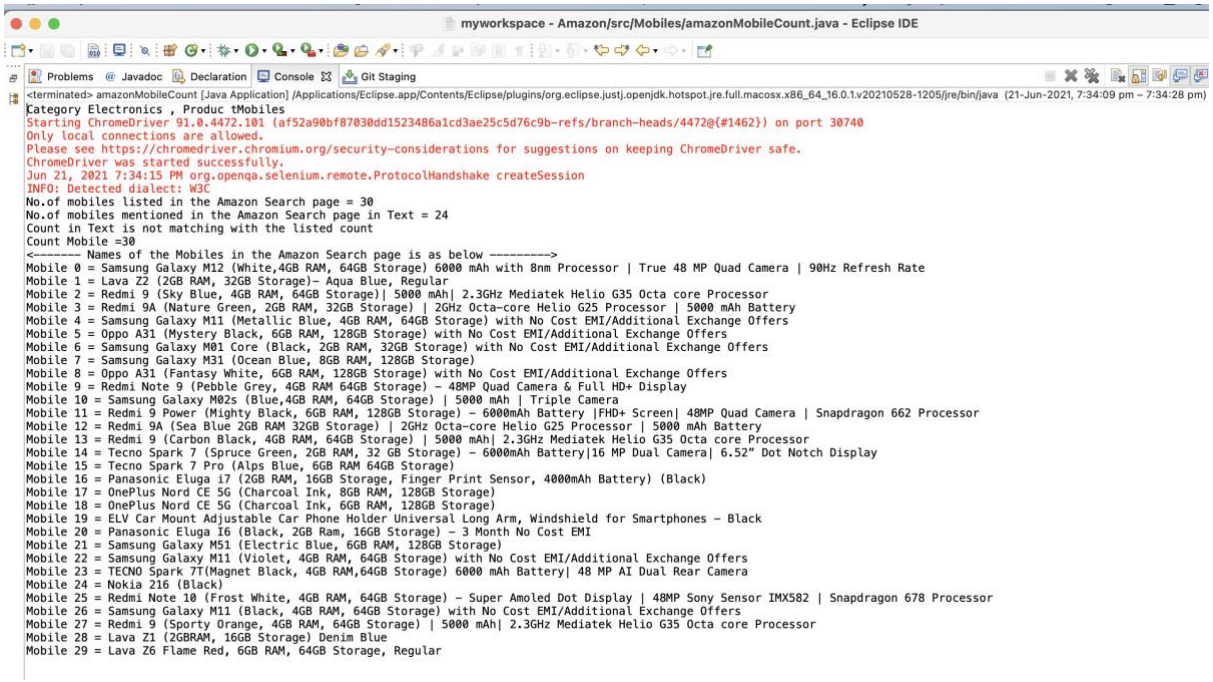
Config Properties File

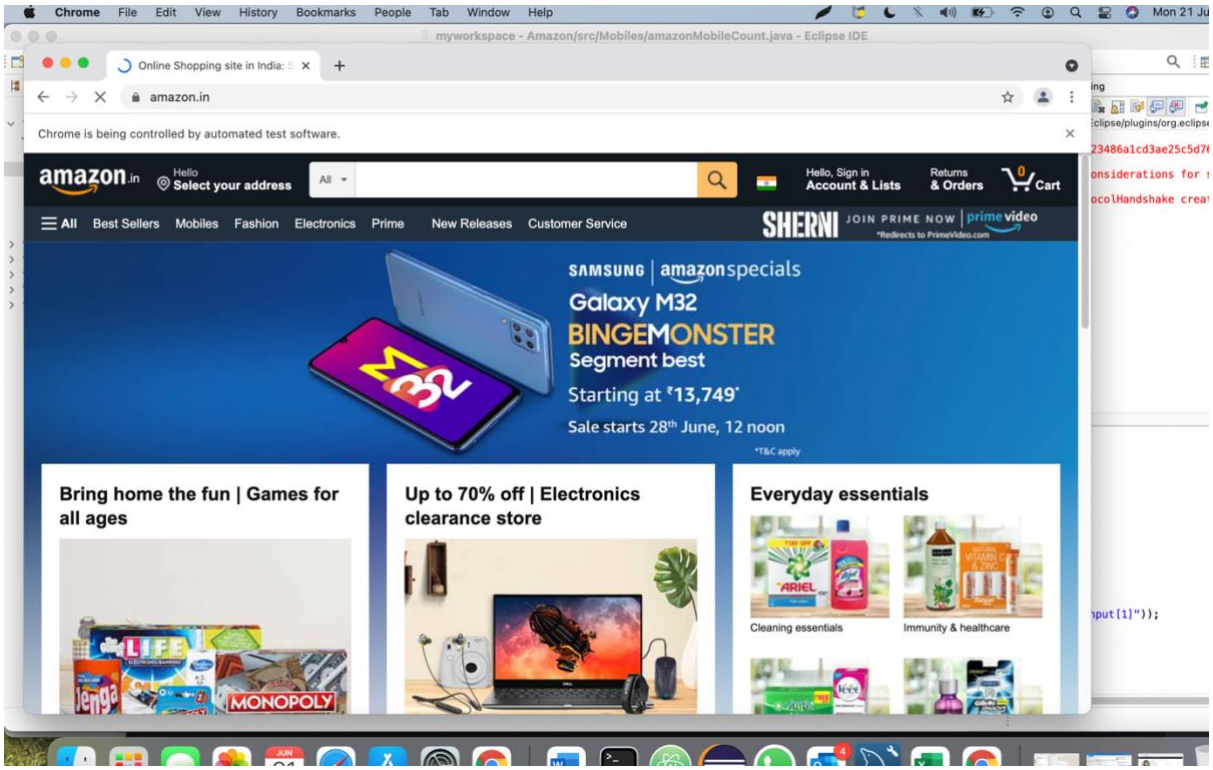


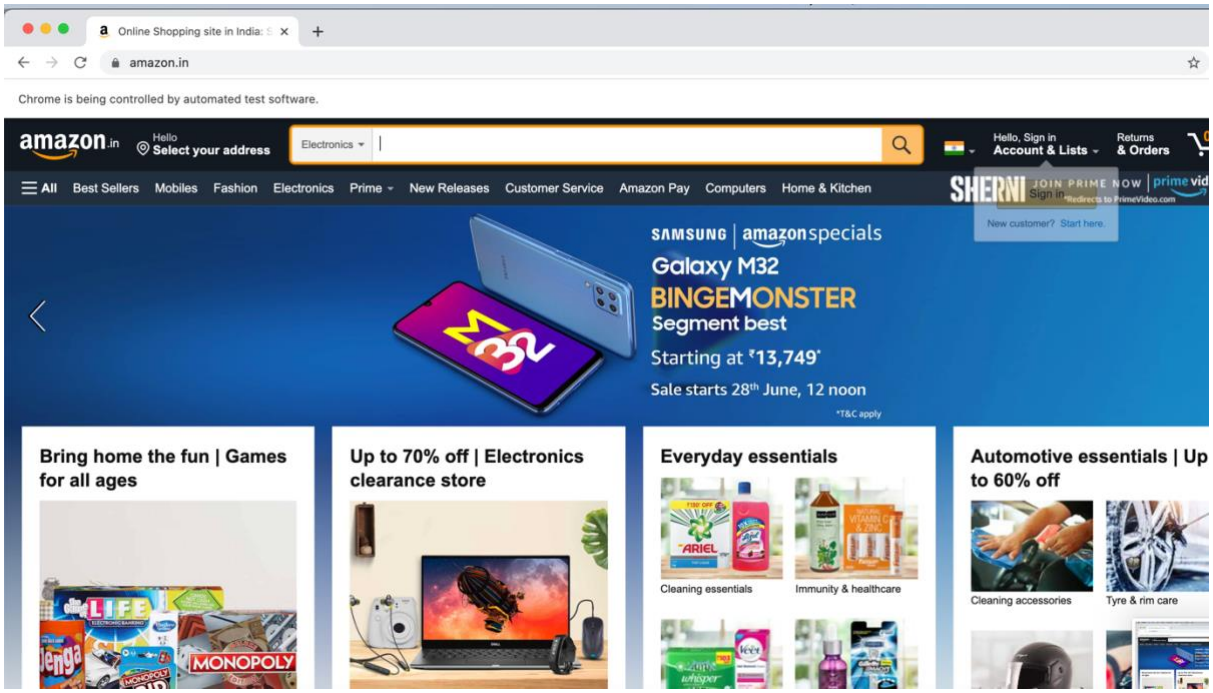
Source Code

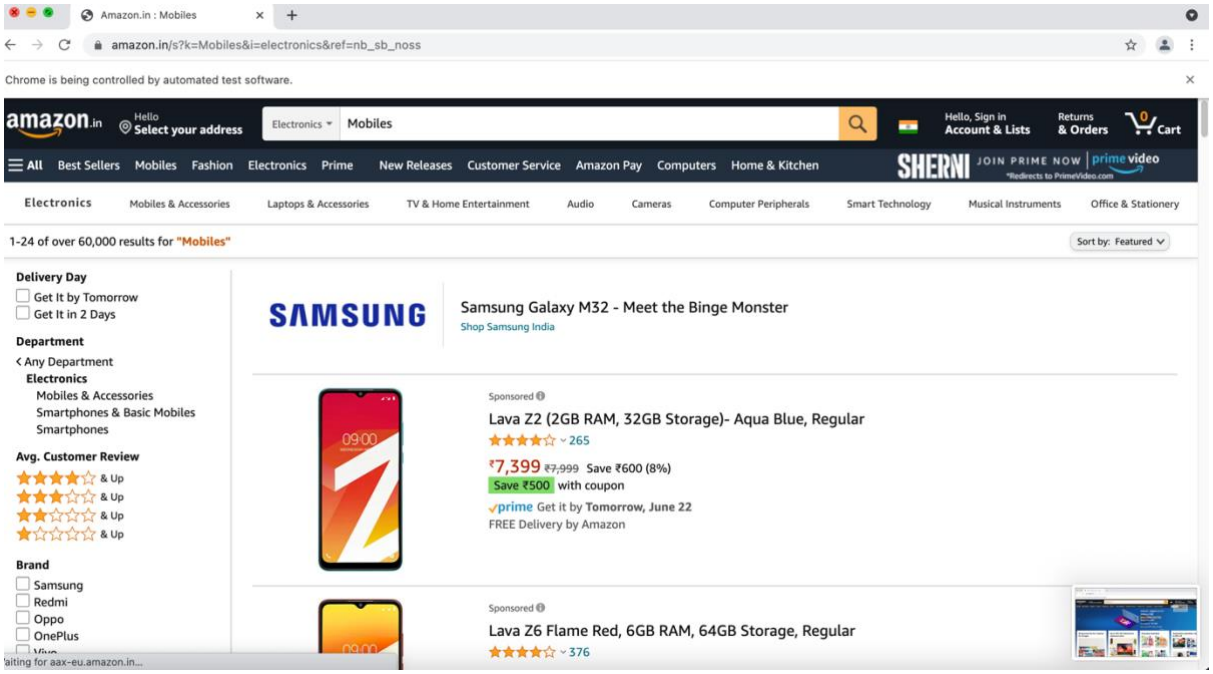


Output


myworkspace - Amazon/src/Mobiles/amazonMobileCount.java - Eclipse IDE
Problems Javadoc Declaration Console Git Staging
<terminated> amazonMobileCount [Java Application] /Applications/Eclipse.app/Contents/Eclipse/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.macosx.x86_64_16.0.1.v20210528-1205/jre/bin/java (21-Jun-2021, 7:34:09 pm – 7:34:28 pm)
Category Electronics , Produc tMobiles
Starting ChromeDriver 91.0.4472.101 (af52a90bf87030dd1523486a1cd3ae25c5d76c9b-refs/branch-heads/4472@{#1462}) on port 30740
Only local connections are allowed.
Please see https://chromedriver.chromium.org/security-considerations for suggestions on keeping ChromeDriver safe.
ChromeDriver was started successfully.
Jun 21, 2021 7:34:15 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
No.of mobiles listed in the Amazon Search page = 30
No.of mobiles mentioned in the Amazon Search page in Text = 24
Count in Text is not matching with the listed count
Count Mobile =30
<-------- Names of the Mobiles in the Amazon Search page is as below --------->
Mobile 0 = Samsung Galaxy M12 (White,4GB RAM, 64GB Storage) 6000 mAh with 8nm Processor | True 48 MP Quad Camera | 90Hz Refresh Rate
Mobile 1 = Lava Z2 (2GB RAM, 32GB Storage)- Aqua Blue, Regular
Mobile 2 = Redmi 9 (Sky Blue, 4GB RAM, 64GB Storage)| 5000 mAh| 2.3GHz Mediatek Helio G35 Octa core Processor
Mobile 3 = Redmi 9A (Nature Green, 2GB RAM, 32GB Storage) | 2GHz Octa-core Helio G25 Processor | 5000 mAh Battery
Mobile 4 = Samsung Galaxy M11 (Metallic Blue, 4GB RAM, 64GB Storage) with No Cost EMI/Additional Exchange Offers
Mobile 5 = Oppo A31 (Mystery Black, 6GB RAM, 128GB Storage) with No Cost EMI/Additional Exchange Offers
Mobile 6 = Samsung Galaxy M01 Core (Black, 2GB RAM, 32GB Storage) with No Cost EMI/Additional Exchange Offers
Mobile 7 = Samsung Galaxy M31 (Ocean Blue, 8GB RAM, 128GB Storage)
Mobile 8 = Oppo A31 (Fantasy White, 6GB RAM, 128GB Storage) with No Cost EMI/Additional Exchange Offers
Mobile 9 = Redmi Note 9 (Pebble Grey, 4GB RAM 64GB Storage) - 48MP Quad Camera & Full HD+ Display
Mobile 10 = Samsung Galaxy M02s (Blue,4GB RAM, 64GB Storage) | 5000 mAh | Triple Camera
Mobile 11 = Redmi 9 Power (Mighty Black, 6GB RAM, 128GB Storage) - 6000mAh Battery |FHD+ Screen| 48MP Quad Camera | Snapdragon 662 Processor
Mobile 12 = Redmi 9A (Sea Blue 2GB RAM 32GB Storage) | 2GHz Octa-core Helio G25 Processor | 5000 mAh Battery
Mobile 13 = Redmi 9 (Carbon Black, 4GB RAM, 64GB Storage) | 5000 mAh| 2.3GHz Mediatek Helio G35 Octa core Processor
Mobile 14 = Tecno Spark 7 (Spruce Green, 2GB RAM, 32 GB Storage) - 6000mAh Battery|16 MP Dual Camera| 6.52" Dot Notch Display
Mobile 15 = Tecno Spark 7 Pro (Alps Blue, 6GB RAM 64GB Storage)
Mobile 16 = Panasonic Eluga i7 (2GB RAM, 16GB Storage, Finger Print Sensor, 4000mAh Battery) (Black)
Mobile 17 = OnePlus Nord CE 5G (Charcoal Ink, 8GB RAM, 128GB Storage)
Mobile 18 = OnePlus Nord CE 5G (Charcoal Ink, 6GB RAM, 128GB Storage)
Mobile 19 = ELV Car Mount Adjustable Car Phone Holder Universal Long Arm, Windshield for Smartphones - Black
Mobile 20 = Panasonic Eluga I6 (Black, 2GB Ram, 16GB Storage) - 3 Month No Cost EMI
Mobile 21 = Samsung Galaxy M51 (Electric Blue, 6GB RAM, 128GB Storage)
Mobile 22 = Samsung Galaxy M11 (Violet, 4GB RAM, 64GB Storage) with No Cost EMI/Additional Exchange Offers
Mobile 23 = TECNO Spark 7T(Magnet Black, 4GB RAM,64GB Storage) 6000 mAh Battery| 48 MP AI Dual Rear Camera
Mobile 24 = Nokia 216 (Black)
Mobile 25 = Redmi Note 10 (Frost White, 4GB RAM, 64GB Storage) - Super Amoled Dot Display | 48MP Sony Sensor IMX582 | Snapdragon 678 Processor
Mobile 26 = Samsung Galaxy M11 (Black, 4GB RAM, 64GB Storage) with No Cost EMI/Additional Exchange Offers
Mobile 27 = Redmi 9 (Sporty Orange, 4GB RAM, 64GB Storage) | 5000 mAh| 2.3GHz Mediatek Helio G35 Octa core Processor
Mobile 28 = Lava Z1 (2GBRAM, 16GB Storage) Denim Blue
Mobile 29 = Lava Z6 Flame Red, 6GB RAM, 64GB Storage, Regular


Chrome File Edit View History Bookmarks People Tab Window Help
myworkspace - Amazon/src/Mobiles/amazonMobileCount.java - Eclipse IDE
Online Shopping site in India:
amazon.in
Chrome is being controlled by automated test software.
amazon.in
Hello Select your address
All
Hello, Sign in Account & Lists
Returns & Orders
Cart
All Best Sellers Mobiles Fashion Electronics Prime New Releases Customer Service
SHERNI
JOIN PRIME NOW | prime video
SAMSUNG | amazonspecials
Galaxy M32
BINGEMONSTER
Segment best
Starting at ₹13,749*
Sale starts 28th June, 12 noon
*T&C apply
Bring home the fun | Games for all ages
Up to 70% off | Electronics clearance store
Everyday essentials
Cleaning essentials
Immunity & healthcare





Conclusion

I was able to get the steps executed without errors. But identified that the number of mobiles listed in the search page did not compare with the number displayed by Amazon. Number got by automation was 30 and in page it showed '1 – 24 out 60,000'