

110-1 Web Programming

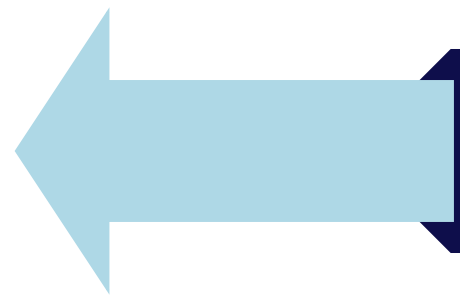
Cypress Tutorial

TA: 鄭謹譯



Introduction

- Cypress is a next generation front end testing tool built for the modern web. We address the key pain points developers and QA engineers face when testing modern applications.
- We will **use cypress** to test your hackathon code
- To Learn More: <https://docs.cypress.io/guides/>



Install and Run

Install and Run

- Installation (No need to install and run here, TA has finished them)
 - `npm install cypress@4.0.1 --save-dev`
 - `yarn add cypress@4.0.1 --dev`
- Run and create a cypress folder
 - `npx cypress open`
 - `yarn run cypress open`
- To learn more: <https://docs.cypress.io/guides/getting-started/installing-cypress#Opening-Cypress>



Github

 ntuee-webprogramming / **cypressTesting** Public

< > Code

Issues

Pull requests


Actions

Projects

Wiki

Security

Insights

 main ▾

 1 branch

 0 tags

Go to file

Add file ▾

Code ▾



chinyi0523 Update README.md

df2131e now  2 commits



cypress/integration

cypress demo

2 hours ago



public

cypress demo

2 hours ago



src

cypress demo

2 hours ago



.gitignore

cypress demo

2 hours ago



README.md

Update README.md

now



cypress.json

cypress demo

2 hours ago



package.json

cypress demo

2 hours ago

Start testing

- cd to your file
 - yarn / npm install
 - yarn start / npm start
 - (if both failed) downgrade the version of node.js to 14.18.1 (LTS)
 - (link) <https://nodejs.org/dist/v14.18.1/node-v14.18.1.pkg>
- Open another terminal and type...
 - yarn test / npm run test
- If you want “head”
 - Modify package.json, replace --spec with --head

Take a look about App.js

- A hook value, setValue
- Initial page when you create React
- A button which increments the value

```
5  const App = () => {  
6    const [value, setValue] = useState(0);  
7  
8    const increment = () => {  
9      setValue(value+1)  
10   }  
11   return (  
12     <div className="App">  
13       <header className="App-header">  
14         <img src={logo} className="App-logo" alt="logo" />  
15         <p>  
16           Edit <code>src/App.js</code> and save to reload.  
17         </p>  
18         <a  
19           className="App-link"  
20           href="https://reactjs.org"  
21           target="_blank"  
22           rel="noopener noreferrer"  
23         >  
24           Learn React  
25         </a>  
26         <div className="wrapper">  
27           <button id="inc" onClick={increment}>  
28             Increment  
29           </button>  
30           <p>  
31             {value}  
32           </p>  
33         </div>  
34       </header>  
35     </div>  
36   );  
37 }  
38 }
```

Take a look about testCypress.js

```
1 describe('Cypress Testing', () => {
2   // Each it is a testcase
3   // Two slashes represents comment
4   it('Each "it" is a testcase', () => {
5     cy.visit('/')
6     cy.get('header').should('have.class', 'App-header')
7   })
8
9   it('Use CSS selector to check the relationships and properties of tags', () => {
10    cy.get('.App-header > img:nth-child(1)').should('have.class', 'App-logo')
11    .invoke('attr', 'src')
12    .should('equal', '/static/media/logo.6ce24c58.svg')
13  })
14
15  it('Demonstrate onclick checking', () => {
16    cy.get('button').should('have.id', 'inc').click()
17    cy.get('button').should('have.id', 'inc').click()
18    cy.get('button').should('have.id', 'inc').click()
19    cy.get('button').should('have.id', 'inc').click()
20    cy.get('button').should('have.id', 'inc').click()
21    cy.get('.wrapper > p:nth-child(2)').contains('5')
22  })
23 })
```

Result

```
Tests:      3
Passing:    3
Failing:    0
Pending:    0
Skipped:    0
Screenshots: 0
Video:      true
Duration:    0 seconds
Spec Ran:    testCypress.js
```

(Video)

- Started processing: Compressing to 32 CRF
- Finished processing: /Users/chinyi0523/Desktop/Web2021/cypressTesting/cypress/videos/testCypress.js.mp4 (0 seconds)

(Run Finished)

Spec	Tests	Passing	Failing	Pending	Skipped
✓ testCypress.js	3	3	-	-	-
✓ All specs passed!	3	3	-	-	-

npm run wrongtest

```
(Results)

Tests:      3
Passing:    2
Failing:    1
Pending:    0
Skipped:    0
Screenshots: 1
Video:      true
Duration:    5 seconds
Spec Ran:    testCypressWrong.js

(Screenshots)

- /Users/chinyi0523/Desktop/Web2021/cypressTesting/cypress/screenshots/testCypressWrong.js/Cypress Testing -- Demonstrate onclick checking (failed).png (1280x720)

(Video)

- Started processing: Compressing to 32 CRF
- Finished processing: /Users/chinyi0523/Desktop/Web2021/cypressTesting/cypress/videos/testCypressWrong.js.mp4 (0 seconds)

=====

(Run Finished)

Spec                                Tests  Passing  Failing  Pending  Skipped
* testCypressWrong.js               00:05    3        2        1        -        -
* 1 of 1 failed (100%)              00:05    3        2        1        -        -
```

Why?



**Good Luck on
Your First Hackathon**