

AUTOMATE YOUR TOOLS

Dave Rupert

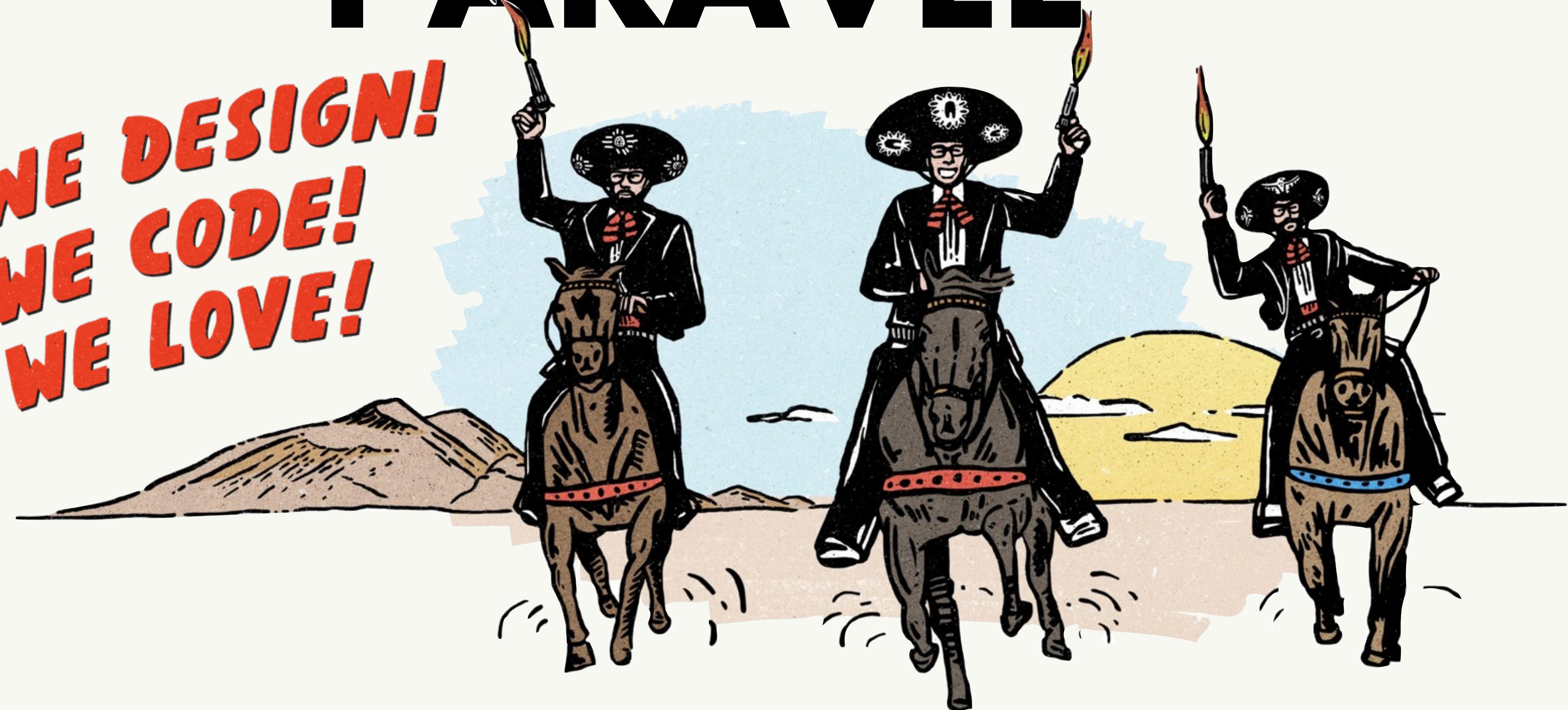
twitter.com/davatron5000
github.com/davatron5000

**~1 HR OF
CAR ANALOGIES**

DISCLAIMER: I actually know
quite little about cars.

PARAVEL

**WE DESIGN!
WE CODE!
WE LOVE!**





[**http://shoptalkshow.com**](http://shoptalkshow.com)



ATX WEB SHOW

<http://atxwebshow.com>

B.A., JAPANOLOGY

2002年テキサス大学卒業性

アジア文化と言語(日本専門)

TABLE OF CONTENTS

Talk about web stuff

Talk about car stuff

Talk about command line stuff

Fail at a live demo

-_(ツ)_/-

“Web Design is getting too complicated. I can’t stay up-to-date with all the cool new tools and tricks. In my day...”



All these kids care about is,
Is this WiFi organic?"



RENT

it's too damn high

WHY?

SKILLS

of Web Publishing

Designers

Developers

The Front End

COMPLEXITY



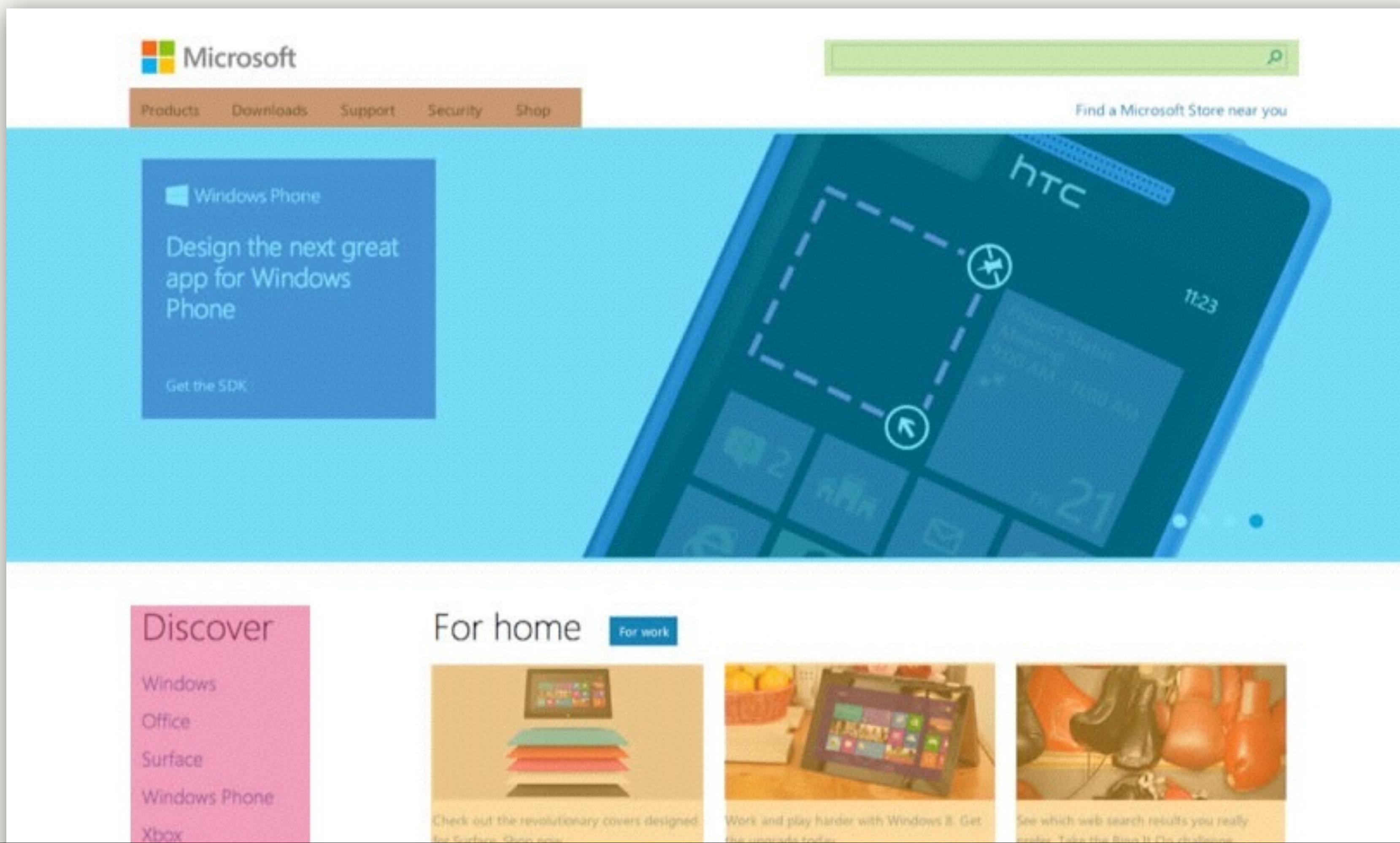
bradfrostweb.com

PREPROCESSORS



`/scss`
`_base.scss`
`_grid.scss`
`_type.scss`
`_buttons.scss`
`style.scss`

ATOMIZATION



UNIX PHILOSOPHY

Small is beautiful.

Make each program do one thing well.

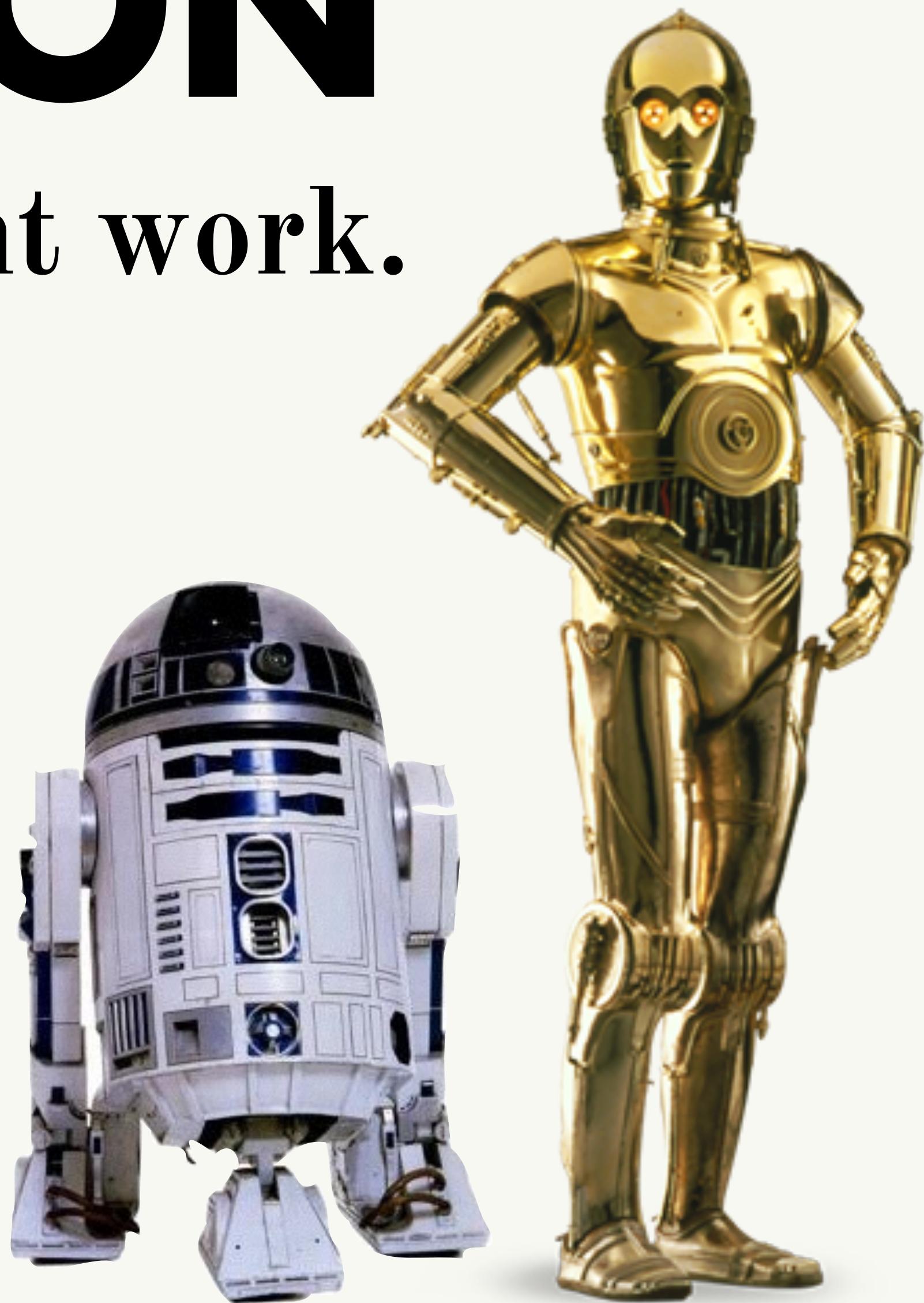
Build a prototype as soon as possible.

Use software leverage to your advantage.

Mike Gancarz (1994)

AUTOMATION

Making robots do our grunt work.



Use your
degree, Dave...



自動化 VS 自働化

Automation

A real word.

Autonomation

Made up by Toyota.
A part of “Lean Manufacturing”

AUTONOMATION

“Automation with a human touch.”

1. The machine shall detect malfunctions and stop itself.
2. No defective parts will be produced.
3. Easy to locate the cause of any malfunction.

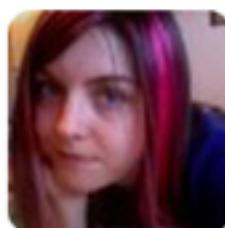
TABLE A.2 Estimated Employee Costs Per Vehicle, 1979

	Ford	Toyo Kogyo
(1) Domestic production of cars and trucks (millions)	3.163	0.983
(2) Total domestic employment		
Automotive	219,599	24,318
Nonautomotive	19,876	2,490
(3) Total domestic employee hours		
Automotive (millions)	355.75	46.20
(4) Total employee cost		
Automotive (millions)	\$7794.50	\$482.20
(5) Employee hours per vehicle	112.5	47.0
(6) Employee cost per vehicle	\$2464	\$491

NOTES: Line (1): Published production figures for Ford have been adjusted to eliminate 65,000 imported vehicles; the Toyo Kogyo data have been adjusted for production of knock-down assembly kits. Lines (2)-(4): Data on automotive employment and costs were obtained by assuming that the ratio of automotive employment to total employment was the same as the ratio of sales; the same assumption was made to obtain Ford employment costs. Line (3): Ford hours were determined by assuming that each employee actually worked 1620 hours per year. Toyo Kogyo hours assume that each employee actually worked 1900 hours. Line (4): Data include salaries, wages, and fringe benefits. For Toyo Kogyo, compensation data were derived by updating a 1976 figure using compensation growth rates at Toyota; an exchange rate of 218 yen per dollar (1979 average) was used to convert yen to dollars.

WHY YOU MIGHT WANT TO AUTOMATE

- 1. You like making more money with less effort.**
- 2. Your company would like to reduce overhead.**
- 3. You want more time with your spouse/kids/pets.**
- 4. You would like to do less bitch work.**



corey
@djcoreynolan



Follow

Nonprogrammer: I don't trust a machine to do something I can do myself. Programmer: I don't trust myself to do something a machine can.

[Reply](#) [Retweet](#) [Favorited](#) [More](#)

RETWEETS

1,165

FAVORITES

520



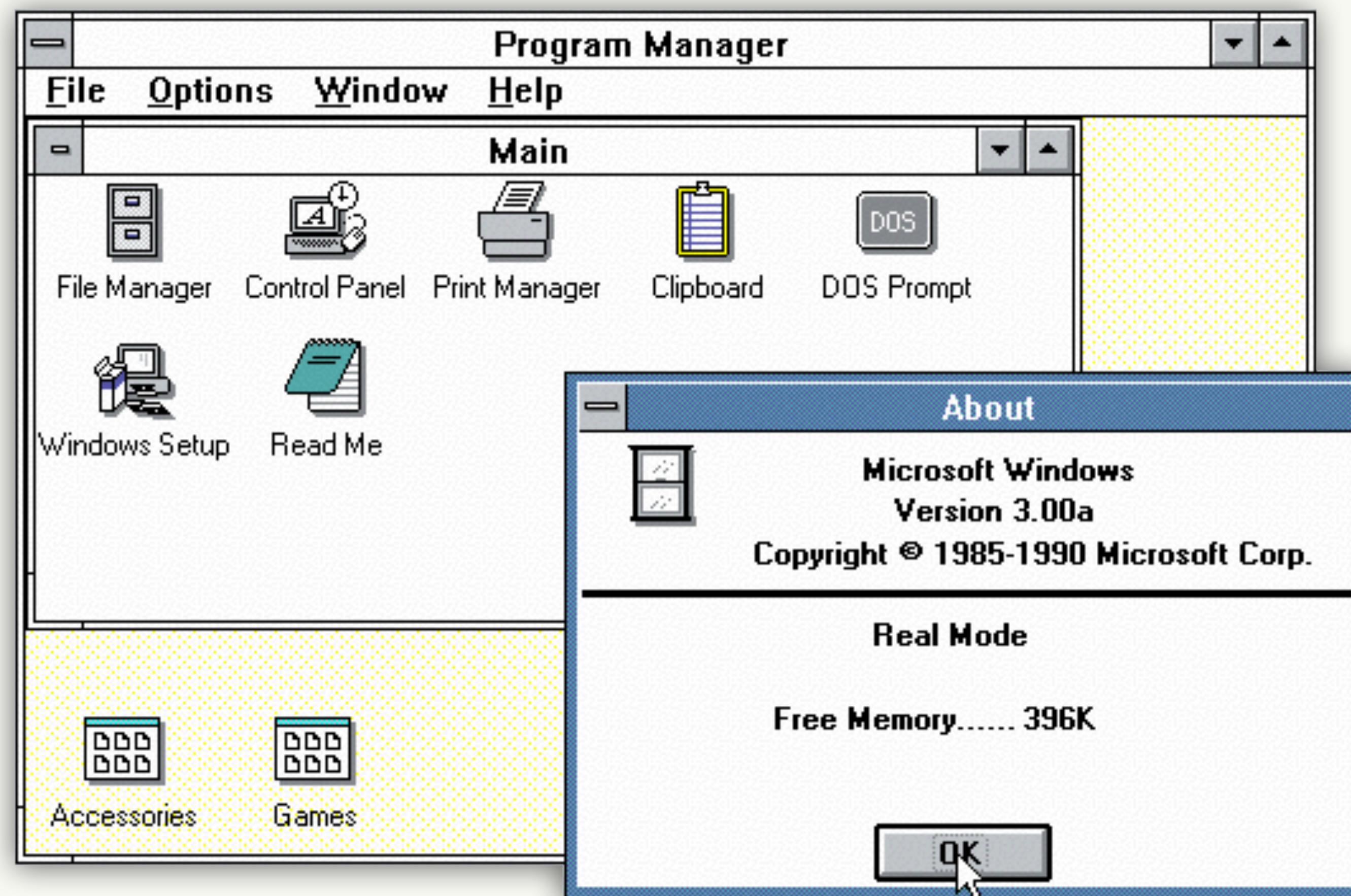
10:18 PM - 27 Jan 2014

<https://twitter.com/djcoreynolan/status/428019344342151168>

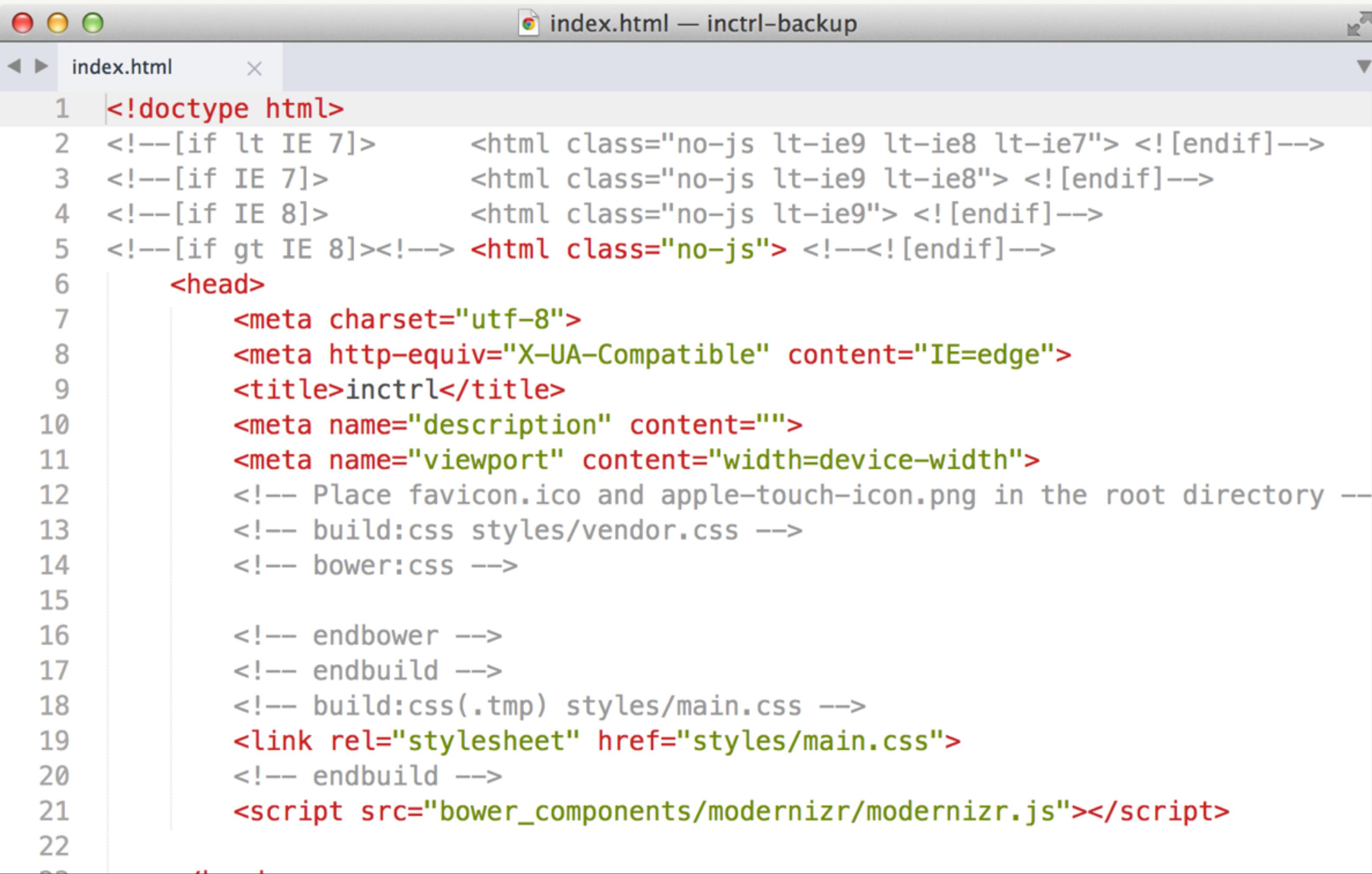
MODERN WEB DEVELOPMENT

Fetchers, Runners, and Scaffolders

APPS & GUIS



CODE EDITORS



The screenshot shows a code editor window titled "index.html — inctrl-backup". The file content is an HTML document with various meta-information and conditional comments for different web browsers. The code is color-coded for readability.

```
1 <!doctype html>
2 <!--[if lt IE 7]>      <html class="no-js lt-ie9 lt-ie8 lt-ie7"> <![endif]-->
3 <!--[if IE 7]>        <html class="no-js lt-ie9 lt-ie8"> <![endif]-->
4 <!--[if IE 8]>        <html class="no-js lt-ie9"> <![endif]-->
5 <!--[if gt IE 8]><!--> <html class="no-js"> <!--<![endif]-->
6   <head>
7     <meta charset="utf-8">
8     <meta http-equiv="X-UA-Compatible" content="IE=edge">
9     <title>inctrl</title>
10    <meta name="description" content="">
11    <meta name="viewport" content="width=device-width">
12    <!-- Place favicon.ico and apple-touch-icon.png in the root directory -->
13    <!-- build:css styles/vendor.css -->
14    <!-- bower:css -->
15
16    <!-- endbower -->
17    <!-- endbuild -->
18    <!-- build:css(.tmp) styles/main.css -->
19    <link rel="stylesheet" href="styles/main.css">
20    <!-- endbuild -->
21    <script src="bower_components/modernizr/modernizr.js"></script>
22
23  </head>
24  <body>
```

SUBLIME TEXT

```
<!doctype html>
<!--[if lt IE 7]>      <html class="no-js lt-ie9 lt-ie8 lt-ie7"> <![endif]-->
<!--[if IE 7]>        <html class="no-js lt-ie9 lt-ie8"> <![endif]-->
<!--[if IE 8]>        <html class="no-js lt-ie9"> <![endif]-->
<!--[if gt IE 8]><!--> <html class="no-js"> <!--<![endif]-->

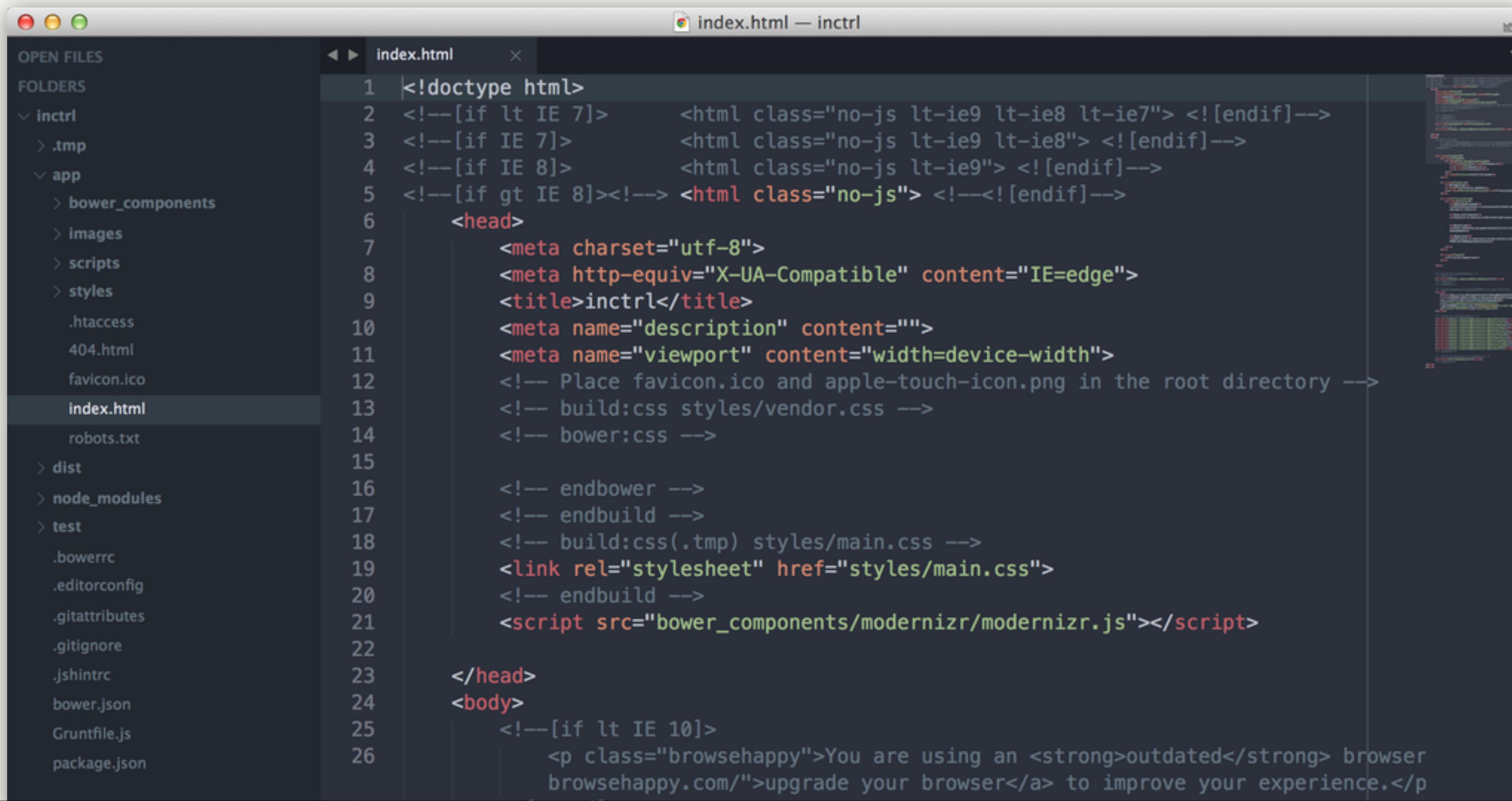
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <title>inctrl</title>
    <meta name="description" content="">
    <meta name="viewport" content="width=device-width">
    <!-- Place favicon.ico and apple-touch-icon.png in the root directory -->
    <!-- build:css styles/vendor.css -->
    <!-- bower:css -->

    <!-- endbower -->
    <!-- endbuild -->
    <!-- build:css(.tmp) styles/main.css -->
    <link rel="stylesheet" href="styles/main.css">
    <!-- endbuild -->
    <script src="bower_components/modernizr/modernizr.js"></script>

</head>
<body>
    <!--[if lt IE 10]>
        <p class="browsehappy">You are using an <strong>outdated</strong> browser. Please
            <a href="http://browsehappy.com/">upgrade your browser</a> to improve your experience.</p>
    <![endif]-->

    <div class="container">
        <div class="header">
            <ul class="nav nav-pills pull-right">
                <li class="active"><a href="#">Home</a></li>
                <li><a href="#">About</a></li>
```

MY SUBLIME TEXT



The screenshot shows the Sublime Text 3 interface with the following details:

- Open Files:** index.html
- Folders:** inctrl, .tmp, app (with bower_components, images, scripts, styles), .htaccess, 404.html, favicon.ico, index.html (selected), robots.txt, dist, node_modules, test, .bowerrc, .editorconfig, .gitattributes, .gitignore, .jshintrc, bower.json, Gruntfile.js, package.json.
- Editor Content (index.html):**

```
1 <!doctype html>
2 <!--[if lt IE 7]>      <html class="no-js lt-ie9 lt-ie8 lt-ie7"> <![endif]-->
3 <!--[if IE 7]>        <html class="no-js lt-ie9 lt-ie8"> <![endif]-->
4 <!--[if IE 8]>        <html class="no-js lt-ie9"> <![endif]-->
5 <!--[if gt IE 8]><!--> <html class="no-js"> <!--<![endif]-->
6   <head>
7     <meta charset="utf-8">
8     <meta http-equiv="X-UA-Compatible" content="IE=edge">
9     <title>inctrl</title>
10    <meta name="description" content="">
11    <meta name="viewport" content="width=device-width">
12    <!-- Place favicon.ico and apple-touch-icon.png in the root directory -->
13    <!-- build:css styles/vendor.css -->
14    <!-- bower:css -->
15
16    <!-- endbower -->
17    <!-- endbuild -->
18    <!-- build:css(.tmp) styles/main.css -->
19    <link rel="stylesheet" href="styles/main.css">
20    <!-- endbuild -->
21    <script src="bower_components/modernizr/modernizr.js"></script>
22
23  </head>
24  <body>
25    <!--[if lt IE 10]>
26      <p class="browsehappy">You are using an <strong>outdated</strong> browser
         browsehappy.com/">upgrade your browser</a> to improve your experience.</p>
```

MAKE IT YOURS

1. Install Package Control
2. Make it look good.
3. Add helpful plugins.
4. Customize settings.
5. Figure out quick keys.

<https://gist.github.com/davatron5000/7215566/>

CODE MÖR GÜD

Hinting n' Linting



A screenshot of a code editor window titled "main.js — inctrl". The window shows a dark-themed interface with a toolbar at the top and a status bar at the bottom. The code editor pane contains the following JavaScript code:

```
1 console.log('\'Allo \'Allo!');

2

3 this.is(NOT) JAVASCripts

4

5 function youForgotABracket( {
6
7     var andASemiColon = 'forgot it'
8
9 }
```

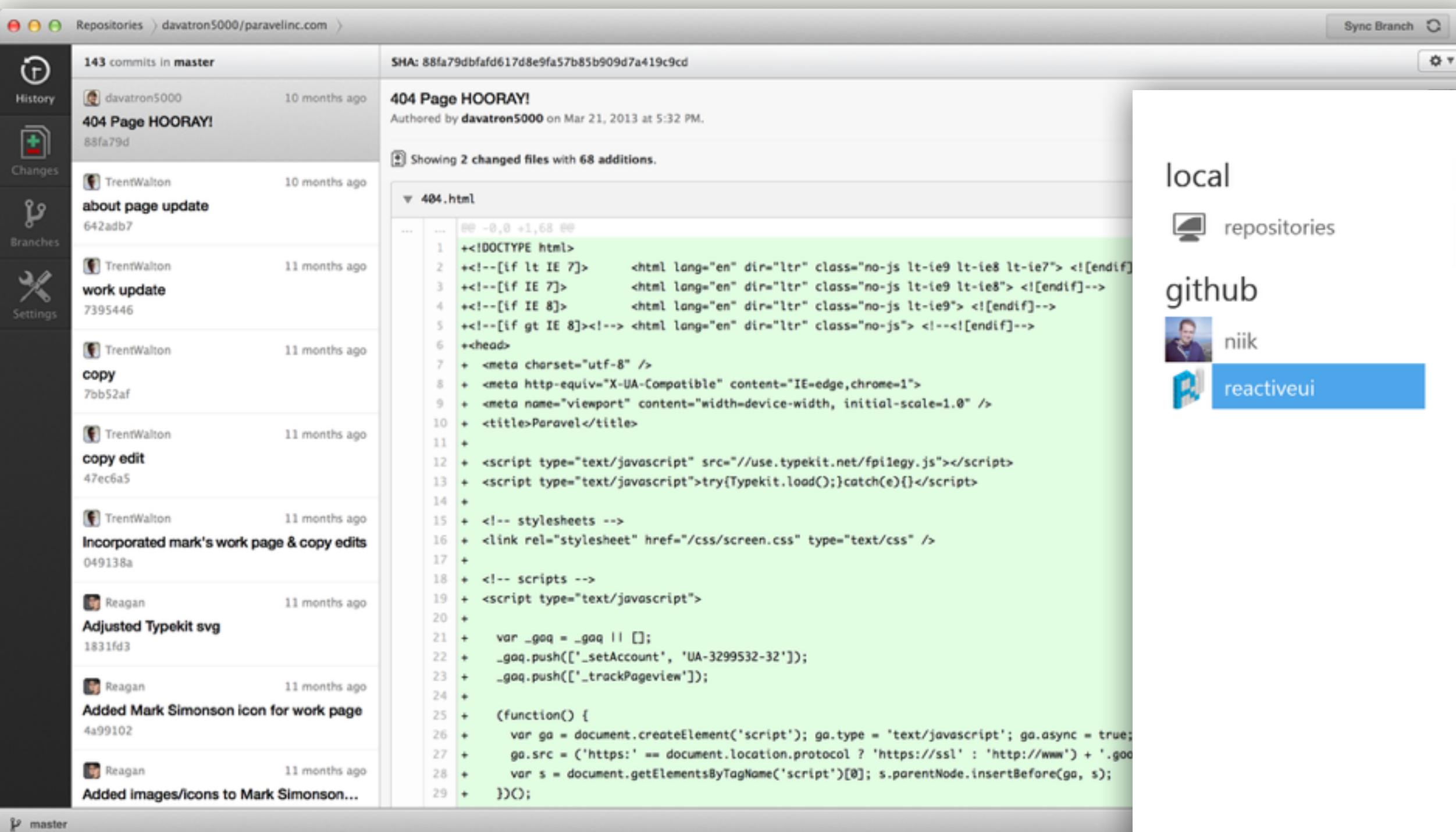
The code is annotated with several error markers:

- Line 3: "this.is(NOT) JAVASCripts" has a yellow box around "this.is(NOT)" and a red box around "JAVASCripts".
- Line 5: "function youForgotABracket({" has a red box around the opening brace "}".
- Line 7: "var andASemiColon = 'forgot it'" has a yellow box around "var" and a red box around "andASemiColon".

The status bar at the bottom of the editor shows the file path "main.js" and the word "linted".

GITHUB

mac.github.com



windows.github.com

A screenshot of the GitHub desktop application running on Windows. The window title is "ReactiveUI". The main pane displays a list of repositories under the "reactiveui" organization. The repository "ReactiveUI" is selected and highlighted with a blue background. Other repositories listed include "ReactiveUI.Samples", "RxUIProjectTemplate", and "RxUI_QCon". To the left, there are sections for "local" and "github" with user profiles for "niik" and "reactiveui". A "repositories" section shows a list of repositories. At the top right, there are buttons for "+ create", "refresh", and "tools". A search bar labeled "Filter Repositories" is also present. The right side of the screen contains descriptive text about the ReactiveUI library, its components, and its organization into assemblies.

ReactiveUI

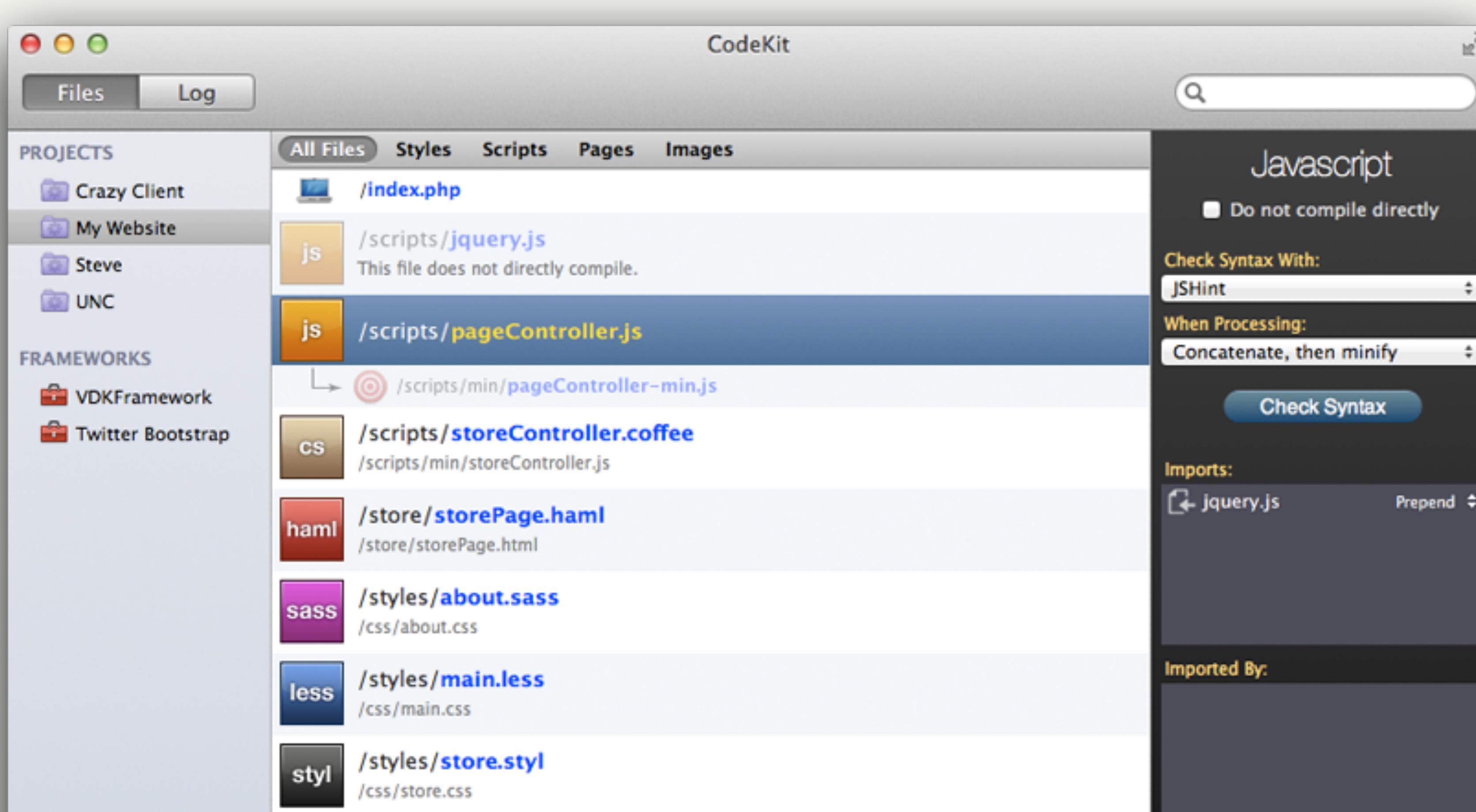
Use the Reactive Extensions for .NET along with Silverlight, WPF, or Windows Phone to create elegant, testable User Interfaces.

This library is organized into several high-level assemblies:

- **ReactiveUI** - Core library that doesn't rely on any particular UI framework. `ReactiveObject`, the base `ViewModel` object, as well as `ReactiveCollection`, a more awesome `ObservableCollection`, is in here.
- **ReactiveUI.Xaml** - Classes that require references to a Xaml'ly framework, like WPF or WinRT. `ReactiveCommand`, an implementation of `ICommand`, as well as the `UserError` classes are in this assembly.
- **ReactiveUI.Blend** - This class has several Blend Behaviors and Triggers that make attaching `ViewModel` changes to Visual State Manager states.
- **ReactiveUI.Routing** - A screens and navigation framework as well as `ViewModel` locator. This framework helps you to write applications using IoC containers to locate views, as well as navigating back and forwards between views.

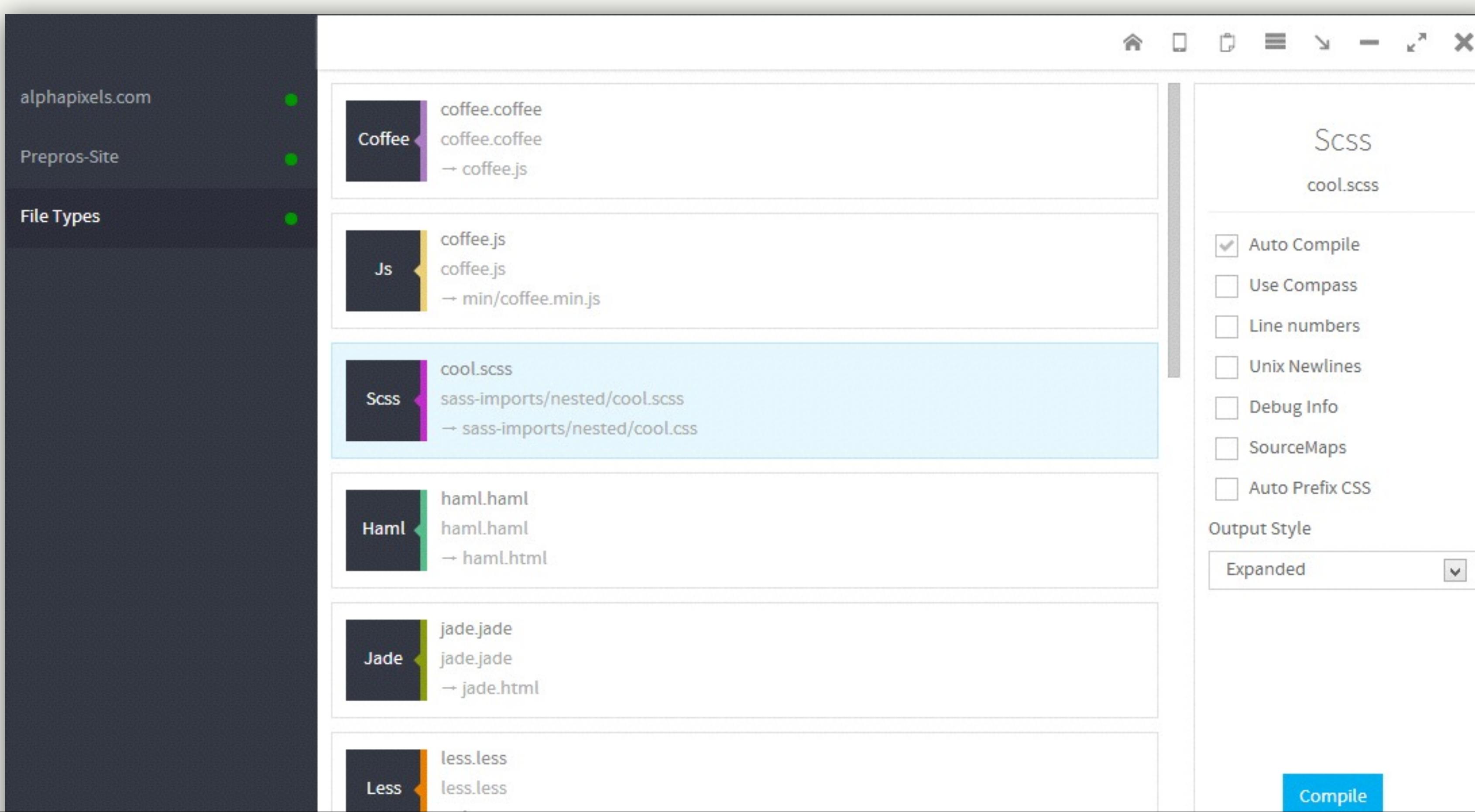
CODEKIT

incident57.com/codekit/



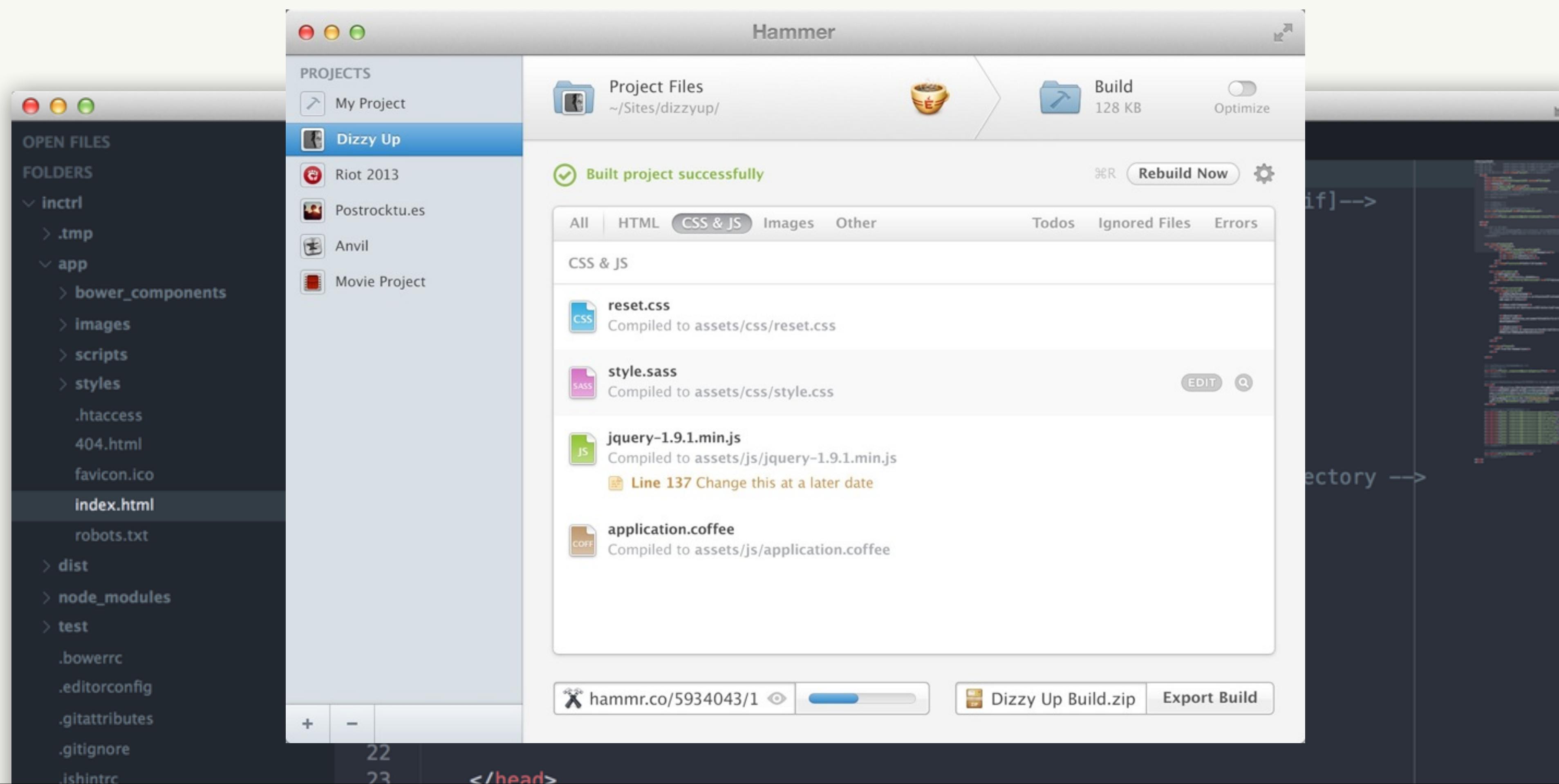
PREPROS

alphapixels.com/prepros/



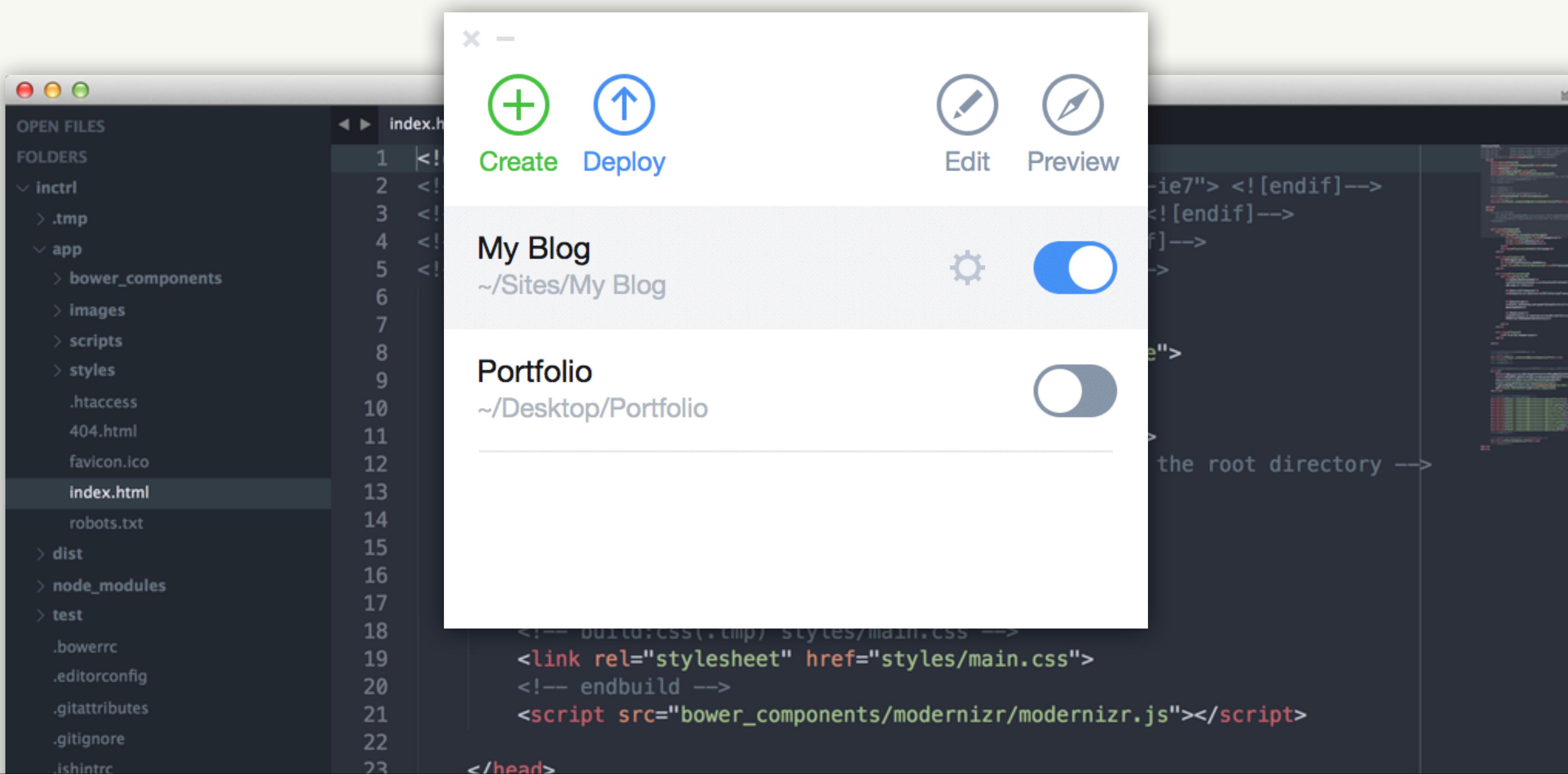
HAMMER

hammerformac.com



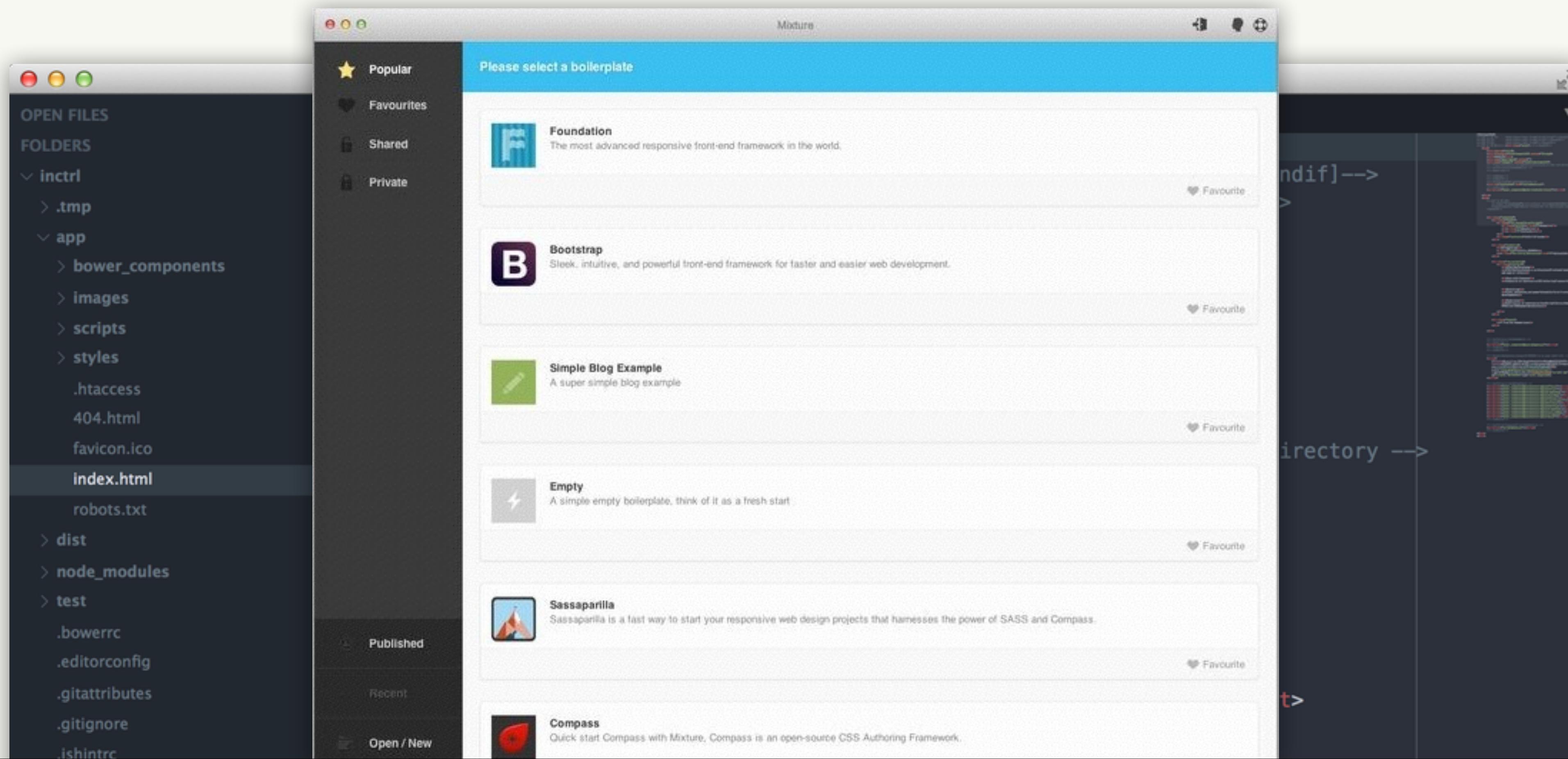
CACTUS

cactusformac.com



MIXTURE

mixture.io



THE COMMAND LINE

est. 1969

```
Last login: Sun Feb 17 11:22:19 on ttys003  
dave on my-macbook.local in ~
```

```
$ █
```





▲ DANGER / POISON
Hazardous if swallowed.
Harmful if inhaled.
Harmful if absorbed through skin.
Explosive if heated.
Keep away from heat, hot surfaces,
open flames and sparks.
Do not expose to temperatures
exceeding 50°C.

▲ DANGER / POISON
Hazardous if swallowed.
Harmful if inhaled.
Harmful if absorbed through skin.
Explosive if heated.
Keep away from heat, hot surfaces,
open flames and sparks.
Do not expose to temperatures
exceeding 50°C.

CLI ANATOMY*

\$ tool <task> <options> <input> <output>

The app/program
you want to use

The task you want it
to perform

Optional stuff
you may need

File/folder/URL
to use as data

Destination
File/folder/URL

* Not official UNIX talk here

DAILY SHELL

```
$ cd ~/Dropbox/dev/      $ jekyll server --auto  
$ compass watch           $ git push master origin  
$ touch index.html        $ npm install -g grunt-thin
```



**BETTER WITH
FRIENDS**

THE BIG THREE

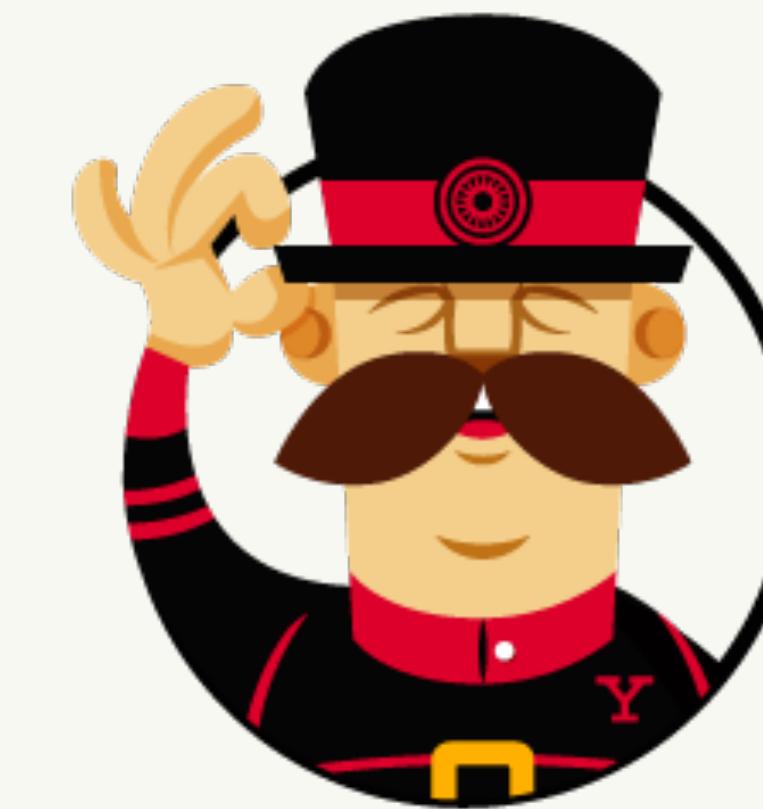
Front-end command line applications



Bower



GRUNT



YEOMAN



SPOTIFY ME!

FILE FETCHER

Fetches files and dependencies from the cloud so you don't have manually.



```
// Fetchers:  
$ bower  
$ npm  
$ gem  
$ yum
```

Download plugins and dependencies:

```
$ bower install fitvids  
// installs jquery AND fitvids
```



TASK RUNNER

Runs mundane (simple or complicated) tasks over and over and over.



```
// Task Runners:  
$ grunt  
$ rake  
$ cake  
$ make  
$ gulp
```



Common tasks (usually verbs):

- \$ grunt build
- \$ grunt watch
- \$ grunt test
- \$ grunt serve

Common tasks (usually verbs):

```
$ gulp build  
$ gulp watch  
$ gulp test  
$ gulp serve
```



ROBO-BUTLER

Generates complete prototypes and scaffolds in milliseconds.



```
// Generators:  
$ yo  
$ rails generate  
$ cake bake
```

Rapid application development:

```
$ npm install -g generator-webapp  
$ yo webapp
```



```
$ yo webapp  
  
      _.-  
     |--(o)--|  .-.-.-.  
     \_U_ /  |  Welcome to Yeoman,  
       A   |  ladies and gentlemen!  
     /___. \  |  
      \~ /  
       '-.'-'  
          Y '  
  
Out of the box I include HTML5 Boilerplate, jQuery, and a Gruntfile  
.js to build your app.  
[?] What more would you like? (Press <space> to select)  
> ● Sass with Compass
```

DEMO TIME:

Build a sample website for InCtrl
with the command line.

THANKS

Dave Rupert
@davatron5000

github.com/davatron5000