

Test Automation using Playwright



By: *Mohamed Bakry*

What is Playwright?

- **Playwright** is an open-source framework for *reliable* end-to-end testing for modern web apps which is developed by Microsoft.
- Playwright's first release was in January 2020.
- Playwright is a Nodejs library to automate web apps in different browsers and APIs.
- Playwright comes with new features and solutions that can be easily used by a simple configurations.



Playwright

Playwright Features

- **Open-source tool:** Doesn't need license however it is supported by Microsoft.
- **Cross-browser:** Playwright supports multiple browsers including Chromium, WebKit, and Firefox.
- **Cross-platform:** Test on Windows, Linux, and macOS, locally or on CI, headless or headed.
- **Cross-language:** Use the Playwright API in TypeScript, JavaScript, Python, .NET, Java.
- **Auto-wait:** Playwright waits for elements to be actionable prior to performing actions.
- **Tracing:** Configure test retry strategy, capture execution trace, videos, screenshots to eliminate flakes.
- **Test isolation:** Every test runs in its own *BrowserContext*, independent of other tests running at the same time. Tests are run in parallel and one test failure wouldn't affect others.
- **Log in once:** Save the authentication state of the context and reuse it in all the tests.
- **API testing:** Playwright supports API test automation with simple implementation.
- **Codegen:** Generate tests by recording your actions. Save them into any language.
- **Visual testing:** We can perform visual testing in easy way without additional libraries or configurations.
- **Easy setup and configurations:** Being a Test Automation Framework, it just needs a configuration as the installation doesn't take much time.
- **Powerful documentation:** Playwright docs is very easy, simple and understandable.

Playwright limitations?

- **Limited community:** Since Playwright is new to the market user base is still growing.
- ***Does not support native mobile apps:*** Only supports mobile view for web applications.

Thank You

