Cypress Browser test runner

START HERE

npm install -D cypress
Add to project

cypress.get(<selector>)
Find elements

npx cypress open
Open the app

cypress.intercept(<method>, <url>)
Spy or stub requests

npx cypress run
Run headless

npx cypress run --spec <glob>
Run some specs

npx cypress run --browser <name>
Pick a browser

cy.visit(<url>)
Load a page

Visit cy.visit → **query** → **Query** cy.get, contains → **act** → **Act** .click, .type → **assert** → **Assert** .should, retries

CONCEPTS

cypress open is interactive with a time-travel runner; cypress run is headless and meant for CI.

Cy commands are queued and run later, not returned. Chain off them instead of using await.

Queries and .should() retry until they pass or time out, so avoid fixed cy.wait(<ms>) pauses.

INSTALL AND MAINTENANCE

npm install -D cypress
Add Cypress to the project

npx cypress install
Download the binary to the cache

npx cypress install --force
Reinstall even if cached

npx cypress verify
Check the binary can run

npx cypress info
Show browsers, paths, OS and env

npx cypress version
Show package, binary, Electron, Node

INSTALL AND MAINTENANCE (cont.)

npx cypress cache list
List cached versions

OPEN THE APP

npx cypress open
Open the interactive runner

npx cypress open --e2e
Start in end-to-end mode

npx cypress open --component
Start in component testing mode

RUN HEADLESS

npx cypress run
Run all specs headless

npx cypress run --spec <glob>
Run matching spec files
Must also match specPattern in the config.

npx cypress run --browser <name>
chrome, chromium, edge or firefox

npx cypress run --headed
Show the browser window

npx cypress run --e2e
Run end-to-end tests (default)

npx cypress run --component
Run component tests

CONFIG, ENV AND REPORTERS

npx cypress run --config <k=v,...>
Override config values inline

npx cypress run --config baseUrl=<url>
Point tests at another host

npx cypress run --config-file <file>
Use another config file

npx cypress run --env <k=v,...>
Set env values for Cypress.env()

npx cypress run --reporter <name>
Mocha reporter, e.g. junit

CYPRESS CLOUD

npx cypress run --record --key <key>
Record the run to Cloud

npx cypress run --record --parallel
Split specs across machines

VISIT AND QUERY

cy.visit(<url>)
Load a page

cy.get(<selector>)
Find elements by selector or alias

VISIT AND QUERY (cont.)

cy.contains(<text>)
Find an element by its text

cy.contains(<selector>, <text>)
Text match limited to a selector

cy.get(<sel>).find(<sel>)
Search inside a subject

cy.get(<sel>).first() / .last() / .eq(<n>)
Pick one from a set

cy.get(<sel>).within(<fn>)
Scope commands to one element

cy.get(<sel>).as(<name>)
Alias an element

cy.url()
Yield the current URL

ACTIONS

.click()
Click the subject

.type(<text>)
Type into the subject

.type(<text>{enter})
Type, then press Enter

.clear()
Empty an input

.check() / .uncheck()
Tick or untick a box

.select(<value>)
Choose a dropdown option

ASSERTIONS

.should('be.visible')
Assert visible

.should('have.text', <text>)
Assert exact text

.should('contain', <text>)
Assert text is included

.should('have.length', <n>)
Assert element count

.should('have.value', <v>)
Assert input value

.should('have.attr', <name>, <v>)
Assert an attribute

.should('not.exist')
Assert it is gone

cy.url().should('include', <path>)
Assert the route

NETWORK AND DATA

cy.intercept(<method>, <url>).as(<name>)
Spy on a request and alias it

cy.intercept(<method>, <url>, <response>)
Stub a response

cy.wait('@<name>')
Wait for the aliased request

NETWORK AND DATA (cont.)

cy.request(<method>, <url>, <body>)
Send an HTTP request directly

cy.fixture(<file>)
Load data from the fixtures folder

cy.intercept(<url>, { fixture: <file> })
Stub with a fixture file

cy.session(<id>, <setup>)
Cache and restore a login

RECIPES

Run one spec in Firefox

```
# headless, one file, with a
base URL override
npx cypress run --browser
firefox --spec "cypress/e2e/
login.cy.js" --config
baseUrl=http://localhost:3000
```

Stub an API and assert

```
cy.intercept('GET', '/api/
users', { fixture:
'users.json' }).as('users')
cy.visit('/users')
cy.wait('@users')
cy.get('li').should('have.
length', 3)
```

Log in once per spec

```
cy.session('user', () => {
  cy.request('POST', '/api/
login', { user: 'a', pass:
'b' })
})
cy.visit('/dashboard')
```