

APP ACCESS



YOU WILL LEARN

- how to access the application data stored in `localStorage`

```
// app.js
SET_TODOS(state, todos) {
  // save the todos to the local storage
  localStorage.setItem('todos', JSON.stringify(todos))
},
```

todos

What needs to be done?

-
- Code the app
-

- Write the tests
-

2 items left

All

Active

Completed

CHECK OUT THE BRANCH

- git checkout e4
- check the localStorage in the browser

PLAYWRIGHT

```
// pw/local-storage.spec.js
const { test, expect } = require('@playwright/test')

// load the two todos from the "./fixtures/two-items.json" file
const todos = require('../fixtures/two-items.json')

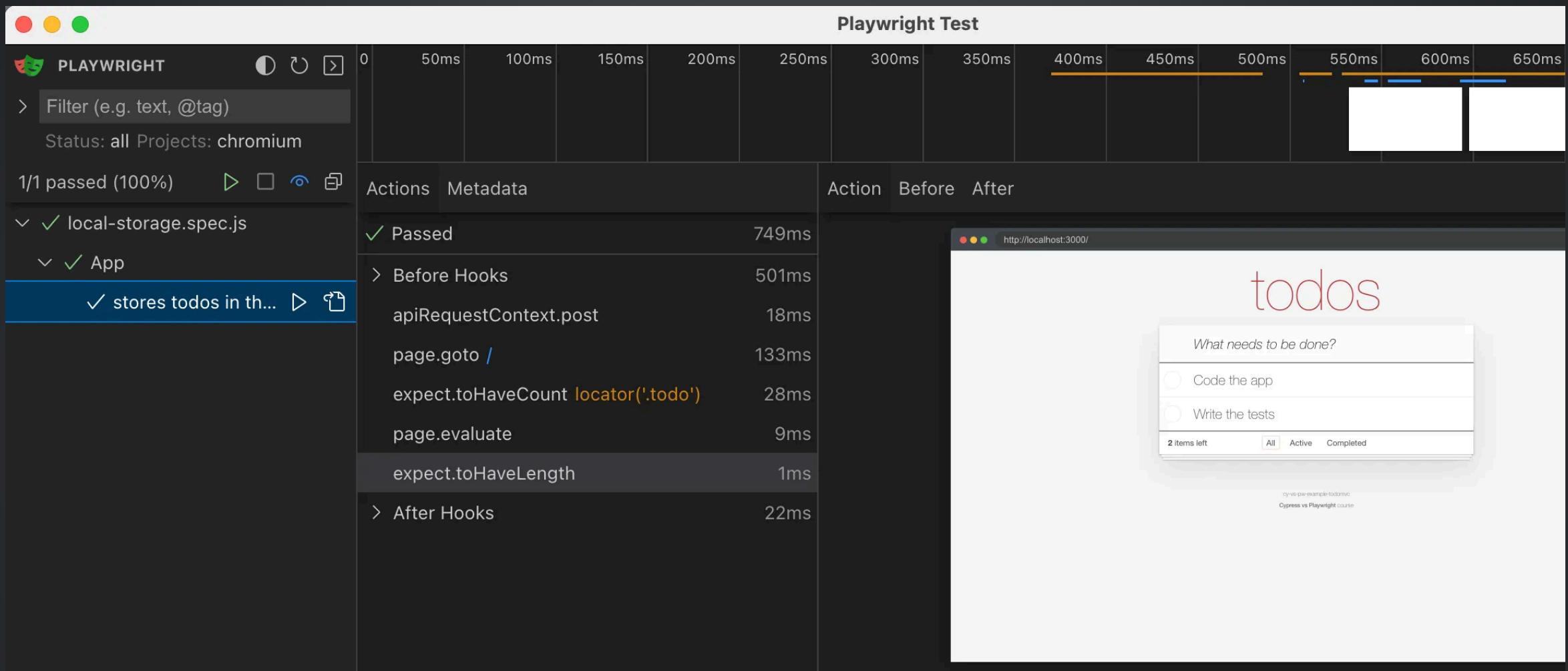
test.describe('App', () => {
  test('stores todos in the local storage', async ({ page, request }) => {
    // reset the backend to only have those todo items
    // by making a network request to the "/reset" endpoint

    // visit the home page
    await page.goto('/')
    // there should be two items on the page

    // the local storage should have two items
  })
})
```

Remember: Playwright script executes in Node.js environment and sends the commands to the browser.

```
await expect(page.locator('.todo')).toHaveLength(2)
// the local storage should have two items
// under the property "todos"
// get the local storage item "todos" and parse it
// and return back to the test
// Tip: use page.evaluate to run code in the browser
const items = await page.evaluate(() => {
  return JSON.parse(localStorage.getItem('todos'))
})
expect(items).toHaveLength(2)
```



Locator Source Call Log Errors Console 4 Network 11 Attachments

629ms Download the Vue Devtools extension for a better development experience:

<https://github.com/vuejs/vue-devtools>

629ms You are running Vue in development mode.

Make sure to turn on production mode when deploying for production.

CYPRESS

```
// cypress/e2e/local-storage.cy.js

describe('App', () => {
  it('stores todos in the local storage', () => {
    // load todos from the fixture file "two-items.json"
    // and reset the backend to only have those todo items

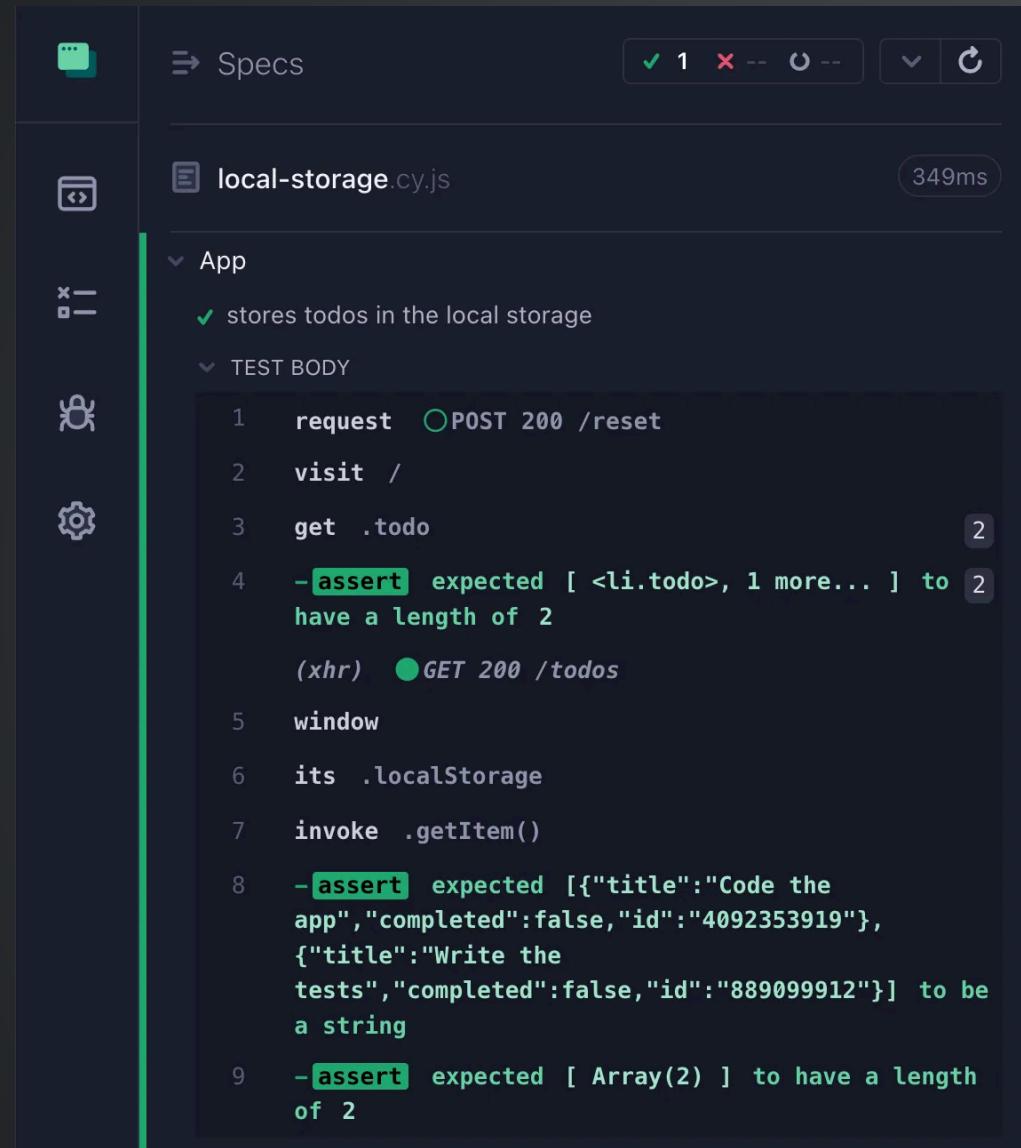
    cy.visit('/')
    // there should be two items on the page

    // the local storage should have two items
    // Tip: the local storage is available under "window.localStorage"
    // and to get an item from the local storage you
    // can invoke the "getItem" method on it
    // confirm the item is a string
    // then parse it into an object
```

Hint: Cypress tests run in the browser and can directly access the app's window via <https://on.cypress.io/window> command

```
// there should be two items on the page
cy.get('.todo').should('have.length', 2)
// the local storage should have two items
// Tip: the local storage is available under "window.localStorage"
// and to get an item from the local storage you
// can invoke the "getItem" method on it
cy.window()
  .its('localStorage')
  .invoke('getItem', 'todos')
  // confirm the item is a string
  // then parse it into an object
  .should('be.a', 'string')
  .then(JSON.parse)
  // which should be an array with 2 items
  .should('have.length', 2)
```

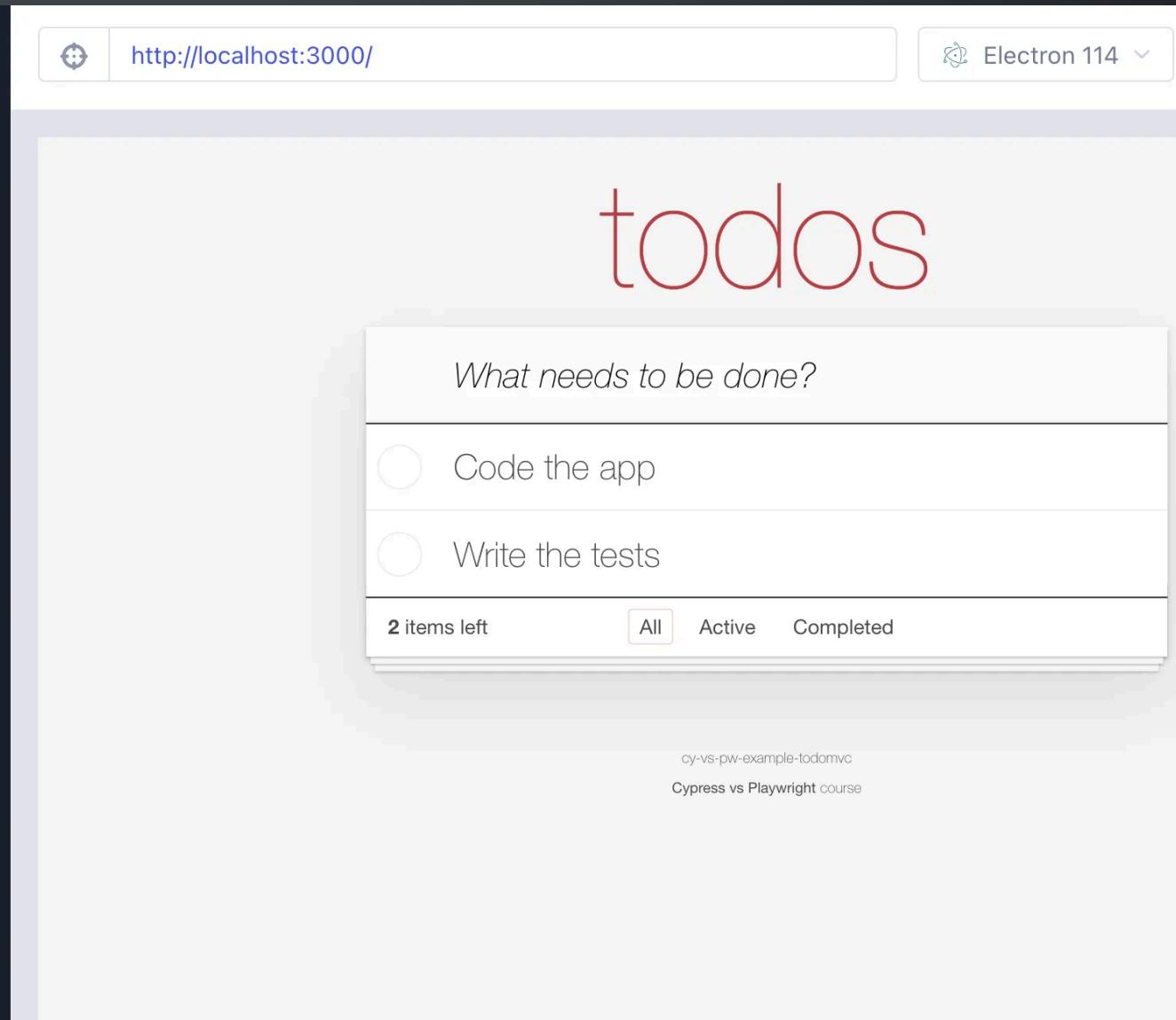
Cypress solution



```
Specs
local-storage.cy.js
349ms

App
✓ stores todos in the local storage

TEST BODY
1 request POST 200 /reset
2 visit /
3 get .todo
4 - assert expected [ <li.todo>, 1 more... ] to have a length of 2
  (xhr) GET 200 /todos
5 window
6 its .localStorage
7 invoke .getItem()
8 - assert expected [{"title": "Code the app", "completed": false, "id": "4092353919"}, {"title": "Write the tests", "completed": false, "id": "889099912"}] to be a string
9 - assert expected [ Array(2) ] to have a length of 2
```



http://localhost:3000

Electron 114

todos

What needs to be done?

- Code the app
- Write the tests

2 items left

All Active Completed

cy-vs-pw-example-todomvc

Cypress vs Playwright course



ACCESS THE APPLICATION DATA

- Playwright can evaluate JavaScript to return a copy of the app's data from the browser
- Cypress can directly access the application's data and code



Go to the [10-ci](#) chapter