



AUTOMATED SOFTWARE TESTING WITH CYPRESS

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Key points about Cypressio testing tool

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Cypressio 101

Videos Lessons:

https://engineers-hub.teachable.com/p/cypressio



Cypress engine directly **operates** inside the browser

Most testing tools (like Selenium) **operate by running outside of the browser** and executing remote commands across the network. However, Cypress engine directly **operates inside the browser**. In other words, the browser is executing your test code.

Credits: https://www.linkedin.com/in/prabhumohano9/?miniProfileUrn=urn%3Ali%3Afs_miniProfile%3AACoAAA7iO4gBTgTMaydE8WFTZNBsX9kcGobdKnA



Cypressio 4.x supports Chrome, Firefox, Edge, Electron and Canary

Edge is chromium based; Until Cypressio 3.8.3, Chrome, Electron were supported. Please read the change logs at: https://docs.cypress.io/guides/references/changelog.html



Cypressio a Javascript Tool

Tools such as selenium support multiple programming languages



Cypressio supports only CSS locators

cypress-xpath available as an extension to use for xpath objects to use within framework



Cypress will not handle child tabs and windows

But alternatives are on method for alerts and removing _blank attribute for child windows.



Closing of browser and pop ups will be taken care automatically

In selenium frameworks, QA use browser.quit() functions; **close**() – It closes the **browser window** on which the focus is set. driver. quit() – It basically calls the driver; But there is no need for any of these in cypress



Data parameterization can be done by fixtures

Ex. example.json



Reusable functions can be written under commands.json file

It is stored in support folder as a best practice



Dependencies could be added in package.json

It is stored in root of the project repository



Chai/Mocha framework/assertions are being used internally

Easy and flexible to use or migrate any javascript assertions used in existing frameworks if chai/mocha used.



There is no intermediate driver concept

Cypress works inside DOM of the browser where as tools such as selenium need a browser driver to interact with browsers from external communication.



Inbuilt locator finder tool is available

Inspect Element can be used just like any browser while launching the browser from cypress



Forcefully we could make actions over invisible elements

{force: true } help in verifying the actions and negative test cases extensively



In Cypress, everything is Promise

QA may use then and catch methods



Mouse actions are supported through trigger commands

Easy to perform mouse actions like mouse movements



Cypress can manipulate DOM

So we can stub any APIs to the front end application



XHR testing is possible

QA can mock the response of API/Rest services.



Cypressio is free to use

Dashboard service available for premium users with extra features. Dashboard service available for premium users with extra features. Refer pricing details:

https://www.cypress.io/pricing/



Automatically takes snapshots in case of failure.

Screenshots folder available from root directory of the repository



Video evidence is also available without any explicit code.

videos folder available from root directory of the repository. This may take additional space when storing in version control tools such as git hence it has to be mentioned in .gitignore files to avoid maintaining with version control repositories.

