

How to write a simple Cypress test

Neil Guertin

Software Engineer in Test
neil.guertin@collabora.com



Collabora
Online



Technical Day
COOL
days





What is Cypress?

Web testing framework

- End-to-end tests
- User interaction
- Asynchronous and retrievable assertions
- Most of our client-side tests are Cypress tests



When to write a test?

- New features
- Bug fixes

When to write a Cypress test?

- User interactions



Where are the tests?

All in cypress_test directory

- integration_tests/
 - common/
 - helper.js
 - desktop_helper.js
 - calc_helper.js
- support/index.js
- data/
 - workdir/data/
 - integration_tests/
 - desktop/
 - calc/
 - X_spec.js
 - Y_spec.js
 - writer/
 - X_spec.js
 - Y_spec.js
 - mobile/
 - calc/
 - X_spec.js
 - Y_spec.js
 - writer/
 - X_spec.js
 - Y_spec.js



Parts of a test

- Setup
- Exercise
- Verify
- Teardown



calc/cell_appearance_spec.js

```
/* global describe it cy beforeEach require afterEach expect Cypress */

var helper = require('../..common/helper');
var calcHelper = require('../..common/calc_helper');
var desktopHelper = require('../..common/desktop_helper');

describe(['tagdesktop'], 'Change cell appearance.', function() {
  var origTestFileName = 'cell_appearance.ods';
  var testFileName;

  beforeEach(function() {
    testFileName = helper.beforeAll(origTestFileName, 'calc');
  });

  afterEach(function() {
    helper.afterAll(testFileName, this.currentTest.state);
  });

  it('Apply background color', function() {
    ...
  });
});
```



calc/cell_appearance_spec.js

```
it('Apply background color', function() {  
  desktopHelper.switchUIToNotebookbar();  
  calcHelper.clickOnFirstCell();  
  
  cy.cGet('#Home').click();  
  cy.cGet('#Home-container .unoBackgroundColor .arrowbackground')  
    .click();  
  desktopHelper.selectColorFromPalette('006CE7');  
  
  calcHelper.selectEntireSheet();  
  cy.cGet('#copy-paste-container table td')  
    .should('have.attr', 'bgcolor', '#006CE7');  
});
```



Basic Workflow

For running Cypress tests

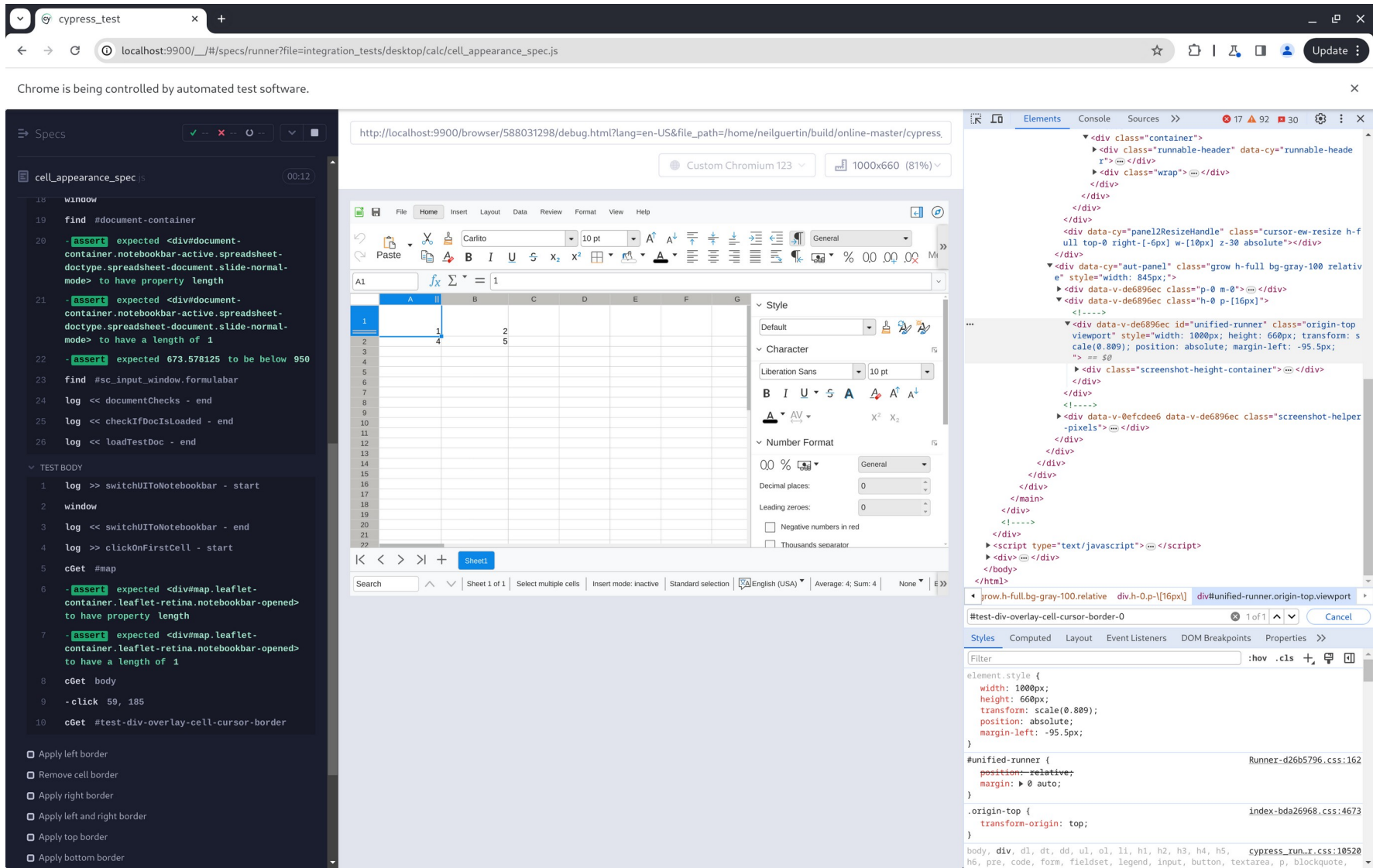
- Configure with `--enable-cypress`
- make online from top directory
- cd to `cypress_test`
- make check
- No need to remake top directory after making test changes



Make check options

Defined in cypress_test/Makefile.am

- make check
- make check-desktop
make check-mobile
make check-multi
- make check-desktop spec=calc/autofilter_spec.js
- make run-desktop spec=calc/autofilter_spec.js
make run-desktop





Cypress commands

Ones we use a lot

- `cy.cGet(selector)`
Custom command, replaces `cy.get()`, handles iFrames
- Selectors: `'#elementId'` `'elementClass'` `'elementType'`
`'element nestedElement'`
- Commands: `.click()` `.type()` `.should()`
- `cy.cGet('#toolbar-up #comment_wizard button').click();`
`cy.cGet('#copy-paste-container p font').should('have.attr', 'color', '#0000ff');`




Tips

- Run just the testpoints you want, using `it.skip()` and `it.only()`
- Stop or watch execution with `cy.pause()`, `cy.debug()`, or `cy.wait()`
- Do not commit tests using `cy.wait()`
Use targeted queries or assertions instead
- `cy.screenshot()`
- Copy and pasting code is okay sometimes



Collabora
Online



Technical Day
COOL
days 

Thank you!

By Neil Guertin



@CollaboraOffice
hello@collaboraoffice.com
www.collaboraoffice.com