

Fundamentals of cypress

What is Cypress?

Cypress.io is an open-source end-to-end testing framework for web applications. It's designed to simplify the process of writing, running, and debugging tests for web applications. Cypress allows developers to write tests using JavaScript, and it provides a clean and intuitive API for interacting with web elements and simulating user actions.

One of the key features of Cypress is its ability to run tests directly in the browser. This means that developers can see what's happening in the browser as the tests are running, making it easier to debug and understand test failures. Cypress also provides features like automatic waiting, real-time reloading, and time-traveling debugger, which streamline the testing process and improve developer productivity.

Overall, Cypress.io is a powerful tool for automating the testing of web applications, and it's widely used by developers and QA engineers to ensure the quality and reliability of their web projects.

General steps to install cypress

- Prerequisites: Before installing Cypress, make sure you have Node.js installed on your system. Cypress requires Node.js version 12 or higher.
- Create a new project (if you haven't already): Navigate to the directory where you want to create your project and run:
`mkdir myCypressProject`
`cd myCypressProject`
- Initialize your project: If you haven't already initialized your project with npm, you can do so by running:
`npm init`
- Install Cypress: Install Cypress as a dev dependency in your project using npm:
`npm install cypress --save-dev`
- Verify Cypress installation: Once Cypress is installed, you can verify the installation by running:
`npm cypress -v`
- Open project cypress on Visual Code code .
- Add configuration to run cypress or

```
"script": {  
  "cy:open": "cypress run open",  
  "cy:run": "cypress run run"  
}
```
- Open Cypress Test Runner
`npm run cy:open`
- Or open Cypress Test Runner (optional): You can open Cypress Test Runner by running:
`npm cypress open`