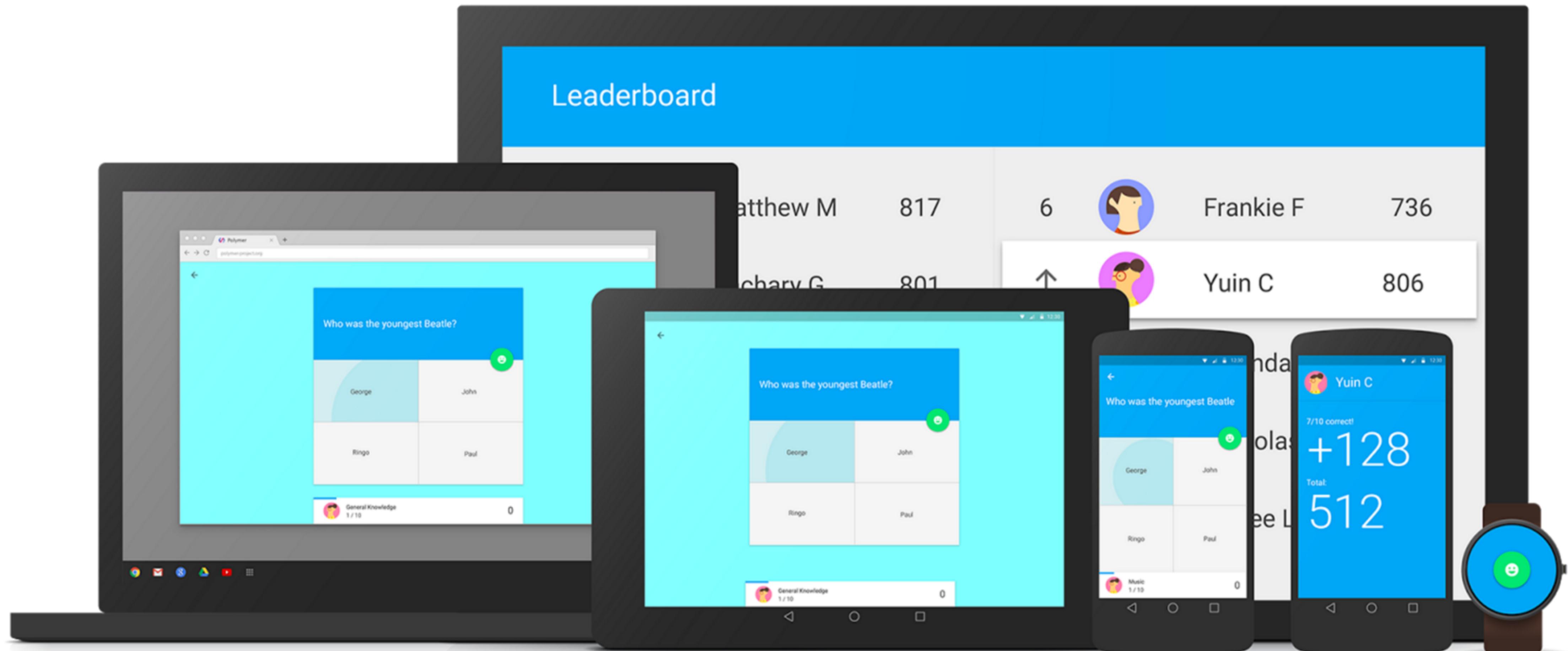




Tools for Polymer





@polymer #itshackademic

```
<div id="tabs"> <div id="tabstrip">
  <ul> <ul>
    <li><a href="#"> <li>Tab 1</li>
    <li><a href="#"> <li>Tab 2</li>
    <li><a href="#"> </ul>
  </ul> <div>Content</div>
  <div id="first"> <div>Content</div>
    <p>First tab</p>
    <pre><code>
</code></pre>
    <script>
      $("#tabstrip").animate({
        height: "100px"
      }, 500);
      $(".tab-content").each(function() {
        $(this).css("height", "100px");
      });
    </script>
  </div>
  <div id="second">
    <div>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia.</div>
    <div>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia.</div>
    <div>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia.</div>
  </div>
  <div id="third">
    <div>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia.</div>
    <div>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia.</div>
    <div>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia. Nullam ac nunc vel nisi euismod lacinia.</div>
  </div>
</div>

<script>
$( "#tabs" ).tab();
</script>
```

```
var tabview = new TabView();
tabview.children = [
  { label: "Content 1", content: "Content 1" },
  { label: "Content 2", content: "Content 2" },
  { label: "Content 3", content: "Content 3" }
]);
```

```
angular.module('tabs', []).directive('angularTabs', function() {
  return {
    restrict: 'E',
    transclude: true,
    scope: { heading: '@' },
    controller: function($scope, $element) {
      var panels = $scope.panels = [];

      $scope.select = function(panel) {
        [].forEach.call(panels, function(panel) {
          panel.selected = false;
        });
        panel.selected = true;
      }

      this.addPanel = function(panel) {
        if (panels.length == 0) {
          $scope.select(panel);
        }
        panels.push(panel);
      }
    },
    template:
      '<div id="container">' +
      '  <aside>{{heading}}</aside>' +
      '  <div class="tab-wrapper">' +
      '    <h2 ng-repeat="panel in panels" ng-click="select(panel)" ng-class="{active: panel.selected}">' +
      '    </div>' +
      '    <div class="contents" ng-transclude></div>' +
      '  </div>',
    replace: false
  };
}).
```



vanilla

```
document.registerElement('paper-tabs', {  
  prototype: Object.create(HTMLElement.prototype)  
});
```



polymer

```
<polymer-element name="paper-tabs">  
  ...  
</polymer-element>
```

usage

```
<paper-tabs>...</paper-tabs>  
// document.createElement('paper-tabs');
```

Type only numbers... (floating)

123A

Input is not a number!



```
<paper-input floatinglabel  
    label="Type only numbers... (floating)"  
    validate="^[0-9]*$"  
    error="Input is not a number!">  
</paper-input>
```



Fe

Iron
Elements

Polymer core elements

1.0.7

Ne

Neon
Elements

Animation and Special Effects

1.0.0

Md

Paper
Elements

Material design elements

1.0.7

Pt

Platinum
Elements

Offline, push, and more

1.2.0

Go

Google Web
Components

Components for Google's APIs
and services

1.0.1

Au

Gold
Elements

Ecommerce Elements

1.0.1

Mo

Molecules

Wrappers for third-party
libraries

1.0.0



Polymer Starter Kit

Web Starter Kit

Boilerplate & Tooling for Multi-Device Development

[Download Kit \(beta\)](#)

```
> tree . -L 2
```

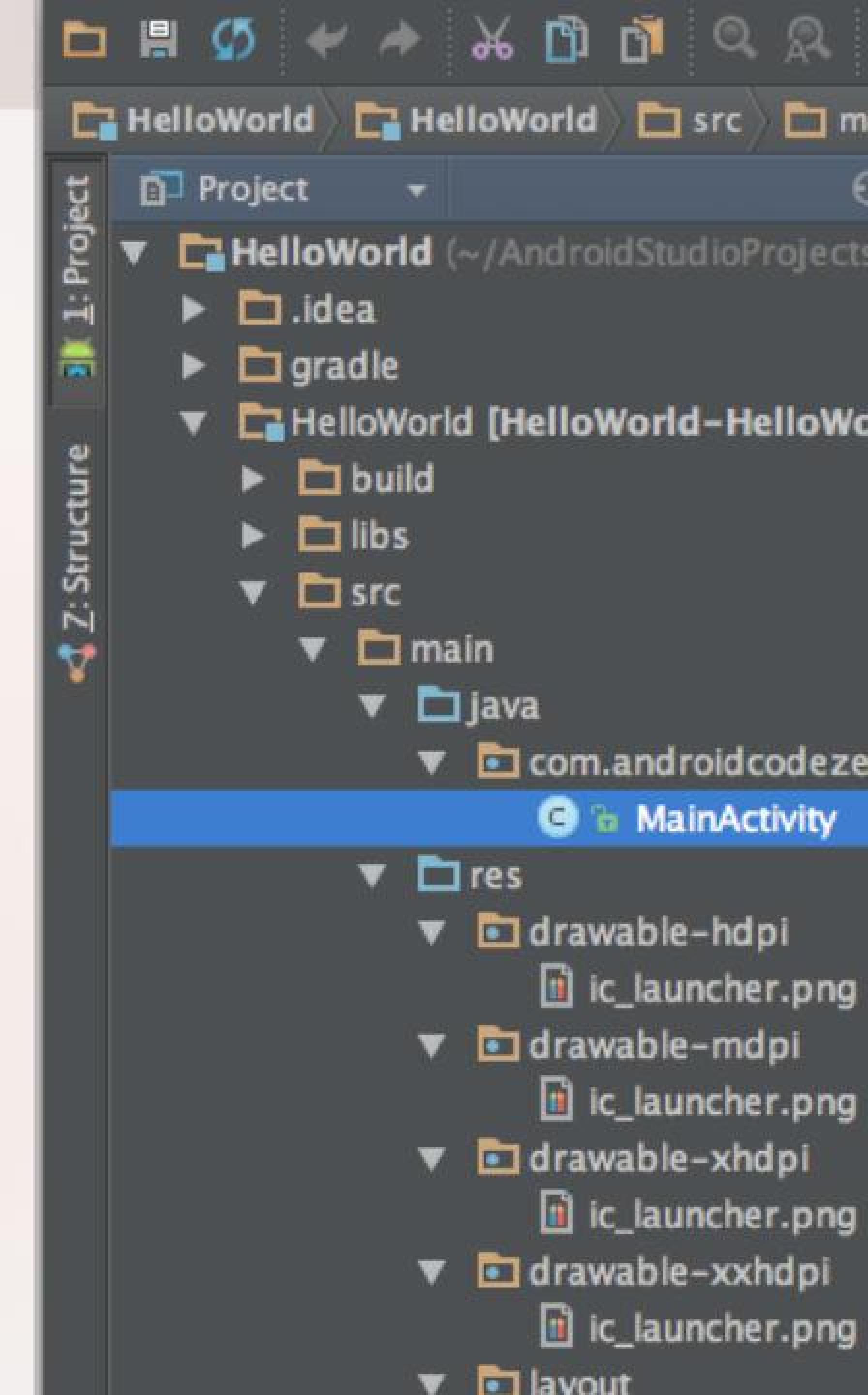
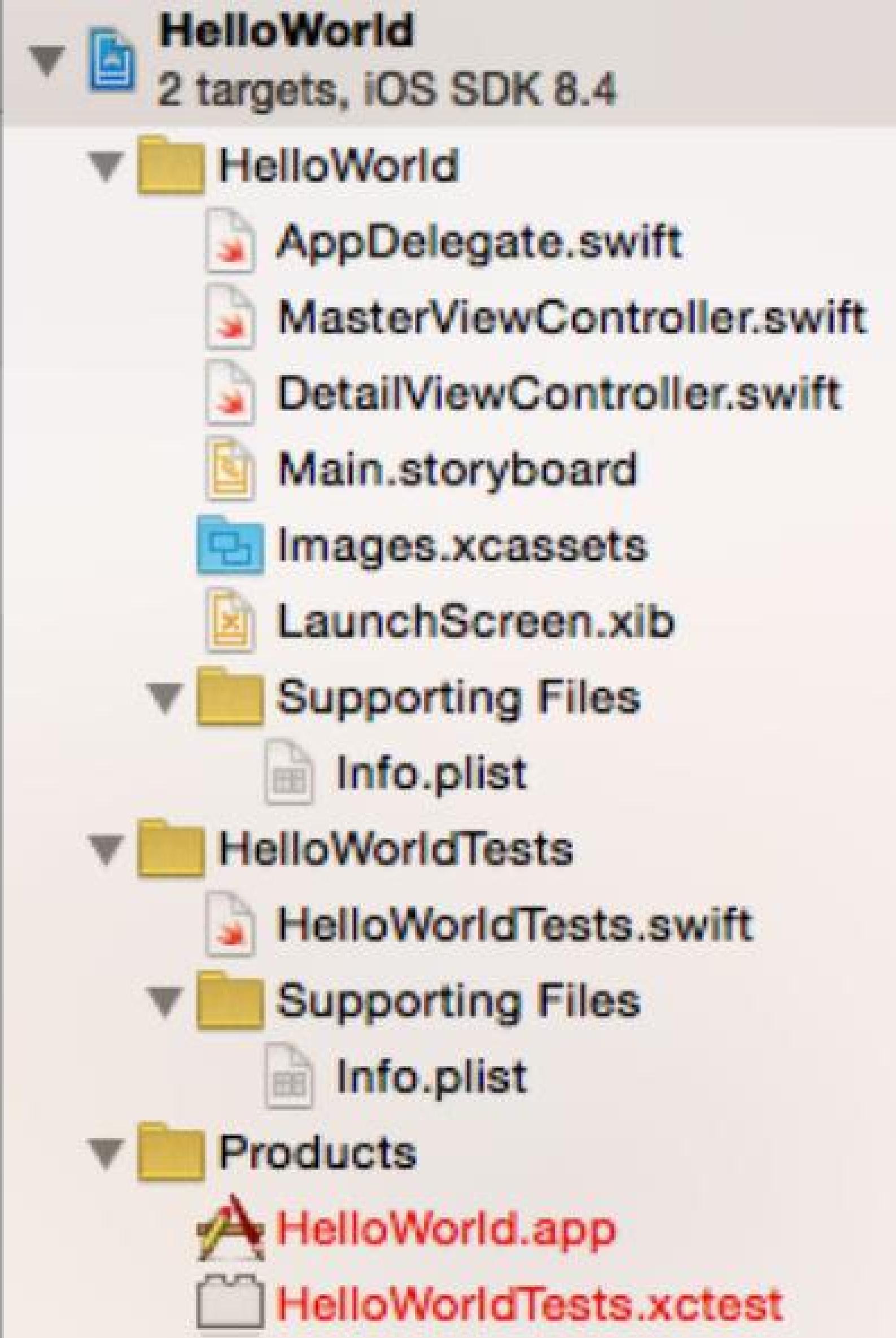
```
.
├── LICENSE
├── README.md
└── app
    ├── basic.html
    ├── favicon.ico
    ├── fonts
    ├── humans.txt
    ├── images
    ├── index.html
    ├── manifest.json
    ├── manifest.webapp
    ├── robots.txt
    ├── scripts
    ├── styleguide.html
    └── styles

├── docs
    ├── commands.md
    └── install.md

├── gulpfile.js
└── package.json
```

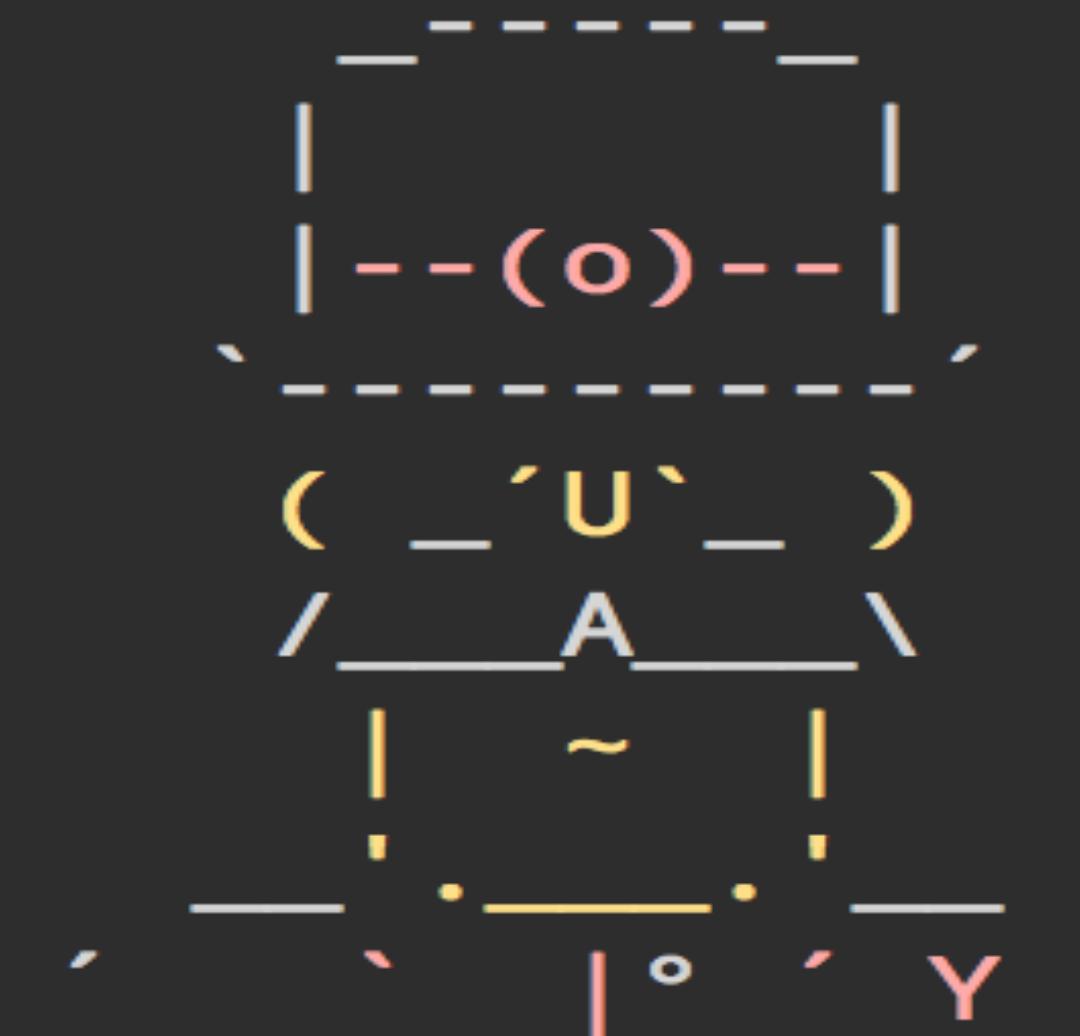
6 directories, 14 files

~/Downloads/web-starter-kit-0.5.4 rag





generator-gulp-webapp: yo gulp-webapp — node



Welcome to Yeoman,
ladies and gentlemen!

Out of the box I include HTML5 Boilerplate, jQuery, and
a `gulpfile.js` to build your app.

[?] What more would you like? (Press <space> to select)

- Sass
- Bootstrap
- Modernizr

FUTURE
INSIGHTS



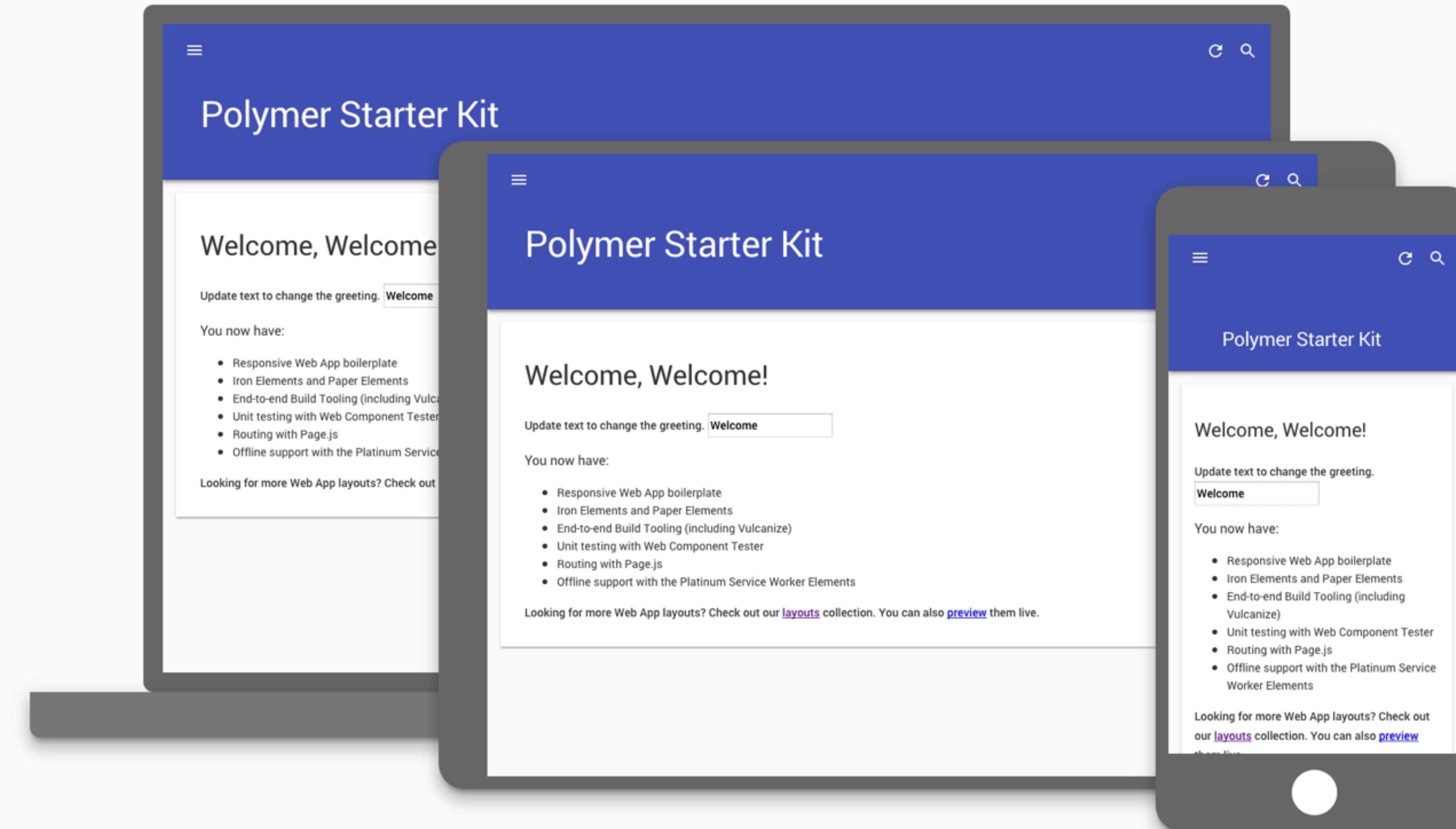
FUTURE OF
WEB APPS

#FOWA

First do it.
Then do it right.
Then do it better.



FUTURE
INSIGHTS





Polymer Starter Kit





DOWNLOAD

developers.google.com/web/tools/polymer-starter-kit

Releases · PolymerElement x

GitHub, Inc. [US] https://github.com/PolymerElements/polymer-starter-kit/releases

GitHub This repository Search Explore Features Enterprise Pricing Sign up Sign in

PolymerElements / polymer-starter-kit Watch 207 Star 1,770 Fork 437

Code Issues 55 Pull requests 5 Wiki Pulse Graphs

Releases

Tags

Latest release

v1.2.1

bb2f93c

1.2.1

 addyosmani released this 9 days ago · 12 commits to master since this release

This release addresses regressions introduced in the latest [1.2.1 release](#) due to upstream dependencies and changes in our tooling workflow and recipes. A full list of changes can be found [here](#)

Downloads available

Beginners

 [polymer-starter-kit-light-1.2.1](#) - a simpler start with just Polymer, some elements and layout.

This requires no additional tools from us and already has dependencies checked in. You can download this version, `cd app` into it and just run `python -m SimpleHTTPServer 8080` (or with Python 3 `python -m http.server 8080`), WAMP or another local server setup to get it running.

Intermediate - Advanced users

 [polymer-starter-kit-1.2.1.zip](#) - the kit with all of our [build process & developer tooling](#) and (optional) offline support. Use this version if building something you're targeting for production.

You will need to run a one-liner to install the Node and Bower dependencies needed once downloaded.

We walk you through this in our [README](#).

Setup Environments

```
.
├── .editorconfig
├── .gitattributes
├── .gitignore
├── .jscsrc
├── .jshintrc
├── .tmp
└── LICENSE.md
    README.md
    app
    bower.json
    bower_components
    dist
    gulpfile.js
    node_modules
    package.json
    wct.conf.json
```

5 directories, 11 files

~/Workspace/psk 0.0655s

> █

1:zsh*Z

```
1 {  
2   "name": "polymer-starter-kit",  
3   "private": true,  
4   "dependencies": {  
5     "iron-elements": "PolymerElements/iron-elements#^1.0.0",  
6     "neon-elements": "PolymerElements/neon-elements#^1.0.0",  
7     "page": "visionmedia/page.js#~1.6.4", [REDACTED]  
8     "paper-elements": "PolymerElements/paper-elements#^1.0.1",  
9     "platinum-elements": "PolymerElements/platinum-elements#^1.1.0",  
10    "polymer": "Polymer/polymer#^1.2.0", [REDACTED]  
11    "paper-menu": "PolymerElements/paper-menu#4fecb43601"  
12  },  
13  "devDependencies": {  
14    "web-component-tester": "*"  
15  },  
16  "ignore": [],  
17  "resolutions": {  
18    "paper-menu": "4fecb43601"  
19  }  
20 }
```

~~~~~



```
1 {  
2   "private": true,  
3   "devDependencies": {  
4     "browser-sync": "^2.7.7",  
5     "connect-history-api-fallback": "^1.1.0",  
6     "del": "^2.0.2",  
7     "glob-all": "^3.0.1",  
8     "gulp": "^3.8.5",  
9     "gulp-autoprefixer": "^3.1.0",  
10    "gulp-cache": "^0.4.0",  
11    "gulp-changed": "^1.0.0",  
12    "gulp-gh-pages": "^0.5.4",  
13    "gulp-html-extract": "^0.0.3",  
14    "gulp-if": "^2.0.0",  
15    "gulp-imagemin": "^2.2.1",  
16    "gulp-jscs": "^3.0.0",  
17    "gulp-jscs-stylish": "^1.1.2",  
18    "gulp-jshint": "^1.6.3",  
19    "gulp-load-plugins": "^1.1.0",  
20    "gulp-minify-css": "^1.2.1",  
21    "gulp-minify-html": "^1.0.2",  
22    "gulp-rename": "^1.2.0",  
23    "gulp-replace": "^0.5.4",  
24    "gulp-size": "^2.0.0",  
25    "gulp-uglify": "^1.2.0",  
26    "gulp-useref": "^2.1.0",  
27    "gulp-vulcanize": "^6.0.0",  
28    "jshint-stylish": "^2.0.0",  
29    "merge-stream": "^1.0.0",  
30    "require-dir": "^0.3.0",  
31    "run-sequence": "^1.0.2".
```





```
~/Workspace/psk 0.0721s
```

```
> tree app -L 1 -Ca
```

```
app
```

```
  └── elements  
  └── favicon.ico  
  └── images  
  └── index.html  
  └── manifest.json  
  └── precache.json  
  └── robots.txt  
  └── scripts  
  └── styles  
  └── sw-import.js  
  └── test
```

```
5 directories, 6 files
```

```
~/Workspace/psk 0.0545s
```

```
> █
```



```
~/Workspace/psk 0.0636s
```

```
> l.*
```

```
.editorconfig  
.gitattributes  
.gitignore  
.jscsrc  
.jshintrc
```

```
~/Workspace/psk 0.0549s
```

```
> █
```



## .dotfiles

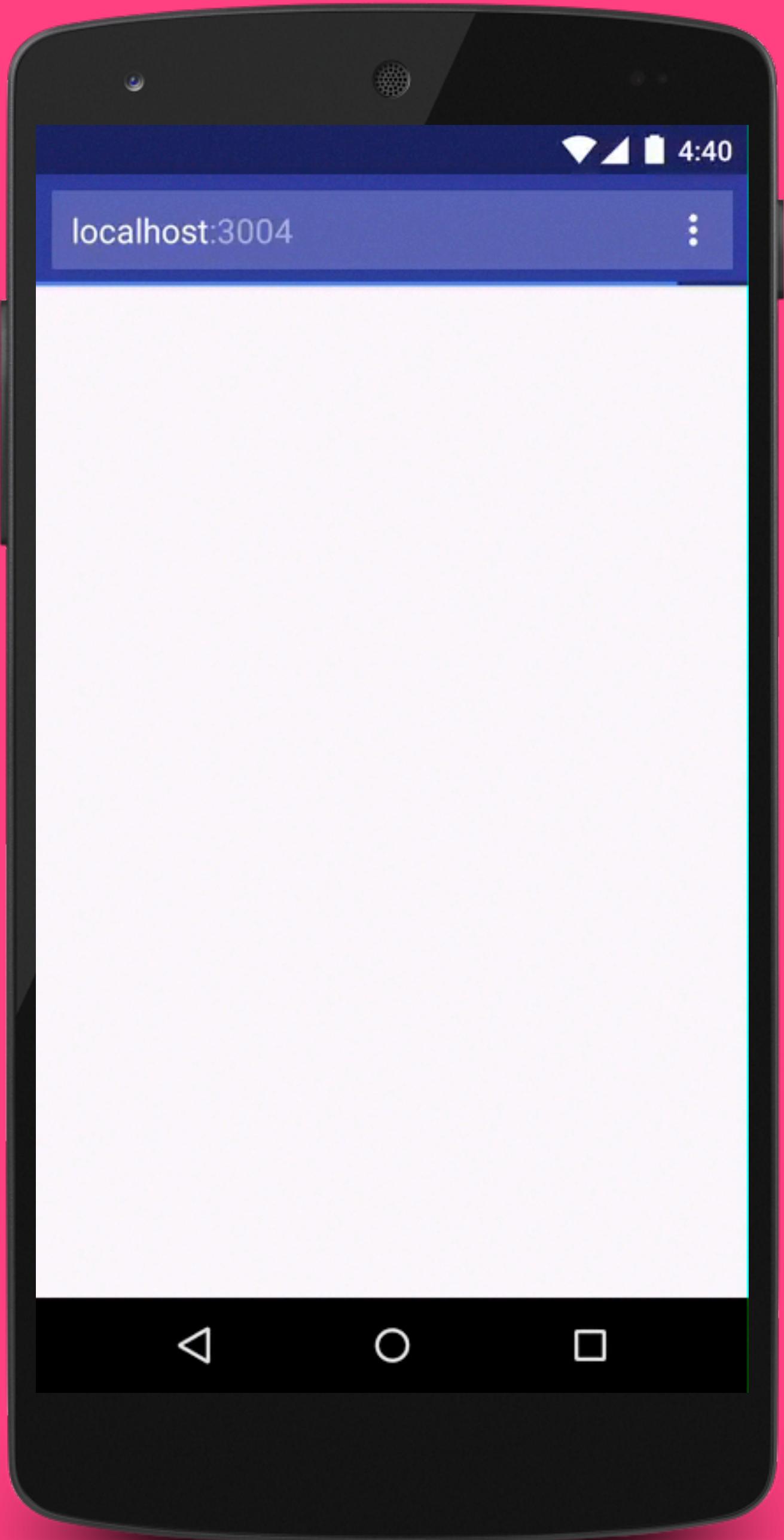
- `.editorconfig`: Defining coding styles and a collection of text editor plugins. intend style, encoding type

- `.jscsrc`: Code style linter for programmatically enforcing your style guide, preset: google, but OPTIONAL or <http://eslint.org/>

- `.jshintrc`: Detect errors and potential problems in your JavaScript code

# Material Design

<paper-drawer-panel>  
<paper-menu>



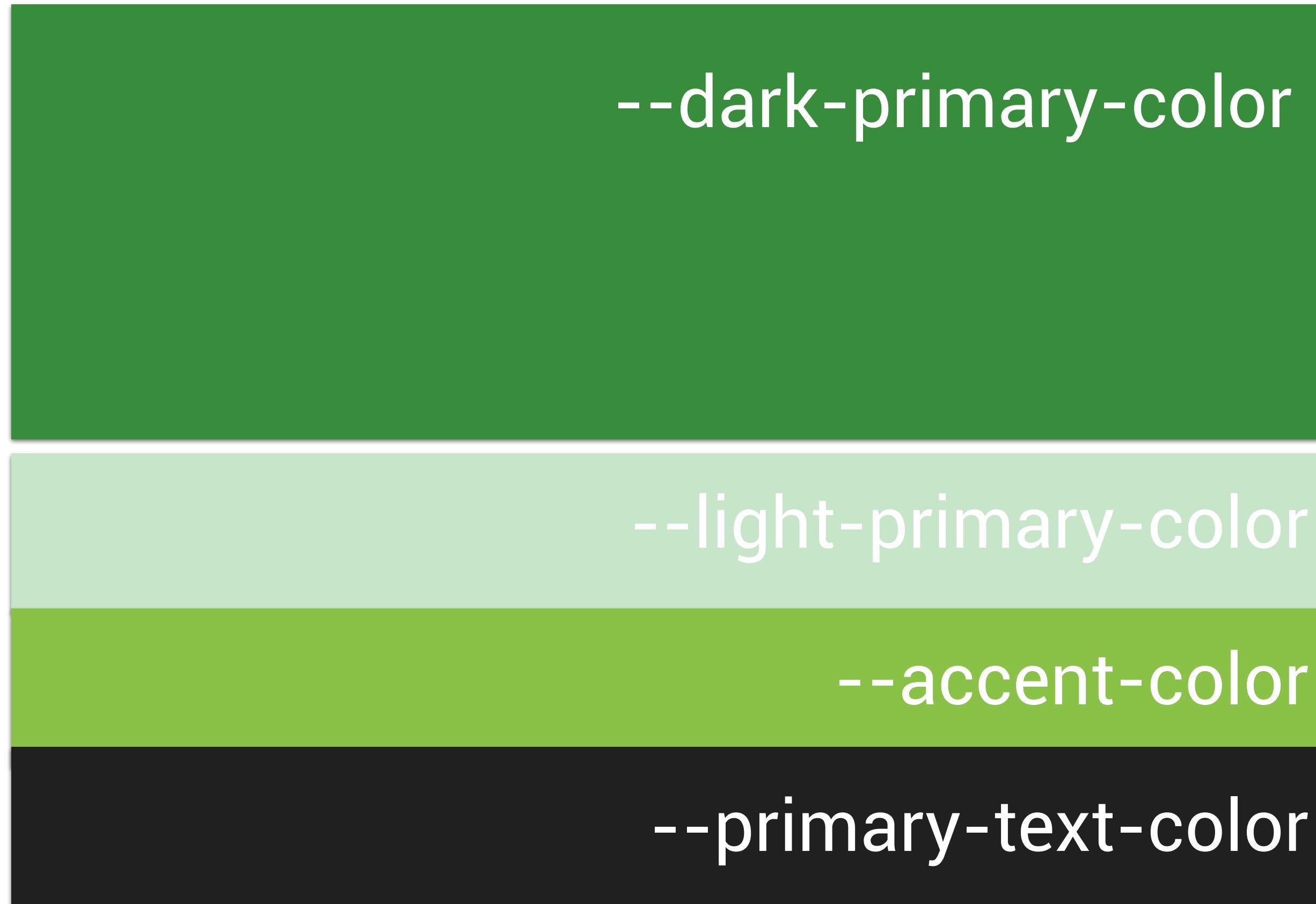
<paper-toolbar>  
<paper-header-panel>

```
~/Workspace/psk ragingwind@azurepeak-mbp15 0.0511s
> tree ./app/elements -L 2 -Ca
./app/elements
└── elements.html
    ├── my-greeting
    │   └── my-greeting.html
    ├── my-list
    │   └── my-list.html
    └── routing.html
```

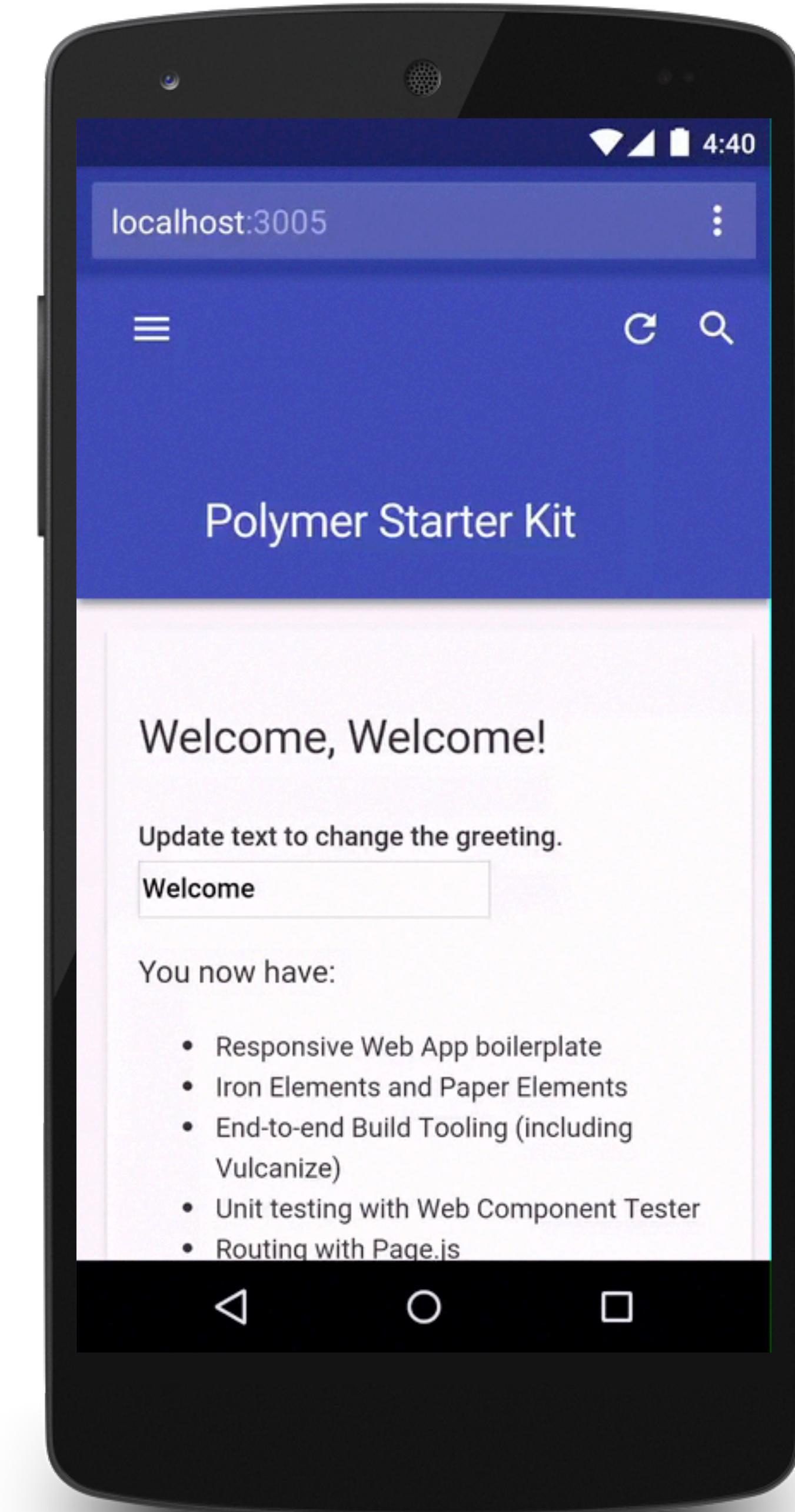
2 directories, 4 files

```
~/Workspace/psk ragingwind@azurepeak-mbp15 0.0542s
> █
```

# App-wide Theming



CSS custom properties





```
~/Workspace/psk 0.1467s
> tree ./app/styles -Ca
./app/styles
└── app-theme.html
    main.css

0 directories, 2 files
```

```
~/Workspace/psk 0.0534s
>
```

```
18     See https://www.polymer-project.or
19     for further information on custom
20     */
21
22     /* Application theme */
23
24     :root {
25         --dark-primary-color: #303F9F;
26         --default-primary-color: #3F51B5;
27         --light-primary-color: #C5CAE9;
28         --text-primary-color: #ffffff; /*
29         --accent-color: #FF4081;
30         --primary-background-color: #c5ca
31         --primary-text-color: #212121;
32         --secondary-text-color: #727272;
33         --disabled-text-color: #bdbdbd;
34         --divider-color: #B6B6B6;
35
36     /* Components */
37
-- INSERT --
```

material palette

[TWEET](#) [SHARE](#) [PLUS](#)

MATERIAL DESIGN EXAMPLES

The main feature is a 5x6 grid of color swatches. Rows are labeled: RED, INDIGO, GREEN, ORANGE. Columns are labeled: PINK, PURPLE, DEEP PURPLE, LIGHT BLUE, CYAN, TEAL, LIGHT GREEN, LIME, YELLOW, AMBER, DEEP ORANGE, BROWN, GREY, and BLUE GREY. Each swatch has a checkmark in the bottom-left corner. A central column contains the text "PICK TWO COLORS".

**PICK TWO COLORS**

**Palette preview**  
Full Palette colors below

**Label**  
December 17th

**Label**  
December 15th

**Your Palette** [DARK PRIMARY COLOR](#) [PRIMARY COLOR](#) [LIGHT PRIMARY COLOR](#) [TEXT / ICONS](#)

|                         |                         |                         |                         |
|-------------------------|-------------------------|-------------------------|-------------------------|
| #00796B                 | #009688                 | #B2DFDB                 | #FFFFFF                 |
| <a href="#">#00BCD4</a> | <a href="#">#212121</a> | <a href="#">#727272</a> | <a href="#">#B6B6B6</a> |

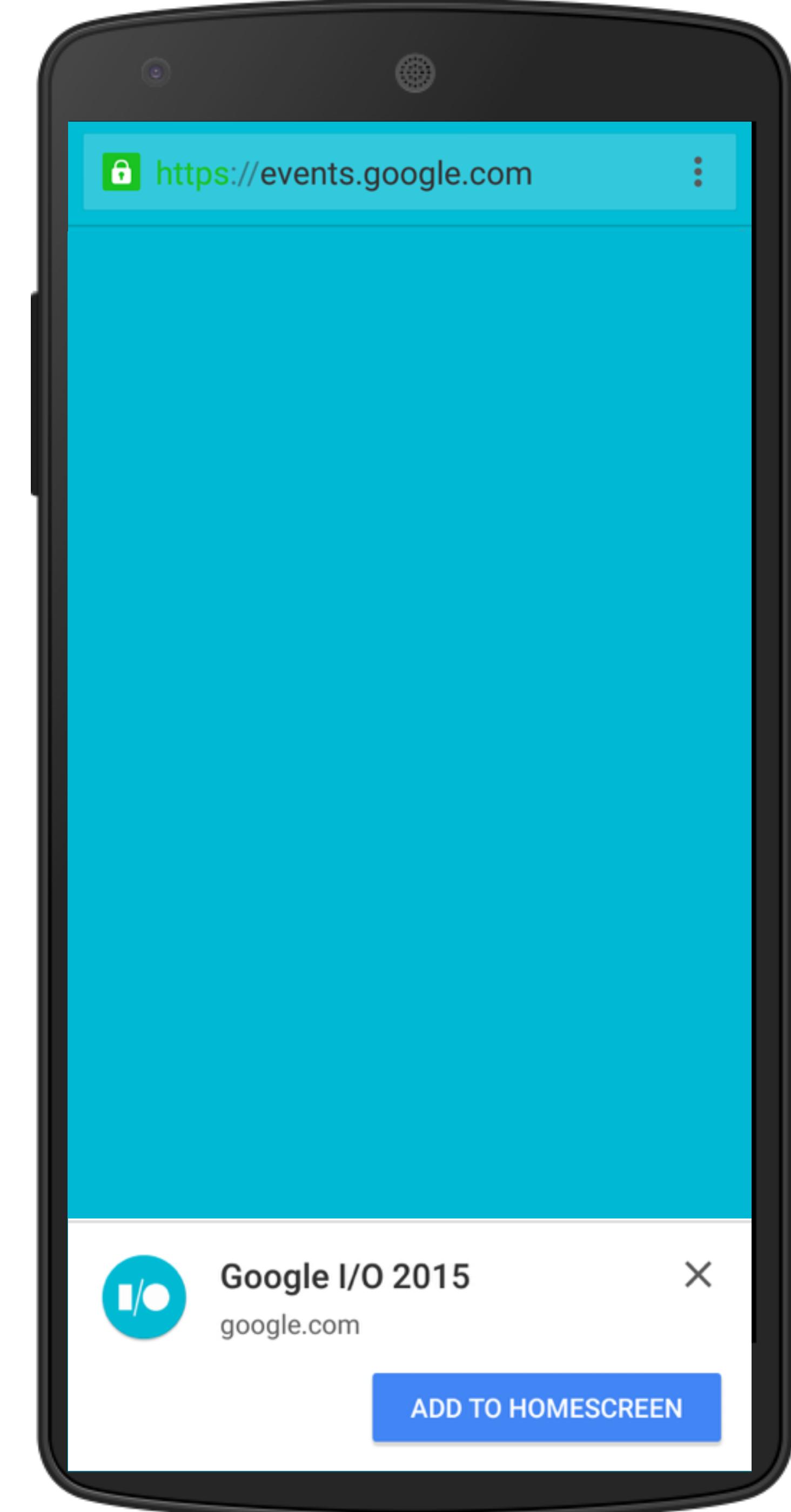
| L           | PNG | <a href="#">POLYMER</a> |  TWEET |
|-------------|-----|-------------------------|-------------------------------------------------------------------------------------------|
| IMARY COLOR |     | #FFFFFF                 | TEXT / ICONS                                                                              |
| NDARY TEXT  |     | #B6B6B6                 | DIVIDER COLOR                                                                             |

```

2 <!-- Replace the one that comes in their
3
4 <style is="custom-style">
5   :root {
6     --dark-primary-color: #0288D1;
7     --default-primary-color: #03A9F4;
8     --light-primary-color: #B3E5FC;
9     --text-primary-color: #FFFFFF;
10    --accent-color: #00BCD4;
11    --primary-background-color: #B3E5FC;
12    --primary-text-color: #212121;
13    --secondary-text-color: #727272;
14    --disabled-text-color: #bdbdbd;
15    --divider-color: #B6B6B6;
16
17
18  /* Components */
19
20  /* paper-drawer-panel */
21  --drawer-menu-color: #fffff;
22  --drawer-border-color: 1px solid #00BCD4;
23  --drawer-toolbar-border-color: 1px solid #00BCD4;
24
25  /* paper-menu */
26  --paper-menu-background-color: #fff;
27  --menu-link-color: #111111;
28
29

```

# Mobile Web defaults



Meta theme colour

Web App install banner



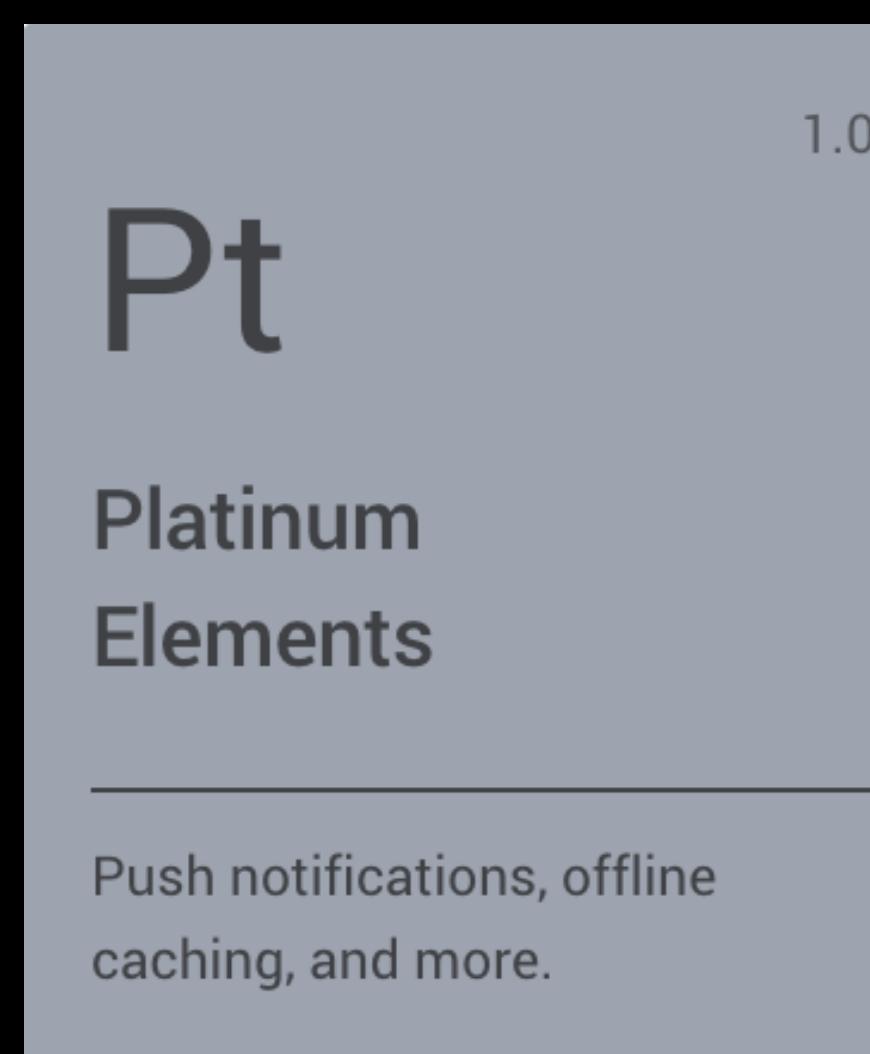
```
~/Workspace/psk 0.0515s
```

```
> tree ./app -L 1 | grep -E  
'manifest|index.html'
```

```
|-- index.html  
|-- manifest.json
```

```
~/Workspace/psk 0.0553s
```

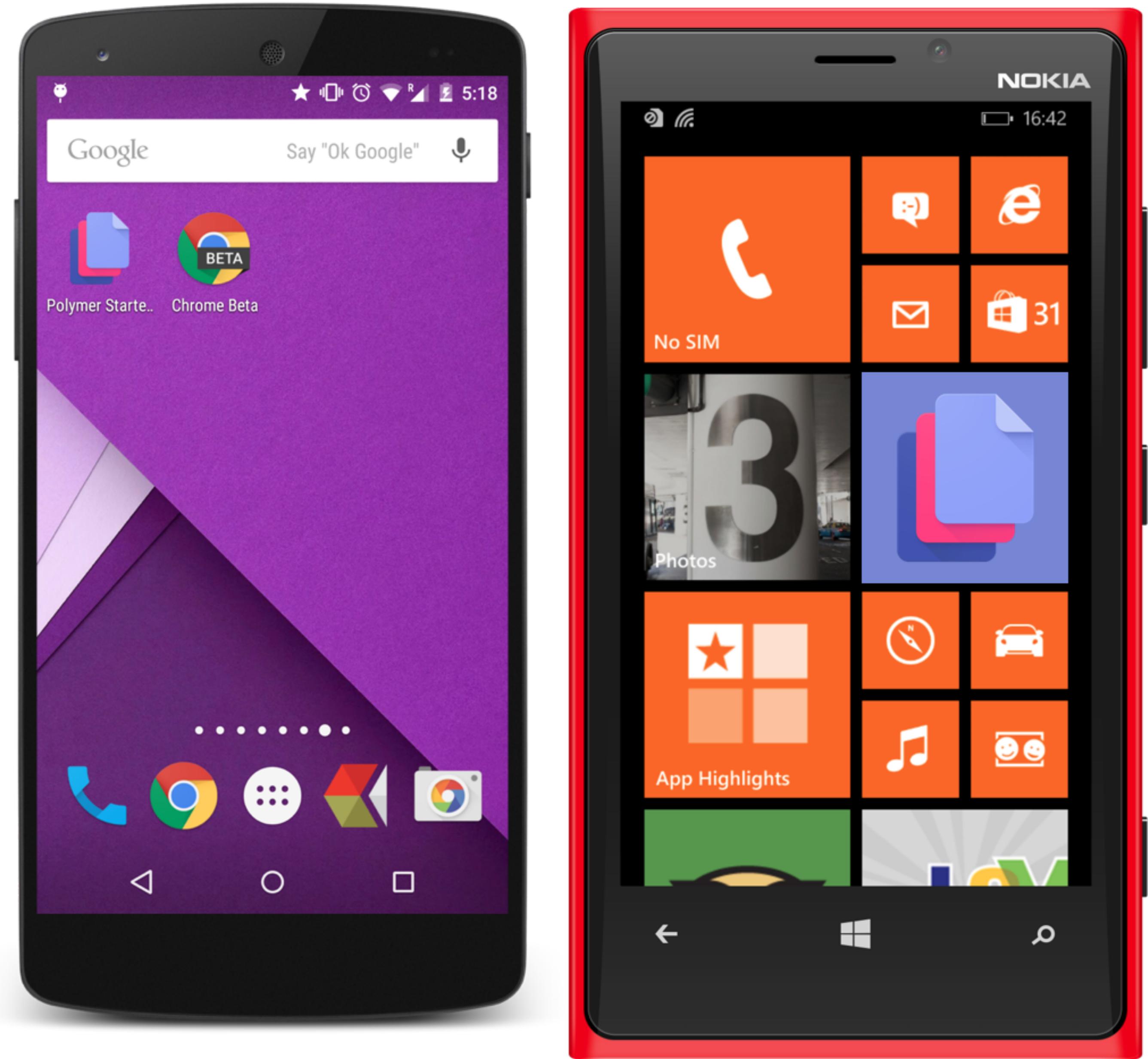
```
> █
```



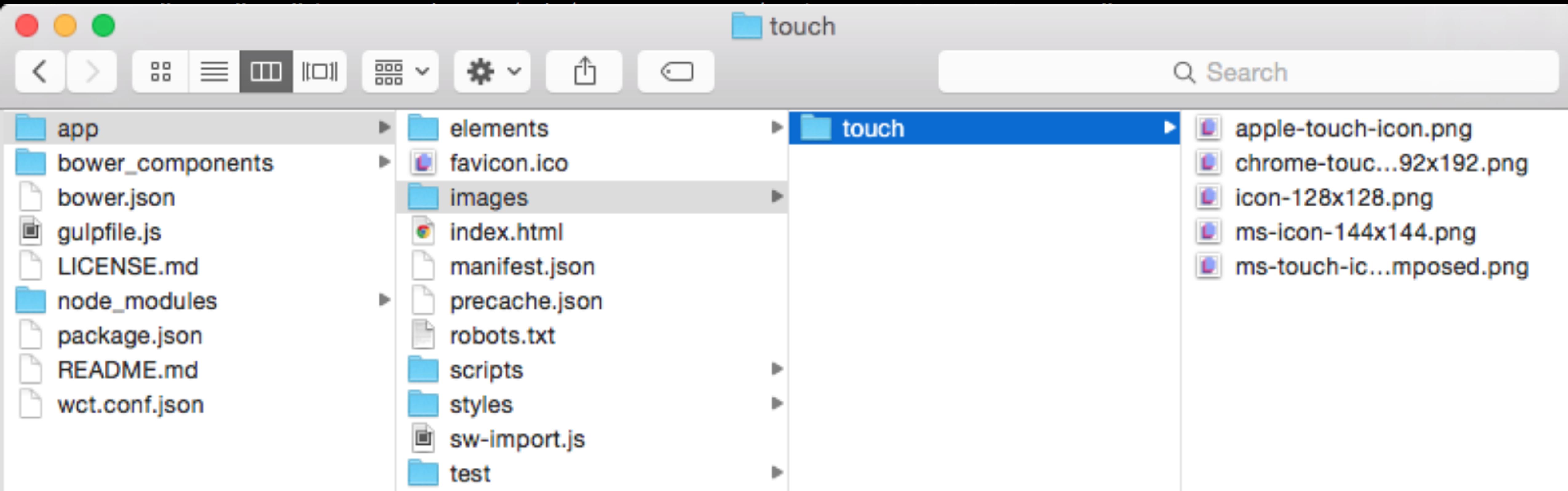
```
22    <!-- Chrome for Android theme color -->  
23    <meta name="theme-color" content="#303F9F">  
24  
25    <!-- Web Application Manifest -->  
26    <link rel="manifest" href="manifest.json">  
27  
28    <!-- Tile color for Win8 -->  
29    <meta name="msapplication-TileColor" content="#303F9F">  
30
```

```
175        duration="6000"  
176        text="Caching complete! This app  
177        </paper-toast>  
178  
179        <platinum-sw-register auto-register  
180            clients-claim  
181            skip-waiting  
182            on-service-worker-installed="displayInstal  
183            <platinum-sw-cache default-cache-strategy="n
```

# Icons



```
8  "icons": [
9    "src": "images/touch/icon-128x128.png",
10   "sizes": "128x128"
11  }, {
12    "src": "images/touch/apple-touch-icon.png",
13   "sizes": "152x152"
14  }, {
15    "src": "images/touch/ms-touch-icon-144x144-precomposed.png",
16   "sizes": "144x144"
17  }, {
```





# Responsive breakpoints

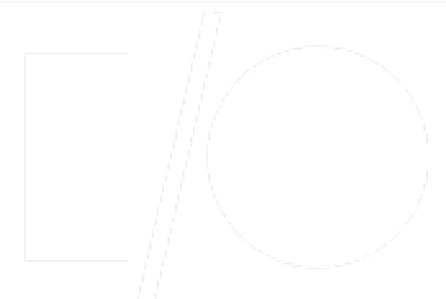
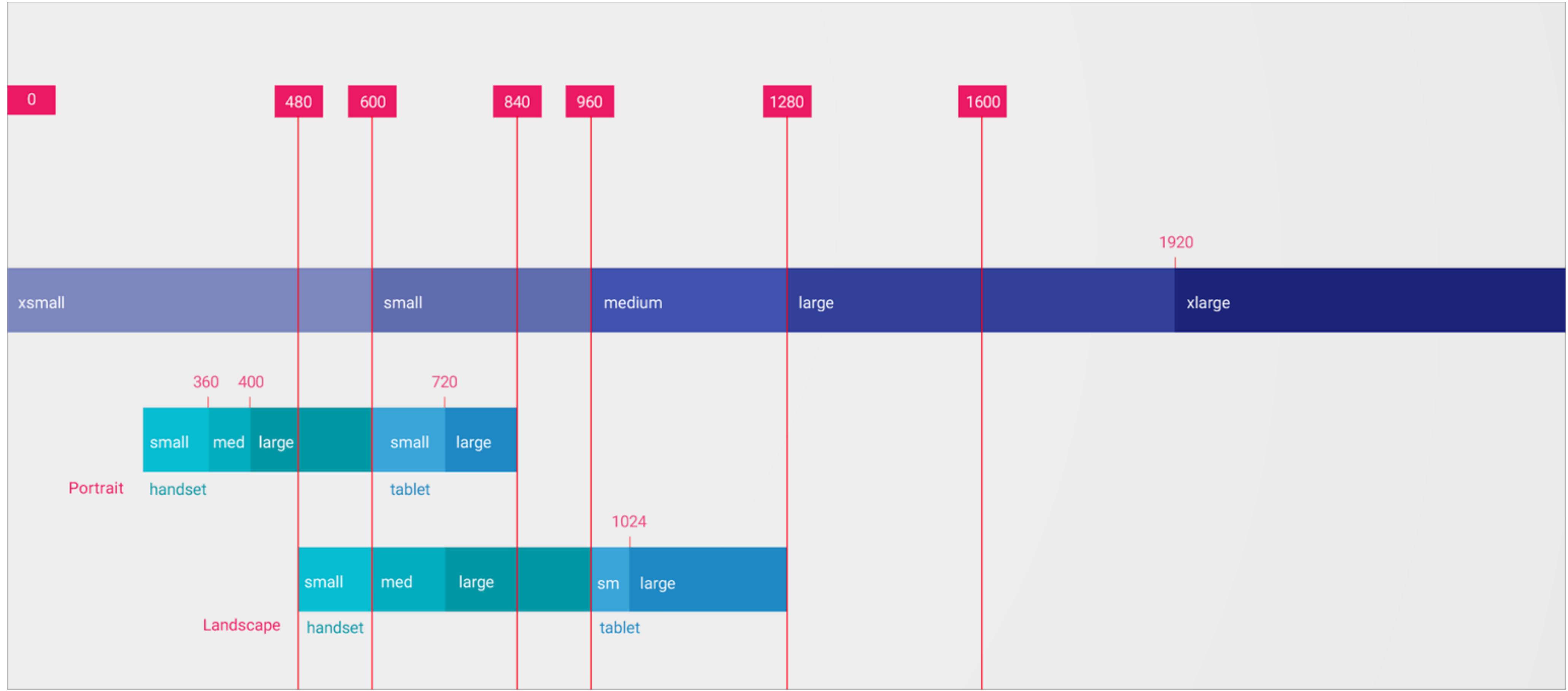


Image: <http://www.dreamstime.com/royalty-free-stock-photos-long-dachshund-front-white-background-image11291518>



# Material Design breakpoints



```
~/Workspace/psk 0.0486s
> tree ./app -L 2 | grep -E 'app-th
eme'
|   └── app-theme.html
~/Workspace/psk 0.0550s
>
```

```
104     margin-left: 48px;
105   }
106
107   /* Height of the scroll area */
108   .content {
109     height: 900px;
110   }
111
112   /* Breakpoints */
113
114   /* Small */
115   @media (max-width: 600px) {
116
117     paper-material {
118       --menu-container-display: none;
119       width: calc(97.33% - 32px);
120       padding-left: 16px;
121       padding-right: 16px;
122     }
123
124     .paper-font-display1 {
125       font-size: 12px;
126     }
127
128     .app-name {
```



Image: <https://www.flickr.com/photos/wwarby/16600407462/>



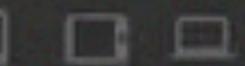
# App templates

Application

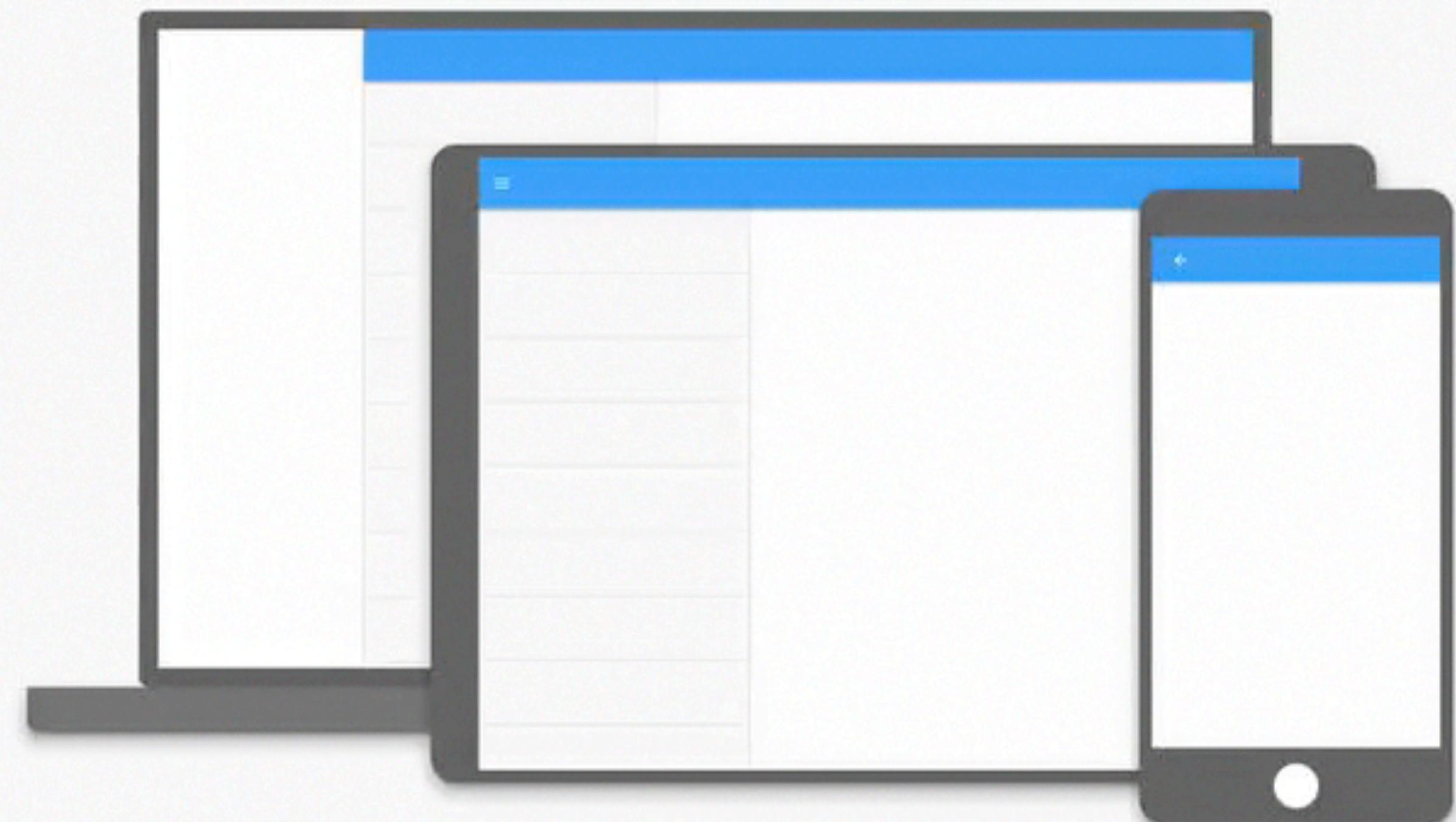
Nav List Detail

Github Link

Device View



Show All Views



Application Layout Templates - <http://goo.gl/Osa6H1>



# Fe

Iron  
Elements

---

Polymer core elements

1.0.7

# Ne

Neon  
Elements

---

Animation and Special Effects

1.0.0

# Md

Paper  
Elements

---

Material design elements

1.0.7

# Pt

Platinum  
Elements

---

Offline, push, and more

1.2.0

# Go

Google Web  
Components

---

Components for Google's APIs  
and services

1.0.1

# Au

Gold  
Elements

---

Ecommerce Elements

1.0.1

# Mo

Molecules

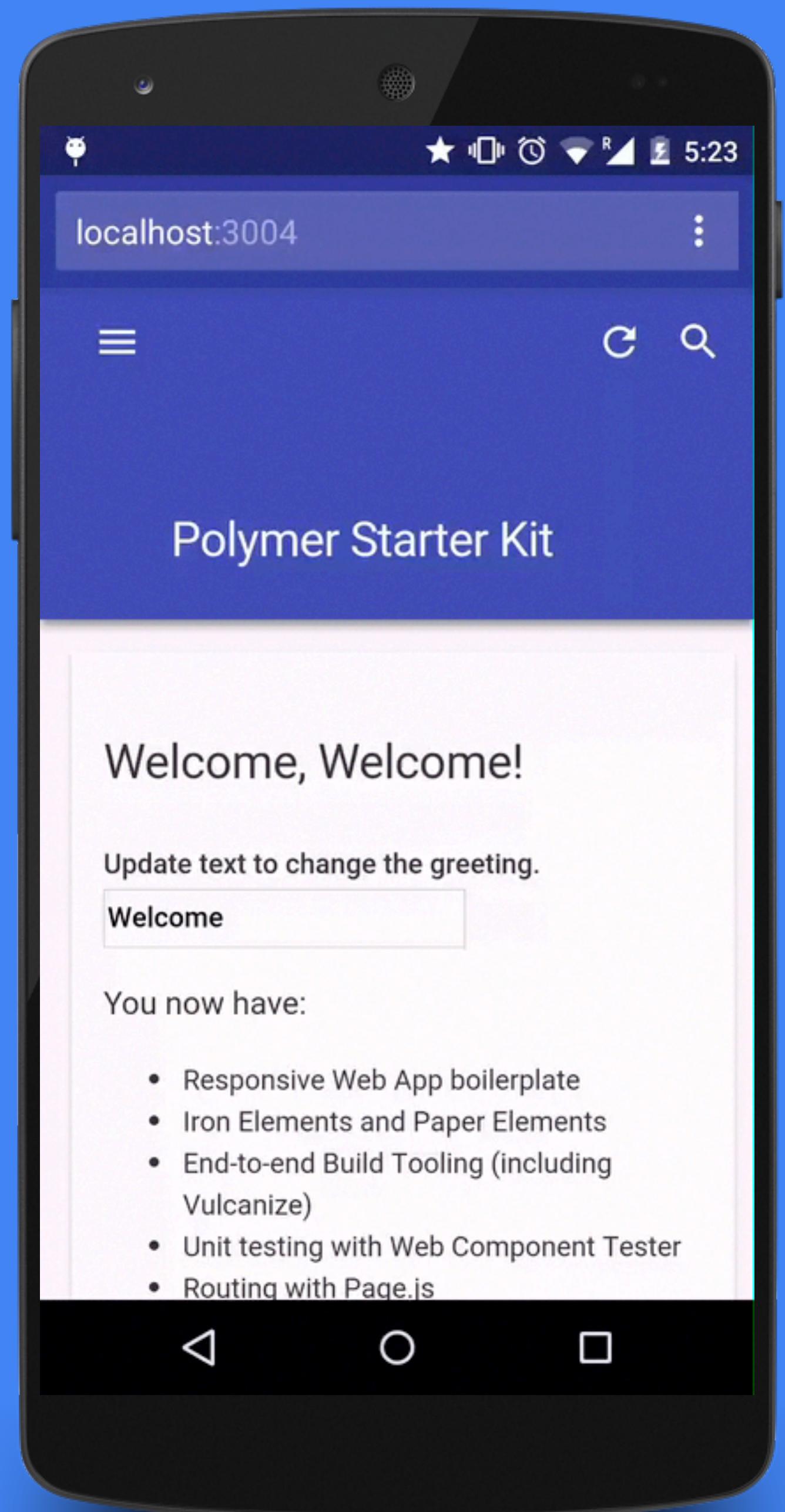
---

Wrappers for third-party  
libraries

1.0.0



Offline-first (in your app)



```
5 The complete set of contributors may be found at http://polymer.github.io/CONTRIBUTORS.txt
6 Code distributed by Google as part of the polymer project is also
7 subject to an additional IP rights grant found at http://polymer.github.io/PATENTS.txt
8 */
9
10 importScripts('bower_components/platinum-sw/service-worker.js');
```

---

```
36     importScripts.apply(null, scripts);
37 } else {
38     importScripts(scripts);
39 }
40 }
41
42 if (params.get('skipWaiting') === 'true' && self.skipWaiting) {
43     self.addEventListener('install', function(e) {
44         e.waitUntil(self.skipWaiting());
45     });
46 }
47
48 if (params.get('clientsClaim') === 'true' && self.clients && self.clients.claim) {
49     self.addEventListener('activate', function(e) {
50         e.waitUntil(self.clients.claim());
51     });
52 }
```



```
~/Workspace/psk 0.0650s
```

```
> tree . -L 2 -Ca | grep -E 'precache'  
|   └── precache.json  
|   └── precache.json
```

```
~/Workspace/psk 0.0524s
```

```
>
```

```
1 []
```

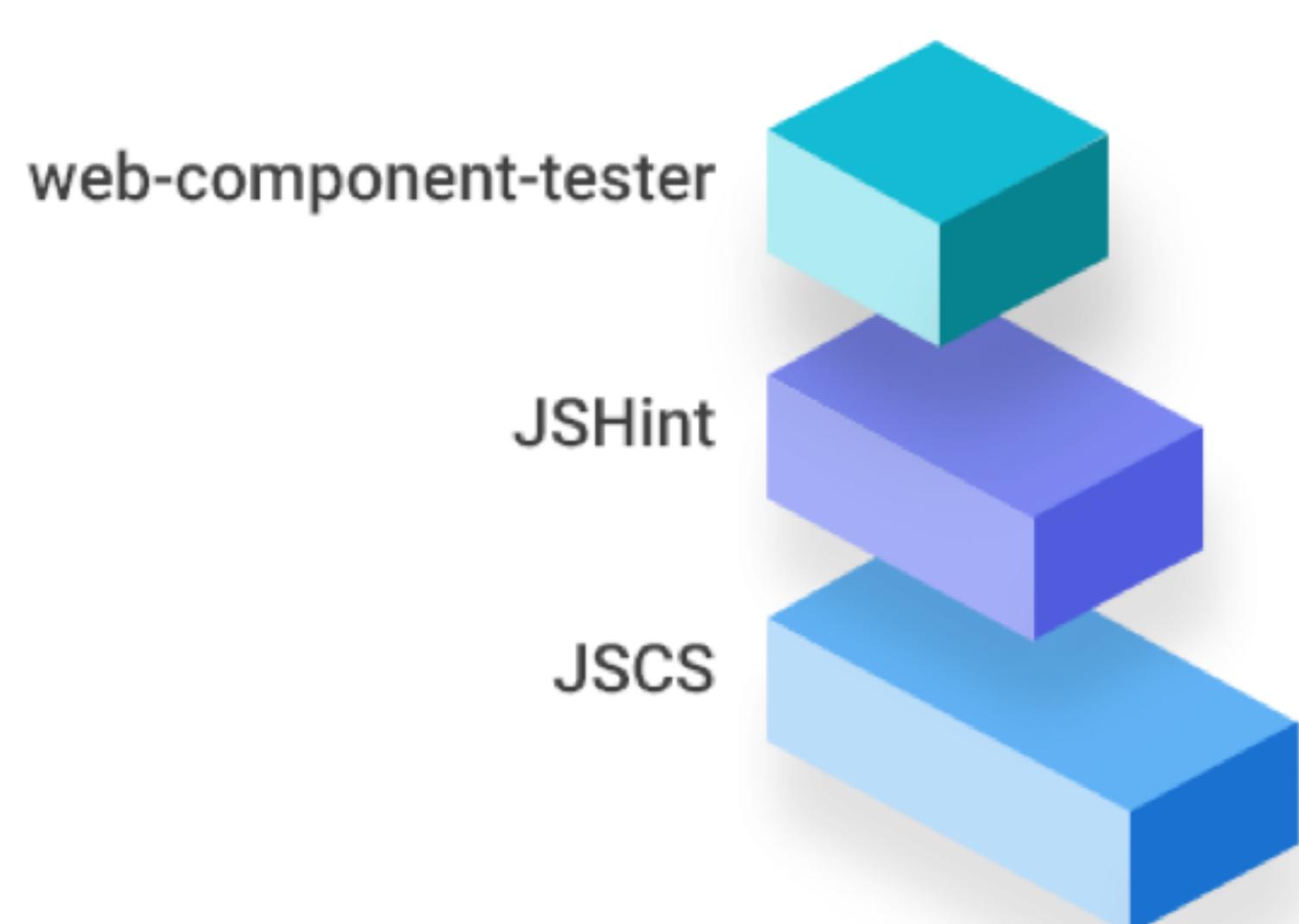
```
~  
~  
~  
~  
~  
~  
~  
~  
~
```

```
2   "elements/bootstrap/sw-toolbox-setup.js"  
3   "elements/elements.html",  
4   "elements/elements.vulcanized.html",  
5   "elements/my-greeting/my-greeting.html"  
6   "elements/my-list/my-list.html",  
7   "elements/routing.html",  
8   "scripts/app.js",  
9   "styles/app-theme.html",  
10  "styles/main.css",
```

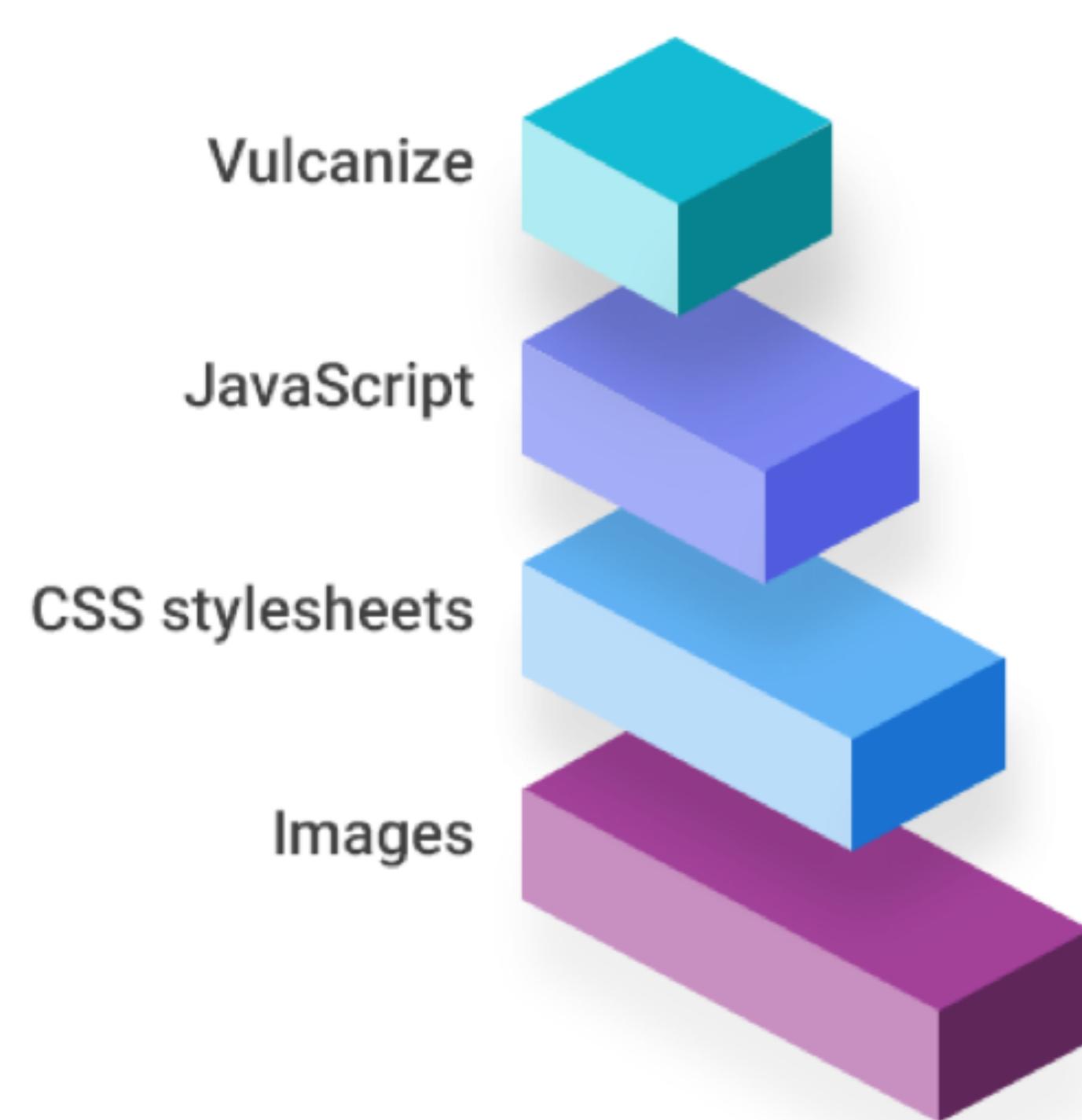
# Build process out of the box



## QUALITY & TESTING



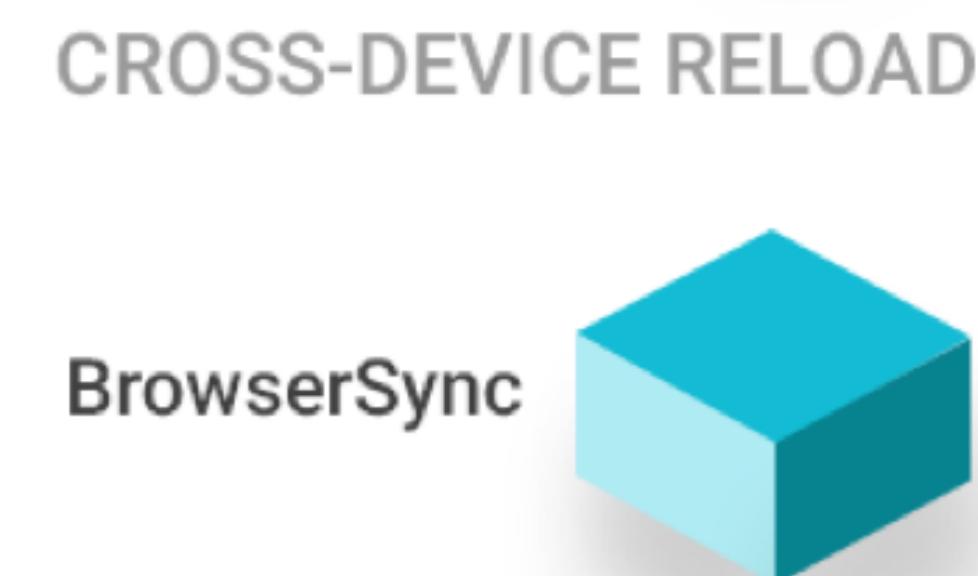
## MINIFICATION



## OFFLINE



## CROSS-DEVICE RELOAD



Preview  
`gulp serve`

mocha  
jasmine  
jshint  
jscs  
  
sass  
babel  
  
browser-sync

i'm lovin' gulp



sourcemap  
  
uglify autoprefixer  
  
uncss  
  
imagemin  
  
sw-precache



1. Default (tmux)

```
~/Workspace/psk 0.0653s
> tree . -L 1 -Ca | grep gulpfile
```

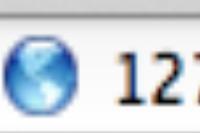
```
|── gulpfile.js
```

```
~/Workspace/psk 0.0658s
```

```
>
```



```
226      // https: true,
227      server: 'dist'
228    });
229  });
230
231 // Build Production Files, the Default Task
232 gulp.task('default', ['clean'], function (cb) {
233   runSequence(
234     ['copy', 'styles'],
235     'elements',
236     ['jshint', 'images', 'fonts', 'html'],
237     'vulcanize', 'precache',
238     cb);
239 });
240
241 // Load tasks for web-component-tester
242 // Adds tasks for `gulp test:local` and `gulp test
243 try { require('web-component-tester').gulp.init(gu
244
245 // Load custom tasks from the `tasks` directory
246 try { require('require-dir')('tasks'); } catch (er
```



# SafariDriver Launcher

```
[ 0.005s] [safaridriver.client] Connecting to SafariDriver browser extension...
[ 0.025s] [safaridriver.client] Extension logs may be viewed by clicking the Selenium [✓] button on the Safari toolbar
[ 2.561s] [safaridriver.client] Unable to establish a connection with the SafariDriver extension
```



```
~/Workspace/psk 0.0660s
> tree . -L 1 -Ca | grep wct
└─ wct.conf.json
```

```
~/Workspace/psk 0.0526s
>
```

```
1 {
2   "suites": ["app/test"],
3   "persistent": true
4 }
```

## Web Components Tester Config File

- Makes testing your web components
- More config
  - persistent: If you want to keep browsers opening

```
"wct.conf.json" 4L, 51C written
```

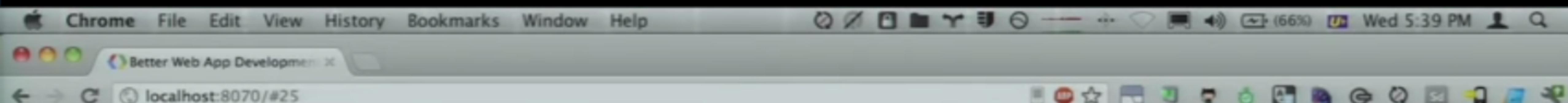


1.0

# YO POLYMER

npm install -g generator-polymer

## for Polymer Starter Kit



# Introducing Yeoman





**YEOMAN**



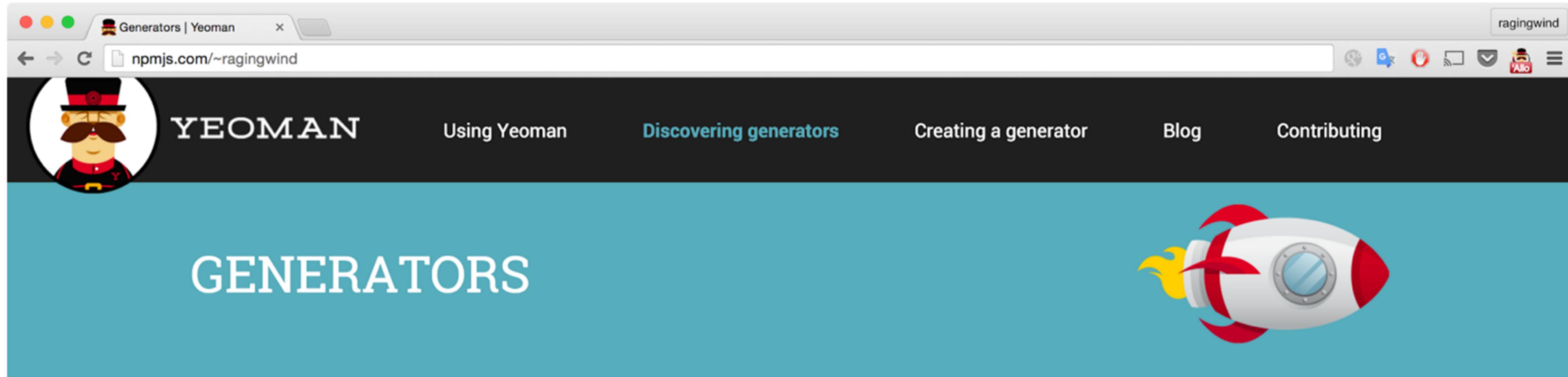
**“ Yeoman kickstarts new projects,  
prescribing best practices and tools to  
help you stay productive ”**

[yeoman.io](http://yeoman.io)



**YEOMAN**

# Over 3400 Generators



Your generator must have a GitHub repository description, the `yeoman-generator` keyword and a description in `package.json` to be listed. Official generators are marked with ↗

Search in 3427 generators...

↑ Generator

↑ Last Updated  
↑ Stars ↓  
Installs

angular by The Yeoman Team

Last updated: 29 days ago 4465 35279

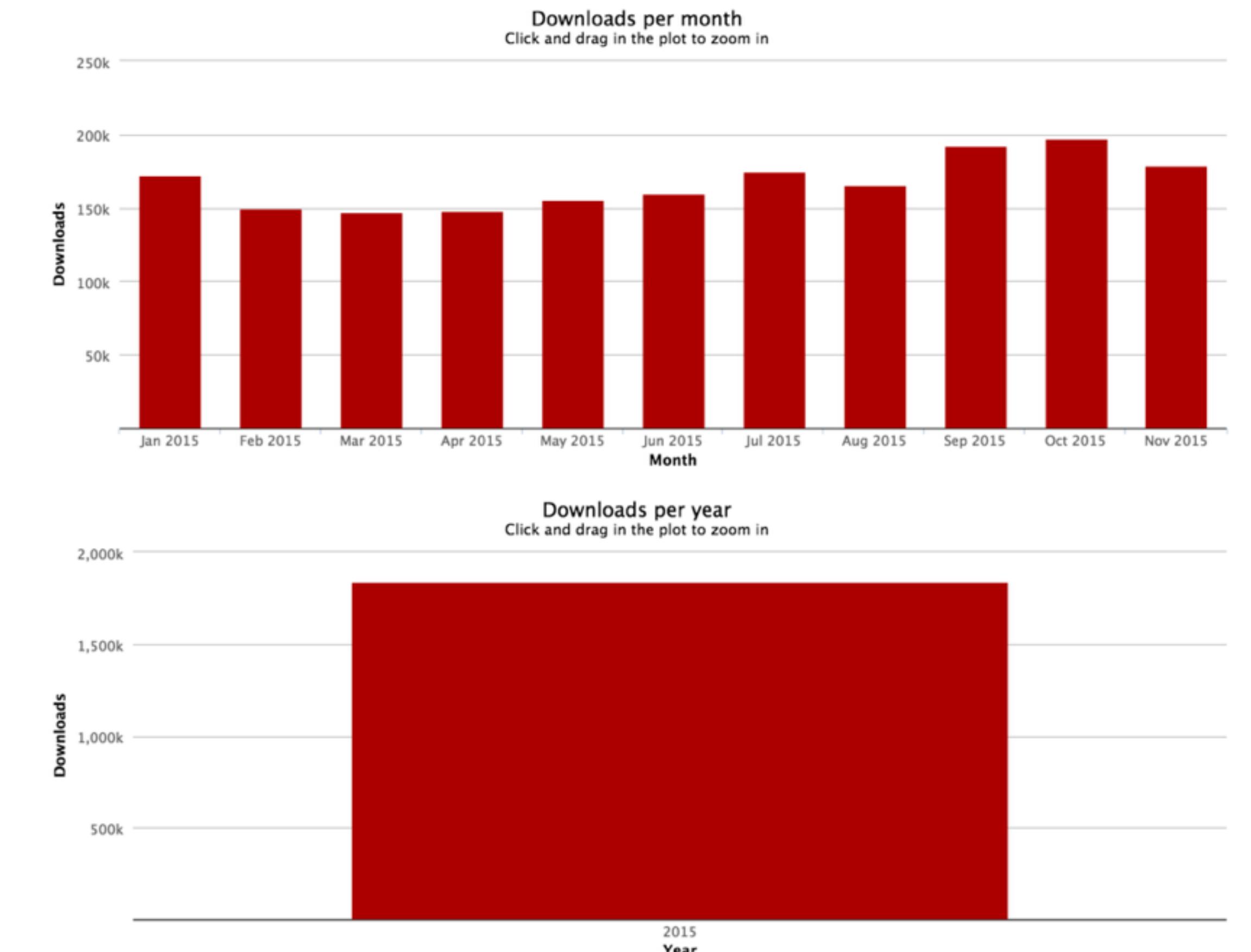
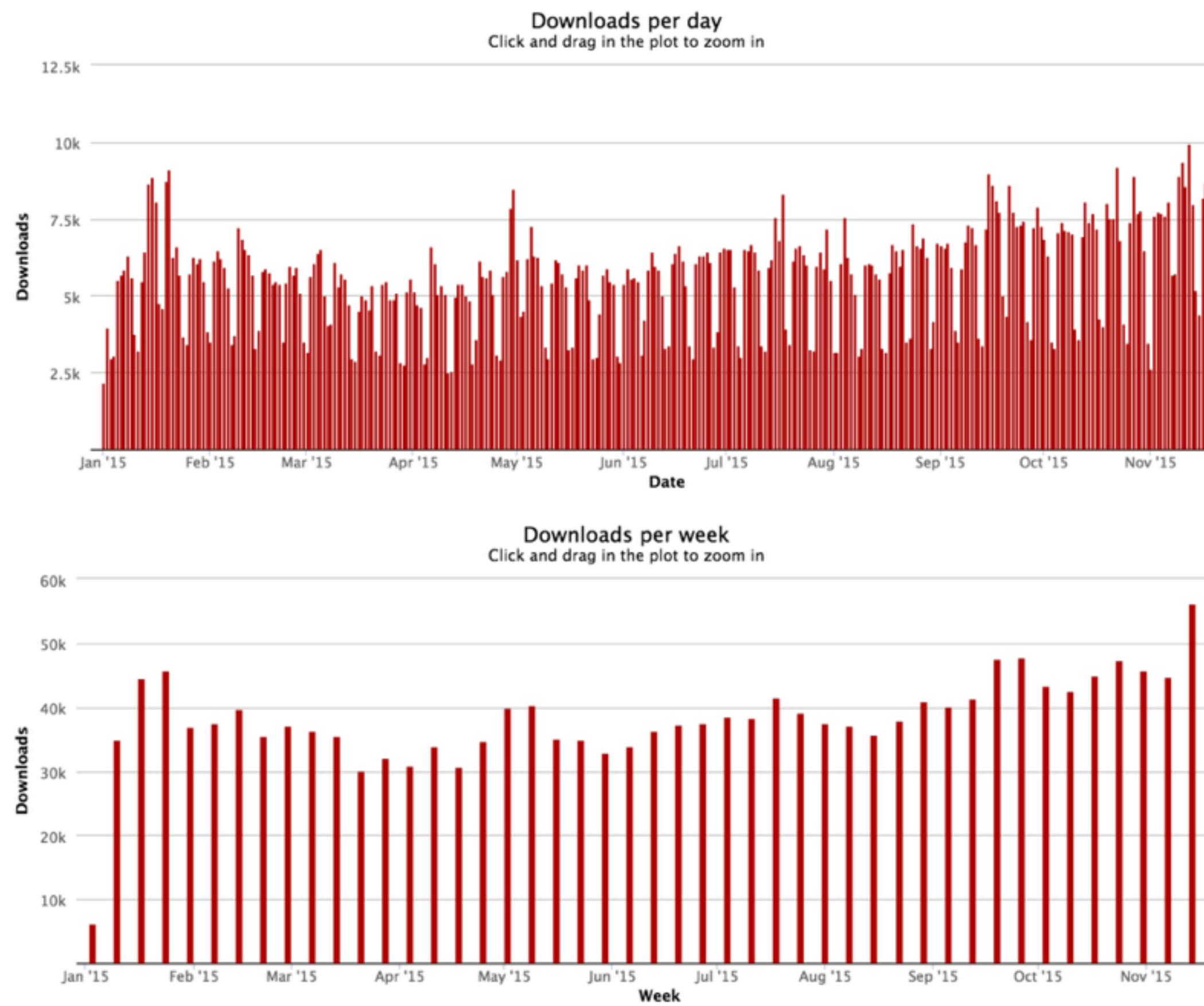
AngularJS

andy by Aldo Borrero

Last updated: 17 months ago 31 50

Andy helps you to quickly create a well configured, well behaved Android app (and project)

# About 2,000,000 Download a Year



# Over 4,000 Related Projects

A screenshot of a web browser showing the npm search results for the query 'yeoman'. The browser window title is 'results for yeoman'. The address bar shows 'npm Inc. [US] https://www.npmjs.com/search?q=yeoman'. The page header includes the npm logo, a search bar containing 'yeoman', and navigation links for 'npm On-Site', 'npm Private Packages', 'npm Open Source', 'documentation', and 'support'. A user profile for 'ragingwind' is visible on the right.

4416 results for 'yeoman'

## **yeoman** sindresorhus

The Yeoman CLI is deprecated. See <http://yeoman.io/migrate.html> for more info.

★ 24 v0.9.6

⌚ front-end, development, dev, build, web, tool, cli, scaffold, stack

[NewsCred](#), [MuleSoft](#), [7digital](#) and lots of other companies are hiring javascript developers. [View all](#)

32...

## **silent-yeoman** chfw

In continuous integration context, a silent yeoman(syo) is preferred than an interactive one

★ 0 v0.0.6

⌚ yeoman, cli

## **yeoman-character** sindresorhus

The Yeoman character in your CLI. Like wat.

★ 0 v1.1.0

⌚ cli-app, cli, bin, yeoman, character, figure, logo, color, ansi, ascii, art

## **yeoman-meteor** doubleu23

A structured yeoman generator for meteor apps with basic scaffolding per subgenerators

★ 1 v0.0.5

⌚ yeoman-generator, meteor, subgenerators, scaffolding, sass, foundation

## **yeoman-assert** sboudrias

Assert utility from yeoman

★ 1 v2.1.0

⌚ assert, utility, helper, yeoman

# Visual Studio Code using Yeoman

The screenshot shows a web browser window with the URL <https://code.visualstudio.com/Docs/editor/setup>. The page is titled "Setting up Visual Studio Code". On the left, there's a sidebar with navigation links for Overview, EDITOR (Setup is selected), CUSTOMIZATION, LANGUAGES, RUNTIMES, EXTENSIONS, EXTENSIBILITY, REFERENCE, and TOOLS. The main content area has a yellow banner at the top stating "VS Code Beta is available. Check out the [new features](#) and [update](#) it now." Below this, the title "Setting up Visual Studio Code" is displayed with an "Edit" button. The "Mac OS X" section contains four numbered steps for installation. A "Tip" section provides instructions for running VS Code from the terminal. A code block shows the command `code () { VSCODE_CWD="$PWD" open -n -b "com.microsoft.VSCode" --args $* ;}`. The "Linux" section lists three steps for installation. On the right side, there's a sidebar titled "IN THIS ARTICLE" with links to Mac OS X, Linux, Windows, Additional Tools, Next Steps, and Common Questions. There are also social sharing buttons for Twitter and Facebook.

## Setting up Visual Studio Code

Getting up and running with VS Code is quick and easy. Follow the platform specific guides below as well as the list of handy tools.

### Mac OS X

1. [Download Visual Studio Code](#) for Mac OS X.
2. Double-click on `VSCode-osx.zip` to expand the contents.
3. Drag `Visual Studio Code.app` to the `Applications` folder, making it available in the `Launchpad`.
4. Add VS Code to your Dock by right-clicking on the icon and choosing `Options, Keep in Dock`.

**Tip:** If you want to run VS Code from the terminal, append the following to your `~/.bash_profile` file (`~/.zshrc` in case you use `zsh`).

```
code () { VSCODE_CWD="$PWD" open -n -b "com.microsoft.VSCode" --args $* ;}
```

Now, you can simply type `code .` in any folder to start editing files in that folder.

### Linux

1. [Download Visual Studio Code](#) for Linux.
2. Make a new folder and extract `VSCode-linux-x64.zip` inside that folder.
3. Double click on `Code` to run Visual Studio Code.

1. Download Visual Studio Code for Linux.

2. Make a new folder and extract `VSCode-linux-x64.zip` inside that folder.

3. Double click on `Code` to run Visual Studio Code.

# Polymer Starter Kit



+RobDodson  
@rob\_dodson



~/Workspace ragingwind@azurepeak-mbp15 0.0511s

> █

\_\_1:zsh\*

\*

```
~/Workspace/polymer-test/yo-polymer ragingwind@  
azurepeak-mbp15 0.0613s  
> l  
.editorconfig  
.gitattributes  
.gitignore  
.jscsrc  
.jshintrc  
LICENSE.md  
README.md  
app  
bower.json  
gulpfile.js  
package.json  
wct.conf.json
```

```
~/Workspace/polymer-test/yo-polymer ragingwind@  
azurepeak-mbp15 0.0504s  
> █
```

```
~/Workspace/polymer-test/psk-1.0.2 ragingw  
ind@azurepeak-mbp15 0.0514s  
> l  
.editorconfig  
.gitattributes  
.gitignore  
.jscsrc  
.jshintrc  
LICENSE.md  
README.md  
app  
bower.json  
gulpfile.js  
package.json  
wct.conf.json
```

```
~/Workspace/polymer-test/psk-1.0.2 ragingw  
ind@azurepeak-mbp15 0.0568s  
>
```

```
~/Workspace/polymer-test/yo-polymer ragingwi  
nd@azurepeak-mbp15 0.0513s  
> yo polymer:element new-element  
? Would you like to include an import in your elements.html file? No  
identical app/elements/new-element/new-element.html  
  
~/Workspace/polymer-test/yo-polymer ragingwi  
nd@azurepeak-mbp15 2.2525s  
> 
```

```
1 <!--  
2 @license  
3 Copyright (c) 2015 The Polymer Project Au  
4 This code may only be used under the BSD  
5 The complete set of authors may be found  
6 The complete set of contributors may be f  
7 Code distributed by Google as part of the  
8 subject to an additional IP rights grant  
9 -->  
10  
11 <link rel="import" href="../../bower_comp  
12  
13 <dom-module id="new-element">  
14   <style>  
15     :host {  
16       display: block;  
17     }  
18   </style>  
19   <template>  
20     <div>Hello from <span>{{foo}}</span><  
21   </template>  
22 </dom-module>  
23 <script>  
-- VISIBLE --
```

~/Workspace/polymer-test/new-element ragi[13/315]  
zurepeak-mbp15 0.0506s  
> yo polymer:seed new-element

```
-----  
| |  
| --(o)-- |  
|-----|  
( _ 'U`_ )  
/ __A__ \\\n| ~ |  
| .---. |  

```

? What is your GitHub username? ragingwind  
? Would you like to include web-component-? Would  
you like to include web-component-tester? Yes  
create bower.json  
create .gitignore

~/Workspace/polymer-test/yo-polymer rag[43/238]  
azurepeak-mbp15 0.0428s  
> yo polymer:gh

```
-----  
| |  
| --(o)-- |  
|-----|  
( _ 'U`_ )  
/ __A__ \\\n| ~ |  
| .---. |  

```

? What is your GitHub username? ragingwind  
? What is your element's name: yo-polymer  
Cloning into 'yo-polymer'...

## README.md

# Recipes

- Add ES2015 (formally ES6) support using Babel
- Polymer Performance Recipe
- Use PSK with Chrome Dev Editor
- Deploy to Github Pages
- Deploy to Firebase using Pretty URLs
- Use PSK for Mobile Chrome Apps

# Using ES6 with Polymer

Amsterdam • September 15, 2015



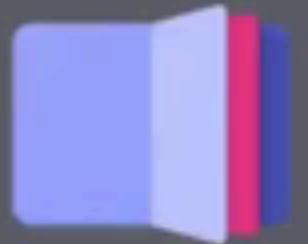
+Eric Bidelman  
@ebidbel



What's going on, everybody?

# Setup Firebase

# Download Polymer Starter Kit



Polymer Starter Kit



Polymer/vulcanize

Github, Inc. [US] https://github.com/polymer/vulcanize

This repository Search

Pull requests Issues Gist

Watch 90 Unstar 945 Fork 92

Code Issues 49 Pull requests 4 Wiki Pulse Graphs

Build tool for HTMLImports and Web Components

437 commits 6 branches 82 releases 17 contributors

Branch: master New pull request New file Find file HTTPS https://github.com/Polymer/vulcanize Download ZIP

azakus Merge pull request #281 from Polymer/escape-inline-scripts ... Latest commit b44172e 14 days ago

| File / Commit         | Description                                         | Date         |
|-----------------------|-----------------------------------------------------|--------------|
| bin                   | add new output option                               | 2 months ago |
| lib                   | Escape inline scripts                               | 20 days ago  |
| test                  | Escape inline scripts                               | 20 days ago  |
| third_party/UglifyJS2 | Escape inline scripts                               | 20 days ago  |
| .editorconfig         | move out casper                                     | 8 months ago |
| .gitattributes        | move out casper                                     | 8 months ago |
| .gitignore            | Add custom protocol support to vulcanize.           | 3 months ago |
| .npmignore            | ignore CHANGELOG and README files                   | 8 months ago |
| .travis.yml           | test with node 5                                    | 2 months ago |
| CHANGELOG.md          | Fix misspelled "redirects" in lib/vulcan and README | 3 months ago |
| LICENSE               | add license file                                    | 9 months ago |
| README.md             | add new output option                               | 2 months ago |

Waiting for camo.githubusercontent.com...

Sindresorhus/gulp-vulcanize

Ragingwind

Github, Inc. [US] https://github.com/sindresorhus/gulp-vulcanize

This repository Search Pull requests Issues Gist

sindresorhus / gulp-vulcanize

Unwatch 10 Unstar 94 Fork 28

Code Issues 0 Pull requests 0 Pulse Graphs

Concatenate a set of Web Components into one file

46 commits 1 branch 14 releases 7 contributors

Branch: master New pull request New file Find file HTTPS https://github.com/sindresorhus/ Download ZIP

sindresorhus 6.1.0 Latest commit c904004 on Nov 14

| fixture        | Use the new api in Vulcanize 1.9.1 | 6 months ago  |
|----------------|------------------------------------|---------------|
| .editorconfig  | cleanup #20                        | 8 months ago  |
| .gitattributes | init                               | 2 years ago   |
| .gitignore     | init                               | 2 years ago   |
| .jshintrc      | cleanup #20                        | 8 months ago  |
| .travis.yml    | Update .travis.yml                 | 10 months ago |
| index.js       | Use the new api in Vulcanize 1.9.1 | 6 months ago  |
| license        | tweaks                             | a year ago    |
| package.json   | 6.1.0                              | a month ago   |
| readme.md      | cleanup #20                        | 8 months ago  |
| test.js        | Fix tests on Windows               | 8 months ago  |

readme.md

PolymerLabs/crisper

Github, Inc. [US] https://github.com/PolymerLabs/crisper

This repository Search

Pull requests Issues Gist

Unwatch 35 Unstar 54 Fork 13

Code Issues 4 Pull requests 2 Wiki Pulse Graphs

No description or website provided.

47 commits 2 branches 12 releases 8 contributors

Branch: master New pull request New file Find file HTTPS https://github.com/PolymerLabs/crisper Download ZIP

azakus Merge pull request #19 from wojtkowiak/master ... Latest commit 3e043d5 8 days ago

| File           | Commit Message                                              | Time         |
|----------------|-------------------------------------------------------------|--------------|
| bin            | Make sure `--script-in-head=false` works for the CLI binary | 24 days ago  |
| test           | Merge pull request #19 from wojtkowiak/master               | 8 days ago   |
| .editorconfig  | add tests                                                   | 8 months ago |
| .gitattributes | add tests                                                   | 8 months ago |
| .gitignore     | Initial commit                                              | 8 months ago |
| .travis.yml    | test with node 5                                            | 2 months ago |
| LICENSE        | Initial commit                                              | 8 months ago |
| README.md      | 2.0.0                                                       | a month ago  |
| index.js       | Merge pull request #19 from wojtkowiak/master               | 8 days ago   |
| package.json   | 2.0.1                                                       | 24 days ago  |

README.md

Ragingwind/gulp-crisper

Github, Inc. [US] https://github.com/ragingwind/gulp-crisper

This repository Search Pull requests Issues Gist

ragingwind / gulp-crisper

Unwatch 1 Unstar 9 Fork 7

Code Issues 1 Pull requests 0 Wiki Pulse Graphs Settings

gulp plugin for crisper — Edit

26 commits 1 branch 8 releases 3 contributors

Branch: master New pull request New file Find file HTTPS https://github.com/ragingwind/gulp-crisper Download ZIP

**ragingwind** Revert the order of options from c87fad3 ... Latest commit 8136fc7 on Nov 13

| fixture        | init                                     | 8 months ago |
|----------------|------------------------------------------|--------------|
| .editorconfig  | Fix travis                               | 8 months ago |
| .gitattributes | init                                     | 8 months ago |
| .gitignore     | init                                     | 8 months ago |
| .jshintrc      | init                                     | 8 months ago |
| .travis.yml    | init                                     | 8 months ago |
| index.js       | Revert the order of options from c87fad3 | a month ago  |
| package.json   | 1.0.0                                    | a month ago  |
| readme.md      | Bumpup for crisper 2.0                   | a month ago  |
| test.js        | Revert the order of options from c87fad3 | a month ago  |
| readme.md      |                                          |              |

PolymerLabs/polybuild

Github, Inc. [US] https://github.com/PolymerLabs/polybuild

This repository Search

Pull requests Issues Gist

Watch 16 Unstar 55 Fork 12

PolymerLabs / polybuild

Code Issues 11 Pull requests 1 Wiki Pulse Graphs

Easy Optimization Tool / Gulp plugin

24 commits 1 branch 5 releases 3 contributors

Branch: master New pull request New file Find file HTTPS https://github.com/PolymerLabs/polybuild Download ZIP

addyosmani Merge pull request #8 from arturparkhisenko/master ... Latest commit 96023cb on Nov 18

|              | File / Commit Message                             | Date         |
|--------------|---------------------------------------------------|--------------|
| bin          | updated bin file for suffix and deps              | a month ago  |
| .gitignore   | initial commit                                    | 7 months ago |
| .npmignore   | update dependencies                               | 7 months ago |
| LICENSE      | initial commit                                    | 7 months ago |
| README.md    | Updated README.md for "suffix" option description | 2 months ago |
| index.js     | updated bin file for suffix and deps              | a month ago  |
| package.json | updated bin file for suffix and deps              | a month ago  |

README.md

# Polybuild

PolymerLabs/polyClean x ragingwind

Github, Inc. [US] https://github.com/PolymerLabs/polyClean

This repository Search Pull requests Issues Gist

PolymerLabs / polyclean Watch 30 Star 10 Fork 1

Code Issues 4 Pull requests 1 Wiki Pulse Graphs

No description or website provided.

14 commits 4 branches 3 releases 2 contributors

Branch: master New pull request New file Find file HTTPS https://github.com/PolymerLabs/polyClean Download ZIP

azakus wrap cleanCss in error reporting Latest commit 1fc9f22 on Jun 3

| File         | Commit                           | Time         |
|--------------|----------------------------------|--------------|
| .gitignore   | commit 2                         | 8 months ago |
| LICENSE      | commit 2                         | 8 months ago |
| README.md    | commit 2                         | 8 months ago |
| index.js     | wrap cleanCss in error reporting | 7 months ago |
| package.json | 1.2.0                            | 7 months ago |

README.md

# Polyclean

Basic gulp plugins for cleaning html.

PolymerLabs/polyserve

Github, Inc. [US] https://github.com/PolymerLabs/polyserve

This repository Search Pull requests Issues Gist

PolymerLabs / polyserve Watch 37 Unstar 99 Fork 19

Code Issues 8 Pull requests 4 Wiki Pulse Graphs

A simple web server for using components locally <https://www.npmjs.com/package/polyserve>

54 commits 5 branches 1 release 11 contributors

Branch: master New pull request New file Find file HTTPS https://github.com/PolymerLabs/polyserve Download ZIP

justinfagnani Merge pull request #38 from PolymerLabs/justin-work ... Latest commit 5956158 on Nov 11

| File         | Description                               | Time         |
|--------------|-------------------------------------------|--------------|
| bin          | Document new command-line options         | a month ago  |
| src          | Remove spurious console.log               | a month ago  |
| .gitignore   | First cut of the server                   | 9 months ago |
| README.md    | Document new command-line options         | a month ago  |
| main.js      | Make port configurable, plus some cleanup | 9 months ago |
| package.json | Bump version to 0.5                       | a month ago  |

README.md

# polyserve

A simple web server for using bower components locally. polyserve serves project files under /components/{bower-



# Custom Elements

Explore the world of Web Components



Search...

LEARN ABOUT ADDING YOUR ELEMENTS HERE

Recently created

Last updated

Most popular

**code-mirror**

by PETComputacaoUFPR

Polymer component wrapping CodeMirror  
(codemirror.net)

★ 0 ⚡ 0

**strand**

by MediaMath

A collection of modular, reusable Web Components  
built upon Polymer

★ 79 ⚡ 17

**HTML-GL**

by PixelsCommander

Get as many FPS as you need and amazing effects  
by rendering HTML/CSS in WebGL

★ 2118 ⚡ 74

**flux-flat-button**

by FluxCapacitors

Flat button with a one-tone background or border.

**iron-elements**

by PolymerElements

Core elements

**x-gif**

by geelen

Custom Elements - Explore the world of Web Components - <https://goo.gl/QWRvDO>  
A custom element for flexible GIF playback

chuckh.github.io/road-to-polymer/repos.html

All Yes no Iron Paper Other Q

Select  Polymer  PolymerElements  Google Web Components C

| Cntr | Name                                          | Description                                                                   | Latest Release | Date Released           |
|------|-----------------------------------------------|-------------------------------------------------------------------------------|----------------|-------------------------|
| 1    | <a href="#">app-layout-templates</a>          | Provides some basic application layout templates                              | no             |                         |
| 2    | <a href="#">chartjs-element</a>               | Web component wrapper for chart.js (chartjs.org)                              | no             |                         |
| 3    | <a href="#">font-roboto</a>                   |                                                                               | 1.0.0          | 6/25/2015 - 8:21:29 AM  |
| 4    | <a href="#">gold-cc-cvc-input</a>             | An input element that only allows cvc codes                                   | v1.0.2         | 6/10/2015 - 3:24:39 AM  |
| 5    | <a href="#">gold-cc-expiration-input</a>      | An input element that only allows credit card expiration dates                | v1.0.3         | 6/30/2015 - 2:36:54 AM  |
| 6    | <a href="#">gold-cc-input</a>                 | An input element that only allows credit card numbers                         | v1.0.4         | 6/13/2015 - 3:41:12 AM  |
| 7    | <a href="#">gold-elements</a>                 | Business elements                                                             | v1.0.1         | 6/13/2015 - 3:43:31 AM  |
| 8    | <a href="#">gold-email-input</a>              | An input element that only allows emails                                      | v1.0.2         | 6/16/2015 - 6:28:02 AM  |
| 9    | <a href="#">gold-phone-input</a>              | An input element that only allows phone numbers                               | v1.0.3         | 6/24/2015 - 4:09:58 AM  |
| 10   | <a href="#">gold-zip-input</a>                | An input element that only allows US zip codes                                | v1.0.1         | 5/29/2015 - 10:10:59 AM |
| 11   | <a href="#">iron-a11y-announcer</a>           | An element that helps with announcing text through screen readers.            | v1.0.2         | 7/9/2015 - 3:03:27 AM   |
| 12   | <a href="#">iron-a11y-keys</a>                | A basic element implementation of iron-a11y-keys-behavior                     | v1.0.1         | 6/13/2015 - 9:28:00 AM  |
| 13   | <a href="#">iron-a11y-keys-behavior</a>       | A behavior that enables keybindings for greater a11y                          | v1.0.5         | 6/26/2015 - 5:45:28 AM  |
| 14   | <a href="#">iron-ajax</a>                     | Exposes XMLHttpRequest functionality                                          | v1.0.2         | 6/13/2015 - 9:32:10 AM  |
| 15   | <a href="#">iron-autogrow-textarea</a>        | Textarea that grows in height as more lines of input are entered              | v1.0.2         | 6/20/2015 - 6:44:14 AM  |
| 16   | <a href="#">iron-behaviors</a>                | Behaviors that manage control states like 'focused', 'disabled', and 'active' | v1.0.3         | 6/13/2015 - 10:48:06 AM |
| 17   | <a href="#">iron-checked-element-behavior</a> | Implements an element that has a checked attribute and can be added to a form | no             |                         |
| 18   | <a href="#">iron-collapse</a>                 | Adds collapsible behavior to a target element                                 | v1.0.2         | 6/25/2015 - 3:51:12 AM  |
| 19   | <a href="#">iron-component-page</a>           | A reusable landing page for elements                                          | v1.0.4         | 5/29/2015 - 2:16:19 PM  |
| 20   | <a href="#">iron-doc-viewer</a>               | Polymer documentation viewer elements                                         | v1.0.3         | 6/19/2015 - 6:53:57 AM  |
| 21   | <a href="#">iron-dropdown</a>                 |                                                                               | no             |                         |

## Polymer Working Samples for 1.0

The sample shows how to works Polymer 1.0. Many samples output their log to console. the console should be opened to watch the logs. The sample list according to [Polymer 1.0 Primer content](#)

## Basic Custom Element sugaring

- [Custom element constructor](#)
  - [Custom element registration](#)
  - [Bespoke constructor support](#)
  - [Basic lifecycle callbacks](#)
  - [Native HTML element extension](#)
  - [Property configuration](#)
  - [Attribute deserialization to property](#)
  - [Static attributes on host](#)
  - [Behaviors mixins](#)

**Template stamped into "local DOM" and tree lifecycle**

- [Template stamping into local DOM](#)
  - [Scoped styling](#)
  - [DOM re-distribution](#)
  - [DOM API](#)
  - [Configuring default values](#)
  - [Bottom-up callback after configuration](#)

## Node marshaling and events

- Local node marshalling
  - Event listener setup
  - Annotated event listener setup
  - Gesture event support
    - Gesture event
    - Gesture event with listener

## Data observation

- Property change callbacks
  - Multiple-property observation
  - Path observation
  - Deep path observation
  - Array observation



시작하세요  
polymer



# <thank-you>



@ragingwind