

Awesome Web Testing with Playwright

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Manual Testing Challenges



Testing is HARD!

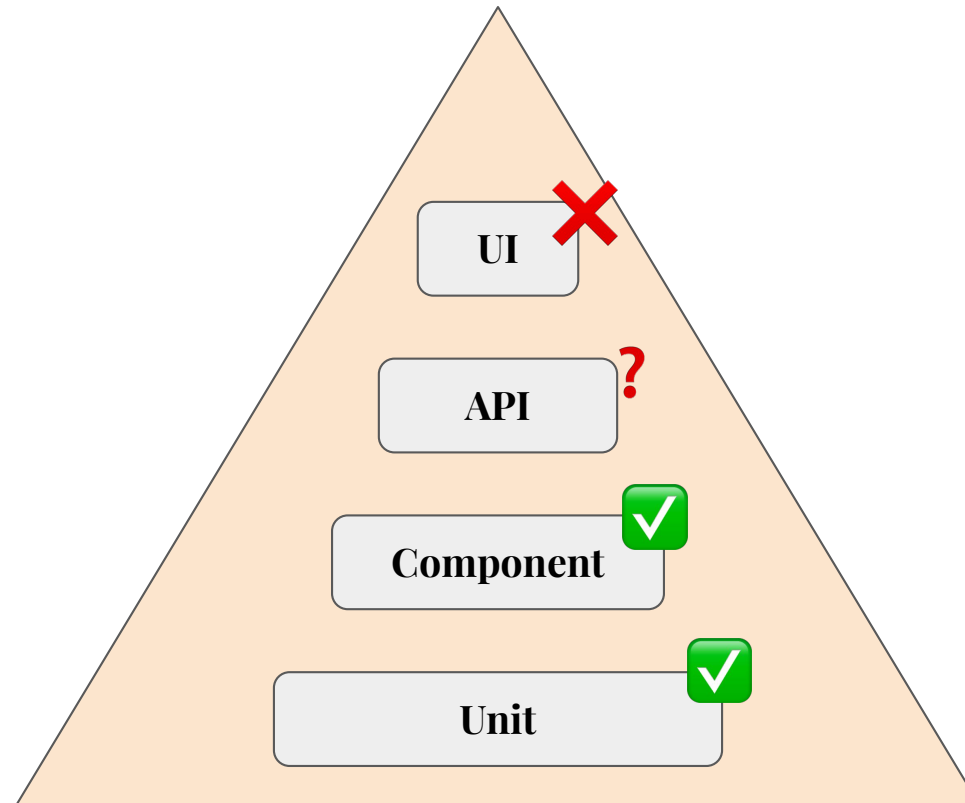
What challenges have y'all faced?

Testing challenges



- Time-Consuming
- Human Errors
- Lack of reusability
- Repetative Work & Fatigue
- Performance testing is difficult
- Limited parallel testing

That Pyramid Scheme



Modern Testing Goals

1. Focus on building **fast feedback loops** rather than certain types of tests.
2. Make test development as **fast and painless** as possible.
3. Choose test tooling that naturally **complements dev workflows**.

Playwright can help.

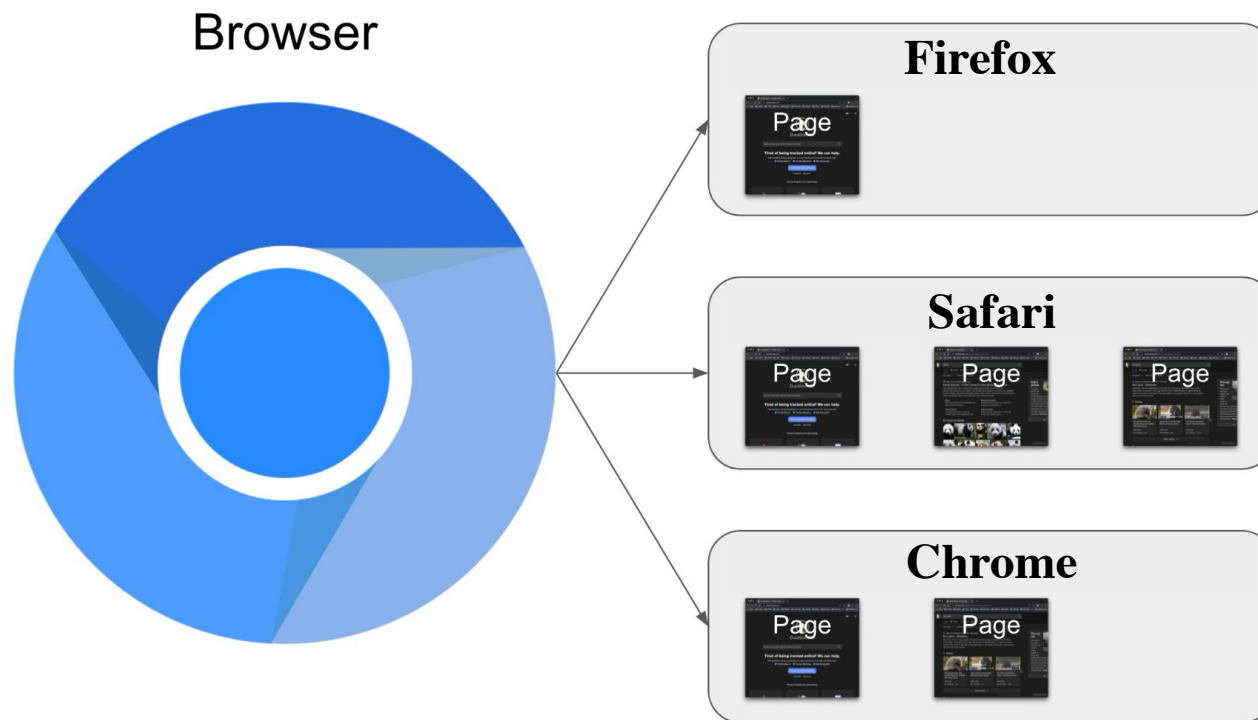


Playwright




- A modern, open source web test framework from Microsoft
- Manipulates the browser via (superfast) debug protocols
- Works with Chromium/Chrome/Edge, Firefox, & WebKit
- Provides automatic waiting, test generation, UI mode, etc.
- Can test UIs and APIs together
- Bindings for JavaScript, Python, Java, & C#
 - TypeScript is recommended



Browsers, contexts, and pages



Browser automation tool comparison

Selenium 	Cypress 	Playwright 
Popular among testers	Popular among developers	So hot right now
C#, Java, JavaScript, Ruby, Python	JavaScript only	C#, Java, JavaScript, Python
All major full browsers	Chrome, Edge, Firefox, Electron	Chromium+, Firefox, WebKit
WebDriver protocol	In-browser JavaScript	Debug protocols
Just a tool – requires a framework	Full, modern framework	Full, modern framework
Can be slow/flaky if waiting is poor	Visual execution but can be slow	Typically the fastest execution
Open source, standards, & gov	Open source from Cypress	Open source from Microsoft