Automation Exercise

WEBSITE: AUTOMATION EXERCISE

Test Plan, Design and Strategy

Content

1. Introduction

This document describes the test automation strategy will be implemented as part of the "Automation Exercise" Project. Among the special points, the following stand out: scope, risks and emergency preparedness, environment and testing tools, design pattern, acceptance criteria, design and test execution; and test report.

2. Scope

The type of testing will be implemented, it will be black box (tests based on functionalities). It will manage the following techniques:

- Equivalence partitioning -> the idea behind the technique is to divide a set of test conditions into groups or sets that can be considered as same. Partitioning usually happens for test objects, which includes inputs, outputs, internal values, time-related values, and for interface parameters.

- Boundary value analysis (BVA) -> consisting of numeric or sequential data. The minimum and maximum values of a partition are its boundary values.

On the other hand, the test cases covered will be automated for desktop and mobile versions.

2.1 Automatable Functionalities

- Home Screen
- Product Details
- Cart and Cart Summary
- Check Out
- Account Creation / Sign Up
- Sign In
- Address
- Payment
- Order Confirmation
- Contact Us

2.2 Non-Automatable Functionalities

Accessibility is not included.

2.3 User Flow

1. User lands on the page and scroll to the middle.
2. User chooses a product and clicks on “View product” at the bottom of the image.
3. User enters the value 30 in the quantity field.
4. User clicks on “Add to cart” and after clicking on “View cart”.
5. User clicks on “Proceed to checkout”.
6. User enters an email and clicks on “Register/Log in”.
7. User enters a name and email in “New User Sign up”.
8. User enters the rest of the information and clicks on “Create Account’.
9. User clicks on “Continue” ubicated below of the title “Account Created!”.
10. User clicks on the shopping cart ubicated on the header.
11. User clicks on “Proceed to checkout”.
12. User enters a comment and clicks on “Place Order”.
13. User enters the information about fake credit card and clicks on “Pay and Confirm Order”.
14. User clicks on the continue button.
15. User clicks on “Log out” at the top on the header.
16. User enters the previously created account in “Log in your account”.
17. User clicks on the “Contact Us” ubicated on the header.
18. User fills out the form and clicks on the submit button.
19. User clicks on ”OK” button localized on the pop-up.
20. User clicks on the “Log out” button on the header.

3. Roles and Responsibilities

Roles	Responsibilities
QA Leader	Automation Testing planning and control Report the testing progress
Automation Engineer / QA Analyst	Automation Test analysis and test design Automated test execution Report defects/bugs Reporting the tests results
Product Owner / Stakeholders	Decisions making

4. Risks Management y Emergency Preparedness

N	Risk	Probability (1-5)	Impact (1-5)	Severity (Pro * Imp)	Emergency Preparedness
1	Changes request in the automated test cases.	3	4	12	Prioritize the changed functionalities list for the next sprint.

5. Test Environment and Testing Tools

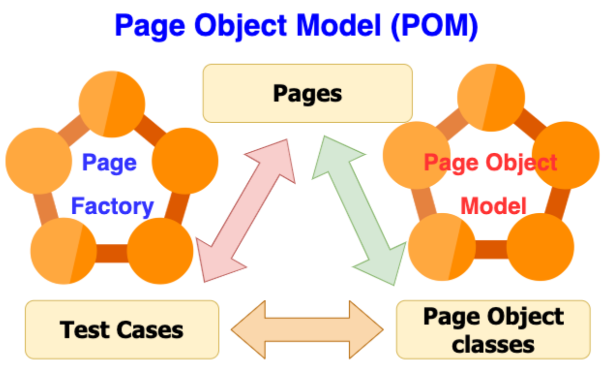
5.1 Environment

The testing environment is “Automation Exercise website”: https://www.automationexercise.com/

5.2 Testing Tools

Tools	Description
Cypress (JavaScript)	Framework in order to automate the test cases of the project.
Viewport (Desktop and Mobile)	Desktop -> 1920 x 1080 Mobile -> 390 x 844
Cypress Test Runner	It is a graphical user interface (GUI) that allows you to easily visualize and debug your tests. Also, shows the test results (failed, passed and skip test cases).
Browsers: Chrome and Electron.	Instances where the tests will be run.
Operating Systems	Windows and Mac

6. Automation Software Architecture



The project architecture is based on the **POM** (Page Object Model), which is a trending technique used in test automation in the Quality Engineering world. Simply put, the Page Object Model refers to using the Objects/Classes to depict and represent all the locators and functions (Components used for the automation) related to that particular page in a web application.

With the Page Object Model, you can simply break down a whole web application into multiple pages and use classes to depict those pages. In this way, each page in the web application corresponds to a particular class in the Page Object. Also sometimes a single page in the application can be used across multiple classes in the Page Object, according to the functionalities of the page.

7. Acceptance Criteria

7.1 Entry Criteria

- The environment should be ready for testing previously.
- The website should have been tested manually.
- The high and blockers bugs should have been tested and closed previously.
- The Cypress framework should be installed and ready.
- The website pages should have some **data-qa data-testid**, **id** or **class** (not recommended) in order to localize the elements of the pages.

7.2 Exit Criteria

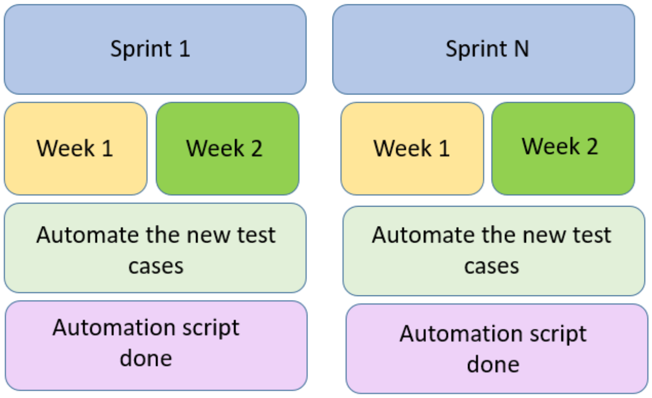
- The most functionalities have been automated (>90%).
- The test cases have been executed successfully.
- There are not high and several open bugs.

8. Automated Tests Planning

8.1 Timeline

Sprint	Functionalities (Pages)	Days	Commentaries
1	Home Screen	1	
	Product Details	0,5	
	Cart and Cart Summary	1	
	Check Out	1,5	
	Account Creation / Sign Up	2	
	Sign In	0,5	
	Address	1	
	Payment	0,5	
	Order Confirmation	0,5	
	Contact Us	1,5	
	Total	10	Sprint every 2 weeks
N			

8.2 Automation Sprint Planning



The automation tasks should start after the manual tests have finished. The sprint will be 2 every weeks, the automation team should begin the development of the automation scripts by pages or functionalities. The team will do continuous deliveries during the sprint and at the end of the sprint should be done all planned automation scripts.

9. Test Results

9.1 Test Matrix

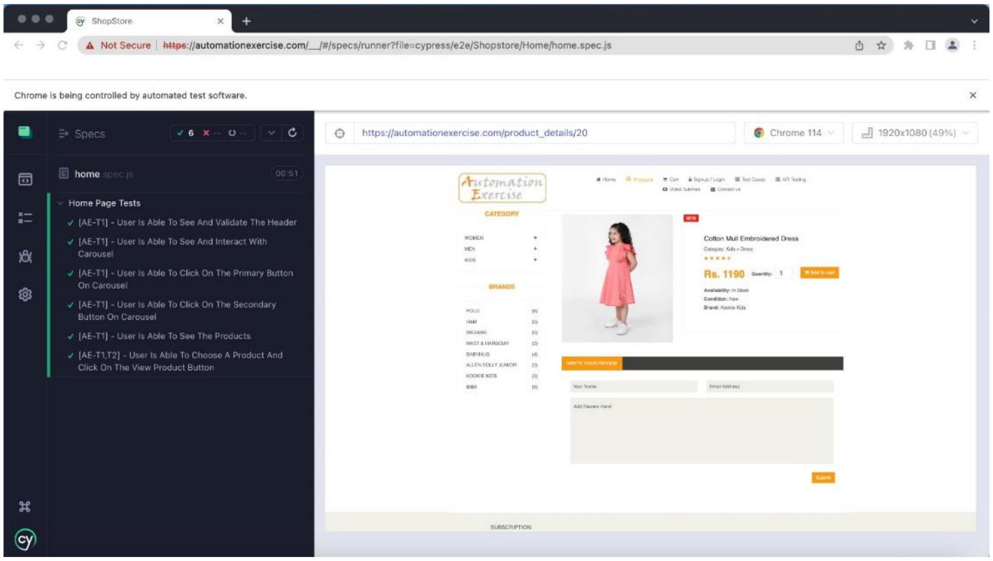
Test Matrix.xlsx

9.2 Test Report

Devices	Total Test Cases	Passed Test Cases	Failed Test Cases
Desktop (1920 x 1080)	26	26	0
Mobile (390 x 844)	26	26	0

The test report will be shown with some screenshots of the Cypress Test Runner for all automated modules.

- Home Screen (Desktop and Mobile)



ShopStore

Not Secure | https://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Home/home.spec.js

Chrome is being controlled by automated test software.

Specs ✓ 6 ✗ --

home.spec.js 00:51

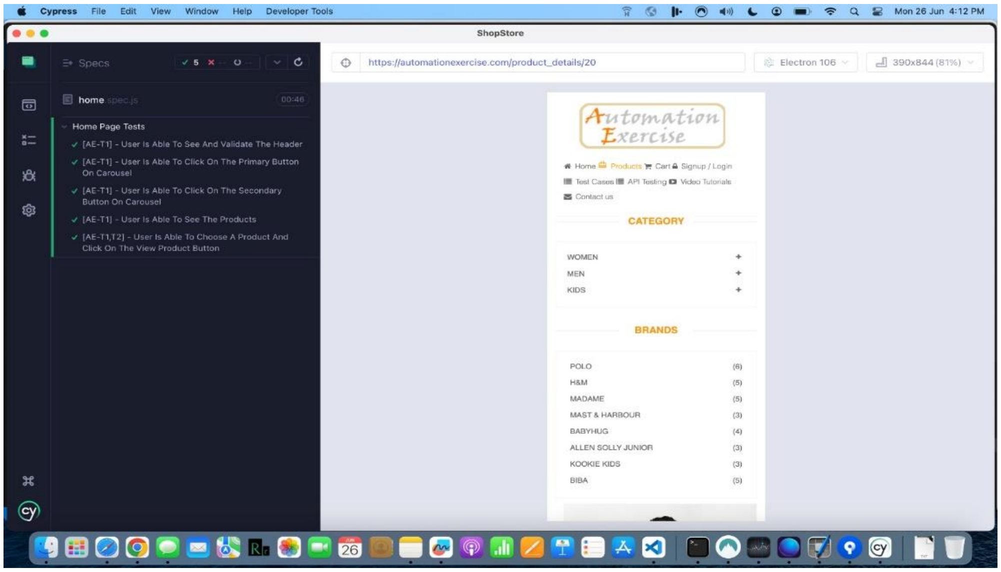
Home Page Tests

- ✓ [AE-T1] - User Is Able To See And Validate The Header
- ✓ [AE-T1] - User Is Able To See And Interact With Carousel
- ✓ [AE-T1] - User Is Able To Click On The Primary Button On Carousel
- ✓ [AE-T1] - User Is Able To Click On The Secondary Button On Carousel
- ✓ [AE-T1] - User Is Able To See The Products
- ✓ [AE-T1,T2] - User Is Able To Choose A Product And Click On The View Product Button

https://automationexercise.com/product_details/20

Chrome 114

1920x1080 (49%)



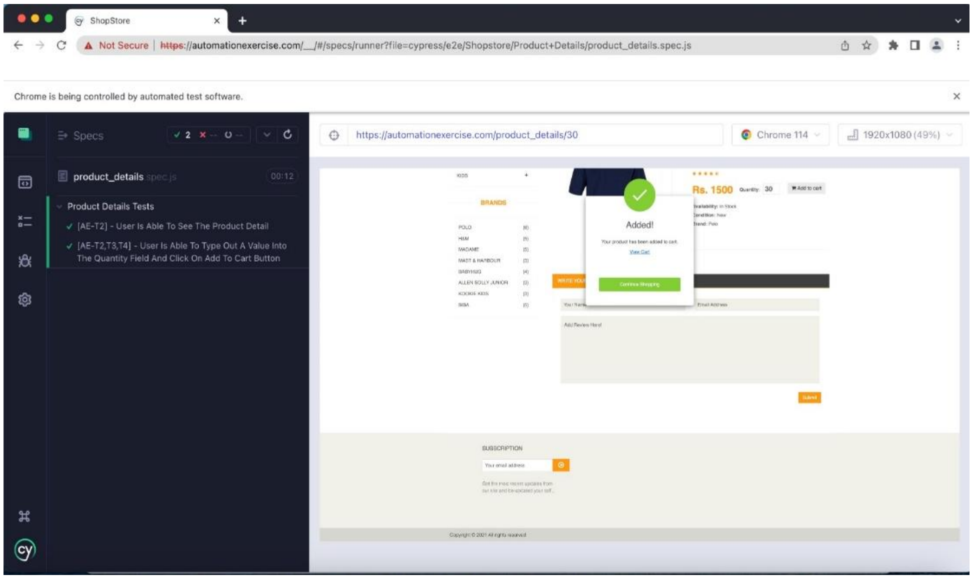
https://automationexercise.com/product_details/20

home.spec.js 00:46

Home Page Tests

- ✓ [AE-T1] - User Is Able To See And Validate The Header
- ✓ [AE-T1] - User Is Able To Click On The Primary Button On Carousel
- ✓ [AE-T1] - User Is Able To Click On The Secondary Button On Carousel
- ✓ [AE-T1] - User Is Able To See The Products
- ✓ [AE-T1,T2] - User Is Able To Choose A Product And Click On The View Product Button

- Product Details (Desktop and Mobile)



https://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Product+Details/product_details.spec.js

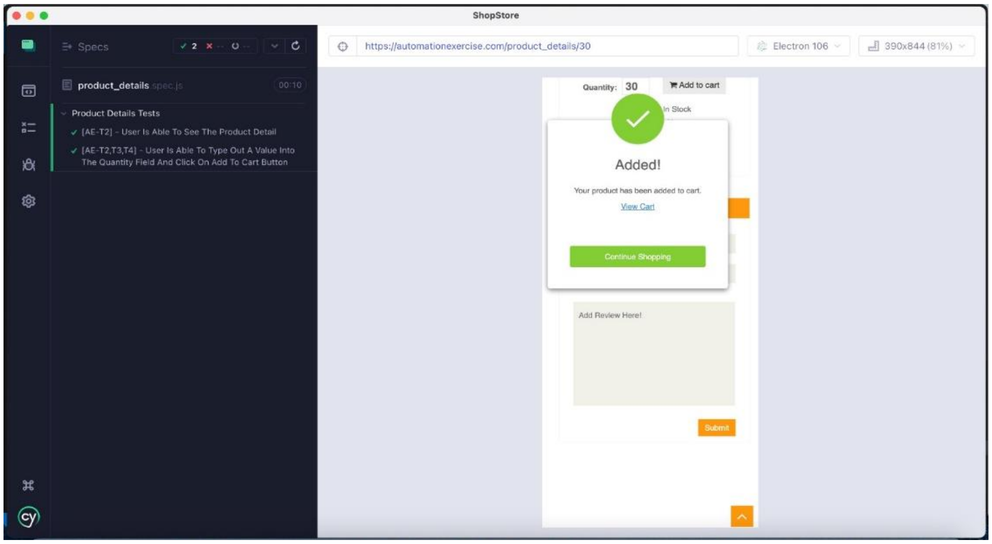
Chrome is being controlled by automated test software.

https://automationexercise.com/product_details/30

product_details.spec.js 00:12

Product Details Tests

- ✓ [AE-T2] - User Is Able To See The Product Detail
- ✓ [AE-T2,T3,T4] - User Is Able To Type Out A Value Into The Quantity Field And Click On Add To Cart Button



ShopStore

Specs ✓ 2 ✕ -- ↻ --

product_details spec.js 00:10

Product Details Tests

- ✓ [AE-T2] - User Is Able To See The Product Detail
- ✓ [AE-T2,T3,T4] - User Is Able To Type Out A Value Into The Quantity Field And Click On Add To Cart Button

https://automationexercise.com/product_details/30

Electron 106

390x844 (81%)

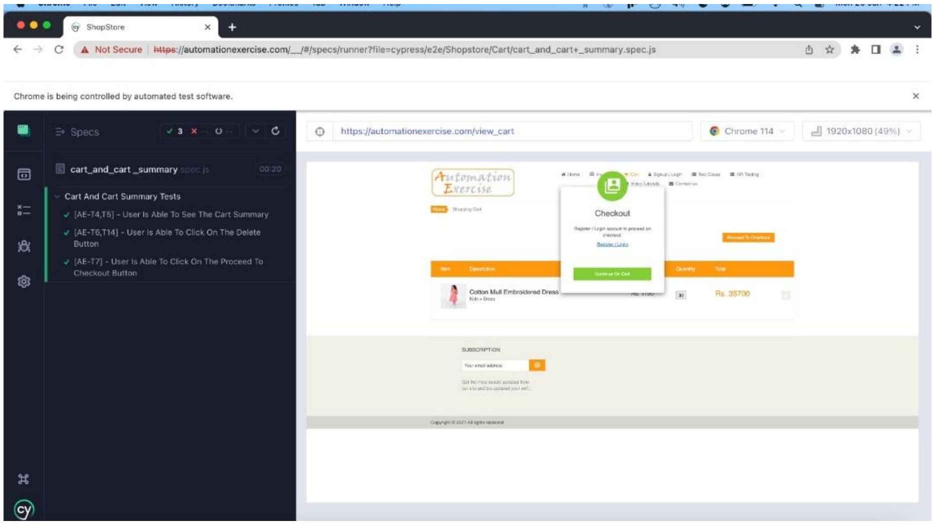
Quantity: 30

In Stock

Added!

Your product has been added to cart.

- Cart and Cart Summary (Desktop and Mobile)



ShopStore

Not Secure | ~~https~~://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Cart/cart_and_cart+_summary.spec.js

Chrome is being controlled by automated test software.

Specs ✓ 3 ✕ -- ↻ --

cart_and_cart _summary spec.js 00:20

Cart And Cart Summary Tests

- ✓ [AE-T4,T5] - User Is Able To See The Cart Summary
- ✓ [AE-T6,T14] - User Is Able To Click On The Delete Button
- ✓ [AE-T7] - User Is Able To Click On The Proceed To Checkout Button

https://automationexercise.com/view_cart

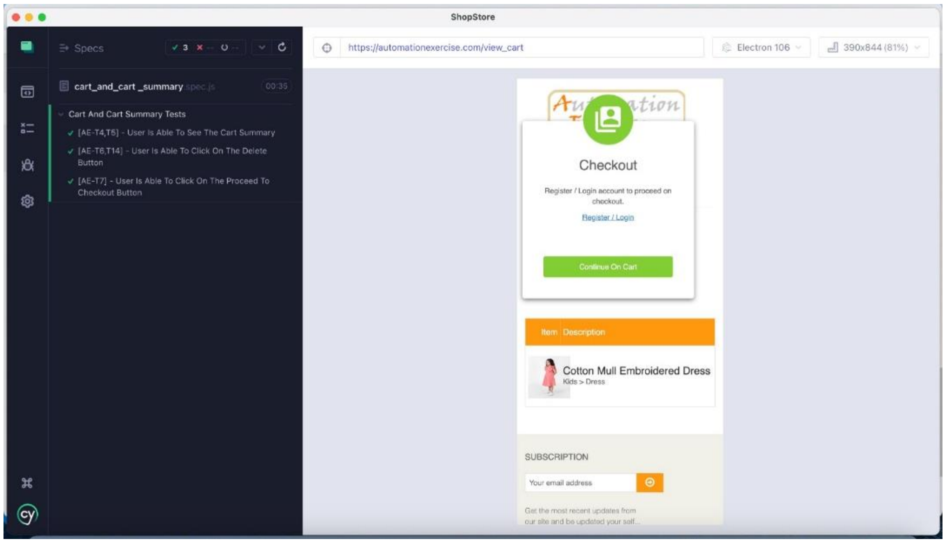
Chrome 114

1920x1080 (49%)

Checkout

Cotton Mull Embroidered Dress

Rs. 35700



ShopStore

Specs ✓ 3 ✕ -- ○ --

cart_and_cart _summary.spec.js 00:35

Cart And Cart Summary Tests

- ✓ [AE-T4,T5] - User Is Able To See The Cart Summary
- ✓ [AE-T6,T14] - User Is Able To Click On The Delete Button
- ✓ [AE-T7] - User Is Able To Click On The Proceed To Checkout Button

https://automationexercise.com/view_cart

Electron 106

390x844 (81%)

Checkout

Register / Login account to proceed on checkout.

Register / Login

Continue On Cart

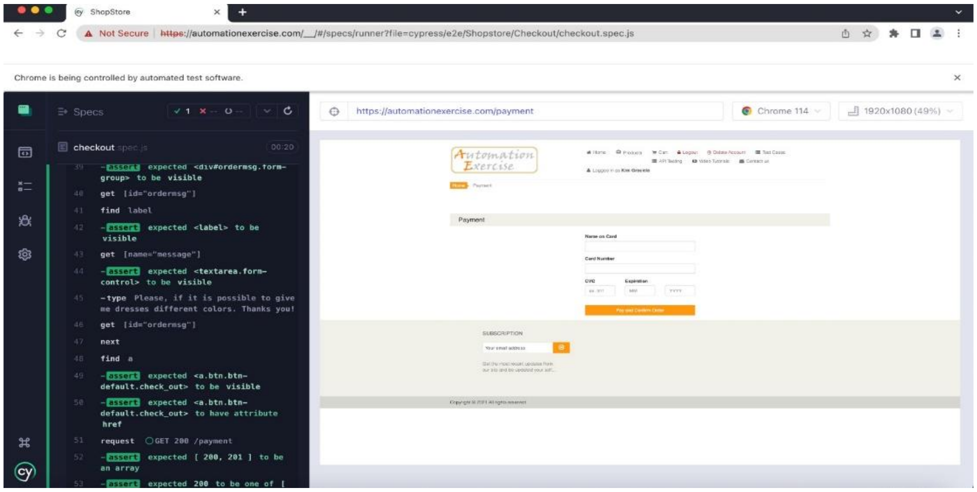
Item	Description
	Cotton Mull Embroidered Dress Kids > Dress

SUBSCRIPTION

Your email address

Get the most recent updates from our site and be updated your self...

- Check Out (Desktop and Mobile)



ShopStore

Not Secure | https://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Checkout/checkout.spec.js

Chrome is being controlled by automated test software.

Specs ✓ 1 ✕ -- ○ --

checkout.spec.js 00:20

```
-assert expected <div#ordermsg.form-group> to be visible
get [id="ordermsg"]
find label
-assert expected <label> to be visible
get [name="message"]
-assert expected <textarea.form-control> to be visible
-type Please, if it is possible to give me dresses different colors. Thanks you!
get [id="ordermsg"]
next
find a
-assert expected <a.btn.btn-default.check_out> to be visible
-assert expected <a.btn.btn-default.check_out> to have attribute href
request ○GET 200 /payment
-assert expected [ 200, 201 ] to be an array
-assert expected 200 to be one of [
```

https://automationexercise.com/payment

Chrome 114

1920x1080 (49%)

Home Payment

Payment

Name on Card

Card Number

CVC

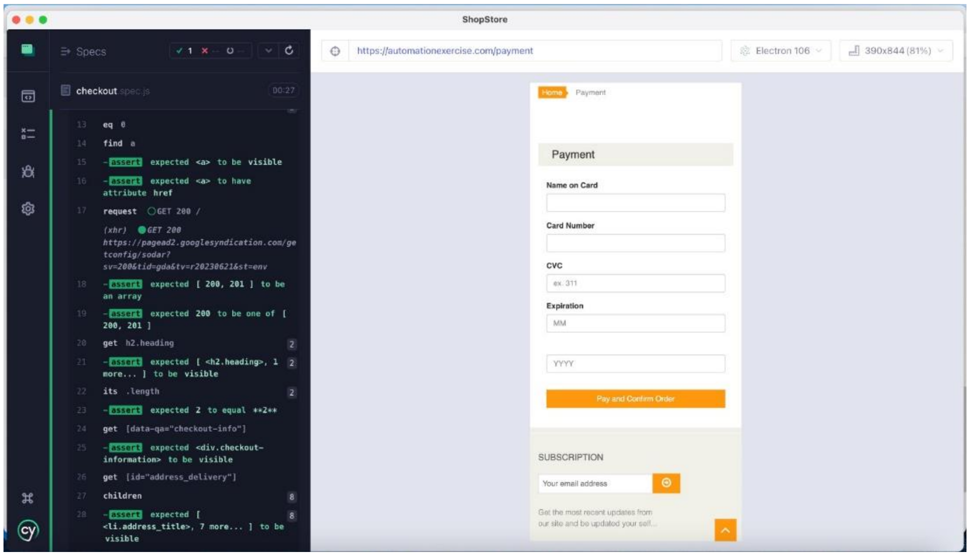
Expiration

Pay and Confirm Order

SUBSCRIPTION

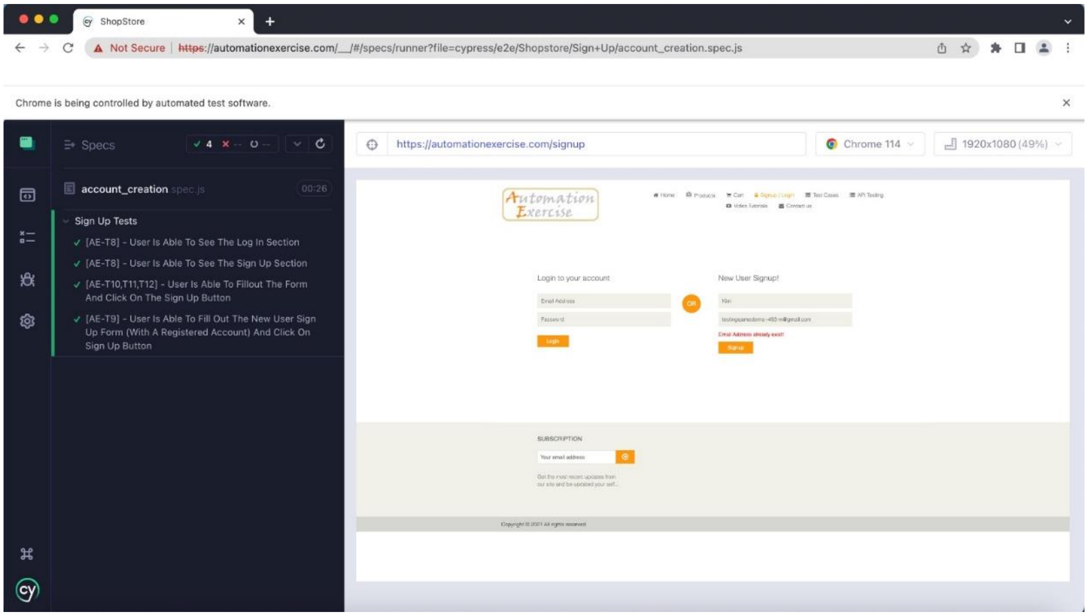
Your email address

Get the most recent updates from our site and be updated your self...



```
13  eq  0
14  find  a
15  -assert  expected <a> to be visible
16  -assert  expected <a> to have attribute href
17  request  ○GET 200 /
    (xhr)  ●GET 200 https://pagead2.googlesyndication.com/getconfig/sodar?sv=200&tid=gda&tv=r20230621&st=env
18  -assert  expected [ 200, 201 ] to be an array
19  -assert  expected 200 to be one of [ 200, 201 ]
20  get  h2.heading                                        2
21  -assert  expected [ <h2.heading>, 1 more... ] to be visible   2
22  its  .length                                           2
23  -assert  expected 2 to equal **2**
24  get  [data-qa="checkout-info"]
25  -assert  expected <div.checkout-information> to be visible
26  get  [id="address_delivery"]
27  children                                               8
28  -assert  expected [ <li.address_title>, 7 more... ] to be visible   8
```

- Account Creation / Sign Up (Desktop and Mobile)



https://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Sign+Up/account_creation.spec.js

Chrome is being controlled by automated test software.

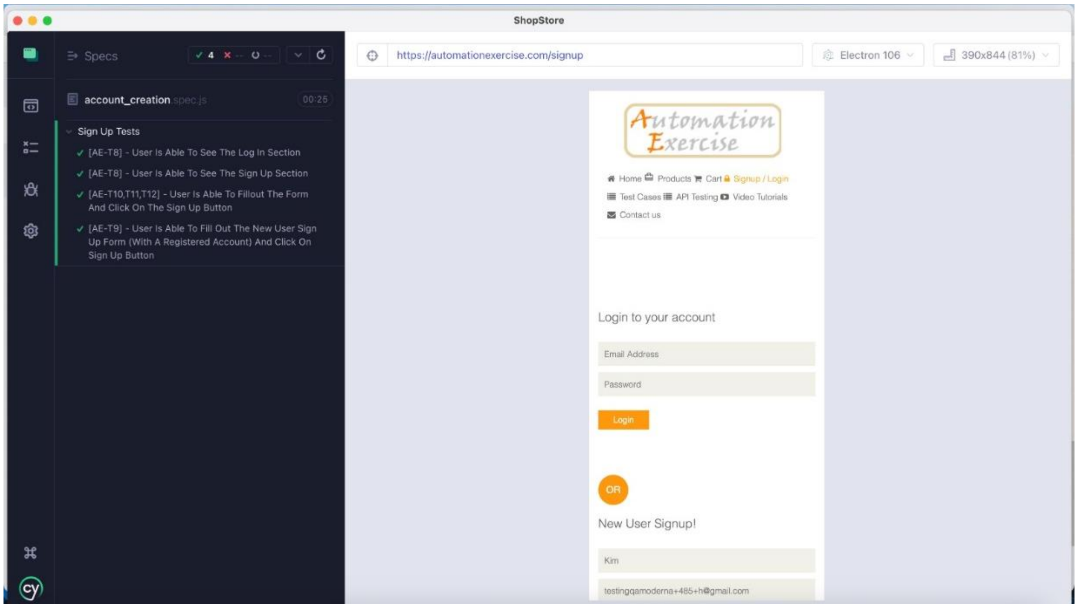
https://automationexercise.com/signup

account_creation.spec.js

Sign Up Tests

- ✓ [AE-T8] - User Is Able To See The Log In Section
- ✓ [AE-T8] - User Is Able To See The Sign Up Section
- ✓ [AE-T10,T11,T12] - User Is Able To Fillout The Form And Click On The Sign Up Button
- ✓ [AE-T9] - User Is Able To Fill Out The New User Sign Up Form (With A Registered Account) And Click On Sign Up Button

Email Address already exist!



ShopStore

Specs ✓ 4 ✕ -- ○ --

https://automationexercise.com/signup

Electron 106

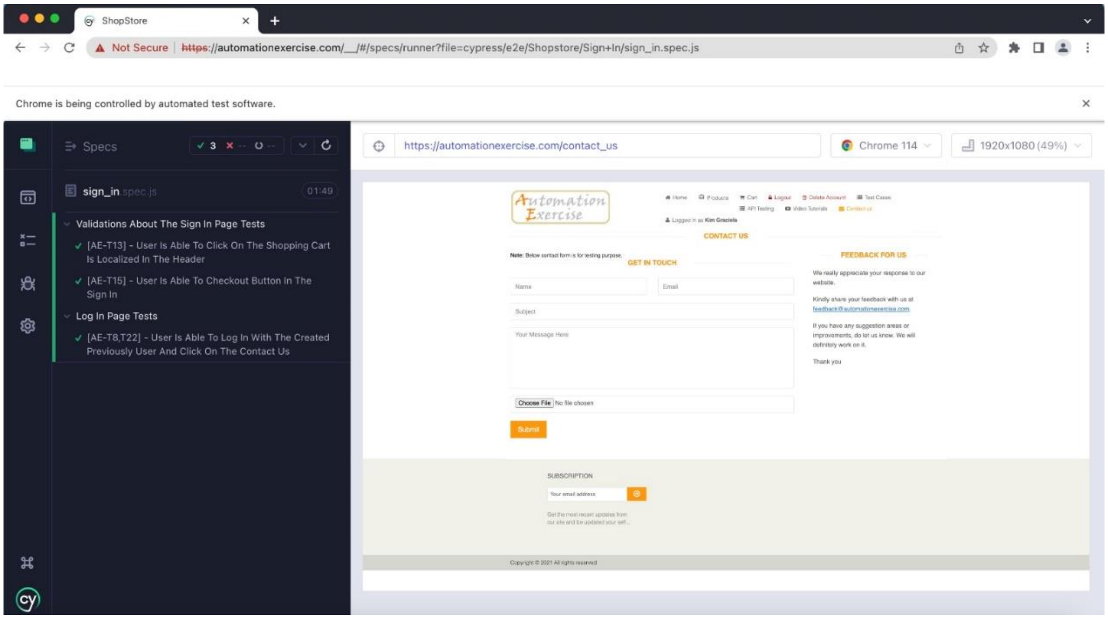
390x844 (81%)

account_creation spec.js 00:25

Sign Up Tests

- ✓ [AE-T8] - User Is Able To See The Log In Section
- ✓ [AE-T8] - User Is Able To See The Sign Up Section
- ✓ [AE-T10,T11,T12] - User Is Able To Fillout The Form And Click On The Sign Up Button
- ✓ [AE-T9] - User Is Able To Fill Out The New User Sign Up Form (With A Registered Account) And Click On Sign Up Button

- Sign In (Desktop and Mobile)



ShopStore

Not Secure | https://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Sign+In/sign_in.spec.js

Chrome is being controlled by automated test software.

Specs ✓ 3 ✕ -- ○ --

https://automationexercise.com/contact_us

Chrome 114

1920x1080 (49%)

sign_in spec.js 01:49

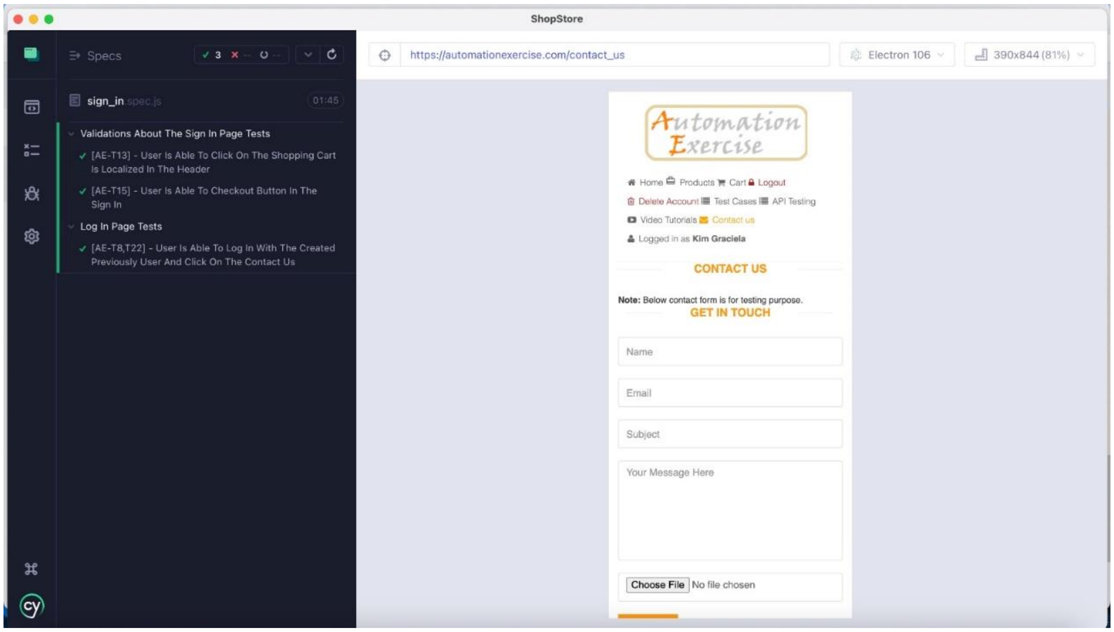
Validations About The Sign In Page Tests

- ✓ [AE-T13] - User Is Able To Click On The Shopping Cart Is Localized In The Header
- ✓ [AE-T15] - User Is Able To Checkout Button In The Sign In

Log In Page Tests

- ✓ [AE-T8,T22] - User Is Able To Log In With The Created Previously User And Click On The Contact Us

Home
Products
Cart
Logout
Delete Account
Test Cases
API Testing
Video Tutorials
Contact us
Logged in as Kim Graciela
CONTACT US
Note: Below contact form is for testing purpose.
GET IN TOUCH
Name
Email
Subject
Your Message Here
Choose File No file chosen
Submit
FEEDBACK FOR US
We really appreciate your response to our website.
Kindly share your feedback with us at feedback@automationexercise.com.
If you have any suggestion areas or improvements, do let us know. We will definitely work on it.
Thank you
SUBSCRIPTION
Your email address
Get the most recent updates from our site and be updated your self...
Copyright © 2021 All rights reserved



ShopStore

Specs ✓ 3 ✕ -- ○ --

https://automationexercise.com/contact_us

Electron 106

390x844 (81%)

sign_in.spec.js 01:45

- Validations About The Sign In Page Tests
  - ✓ [AE-T13] - User Is Able To Click On The Shopping Cart Is Localized In The Header
  - ✓ [AE-T15] - User Is Able To Checkout Button In The Sign In
- Log In Page Tests
  - ✓ [AE-T8,T22] - User Is Able To Log In With The Created Previously User And Click On The Contact Us

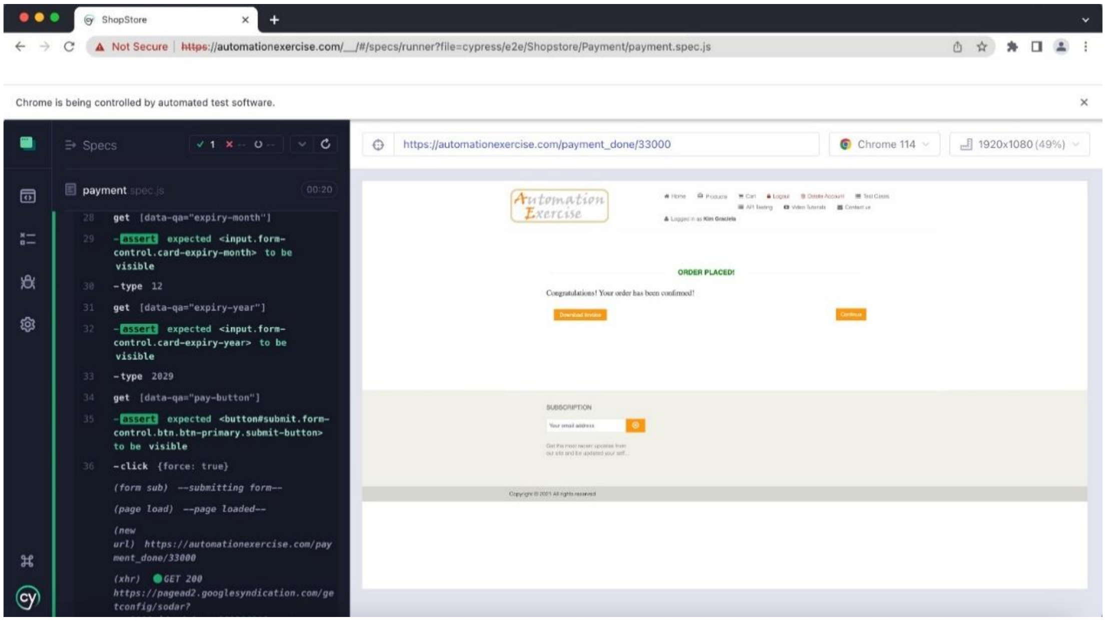
Automation Exercise
Home Products Cart Logout
Delete Account Test Cases API Testing
Video Tutorials Contact us
Logged in as Kim Graciela

CONTACT US

Note: Below contact form is for testing purpose.

GET IN TOUCH

- Payment (Desktop and Mobile)



ShopStore

⚠ Not Secure | ~~https~~://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Payment/payment.spec.js

Chrome is being controlled by automated test software.

Specs ✓ 1 ✕ -- ○ --

https://automationexercise.com/payment_done/33000

Chrome 114

1920x1080 (49%)

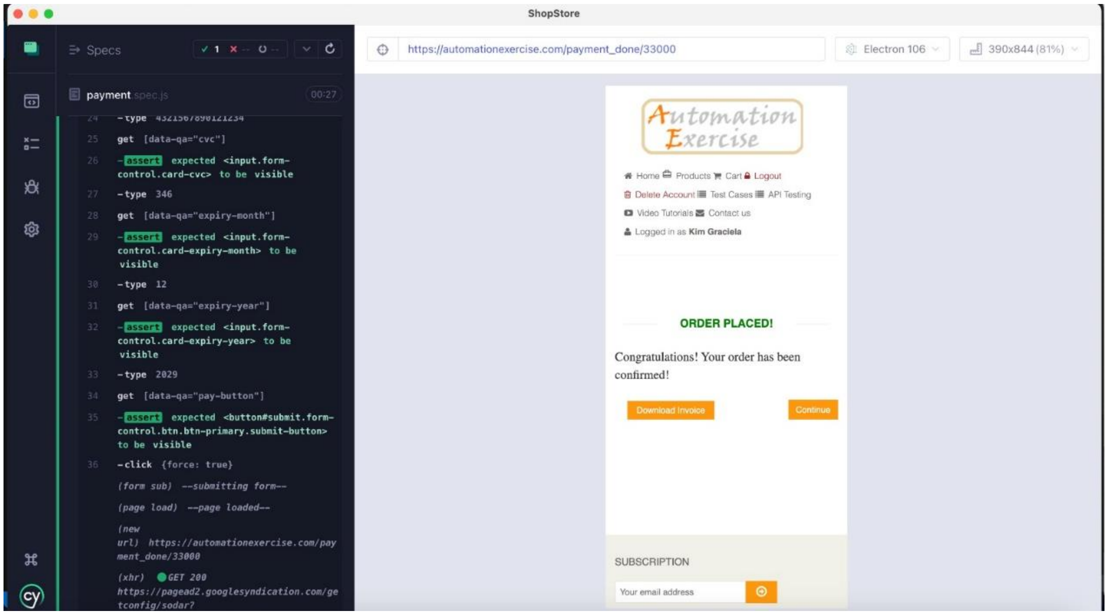
payment.spec.js 00:20

```
28  get [data-qa="expiry-month"]
29  -assert expected <input.form-control.card-expiry-month> to be visible
30  -type 12
31  get [data-qa="expiry-year"]
32  -assert expected <input.form-control.card-expiry-year> to be visible
33  -type 2029
34  get [data-qa="pay-button"]
35  -assert expected <button#submit.form-control.btn.btn-primary.submit-button> to be visible
36  -click {force: true}
    (form sub) --submitting form--
    (page load) --page loaded--
    (new url) https://automationexercise.com/payment_done/33000
    (xhr) ● GET 200 https://pagead2.googlesyndication.com/getconfig/sodar?
```

ORDER PLACED!

Congratulations! Your order has been confirmed!

Download Invoice
Continue
SUBSCRIPTION
Your email address
Get the most recent updates from our site and be updated your self...
Copyright © 2021 All rights reserved



ShopStore

Specs ✓ 1 ✗ -- ○ --

payment spec.js 00:27

```
24  -type 4321567890121234
25  get [data-qa="cvc"]
26  -assert expected <input.form-
    control.card-cvc> to be visible
27  -type 346
28  get [data-qa="expiry-month"]
29  -assert expected <input.form-
    control.card-expiry-month> to be
    visible
30  -type 12
31  get [data-qa="expiry-year"]
32  -assert expected <input.form-
    control.card-expiry-year> to be
    visible
33  -type 2029
34  get [data-qa="pay-button"]
35  -assert expected <button#submit.form-
    control.btn.btn-primary.submit-button>
    to be visible
36  -click {force: true}
    (form sub) --submitting form--
    (page load) --page loaded--
    (new
    url) https://automationexercise.com/pay
    ment_done/33000
    (xhr) ● GET 200
    https://pagead2.googlesyndication.com/ge
    tconfig/sodar?
```

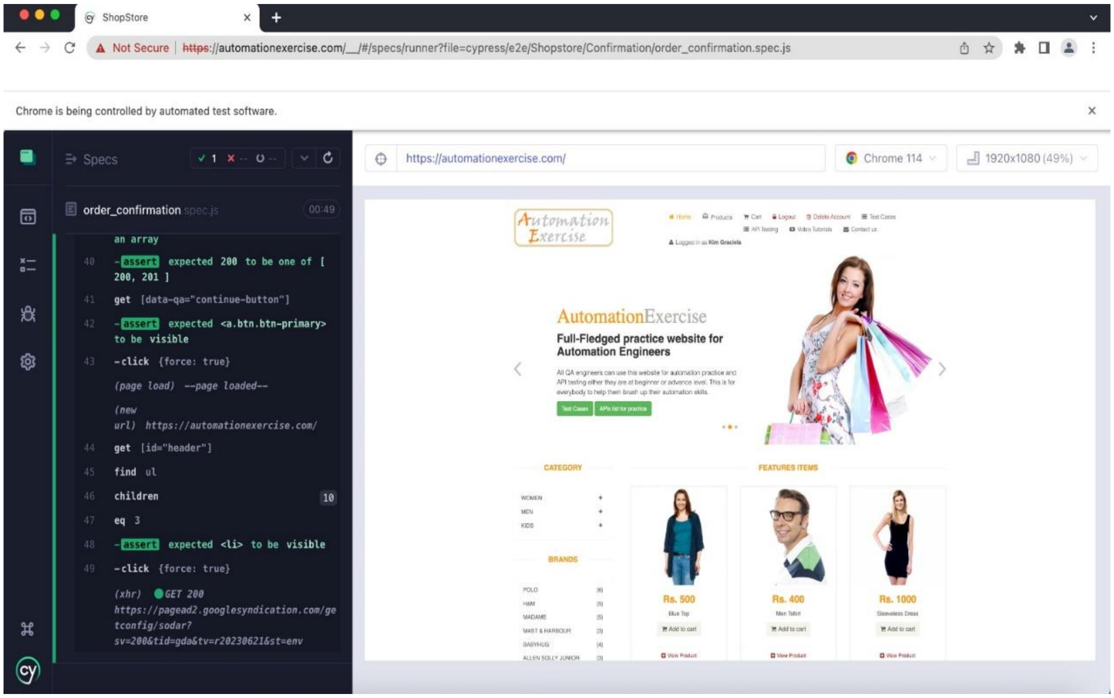
https://automationexercise.com/payment_done/33000 | Electron 106 | 390x844 (81%)

Logged in as Kim Graciela

ORDER PLACED!

Congratulations! Your order has been confirmed!

- Order Confirmation (Desktop and Mobile)



ShopStore

⚠ Not Secure | ~~https~~://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Confirmation/order_confirmation.spec.js

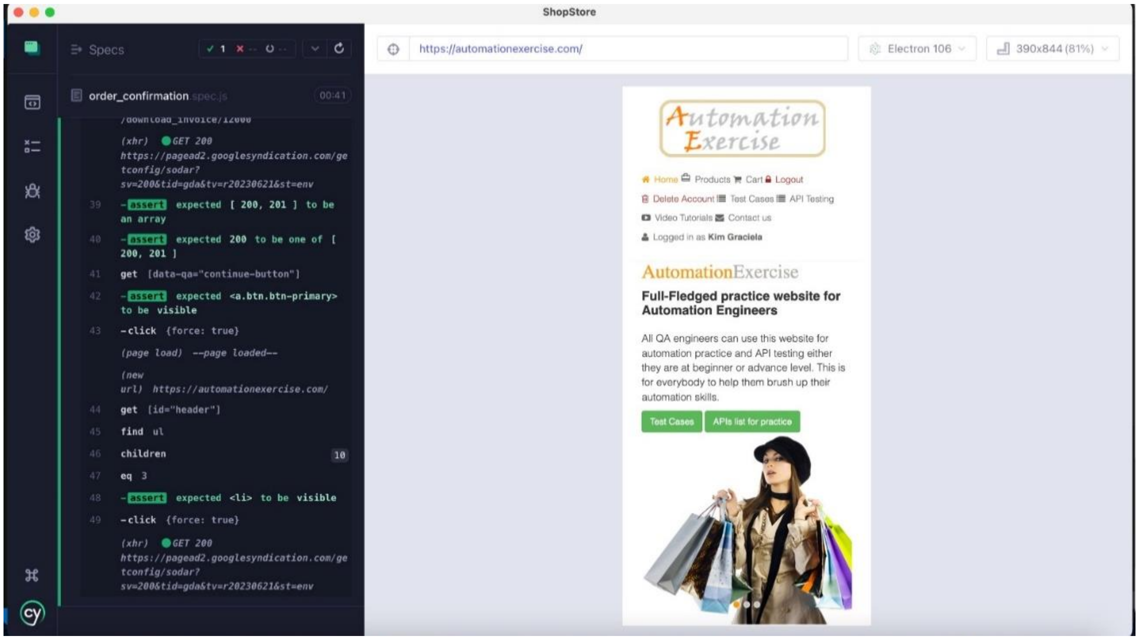
Chrome is being controlled by automated test software.

Specs ✓ 1 ✗ -- ○ --

order_confirmation spec.js 00:49

```
    an array
40  -assert expected 200 to be one of [
    200, 201 ]
41  get [data-qa="continue-button"]
42  -assert expected <a.btn.btn-primary>
    to be visible
43  -click {force: true}
    (page load) --page loaded--
    (new
    url) https://automationexercise.com/
44  get [id="header"]
45  find ul
46  children                          10
47  eq 3
48  -assert expected <li> to be visible
49  -click {force: true}
    (xhr) ● GET 200
    https://pagead2.googlesyndication.com/ge
    tconfig/sodar?
    sv=200&tid=gda&tv=r20230621&st=env
```

https://automationexercise.com/ | Chrome 114 | 1920x1080 (49%)



ShopStore

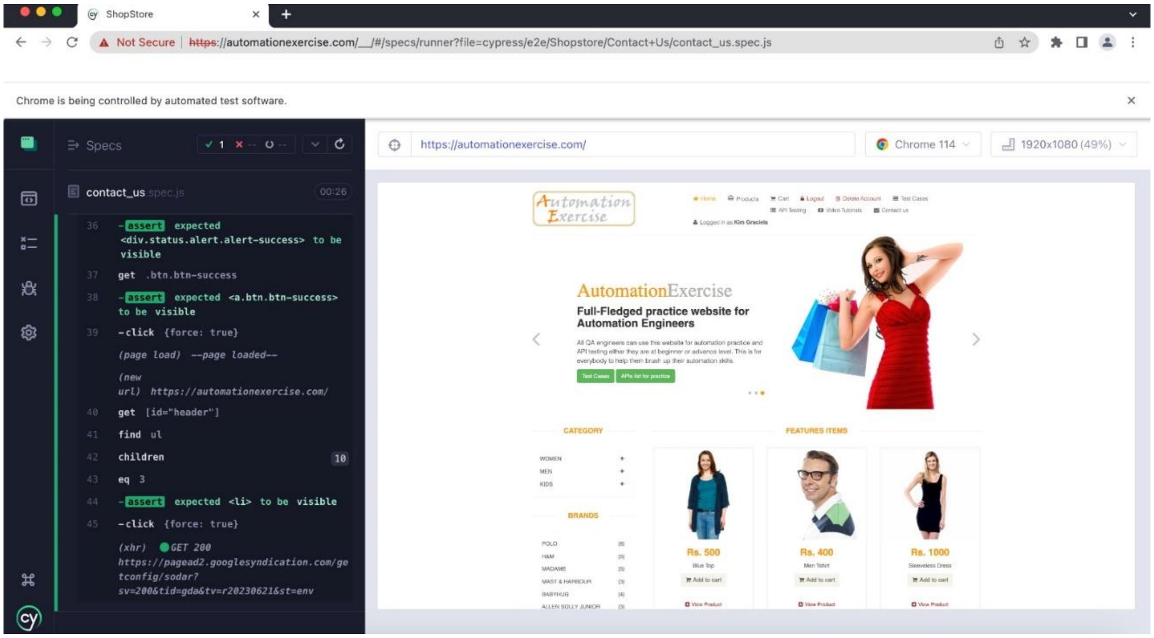
Specs ✓ 1 ✗ -- ↻ --

order_confirmation.spec.js 00:41

```
   /download_invoice/12000
   (xhr)  ● GET 200
   https://pagead2.googlesyndication.com/ge
   tconfig/sodar?
   sv=200&tid=gda&tv=r20230621&st=env
39 -assert expected [ 200, 201 ] to be
   an array
40 -assert expected 200 to be one of [
   200, 201 ]
41 get [data-qa="continue-button"]
42 -assert expected <a.btn.btn-primary>
   to be visible
43 -click {force: true}
   (page load) --page loaded--
   (new
   url) https://automationexercise.com/
44 get [id="header"]
45 find ul
46 children                          10
47 eq 3
48 -assert expected <li> to be visible
49 -click {force: true}
   (xhr)  ● GET 200
   https://pagead2.googlesyndication.com/ge
   tconfig/sodar?
   sv=200&tid=gda&tv=r20230621&st=env
```

https://automationexercise.com/
Electron 106
390x844 (81%)
Automation Exercise
Home Products Cart Logout
Delete Account Test Cases API Testing
Video Tutorials Contact us
Logged in as Kim Graciela
AutomationExercise
Full-Fledged practice website for Automation Engineers
All QA engineers can use this website for automation practice and API testing either they are at beginner or advance level. This is for everybody to help them brush up their automation skills.
Test Cases
APIs list for practice

- Contact Us (Desktop and Mobile)



ShopStore

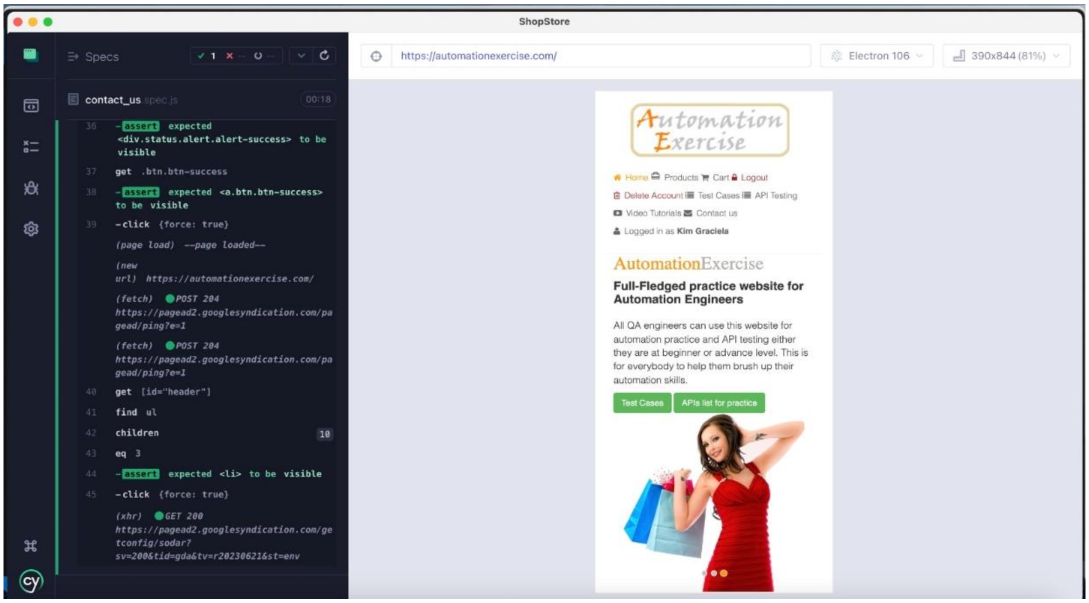
Not Secure | ~~https~~://automationexercise.com/__/#/specs/runner?file=cypress/e2e/Shopstore/Contact+Us/contact_us.spec.js

Chrome is being controlled by automated test software.

Specs ✓ 1 ✗ -- ↻ --

contact_us.spec.js 00:26

```
36 -assert expected
   <div.status.alert.alert-success> to be
   visible
37 get .btn.btn-success
38 -assert expected <a.btn.btn-success>
   to be visible
39 -click {force: true}
   (page load) --page loaded--
   (new
   url) https://automationexercise.com/
40 get [id="header"]
41 find ul
42 children                          10
43 eq 3
44 -assert expected <li> to be visible
45 -click {force: true}
   (xhr)  ● GET 200
   https://pagead2.googlesyndication.com/ge
   tconfig/sodar?
   sv=200&tid=gda&tv=r20230621&st=env
```



```
36  -assert expected
    <div.status.alert.alert-success> to be
    visible
37  get .btn.btn-success
38  -assert expected <a.btn.btn-success>
    to be visible
39  -click {force: true}
    (page load) --page loaded--
    (new
    url) https://automationexercise.com/
    (fetch) ●POST 204
    https://pagead2.googlesyndication.com/pa
    gead/ping?e=1
    (fetch) ●POST 204
    https://pagead2.googlesyndication.com/pa
    gead/ping?e=1
40  get [id="header"]
41  find ul
42  children                                10
43  eq 3
44  -assert expected <li> to be visible
45  -click {force: true}
    (xhr) ●GET 200
    https://pagead2.googlesyndication.com/ge
    tconfig/sodar?
    sv=200&tid=gda&tv=r20230621&st=env
```

Automation Exercise
Home Products Cart Logout
Delete Account Test Cases API Testing
Video Tutorials Contact us
Logged in as Kim Graciela
AutomationExercise

Full-Fledged practice website for Automation Engineers

All QA engineers can use this website for automation practice and API testing either they are at beginner or advance level. This is for everybody to help them brush up their automation skills.