

Features

Cypress comes fully baked, batteries included. Here is a list of things it can do that no other testing framework can:

- **Time Travel:** Cypress takes snapshots as your tests run. Hover over commands in the [Command Log](#) to see exactly what happened at each step.
- **Debuggability:** Stop guessing why your tests are failing. [Debug directly](#) from familiar tools like Developer Tools. Our readable errors and stack traces make debugging lightning fast.
- **Automatic Waiting:** Never add waits or sleeps to your tests. Cypress [automatically waits](#) for commands and assertions before moving on. No more async hell.
- **Spies, Stubs, and Clocks:** Verify and [control the behavior](#) of functions, server responses, or timers. The same functionality you love from unit testing is right at your fingertips.
- **Network Traffic Control:** Easily [control, stub, and test edge cases](#) without involving your server. You can stub network traffic however you like.
- **Consistent Results:** Our architecture doesn't use Selenium or WebDriver. Say hello to fast, consistent and reliable tests that are flake-free.
- **Screenshots and Videos:** View screenshots taken automatically on failure, or videos of your entire test suite when run from the CLI. Record to [Cypress Cloud](#) to store them with your test results for zero-configuration debugging.
- **Cross browser Testing:** Run tests within Firefox and Chrome-family browsers (including Edge and Electron) locally and [optimally in a Continuous Integration pipeline](#).
- **Smart Orchestration:** Once you're set up to record to Cypress Cloud, easily [parallelize](#) your test suite, rerun failed specs first with [Spec Prioritization](#), and cancel test runs on failures with [Auto Cancellation](#) for tight feedback loops.
- **Flake Detection:** Discover and diagnose unreliable tests with Cypress Cloud's [Flaky test management](#).

Assertions:

Implicit : in-built assertion

Should(),or, and() commands will be use in implicit.

Should-contain:

Ex: cy.get('locator').should('contain','Button')

Should-have:

EX: should('have. Attribute name',' Attribute value')

Should-be:

.should('be.visible')

Be.selected

Be.disabled

Be.focused.

Explicit: expect() ,or, assert() will be use in explicit.

EX: expect(true).to.be.true

Let name='cypress';

Expect(name).to.be.equal('cypress')

To.not.equal()

To.be.a('string')

To.be.true

To.be.false

To.be.null

To.exist

Assert.equal.

```
Assert.equal(3,3,'message')
```

Page Object Model:

Ex:

```
export class loginpage{  
  enterUsername(){  
    cy.get("textusername").type('admin')  
  }  
}
```

Login test

```
import {loginPage} from "../pages/login_page"
```

```
const loginpage=new loginpage()
```

```
if('pom demo',function(){
```

```
  cy.visit('url')
```

```
  loginpage.enterusername()
```

```
})
```

Locaters:

Type()----- this method is use for type data in text box.

Cy.get("locator") -----this method used to identify the elements.

It use css selector and Xpath locter only

CSS selector:

Tag id-----(#idvalue)

Tag class-----(.classvalue)

Tag attribute-----[attribute='value']

Tag class attribute----- (.classvalue[attribute='value'])

Writing the test script in cypress

Syntax:

```
describe('test suite',function(){
```

```
  it('test case1',function(){
```

```
    steps
```

```
  })
```

```
  It('test case 2',function(){
```

```
    Steps
```

```
  })
```

```
})
```

Interacting with UI Elements

Commands.

`.visit()` ---is user for navigate url

`.url()`----- is use for get current url.

`.get` ----- is use for select element.

`.title()` -----is use for get titile of the page.

CHECK BOXES.

FOR (CHECKED).

```
cy.get('selector').check().should('be.checked').and('have.value','cricket')
```

FOR UNCHECKED:

```
cy.get('selector').uncheck().should('not.be.checked')
```

CHECK MULTIFULL:

```
Cy.get('selectors').check(['value','value2'])
```

Dropdown:

If select drop down :

```
.select('value').should('have.value','value')
```

NOT SELECT DROPDOWN:

```
Cy.get('selector').click()
```

```
Cy.get('selector(command selector)').contains('English').click()
```

```
Cy.get('selector(command selector)').contains('Japan').click()
```

Alerts:

```
cy.on('window:alert', (str) =>
{
  Expect(str).to.equal('alert message')
}
)
```

Confirmation alert:

```
cy.on('window:confirm', (str) =>
{
  Expect(str).to.equal('press a button')
}
)
```

PROMPT ALERT

```
cy.window().then((win) => {
  cy.stub(win, 'prompt').returns('welcome');
})----- After click on prompt alert link.
```

NAVIGATE (BACK,FORWARD,REFRESH):

`cy.go('forward')` or `cy.go(1)`

`cy.go('back')` or `cy.go(-1)`

`cy.reload()`

CYPRESS HOOKS:

- `beforeEach` ----- this will execute before one test
- `afterEach`----- this will execute after each test
- `before`----- this will execute before all test.
- `after`----- this will execute after all test.

EX:

```
describe('my test suite',() =>{
  before(function(){
    cy.log('-----before-----')
  })
  after(function(){
    cy.log('----- after-----')
  })
  beforeEach(function(){
    cy.log('-----before each-----')
  })
  afterEach(function(){
    cy.log('-----afterEach-----')-----for print in console.
  })
  it('search',() =>{
    Code
  })
})
```

```
It("search2", function(){  
Code  
})  
})
```

Fixtures file

Create fixture file in fixtures folder with extension .json

```
{  
  "email":"1234",  
  "password":"123456"  
}
```

Using of fixture file in cypress.

Syntax:

```
before(function(){  
  cy.fixture('file path').then(function(data){  
    this.data=data ----- store the data in this.data(it is  
    global variable).  
  })  
})
```

Use email inside type(this.data.email)

Handling window popup in cypress.

Remove target attribute

```
cy.get('selector').invoke('removeAttr','target').click();
```

Handling Iframes:

```
const iframe=cy.get('framelocator')  
.its('0.contentDocument.body')  
.should('be.visible')  
.then(cy.wrap);
```

Iframe.find('locator').click() -----this for click element inside frame.

```
Iframe.clear().type('welcom');
```

MOUSE OVER ACTIONS.

Cy.get('selector').trigger('mouseover').click(); ---- this for move to element.

.trigger('contextmenu') ----- this for right click.

(or)

```
.rightclick();
```

.trigger('dblclick'); ----- for double click.

(or)

```
.dblclick();
```

Scroll particular element in page

```
.scrollIntoView();  
.scrollIntoView({duration:200});
```

Tags:

.skip---- it is skip test case.

.only ----- it execute only one test case.

CUSTOM COMAND.

Creating:

```
Cypress.Comands.add('methodname',(variable) =>{
```

```
Cy.get('selector').contains(variable).click();  
})
```

Overriding existingcomands

```
Cypress.Commands.overwrite('methodname',(variable,
```

SCREENSHOTS:

```
cy.screenshot("homepage");
```

take screenshot for particular element.

```
Cy.get("selector").screenshot("name");
```

Run exact file or test in comandfront.

Npx cypress run --spec filepath