



Accessibility Testing

Accessibility Basics





Bake it in from the start...




...it's easier

1.1 FIVE MAJOR CHARACTERISTICS OF INTERACTION DESIGN

With the increasing penetration of the Internet, the advent of home and leisure computing, and eventually the emergence of digital interactive consumer products, the two cultures of design and engineering gravitated towards a common interest in discretionary use and user experience. Towards the turn of the century, the notion of interaction design started to gain in popularity as a way to acknowledge a more designerly approach to the topic – going beyond pure utility and efficiency to consider also aesthetic qualities of use, for example.

Since then, a plethora of professional practices, academic study programs, literatures, networks and venues have formed under the umbrella of interaction design. It goes without saying that there are many different understandings of exactly what interaction design is. I don't see any real point in surveying all these definitions but instead I would like to offer a very simple formulation of interac-

 **Rodney Tamblyn**
10 months ago
My comment
[Reply](#)

Tab order - The order in which elements receive focus as the user presses the **tab** key.

22/05/18

This is a super-handy piece of information!

Manual testing





Tab through a page with the keyboard



Use a screenreader

Semi-automated testing





Let's do an audit

Properly automated testing





Unit tests



```
it('should pass aria-label to the inner button', inject(function() {  
    var template = '<custom-button label="Squishy Face"></custom-button>';  
    var compiledElement = make(template);  
  
    expect(  
        compiledElement  
        .find('button')  
        .attr('aria-label')  
    ).toEqual('Squishy Face');  
}));
```



```
var axe = require('axe-core');

describe('Custom button', function() {
  it('should have no accessibility violations', function(done) {
    axe.run('custom-button', {}, function(error, results) {
      if (error) return error;

      expect(results.violations.length).toBe(0);
    });
  });
});
```



Integration tests



```
it('should focus the next tab on [arrow right]', async function() {  
  const found = await helper.pressKeyUntil(this.driver, Key.TAB,  
    _ => document.activeElement.getAttribute('role') === 'tab'  
  );  
  expect(found).toBe(true);  
  
  await this.driver.executeScript(_ => {  
    window.firstTab = document.querySelector('[role="tablist"] > [role="tab"]:nth-of-type(1)');  
    window.secondTab = document.querySelector('[role="tablist"] > [role="tab"]:nth-of-type(2)');  
  });  
  await this.driver.actions().sendKeys(Key.ARROW_RIGHT).perform();  
  const focusedSecondTab = await this.driver.executeScript(_ =>  
    window.secondTab === document.activeElement  
  );  
  expect(focusedSecondTab).toBe(true);  
});
```



```
var AxeBuilder = require('axe-webdriverjs');
var Webdriver = require('selenium-webdriver');

describe('My page', function() {
  it('should have no accessibility violations', function(done) {
    var driver = new Webdriver.Builder().forBrowser('chrome').build();

    driver.get('http://localhost:8080')
      .then(function(done) {
        AxeBuilder(driver)
          .analyze(function(results) {
            expect(results.violations.length).toBe(0);
            done();
          });
      });
  });
});
```

Real user feedback





Summary

Use keyboard & screenreader

Browser plugins

Unit tests

Integration tests