

Introduction to Bootstrap

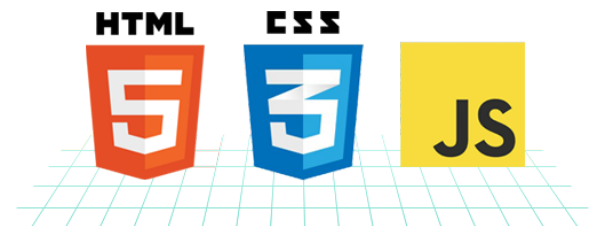
Ron Reiter

Agenda

1. Web development 101
2. Twitter Bootstrap
3. Resources

Web development 101

- **HTML**
 - Defines the data and structure of the page using elements
- **CSS**
 - Defines how the data and the elements actually look, and how they behave when interacting with them
- **JavaScript**
 - The programming language of the web



How to start

You should remember this boilerplate code:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page title</title>
  </head>
  <body>
    <!-- page content goes here -->
  </body>
</html>
```

Basic HTML elements

- Titles - `<h1>...</h1>` from h1 to h6
- Paragraph - `<p>...</p>`
- Simple block element - `<div></div>`
- Simple inline element - ``
- Images - ``

How to use CSS

- Inline CSS

- `<div style="color: red">This text is red</div>`

- Style CSS tag

- `<div class="red-color">This text is red</div>`
- `<style>`
 `.red-color { color: red; }`
 `</style>`

- External CSS file (put in `<head>`)

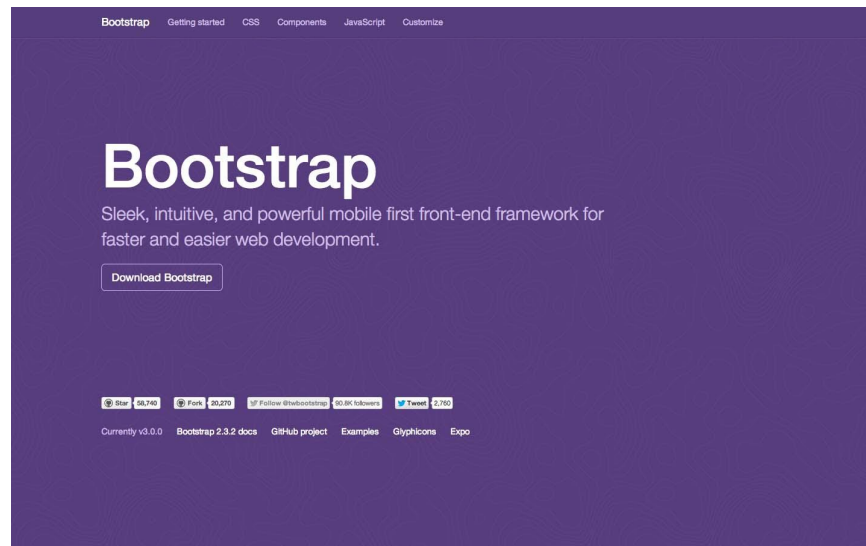
- `<link rel="stylesheet" href="style.css"/>`

Twitter Bootstrap

Twitter Bootstrap is a popular UI framework

<http://getbootstrap.com/getting-started/>

As of June 28, 2013, 1% of all websites are powered by Twitter Bootstrap



Features

- CSS resetting for cross browser compatibility
- Grid scaffolding for design
- Multi-screen support (responsive design)
- “Mobile first”, like jQuery Mobile
- **And a really good looking UI framework**

Features (cont.)

- JavaScript plugins
 - Dialogs
 - Tabs
 - Alerts
 - Carousel
 - Tooltips
 - ... and more.

Customization

1. You can customize the CSS yourself (not recommended)
2. You can use LESS to compile a Bootstrap CSS version on your own
3. You can just download a customized version
<http://bootswatch.com/>

How to add Twitter Bootstrap

You should use a CDN (content delivery network) for loading resources.

<http://www.bootstrapcdn.com/>

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page title</title>
    <link href="//netdna.bootstrapcdn.com/bootstrap/3.0.0/css/bootstrap.min.css" rel="stylesheet">
    <script src="//netdna.bootstrapcdn.com/bootstrap/3.0.0/js/bootstrap.min.js"></script>
    <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no">
  </head>
  <body>
    <!-- page content goes here -->
  </body>
</html>
```

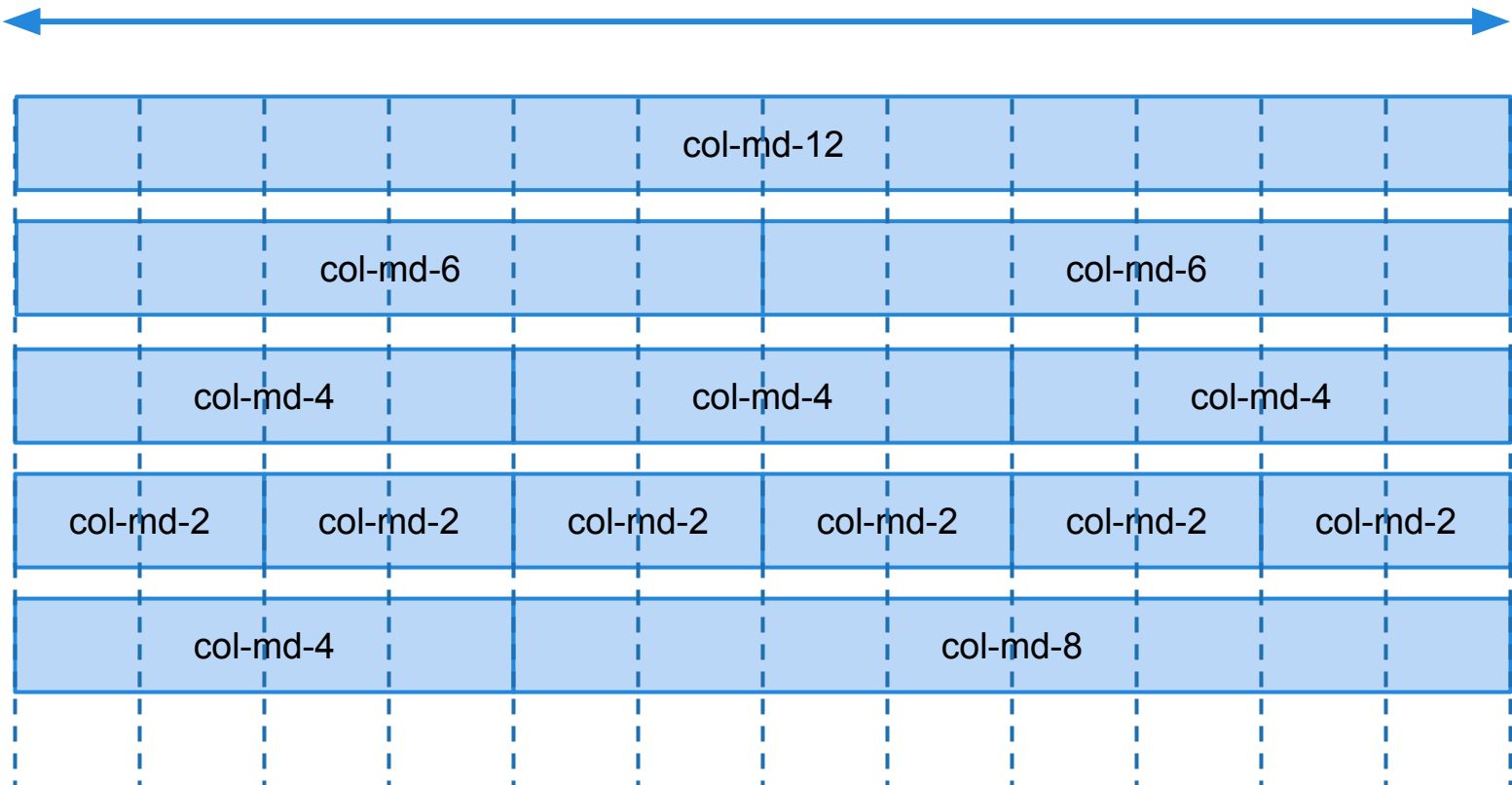
What are those lines?

We use a shared CDN because chances are that common files are most likely already cached in the user's computer.

1. The `<link>` tag loads the CSS - the actual bootstrap styling. This is obviously the most important
2. The `<script>` tag loads additional JavaScript capabilities of the Bootstrap framework
3. The `<meta>` tag is for smaller devices which have a viewport, and it disables zooming so that the responsive features of Bootstrap will kick in

The grid layout

12 column row



The grid (cont.)

Bootstrap 3 features an always-responsive grid with a maximum size:

1. `col-xs-[num]` grids have no maximum size (fluid)
2. `col-sm-[num]` grids resize up to 750px
3. `col-md-[num]` grids resize up to 970px
4. `col-lg-[num]` grids resize up to 1170px

You should choose `col-md` or `col-lg` for desktop sites.

The grid (cont.)

You can also use two grid sizes for different screen sizes:

```
<div class="row">  
  <div class="col-md-4 col-xs-6">  
    <!-- content -->  
  </div>  
  <div class="col-md-8 col-xs-6">  
    <!-- content -->  
  </div>  
</div>
```


Tables

```
<table class="table">  
  <thead>  
    <th><td>Name</td><td>Age</td></th>  
  </thead>  
  <tbody>  
    <tr><td>Alice</td><td>20</td></tr>  
    <tr><td>Bob</td><td>25</td></tr>  
  </tbody>  
</table>
```

Forms

```
<form role="form">
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="
exampleInputEmail1" placeholder="Enter email">
  </div>
  <div class="form-group">
    <label for="exampleInputPassword1">Password</label>
    <input type="password" class="form-control" id="
exampleInputPassword1" placeholder="Password">
  </div>
  <button type="submit" class="btn btn-default">Submit</button>
</form>
```

Buttons

Buttons can either be button elements, links or input elements. They will all look like buttons.

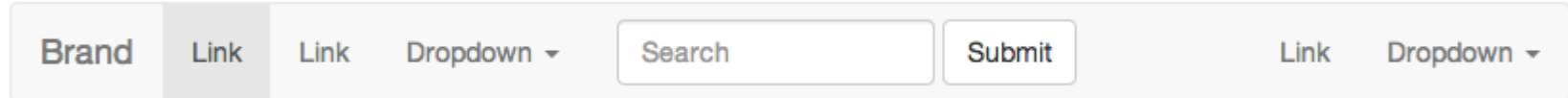
- For simple links, use the `<a>` element and add button styling if needed.
- For forms or dynamic buttons, use the button element.

```
<button class="btn btn-primary">Primary</button>
```

```
<a href="#" class="btn btn-primary">Primary</a>
```

```
<input type="submit" class="btn btn-primary"/>
```

Bootstrap elements

A horizontal Bootstrap navbar with a light gray background. It contains a 'Brand' link, a 'Link' (active), another 'Link', a 'Dropdown' menu, a 'Search' input field, a 'Submit' button, another 'Link', and another 'Dropdown' menu.

Brand Link Link Dropdown ▾ Search Submit Link Dropdown ▾

- Dropdowns
- Tabs
- Pills
- Navbars
- Alerts
- Lists

A Bootstrap dropdown menu with a light gray background and rounded corners. It contains three items: 'Action', 'Another action', and 'Something else here'. Below these items is a separator line and a 'Separated link'.

Action
Another action
Something else here
Separated link

Check out the Bootstrap reference for more:

<http://getbootstrap.com/components/>

Font icons

To insert a user icon to a button, use the following syntax inline with any text:

```
<span class="glyphicon glyphicon-user"></span>
```

For example, for a button with a star:

```
<button type="button" class="btn btn-default btn-lg">  
  <span class="glyphicon glyphicon-star"></span> Star  
</button>
```

Icon resources

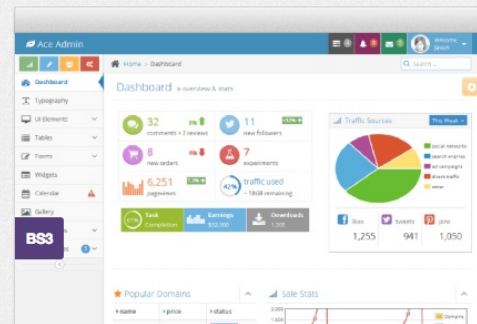
- Glyphicons - Comes with bootstrap
- Font Awesome - Recommended
 - <http://fontawesome.github.io/Font-Awesome/>
- Fontello - Customize your font package
 - <http://fontello.com/>
- Free icons - many of them over the internet
 - <http://www.pixeden.com/media-icons/flat-design-icons-set-vol1>
- Commercial icons - Shutterstock, istockphoto, etc.

Resources

Wrap Bootstrap

<http://wrapbootstrap.com>

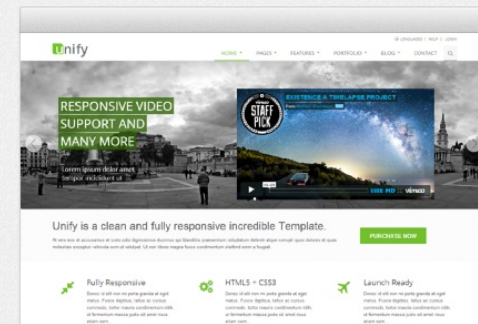
195 Ace - Responsive Admin Template



\$18 4490

Released 5 months ago

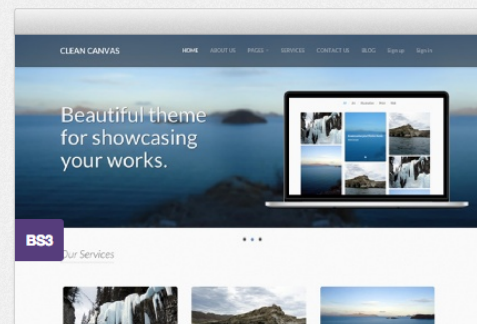
71 Unify - Responsive Website Template



\$14 2513

Released 5 months ago

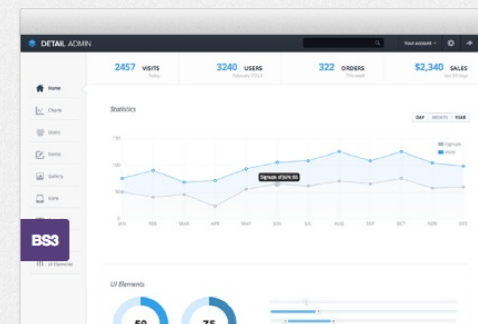
95 Clean Canvas - Business Theme



\$12 3013

Released 7 months ago

47 Detail Admin - Responsive Theme

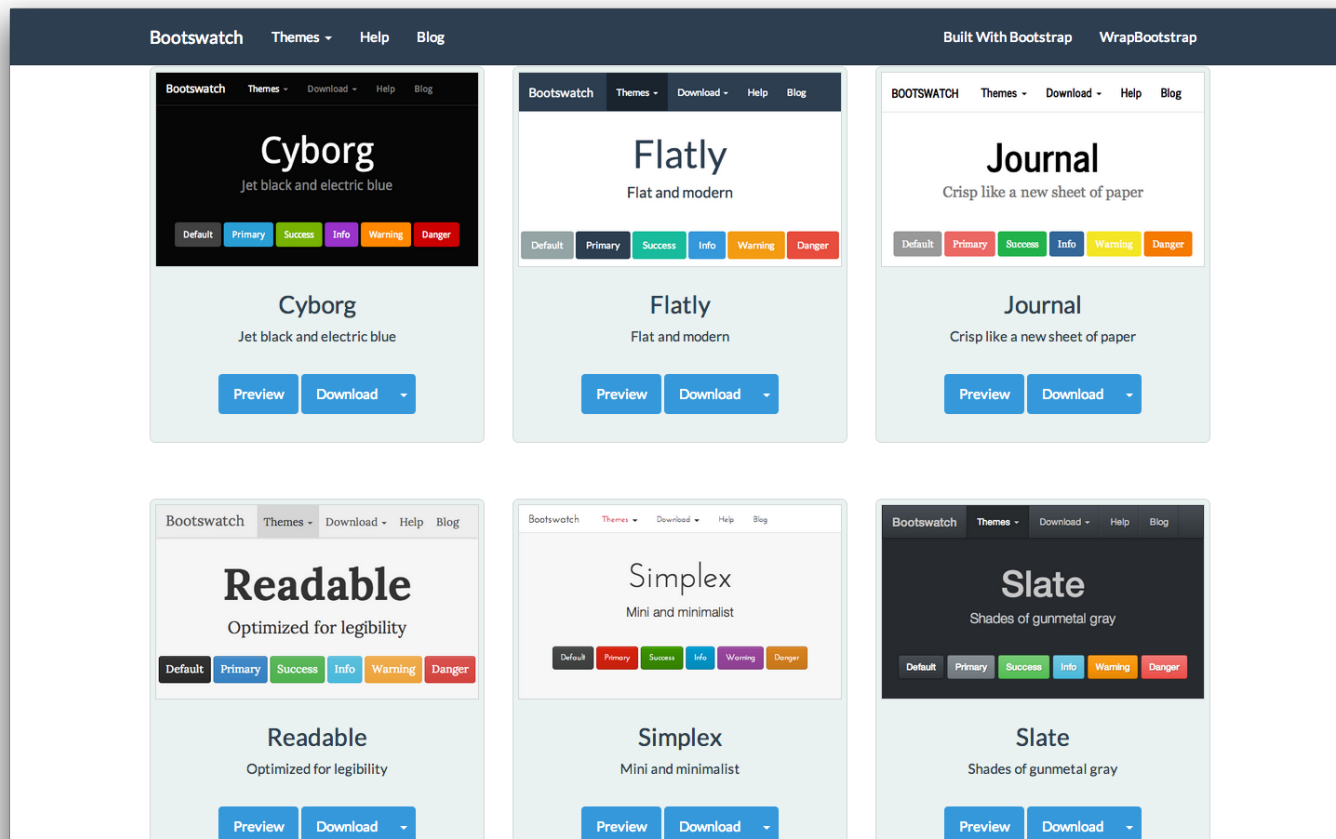


\$18 1628

Released 5 months ago

Bootswatch

<http://bootswatch.com/>




Start Bootstrap

<http://startbootstrap.com/>

[Start Bootstrap](#) [Templates ▾](#) [Help](#) [Contact](#) [Blog](#)


Recently Added Templates:



Modern Business Full Site

A 17 page multi-purpose template.

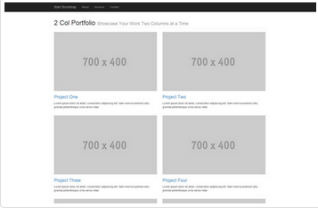
[Preview & Download](#)



Simple Sidebar New

A sidebar template with a hint of JavaScript.

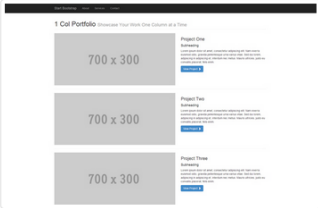
[Preview & Download](#)



2 Col Portfolio

A two column portfolio template.


[Preview & Download](#)



1 Col Portfolio

A one column portfolio template.

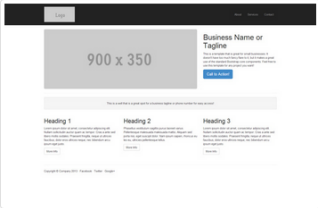
[Preview & Download](#)



Half Slider

A half page background slider.

[Preview & Download](#)




Small Business

A small business template.

[Preview & Download](#)

LESS

<http://lesscss.org/>





The dynamic stylesheet language.

LESS extends CSS with dynamic behavior such as variables, mixins, operations and functions.

LESS runs on both the server-side (with Node.js and Rhino) or client-side (modern browsers only).

 version 1.4.1
changelog

Write some LESS:

```
@base: #f938ab;

.box-shadow(@style, @c) when (iscolor(@c)) {
  box-shadow: @style @c;
  -webkit-box-shadow: @style @c;
  -moz-box-shadow: @style @c;
}

.box-shadow(@style, @alpha: 50%) when (isnumber(@alpha)) {
  .box-shadow(@style, rgba(0, 0, 0, @alpha));
}

.box {
  color: saturate(@base, 50);
  border-color: lighten(@base, 30%);
  div { .box-shadow(0 0 5px, 30%) }
```

Compile to CSS:

```
npm install -g less
lessc styles.less styles.css
```

[overview](#) [usage](#) [language](#) [function reference](#) [source](#) [about](#) [try it now!](#)

1.4.0

We have released 1.4.0. This includes new features such as `extends`, the `data-uri` function and more maths functions. See the [changelog](#) for a full list of changes.

There are some known **breaking changes**.

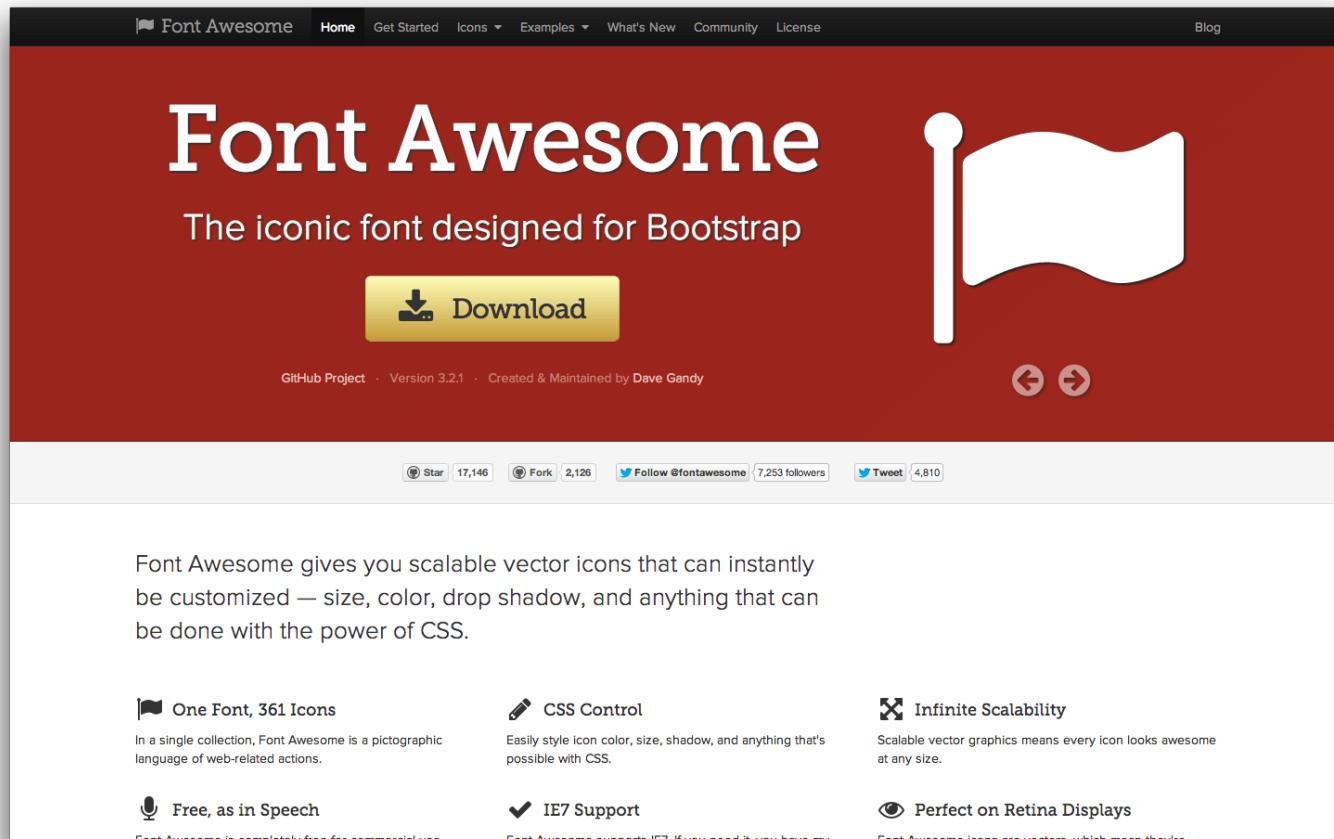
`@import-once` is removed and is now default behaviour for `@import`.

```
(~".myclass_{index}") { ... selector interpolation is deprecated, do this instead .myclass_{index}
{ ... This works in 1.3.1 onwards.
```

The browser version no longer bundles a version of `es5-shim.js` - the version we previously used was inaccurate and the new version is significantly larger. Please include your choice of `es-5 shim` or only use on modern browsers.

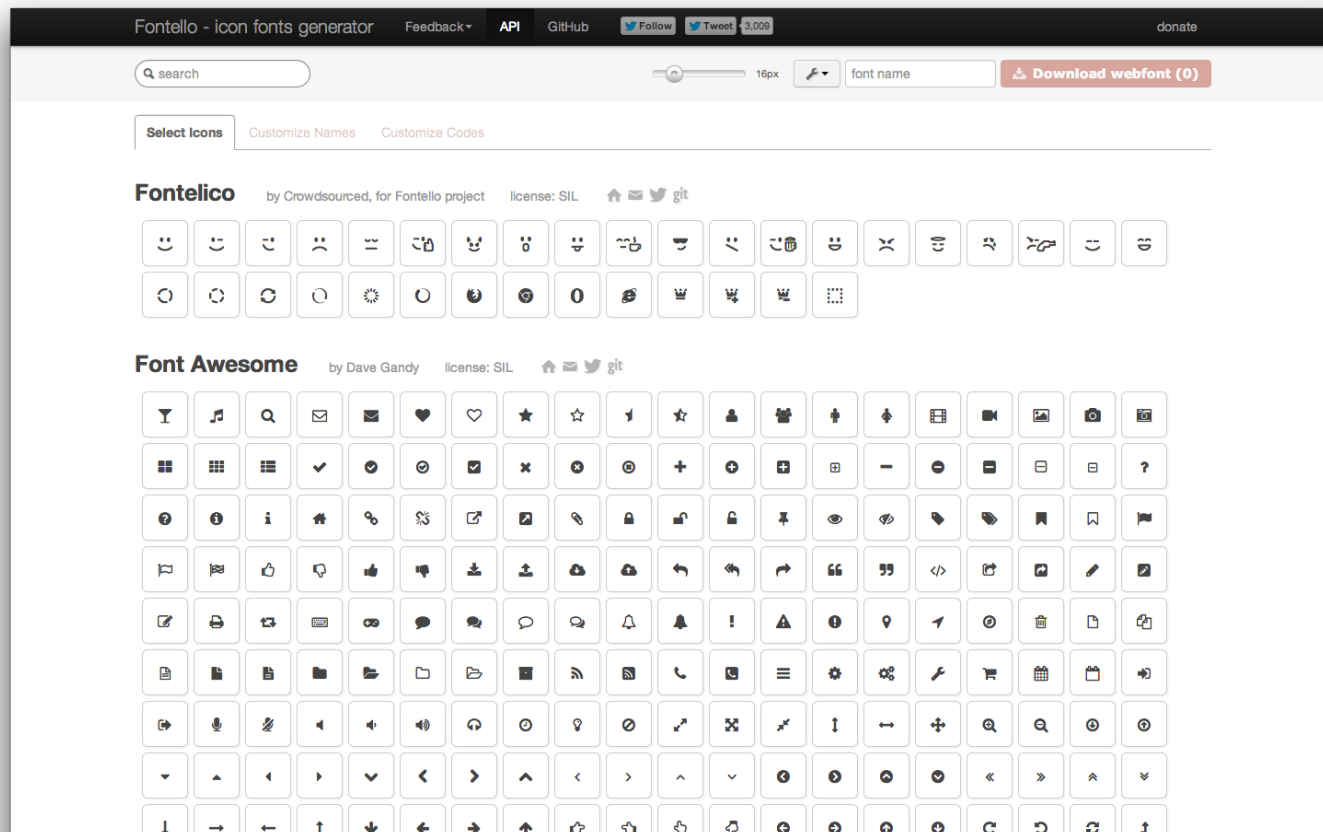
Font Awesome

<http://fontawesome.github.io/Font-Awesome/>



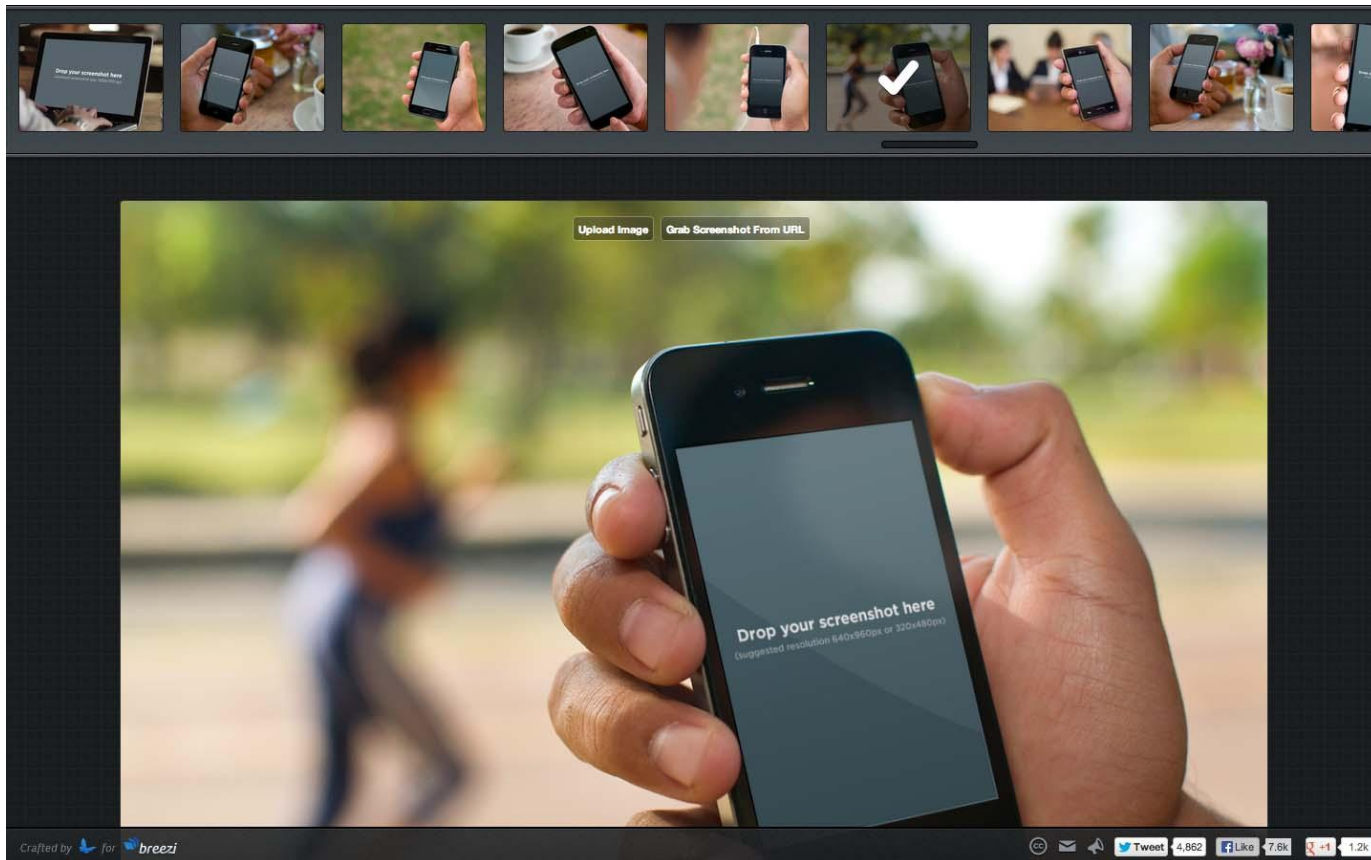
Fontello

<http://fontello.com/>



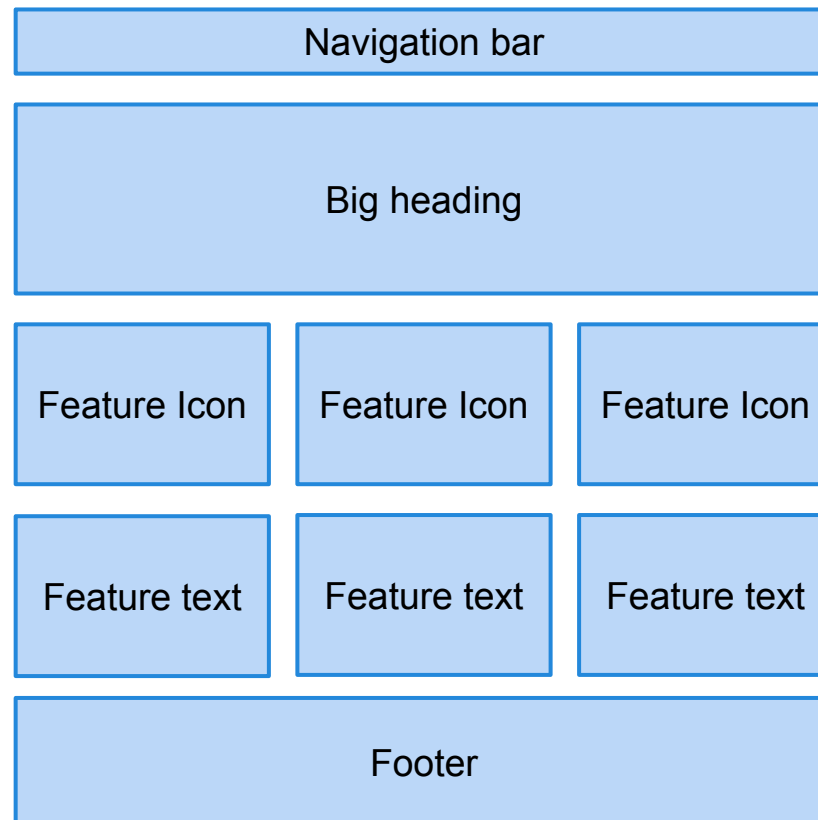
Placeit by Breezi

<http://placeit.breezi.com/>



Exercise

- Design a page with the following layout



Thank You!