## Visual/CSS Regression Testing with <u>WebDriver.io/WebDriverCSS</u>

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## What is Regression Testing?



## How do you regression test the visual components of a user interface?



### What if you could take a "before" and "after" picture....

### ...and could easily compare those pictures to each other?



### ...And, what if you could automate that process...

## ...and run it using multiple browser / operating system combinations, and even mobile devices



## **Enter Selenium and WebDriverCSS**



#### Requirements

- Node Package Manager
- NodeJS
- Selenium Standalone Server
- GraphicsMagick or ImageMagick
- <u>webdriver.io</u>
- WebdriverCSS plugin for <u>webdriver.io</u>
- PhantomJS, Chrome/ChromeDriver, Firefox (Iceweasel may work)
- Font Packages (for Linux; OS X and Windows may have plenty installed)
- xvfb (for running Chrome/Firefox headless; not needed for PhantomJS)
- Testing framework (I use Mocha; Jasmine and Cucumber also work)



## How do they work?



## What does that look like?

#### Courses

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# Skillsets Needed to Write Tests for using WebDriverCSS

## Javascript



## What does a test look like?



```
it('This is the home page', function(done){
    client
```

```
.init()
    .url('https://website.testbuild.us/')
    .pause(2000)
    .webdrivercss('frontpage',[
        name: 'page',
        elem: '#page',
      },
    1,
    function(err,res) {
      assert.ifError(err);
      assert.ok(res.page[0].isWithinMisMatchTolerance);
  .call(done)
  .end();
});
```



## Let's Look at this in Action



## Exclude, Hide, Remove

- Exclude overlays a blackout area on the specified element
- Hide applies "visibility: hidden"
- Remove applies "display: none"



## Selenium / WebdriverCSS / Testing Framework Documentation

- <u>http://webdriver.io/guide.html</u>
- <u>http://webdriver.io/api.html</u>
- <u>https://github.com/webdriverio/webdrivercss</u>
- <u>http://www.seleniumhq.org/projects/webdriver/</u>
- <u>https://nodejs.org</u>
- https://mochajs.org/
- phantomjs.org/documentation/



## **BrowserStack Documentation**

- <u>https://www.browserstack.com/automate/capabilities</u>
- <u>https://www.browserstack.com/automate/node#setting-os-and-browser</u>
- <u>https://www.browserstack.com/automate/node#configure-</u> capabilities
- <u>https://www.browserstack.com/automate/node#setting-local-tunnel</u>



## **Questions?**

