BLEKINGE TEKNISKA HÖGSKOLA • BTH •

Gemensam text

PA1489

Group 19

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Brief Summary of What Was Tested:

We tested core functionalities related to managing burger orders. This included testing database functions for fetching burgers that we had created, placing orders, and retrieving all orders in the kitchen view.

Test name	Description	Type	**Expected Result**
getburger	Fetches a specific burger with toppings from the database.	Jest Unit test	Returns the correct burger name and toppings.
placeOrder	Places a new order with burger, toppings, sides, and drink.	Jest Unit test	Successfully inserts the order and returns an order ID.
getOrderId	Retrieves the latest order ID from the database.	Jest Unit test	Returns the order ID.
Placing order via UI	Simulates placing an order through the user interface.	Cypress E2E test	Displays a success message after placing an order.
Checking Burger Display	Verifies that burgers and descriptions are correctly displayed on the UI.	Cypress E2E test	All burgers are rendered with correct data (name, image, description).
Testing Dropdown	Ensures dropdowns for toppings, sides, and drinks work properly on the UI.	Cypress E2E test	Dropdown values are selectable and passed correctly to the order form.

Summary of How Tests Were Conducted:

We used Jest to perform unit tests of the backend, mocking the database calls to simulate actual functionality. For end-to-end (E2E) tests Cypress was used to ensure user flows like placing an order work correctly via the UI simulating usage of BurgerHub.

Experience Writing Automated Unit Tests and E2E tests:

What Went Well?

Mocking the database with Jest was smooth and testing and setup for both Jest and Cypress was rather simple. Due to Burgerhubs simple design it was a rather small amount of features that had to be tested.

Challenges

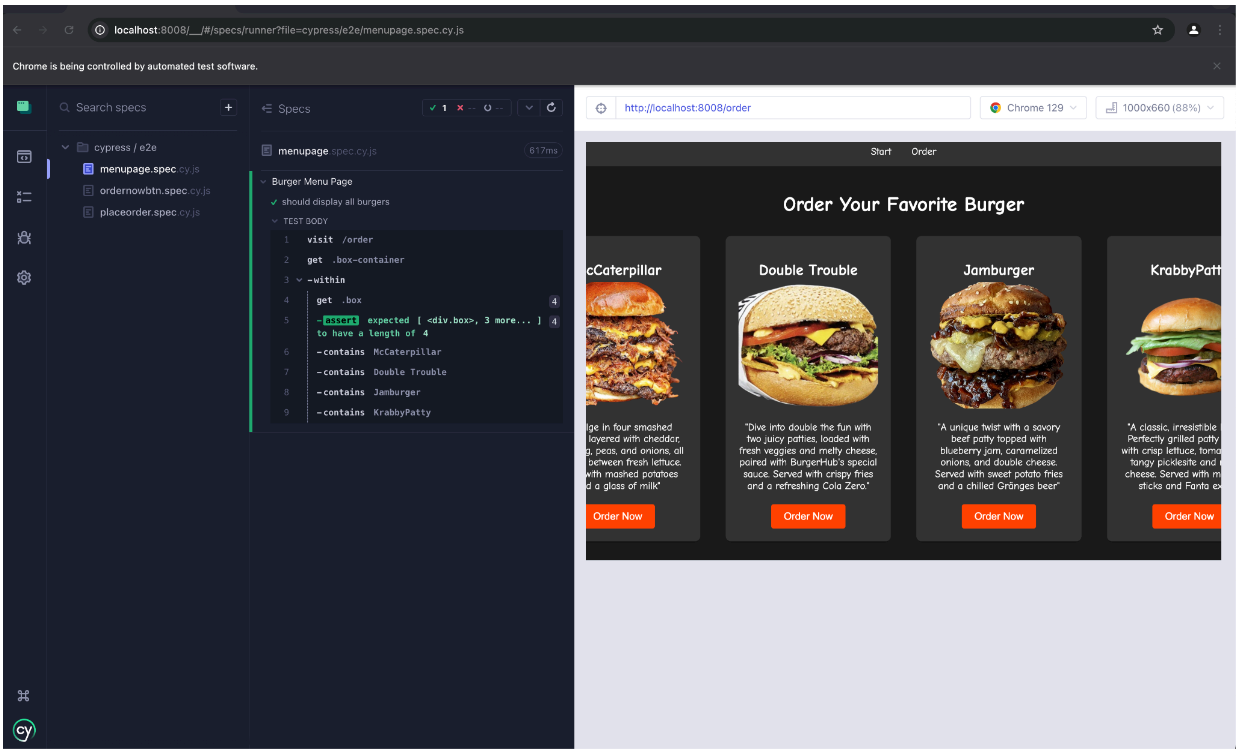
Configuring paths in the test environment caused issues. Cypress sometimes struggled with specific UI elements such as not being able to find the Double Trouble burger even though it was clearly displayed on the screen. This may be a problem with either the tests running too fast or that Double Trouble actually uses a different name.

How Were Challenges Resolved?

We resolved path issues by using relative paths and Node's path module. For Cypress, we adjusted the element selectors to be more specific.

What Could Not Be Solved

Some minor UI issues during end-to-end tests particularly related to dynamic rendering (double trouble), could not be fully resolved within the project's timeframe. This problem is not solved yet however as we did manual tests no problem were seen and when assisting the cypress application by navigating back home right before the test for double trouble, this issue got solved and the tests returned 100% success.



localhost:8008/__/#/specs/runner?file=cypress/e2e/menupage.spec.cy.js

Chrome is being controlled by automated test software.

menupage.spec.cy.js 617ms

Burger Menu Page

✓ should display all burgers

TEST BODY

```
1   visit  /order
2   get  .box-container
3   -within
4     get  .box                                              4
5     -assert  expected [ <div.box>, 3 more... ]             4
      to have a length of 4
6     -contains  McCaterpillar
7     -contains  Double Trouble
8     -contains  Jamburger
9     -contains  KrabbyPatty
```

http://localhost:8008/order

Chrome 129 · 1000x660 (88%)

Order Your Favorite Burger

cCaterpillar

lge in four smashed layered with cheddar, g, peas, and onions, all between fresh lettuce. with mashed potatoes d a glass of milk"

Double Trouble

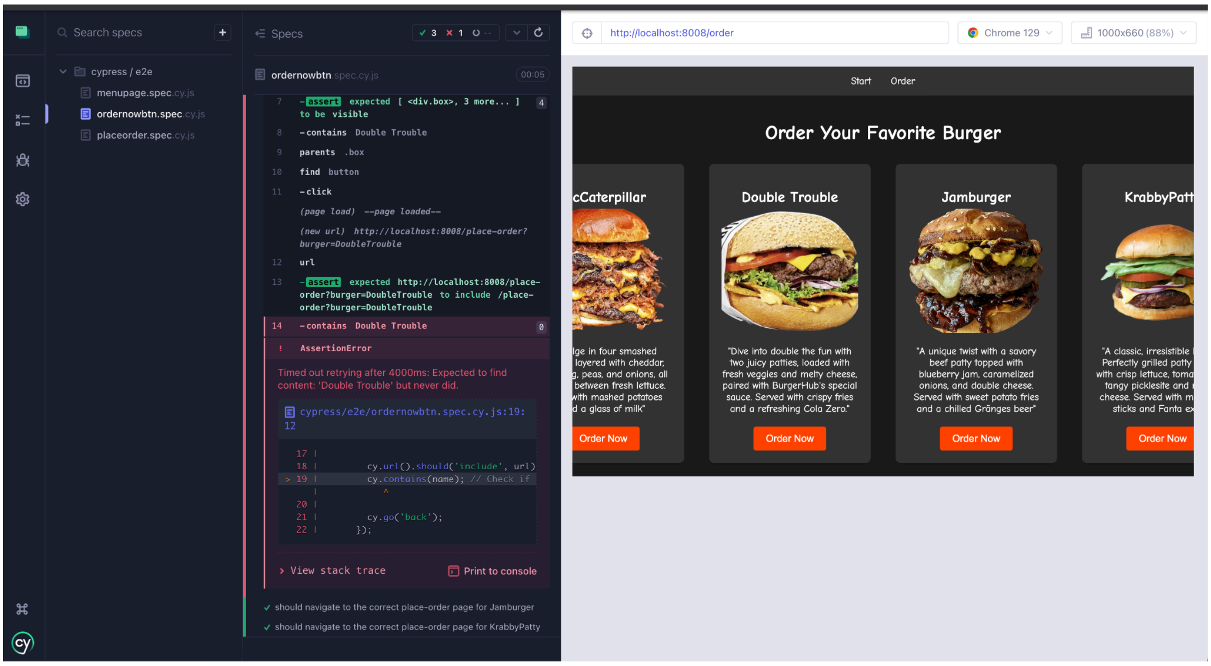
"Dive into double the fun with two juicy patties, loaded with fresh veggies and melty cheese, paired with BurgerHub's special sauce. Served with crispy fries and a refreshing Cola Zero."

Jamburger

"A unique twist with a savory beef patty topped with blueberry jam, caramelized onions, and double cheese. Served with sweet potato fries and a chilled Gränges beer"

KrabbyPatt

"A classic, irresistible Perfectly grilled patty with crisp lettuce, toma tangy picklesite and cheese. Served with m sticks and Fanta ex



ordernowbtn.spec.cy.js 00:05

```
7   -assert  expected [ <div.box>, 3 more... ]               4
    to be visible
8   -contains  Double Trouble
9   parents  .box
10  find  button
11  -click
    (page load)  --page loaded--
    (new url)  http://localhost:8008/place-order?
    burger=DoubleTrouble
12  url
13  -assert  expected http://localhost:8008/place-
    order?burger=DoubleTrouble to include /place-
    order?burger=DoubleTrouble
14  -contains  Double Trouble                                  0
```

```
!  AssertionError

Timed out retrying after 4000ms: Expected to find
content: 'Double Trouble' but never did.

cypress/e2e/ordernowbtn.spec.cy.js:19:
12

  17 |
  18 |         cy.url().should('include', url)
> 19 |         cy.contains(name); // Check if
     |            ^
  20 |
  21 |         cy.go('back');
  22 |       });
```

✓ should navigate to the correct place-order page for Jamburger

✓ should navigate to the correct place-order page for KrabbyPatty

http://localhost:8008/order

Chrome 129 · 1000x660 (88%)

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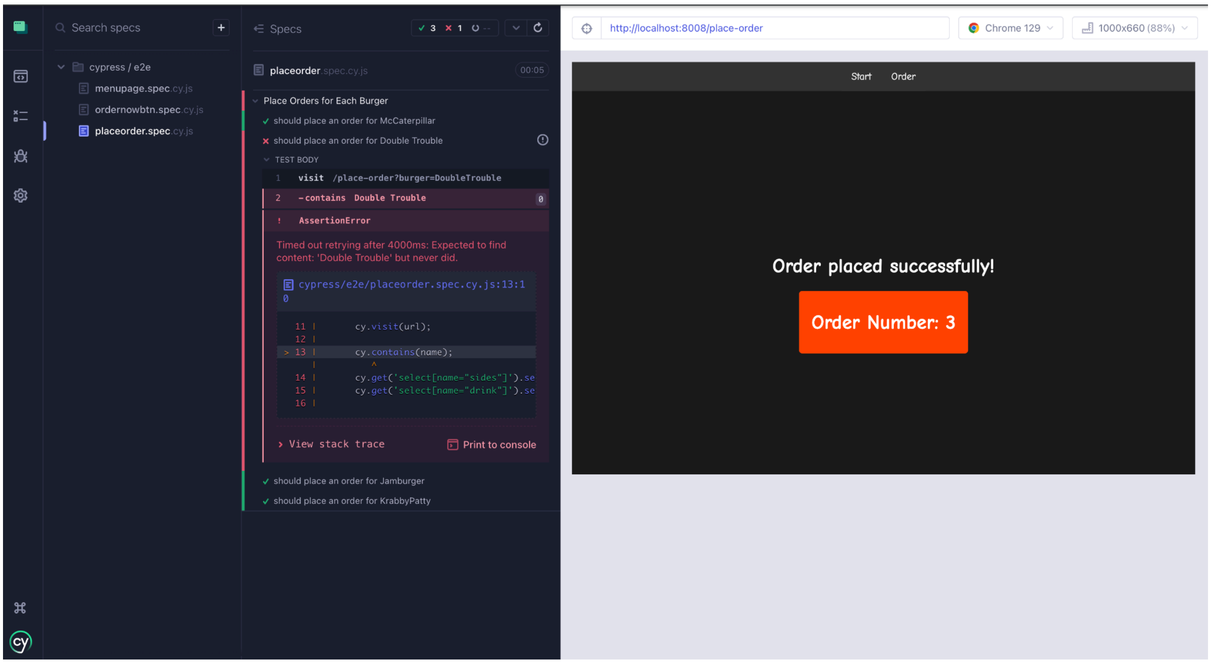
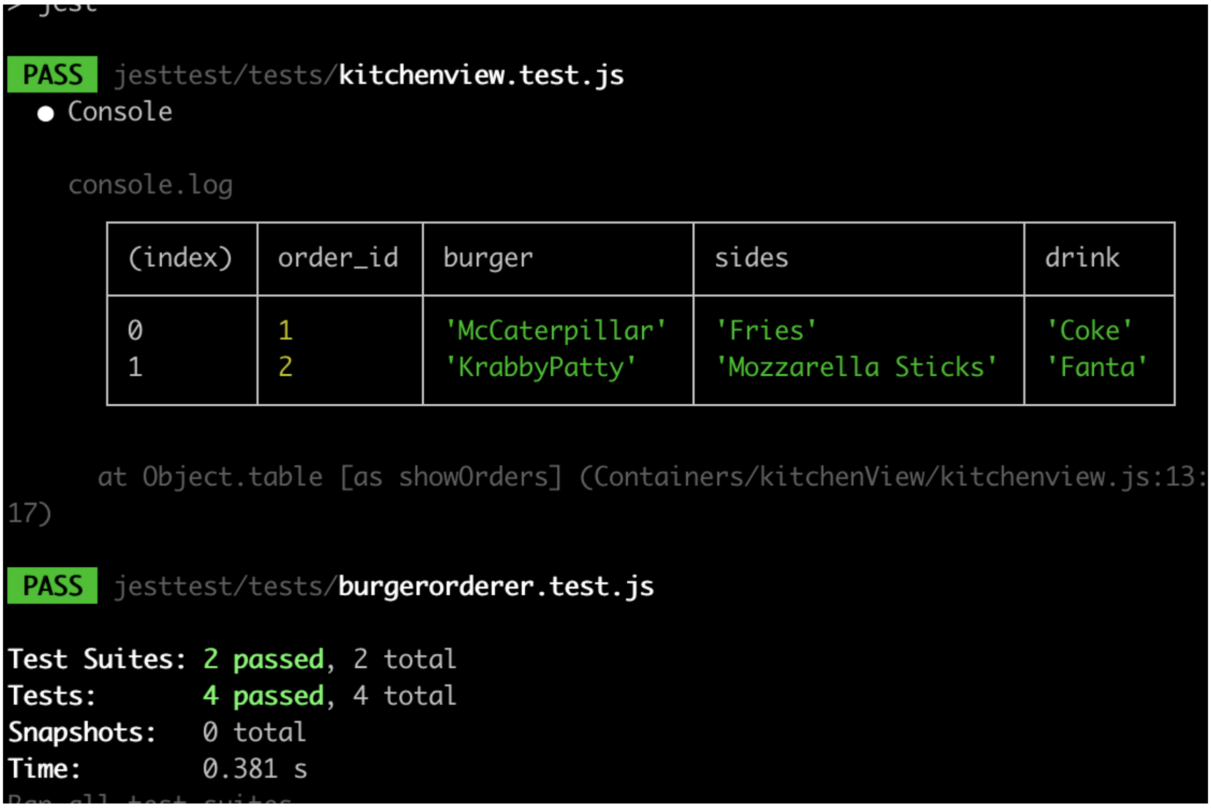


```
placeorder.spec.cy.js                                  00:05

Place Orders for Each Burger
✓ should place an order for McCaterpillar
✕ should place an order for Double Trouble
TEST BODY
1  visit  /place-order?burger=DoubleTrouble
2  -contains  Double Trouble                            0
!  AssertionError

Timed out retrying after 4000ms: Expected to find
content: 'Double Trouble' but never did.

cypress/e2e/placeorder.spec.cy.js:13:1
0

  11 |        cy.visit(url);
  12 |
> 13 |        cy.contains(name);
     |           ^
  14 |        cy.get('select[name="sides"]').se
  15 |        cy.get('select[name="drink"]').se
  16 |

> View stack trace                      Print to console
✓ should place an order for Jamburger
✓ should place an order for KrabbyPatty
```

Order placed successfully!

Order Number: 3



```
> jest

 PASS  jesttest/tests/kitchenview.test.js
  ● Console

    console.log
      ┌─────────┬──────────┬─────────────────┬──────────────────────┬─────────┐
      │ (index) │ order_id │ burger          │ sides                │ drink   │
      ├─────────┼──────────┼─────────────────┼──────────────────────┼─────────┤
      │ 0       │ 1        │ 'McCaterpillar' │ 'Fries'              │ 'Coke'  │
      │ 1       │ 2        │ 'KrabbyPatty'   │ 'Mozzarella Sticks'  │ 'Fanta' │
      └─────────┴──────────┴─────────────────┴──────────────────────┴─────────┘

      at Object.table [as showOrders] (Containers/kitchenView/kitchenview.js:13:
17)

 PASS  jesttest/tests/burgerorderer.test.js

Test Suites: 2 passed, 2 total
Tests:       4 passed, 4 total
Snapshots:   0 total
Time:        0.381 s
Ran all test suites.
```