

Playwright vs Selenium :
Which one should I learn First

Which one is preferred – Playwright or Selenium?

- Playwright - it is fairly new and lacks support on various levels such as community, browsers, real devices, language options, and integrations
- Selenium is mature & widely used in companies
- for Complex scenarios Playwright offers more, but again Selenium since present from many year has some advantage

Before Jumping to Playwright

- Playwright is a relatively new player on the market
- Many companies are still evaluating it
- Companies generally avoid new players

Study Material

- <https://medium.com/tech-p7sl/why-favor-playwright-over-selenium-or-cypress-e96df84c08e1>
- <https://playwright.dev/>
- <https://www.browserstack.com/guide/playwright-vs-selenium>

Criteria to choose automation tools

- Documentation
- History
- Support
- Team Knowledge
- My Advice

Requirement/Tool	Selenium	Cypress	Playwright
Established solution	Yes	Yes	Yes
Has own runner/reporting	No	Yes	Yes
Compatible with other runners (JUnit, Jest, ...)	Yes	No	Yes
Cross Domain Support	Yes	No	Yes
Multi tab support	Yes	No	Yes
Performance	Good	Good	Best
Drag and Drop support	Yes	Yes	Yes
Dynamic waits	No	Yes	Yes
Static waits	Yes	Yes	No
Element selector support	css, xpath, text	css, xpath, text	css, xpath, text
Parallel test execution	Yes	Yes (pro version or Sorry Cypress project)	Yes
Video recording, screenshots	Yes (videos only with 3rd party tools)	Yes	Yes
Possibility to use as AWS Lambda	Yes	Yes	Yes
Support for Java, JavaScript and Python	Yes	No	Yes

Major Difference

- Selenium
 - Selenium is widely used for automation testing of web applications. I
 - Java, Ruby, Perl, C#, NodeJS, Python, and PHP to name a few, offering flexibility.
- Playwright
 - Playwright too is an open-source NodeJS based framework.
 - Playwright enables reliable end-to-end testing for modern web apps.
 - Playwright supports all modern rendering engines including Chromium, WebKit, and Firefox.
 - Test Mobile Web. Native mobile emulation of Google Chrome for Android and Mobile Safari. The same rendering engine works on your Desktop and in the Cloud.
 - Playwright also supports multiple programming languages such as Python, Java, and .NET C#, giving more options to QAs writing test scripts.
 - Playwright is highly useful for performing cross browser testing on complex applications, due to its wide coverage, accuracy, and high speed
 - Playwright also supports the execution of simultaneous tests (AKA parallel testing) through Browser Context