



DATA DRIVEN E2E TESTING

CS-522 CS522 - Software QA and Test Automation
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20007

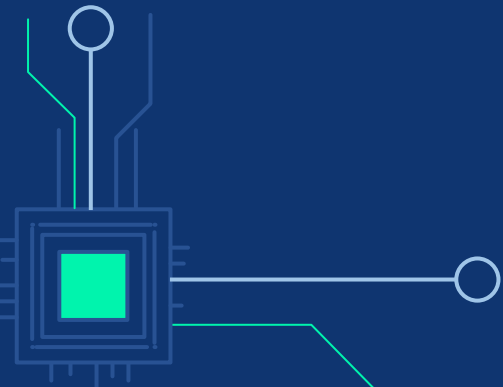


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01. INTRODUCTION

01

GOAL

Automate End-to-End testing on Amazon using Selenium WebDriver.

APPROACH

Selenium for streamlined automation.

02

FOCUS

Specific products in the same category

METHOD

Meticulously designed use cases and test cases for comprehensive coverage.

03

04

02. AUTOMATION DESIGN

WEBDRIVER

Using Chrome Driver to automate tests



IMPORTING LIBRARIES

Importing all the required libraries



SEARCH PRODUCTS

Search products individually



COMPARISON

Expected prices and Actual prices, model, color, quantity



TAKE SCREENSHOT

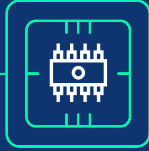
Return results with screenshots

03. USE CASE

- "End-to-End Test Scenario: Holiday Shopping on Amazon.com"
- Objective: Simulate the process of:
 - Searching for a target product (e.g.,JBL bluetooth Speaker Flip6)
 - Comparing prices
 - Exploring promotions
 - Adding the item to the cart without completing the purchase

04. TEST CASE

PRECONDITIONS



Device with internet access



A functioning browser that can run the Amazon site (chrome/firefox)

TEST USE CASE

**HOLIDAY SHOPPING FOR JBL
BLUETOOTH SPEAKER ON AMAZON**

SCENARIO

**EXPLORING AND PURCHASING JBL
BLUETOOTH SPEAKER FOR
UPCOMING HOLIDAY DEALS**

TEST CASE : STEPS

	ACTION	EXPECTED RESULT
OPEN AMAZON.COM	Launch a web browser or Amazon app.	Amazon homepage or app interface is displayed.
SEARCH	Enter "JBL bluetooth Speaker Flip 6" in the search bar and press Enter.	Search results page shows a list of available speakers.
FIND MODEL, COLOR, AND COMPARE PRICE	Browse through search results to find a suitable model and preferred color. Compare prices, specifications, and customer reviews.	User selects a specific bluetooth speaker model and color and has an understanding of price range and features.

TEST CASE

POST CONDITIONS

Script execution is stopped at the "Added to Cart" step.
No actual purchase is made, and no payment information is used.

ACTION	EXPECTED RESULT
Click on the JBL bluetooth Speaker Flip 6 to view details.Check for holiday deals.	Details page opens; identify any promotions.
Adjust quantity on details page. Choose future promotion option if available. Click "Add to Cart".	Item added with specified quantity.
Stop at "Added to Cart" step.	No purchase; script execution halted.

05. OUTPUT

The screenshot displays the IntelliJ IDEA IDE interface. The top toolbar shows the 'Run' button (a green play icon) and a dropdown menu with 'Project1' selected. The 'Project' sidebar on the left shows a project structure for 'CS522_Selenium' with folders for 'idea', 'Features', 'src', and 'week9' through 'week11'. The 'src' folder contains a 'TestAmazonSearch' subfolder. The main editor window shows the source code for 'TestAmazonSearchTestNG.java', which includes a package declaration, imports, and a 'Project1' class with a static logger and a constructor. The 'Run' window at the bottom shows the test results for 'Project1', indicating that 1 of 1 tests passed in 42 seconds and 914 milliseconds. The test suite is 'Default Suite', and the test is 'searchItemFromExcel'. The output log shows the test execution steps, including setting up the test, test setup, executing searchItem, taking screenshots, and tearing down the test.

```
package week15;

import ...

public class Project1 {
    23 usages
    public static final Logger logger = LogManager.getLogger(Project1.class);

    // Constructor
    no usages
    public Project1() {
```

Run: Project1

Tests passed: 1 of 1 test – 42 sec 914 ms

Default Suite 42 sec 914 ms

- CS522_Selenium 42 sec 914 ms
 - Project1 42 sec 914 ms
 - searchItemFromExcel 33 sec 255 ms

18:00:15.412 [main] INFO week15.Project1 - Setting up the test...

18:00:24.788 [main] INFO week15.Project1 - Test setup completed.

18:00:24.798 [main] INFO week15.Project1 - Executing searchItem...

18:00:29.535 [main] INFO week15.Project1 - Taking screenshot...

18:00:30.337 [main] INFO week15.Project1 - Search completed for item: jbl bluetooth speaker

18:00:30.337 [main] INFO week15.Project1 - Finished Executing searchItem...

18:00:30.337 [main] INFO week15.Project1 - Taking screenshot...

18:00:30.817 [main] INFO week15.Project1 - Finished Taking screenshot...

18:00:30.817 [main] INFO week15.Project1 - Executing selectItem...

18:00:39.992 [main] INFO week15.Project1 - Taking screenshot...

18:00:40.673 [main] INFO week15.Project1 - 'Camouflage' color selected for the item.

18:00:40.673 [main] INFO week15.Project1 - Taking screenshot...

18:00:44.186 [main] INFO week15.Project1 - Finished Executing selectItem...

18:00:44.187 [main] INFO week15.Project1 - Taking screenshot...

18:00:44.576 [main] INFO week15.Project1 - Finished Taking screenshot...

18:00:44.576 [main] INFO week15.Project1 - Executing adding to cart

18:00:47.709 [main] INFO week15.Project1 - Taking screenshot...

18:00:51.245 [main] INFO week15.Project1 - Taking screenshot...

18:00:57.672 [main] INFO week15.Project1 - Finished Executing adding to cart

18:00:57.672 [main] INFO week15.Project1 - Taking screenshot...

18:00:58.052 [main] INFO week15.Project1 - Finished Taking screenshot...

18:00:58.056 [main] INFO week15.Project1 - Tearing down the test...

18:00:58.328 [main] INFO week15.Project1 - Test teardown completed.

Version Control Run TODO Problems Terminal Services Build

Tests passed: 1 (2 minutes ago) 171:64 LF UTF-8 4 spaces

OUTPUT



Delivering to Nashville 37217
[Update location](#)

All ▾

jbl bluetooth speaker flip 6



EN ▾

Hello, sign in
[Account & Lists](#) ▾

[Returns & Orders](#)

[0 Cart](#)

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120W Portable Speaker Loud with Booming Bass

ZEALOT

★★★★☆ 60

-19% \$189.99 ~~\$235.99~~ [prime](#)



Sponsored ⓘ

[← Back to results](#)



JBL Flip 6-Portable Bluetooth Speaker,Powerful Sound and deep bass, IPX7 Waterproof,12 Hours of Playtime,PartyBoost for Multiple Speaker Pairing for Home,Outdoor and Travel (Squad),Camouflage

[Visit the JBL Store](#)

4.7 ★★★★★ ▾ 13,849 ratings | [Search this page](#)

Amazon's Choice in Portable Bluetooth Speakers by JBL

500+ bought in past month

-23% **\$99⁹⁵**

List Price: ~~\$129.95~~ ⓘ

[FREE Returns](#) ▾

Get \$10 off instantly: Pay **\$89.95** ~~\$99.95~~ upon approval for the Amazon Store Card. No annual fee.

Available at a lower price from [other sellers](#) that may not offer free Prime shipping.



Enjoy fast, free delivery, exclusive deals, and award-winning movies & TV shows with Prime

[Try Prime](#) and start saving today with fast, free delivery

Buy new:

\$99⁹⁵


[FREE Returns](#) ▾

FREE delivery **Wednesday, April 24**

Or fastest delivery **Tomorrow, April 20.** Order within **3 hrs 59 mins**


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OUTPUT

 Delivering to Nashville 37217
[Update location](#)

All ▾


jbl bluetooth speaker flip 6



 EN ▾

Hello, sign in
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 Cart

All ▾

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Smart Home ▾

Home Audio & Theater ▾

Premium Audio ▾

Headphones ▾

Home Theater Systems ▾


Speakers ▾

Wireless Audio ▾


Stereo System Components ▾

Accessories ▾

Deals ▾

 Bose SoundLink Flex Bluetooth Speaker ★★★★☆ 29,709 ~~\$149.00~~ [prime](#)


[Back to results](#)

 JBL Flip 6 - Portable Bluetooth Speaker, powerful sound and deep bass, IPX7 waterproof, 12 hours of playtime, JBL PartyBoost for multiple speaker pairing for home, outdoor and travel (Blue)

Visit the JBL Store

4.7 ★★★★☆ 13,849 ratings | Search this page

4K+ bought in past month

 Enjoy fast, free delivery, exclusive deals, and award-winning movies & TV shows with Prime

Try Prime and start saving today with fast, free delivery


Buy new:

~~\$99~~ ³⁵\$99 (56.25 / Ounce)






FREE Returns ▾


FREE delivery **Wednesday, April 24**

Or fastest delivery **Tomorrow, April 20.** Order within 3 hrs 59 mins

 Delivering to Nashville 37217 - [Update location](#)


Color: Camouflage


    

 Delivering to Nashville 37217
[Update location](#)

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Search Amazon



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Registry ▾

Books ▾

Gift Cards ▾

 **Added to Cart**

Color: Camouflage
Style: Flip 6


Your order qualifies for **FREE Shipping**.
Choose this option at checkout. [See details](#)

Cart Subtotal: \$99³⁵

[Proceed to checkout \(1 item\)](#)

[Go to Cart](#)


For best experience [sign in to your account](#)


 **\$99.95**


[Go to Cart](#)


Products related to JBL Flip 6-Portable Bluetooth Speaker,Powerful Sound and...


Page 1 of 4


 **ABRAMTEK 100W Bluetooth Speaker, E600 High Power...** ★★★★☆ 1,345 **\$219⁰⁰** [Add to Cart](#)

 **ZICORROOP Bluetooth Speakers,Portable Wireless...** ★★★★☆ 254 **\$35⁹⁹** [Add to Cart](#)

 **ABRAMTEK 200W Bluetooth Speaker, E500 (2nd Gen) HI...** ★★★★☆ 304 **\$329⁰⁰** [Add to Cart](#)

 **Raymate Bluetooth Speakers, Pair up to 100 Speakers,IPX...** ★★★★☆ 468 **\$49⁹⁹** [Add to Cart](#)

 **Bluetooth Speaker, DOSS SoundBox Pro+ Wireless Pai...** ★★★★☆ 6,937 **\$69⁹⁹** [Add to Cart](#)

 **Ortizan Portable Bluetooth Speakers, IPX7 Waterp...** ★★★★☆ 36,105 **\$37⁹⁹** [Add to Cart](#)

06. CONCLUSION

- The End-to-End Shopping Test, aimed at replicating the process of adding a JBL bluetooth Speaker Flip 6 to the cart on Amazon.com, has met its goals. Through a comprehensive automation script leveraging tailored web testing frameworks and libraries, the test executed seamlessly. It meticulously followed key steps, from accessing the Amazon homepage to searching for the desired speaker, adjusting quantities, and finally adding the item to the cart.





THANK YOU