

Workshop Introduction to Microsoft Playwright



Module 1

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Agenda- Day 1

- . Introduction to Playwright
- . Playwright for UI
- . Hands-on Implementation
- . Debugging tips

Learning Units covered in this Module



Getting Started with Playwright



Demo



More Resources



Getting Started with Playwright

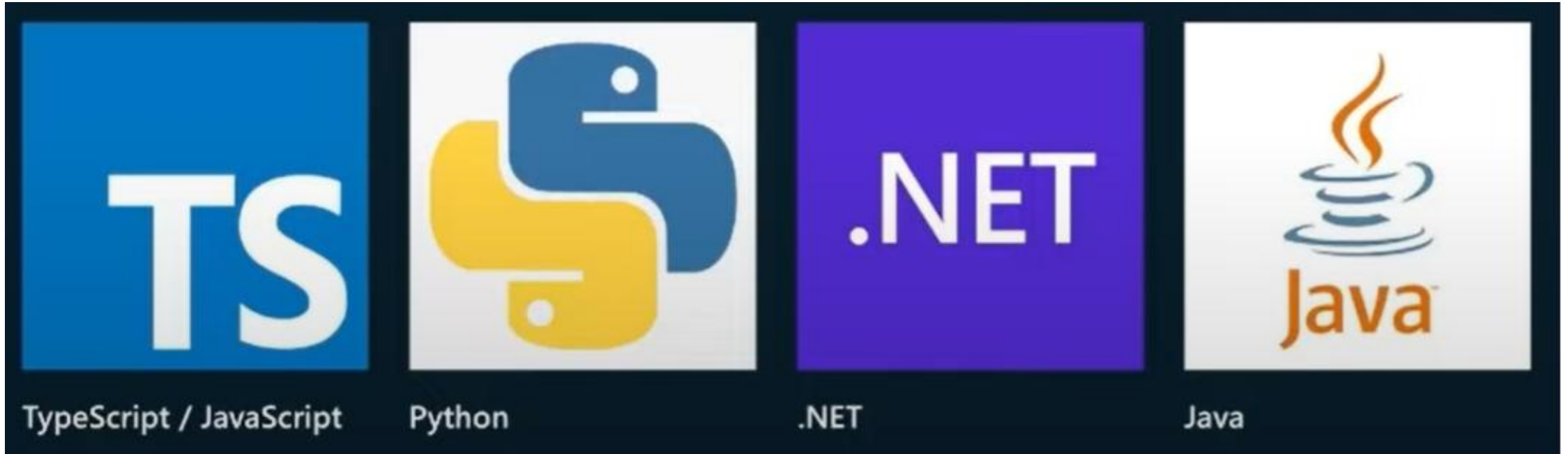
Playwright

Reliable end-to-end testing for modern web apps

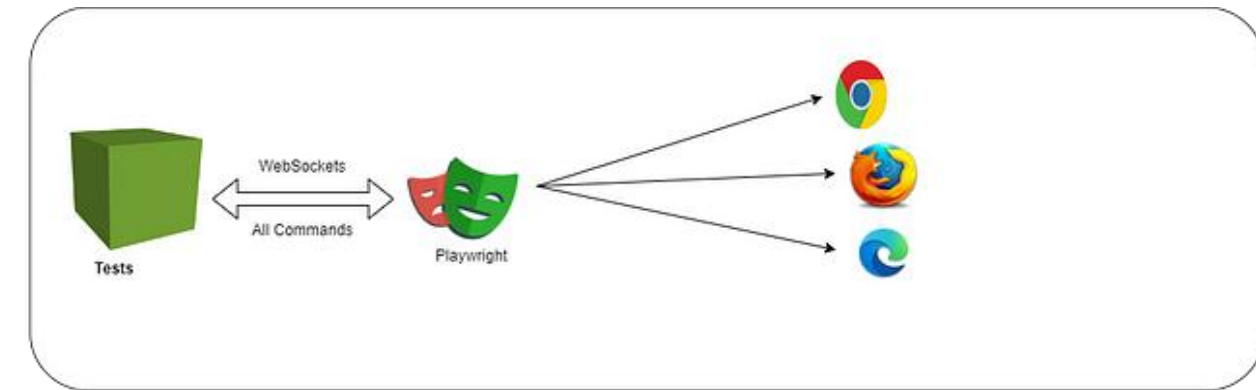
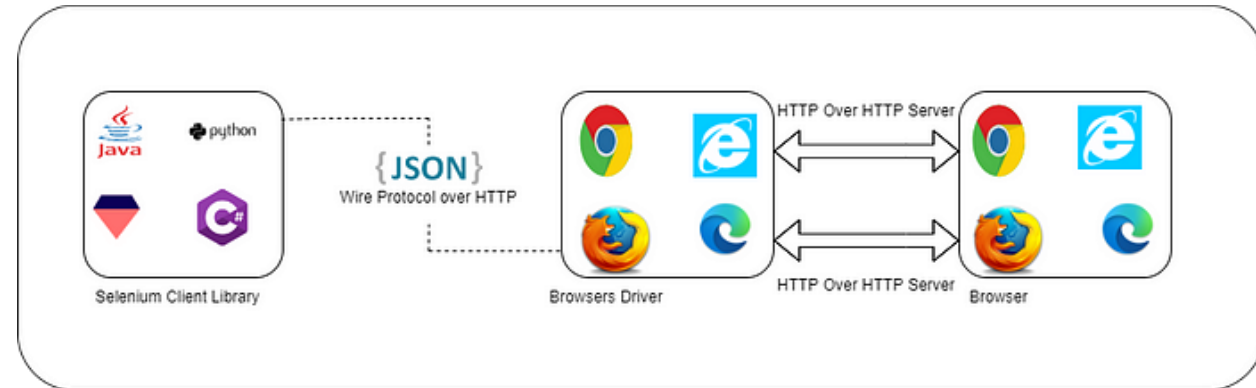
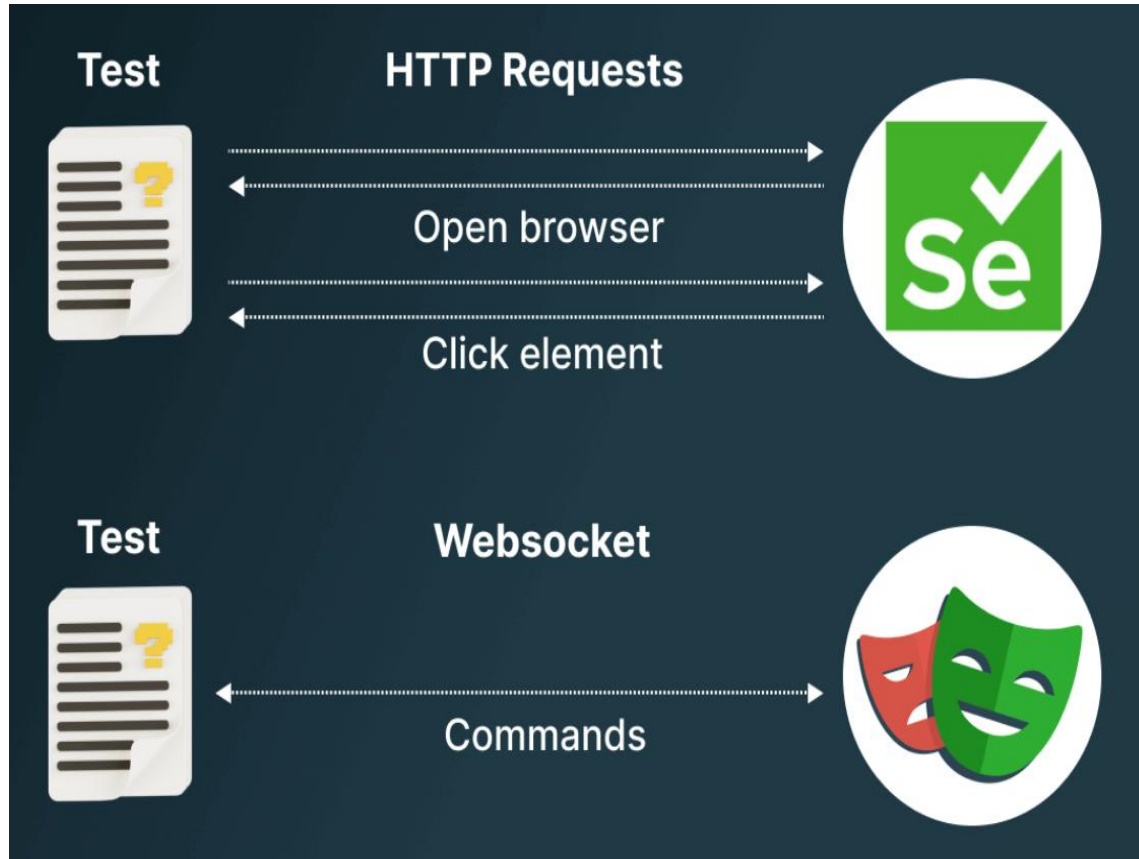
- Any browser • Any platform • One API
- Full isolation • Fast execution
- Powerful Tooling • Multi Language



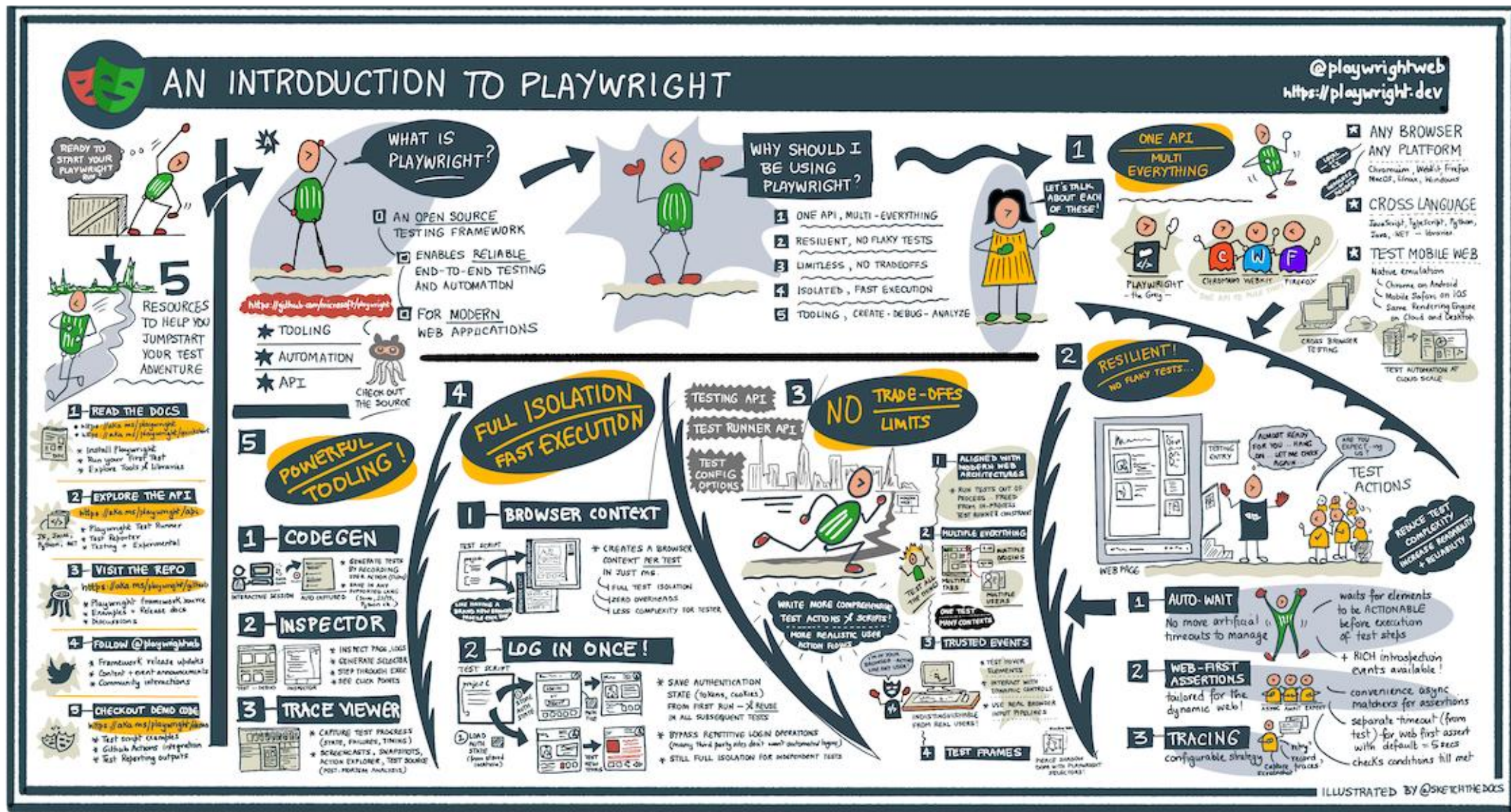
Multi Language



Playwright Architecture



Why should we use Playwright ?

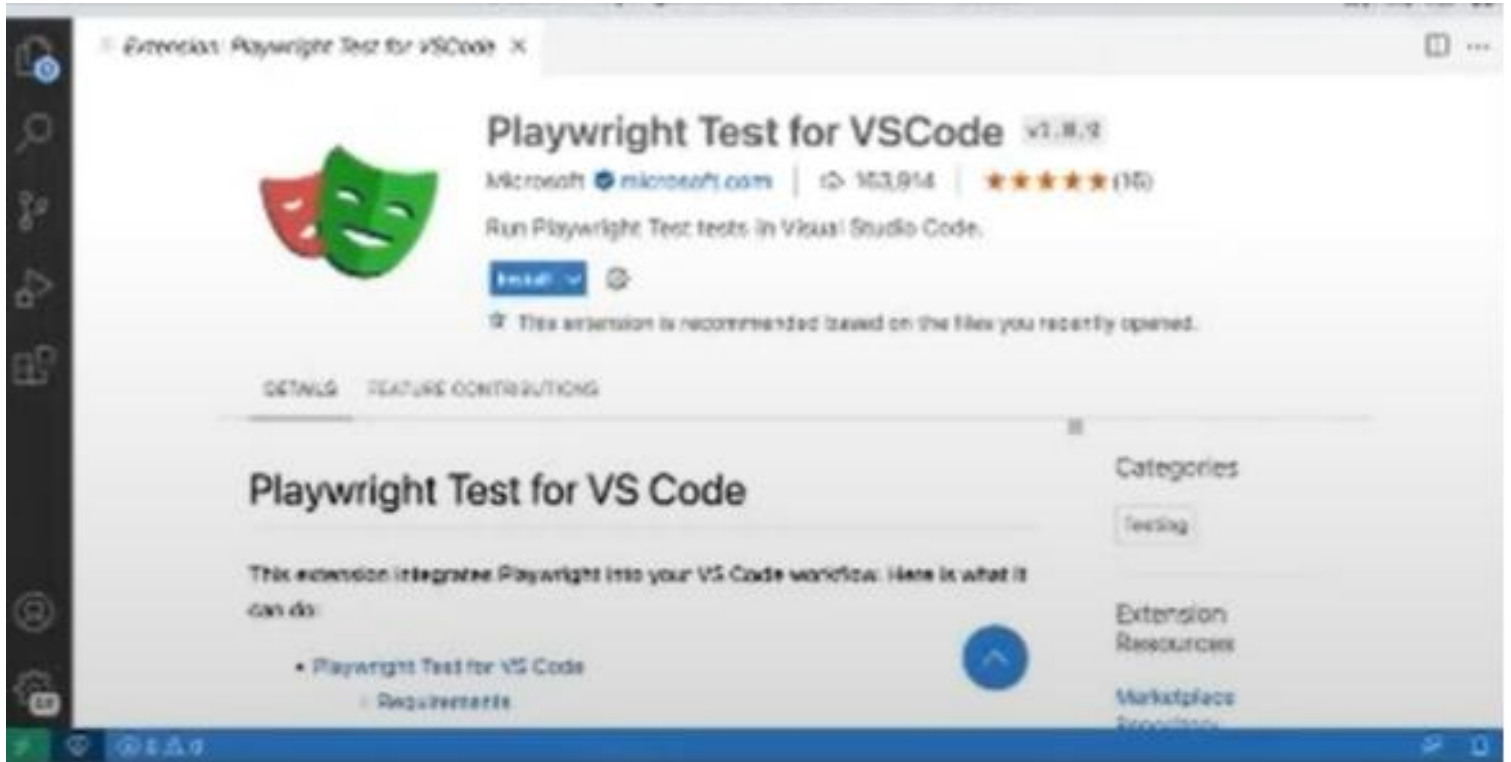


Browsers support

- Chromium (84 & above)
- Firefox (76 & above)
- WebKit (13 & above)
- Google Chrome (Chrome 66 & above)
- Microsoft Edge (Edge 80 & above)

VS Code Extension

Install, run, write and debug tests from VS Code



Demo

Installing Playwright

Locating elements

Playwright's locators

- `page.getByRole()` to locate by explicit and implicit accessibility attributes.
- `page.getByText()` to locate by text content.
- `page.getByLabel()` to locate a form control by associated label's text.
- `page.getByPlaceholder()` to locate an input by placeholder.
- `page.getByAltText()` to locate an element, usually image, by its text alternative.
- `page.getByTitle()` to locate an element by its title attribute.
- `page.getByTestId()` to locate an element based on its `data-testid` attribute (other attributes can be configured).

```
await page.getByLabel('User Name').fill('John');

await page.getByLabel('Password').fill('secret-password');

await page.getByRole('button', { name: 'Sign in' }).click();

await expect(page.getByText('Welcome, John!')).toBeVisible();
```

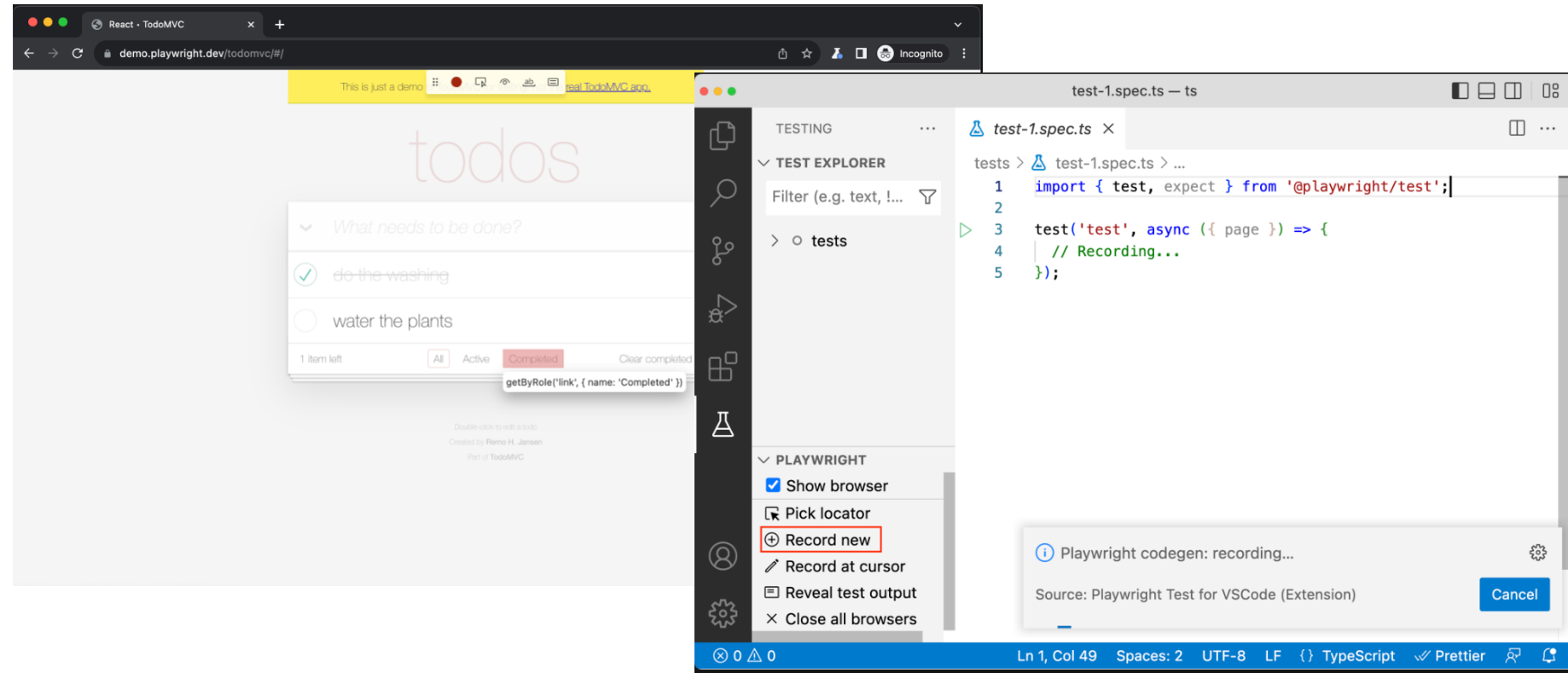
Demo

Picking Locators

Codegen

Playwright's test generator

Easily generate your tests by recording user actions



Demo

Codegen

UI Mode

Watch mode and time
travel debugging



```
npx playwright test --ui
```

Demo

UI Mode

Playwright Report

Built-in Reporter that reports the test execution status in html format

cmd: `npx playwright show-report`

Q	All 9	Passed 6	✗ Failed 3	Flaky 0	Skipped 0
12/01/2024, 11:55:11 Total time: 36.7s					
example.spec.ts					
✗	get started link	chromium			30.0s
example.spec.ts:10					
✓	has title	chromium			1.5s
example.spec.ts:3					
test-2.spec.ts					
✗	test	chromium			30.0s
test-2.spec.ts:3					
test-4.spec.ts					
✗	test	chromium			830ms
test-4.spec.ts:5					
auth.setup.ts					
✓	Create authenticated state for standarduser	setup			1.7s
auth.setup.ts:7					
loginTest.spec.ts					
✓	@bvt user test	chromium	bvt	1.2s	
loginTest.spec.ts:11					
✓	@bvt read csv and print test	chromium	bvt	234ms	
loginTest.spec.ts:17					
test-1.spec.ts					
✓	test	chromium			1.2s
test-1.spec.ts:3					

Demo

Playwright Reports



Playwright is Open Source and free

playwright-core

A high-level API to automate web browsers

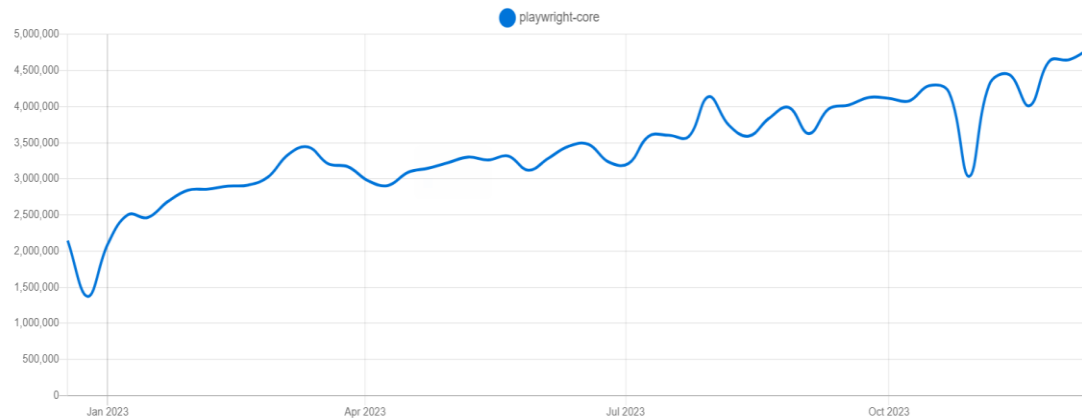


Enter an npm package...

playwright-core x

+ cypress + selenium-webdriver + puppeteer + webdriverio + playwright + playwright-chromium

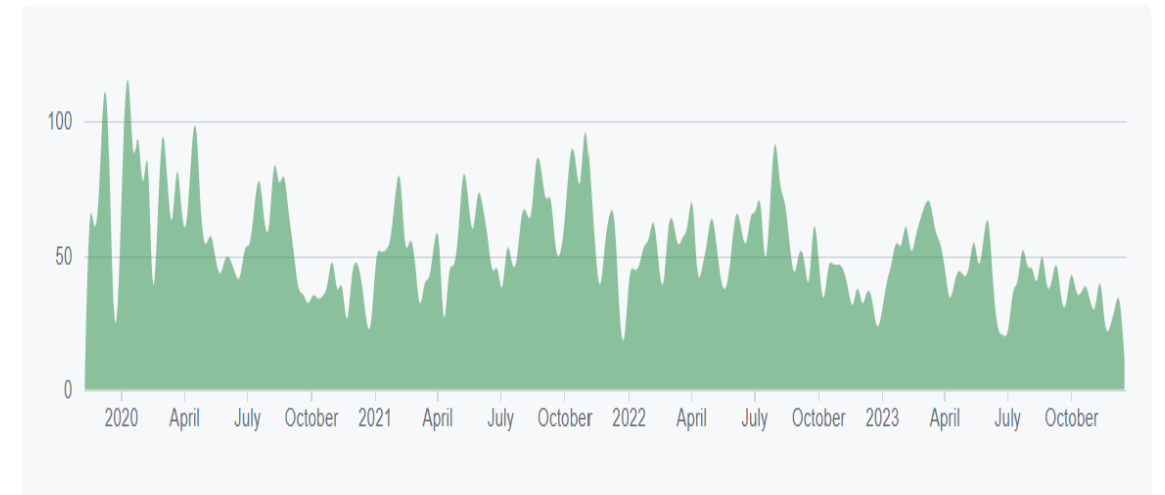
Downloads in past 1 Year



Nov 10, 2019 – Dec 20, 2023

Contributions: Commits

Contributions to main, excluding merge commits



More Resources

More Resources

- Documentation: <https://playwright.dev/docs>
- Community on Discord – aka.ms/playwright/discord
- Open source on GitHub: <https://github.com/microsoft/playwright>
- File an issue on Github for Bug, Feature Requests .
- Blog: <https://dev.to/playwright>

Questions?

