# Testing Clientside JavaScript
## Testing Utilities

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[www.testdrivenjs.com](www.testdrivenjs.com)

[www.pluralsight.com](www.pluralsight.com)

**pluralsight**
hardcore developer training

# Agenda

- **Live Reload**
- **Karma**
- **Grunt**

# Live Reload

- **Refreshes the browser on file change**
  - HTML
  - CSS
  - JS
  - CoffeeScript
  - SASS/LESS
- **livereload.com**
- **Install:**
  - Mac:  Mac App Store $9.99
  - Windows:  download from livereload.com
- **Browser Extension**

# Karma

- **Built by Google**
- **Renamed from Testacular**
- **Built on Node.js**
- **Run tests in multiple browsers**
- **For testing only**
- **Fast**
- **Supports QUnit, Jasmine, Mocha**
- **Supports CI**

# Installing Karma

- **Install with npm**

```
npm install –g Karma
```

```
CHROME_BIN
C:\Program Files (x86)\Google\Chrome\Application
\chrome.exe
```

```
FIREFOX_BIN
C:\Program Files (x86)\Mozilla Firefox\firefox.exe
```

# Grunt

- "Task-based command line build tool for JavaScript projects"
- Created by Ben Alman - @cowboy
- Built on Node
- Comprehensive and robust
- Version 0.4
- Many plugins are still being stabilized
- Subject to change

# Grunt Features

- **Running tests in Jasmine, Mocha, Qunit**
- **Linting files**
- **Watching files**

# Grunt Installation

- **Installed through NPM**

# Testing with Grunt

- Simple way to run tests
- Works with Jasmine, QUnit, and Mocha

# Linting

- **Finds problems in JavaScript Files**
  - Syntax
  - Style
  - Code Smells

# Summary

- **Live Reload**
- **Karma**
- **Grunt**