

Grids + Bootstrap

Kevin Bluer



Agenda

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- Goals
- Referencing Bootstrap
- Fun with Grids :)
- Bootstrap Playground (CSS, Component, JavaScript)
- **Fooooood! 2.0**
- Explore Bootstrap prototyping tools
- Bootstrap 4.0
- Summary

Goals

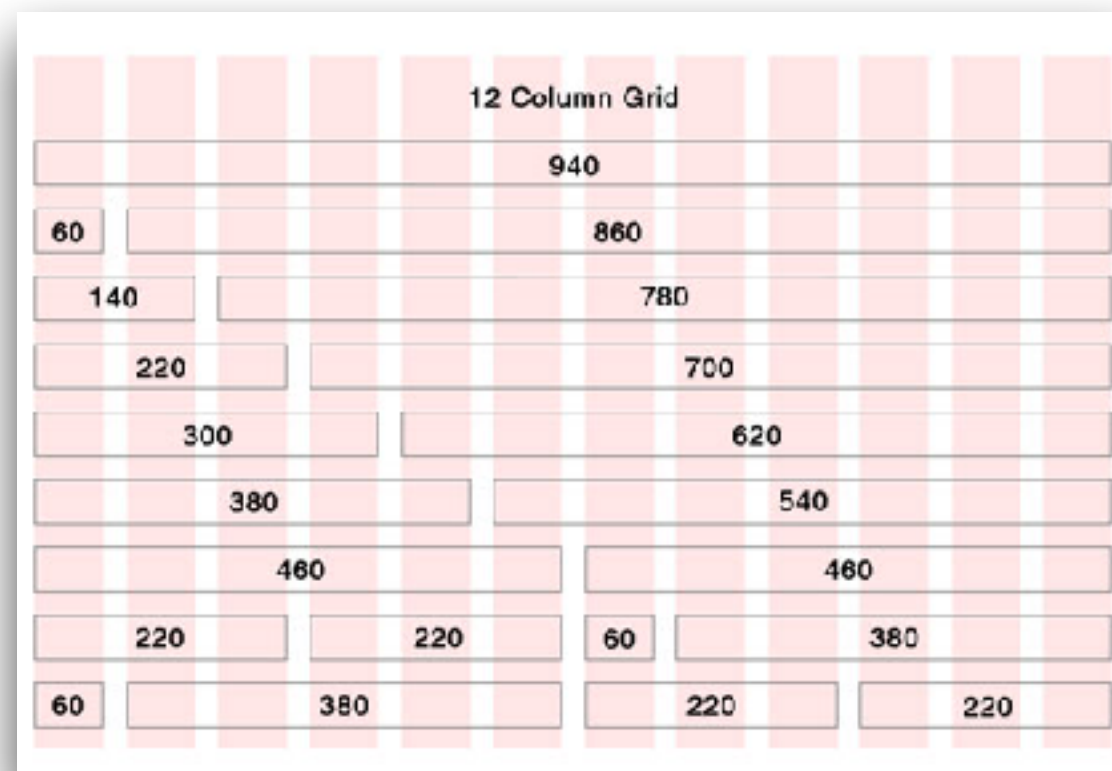
Goals

- Appreciate a “real” grid system
- Begin getting comfortable with a ranges of aspects of Bootstrap (including it’s CSS, components, and JavaScript, etc)

Grid Systems

Grid Systems, huh?

- “Grid systems are used for creating page layouts through a series of rows and columns that house your content.”



Bootstrap's Grid

- “Bootstrap includes a responsive, mobile first fluid grid system that appropriately scales up to 12 columns as the device or viewport size increases.”

.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1
.col-md-8								.col-md-4			
.col-md-4				.col-md-4				.col-md-4			
.col-md-6						.col-md-6					

Bootstrap's Grid Options

	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Container width	None (auto)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-
# of columns	12			
Column width	Auto	~62px	~81px	~97px
Gutter width	30px (15px on each side of a column)			
Nestable	Yes			
Offsets	Yes			
Column ordering	Yes			

Using Bootstrap

Using Bootstrap

- <http://getbootstrap.com/getting-started/#download>
- Approaches
 - Download locally or reference via CDN
 - Install with Bower (coming soon)
 - Install with NPM (coming soon)

```
<!-- Latest compiled and minified CSS -->
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css" integrity="sha384-1q8mTJ045x8j1Au+e5WDVnP121kFfwEAa8hD0dJZ1qLegxhjWME1fgjWPGmkzs7" crossorigin="anonymous">

<!-- Optional theme -->
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap-
theme.min.css" integrity="sha384-flW2w81LMqja8Bkx31/M9Eahump5feNvV63J5ezn3uZzapT0u7EYs2MjQV+8En5r"
crossorigin="anonymous">

<!-- Latest compiled and minified JavaScript -->
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"
integrity="sha384-8uShbJDEHialfmu8BQ6A4Qrprq5DVfW37PRR3j5ELQxss1yVqDt nepHVP9aJ7x5"
crossorigin="anonymous"></script>
```



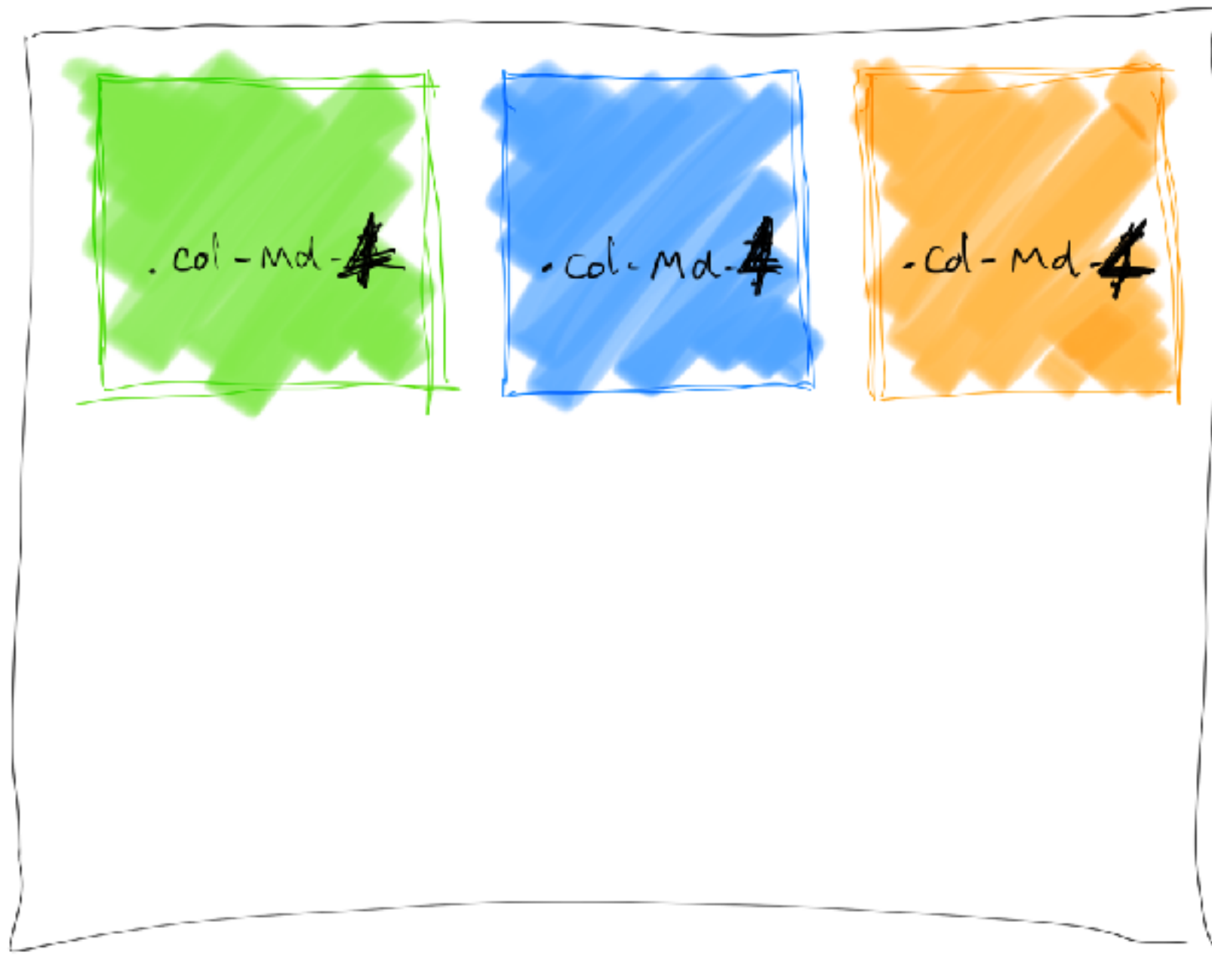
Exercise

Fun With Grids :)

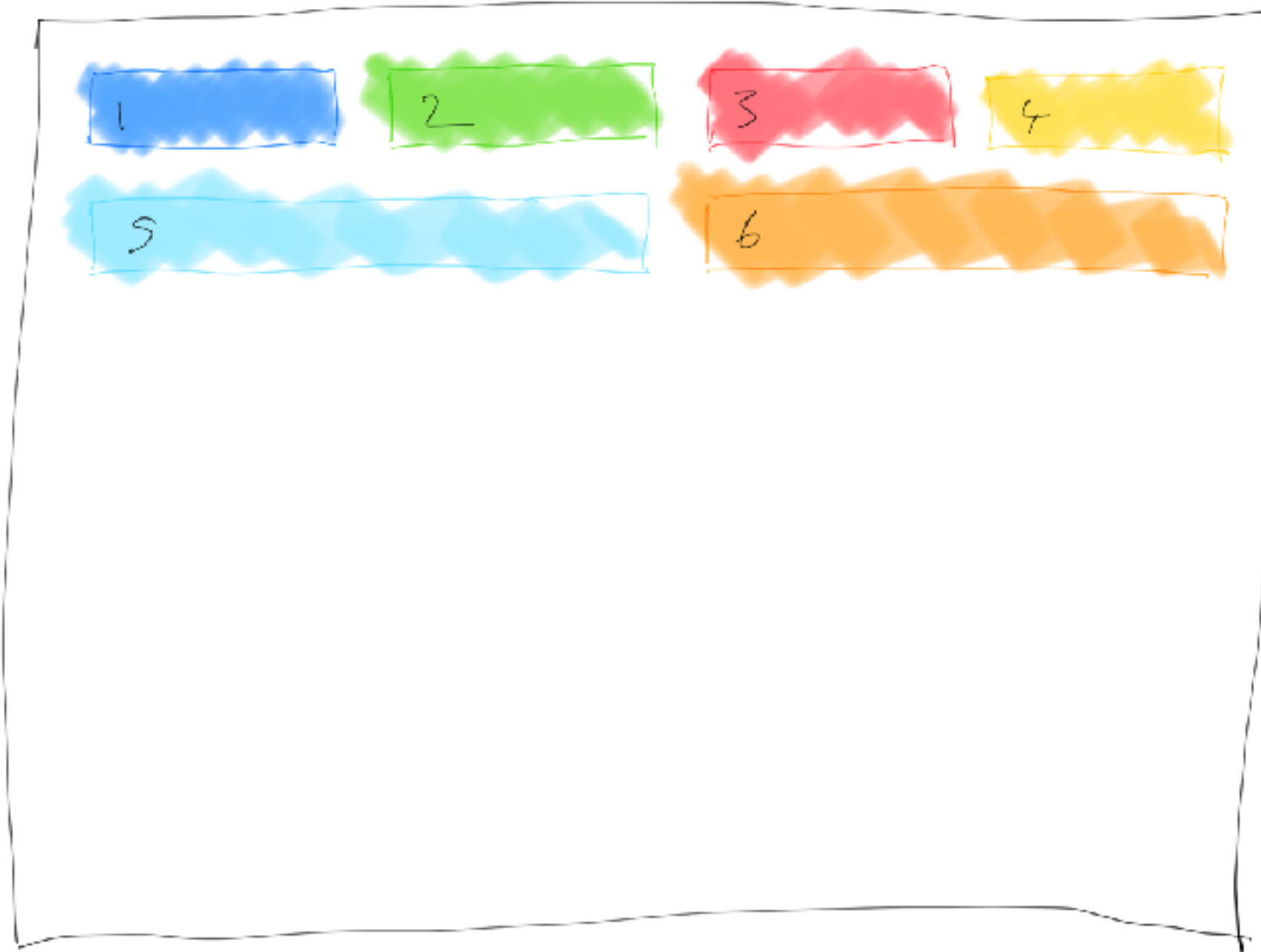
Bootstrap Grid System

- Create the following examples (note the difference between using `.container` and `.container-fluid`)
- Use `col-md-*` for all columns (as we'll be exploring responsive separately)

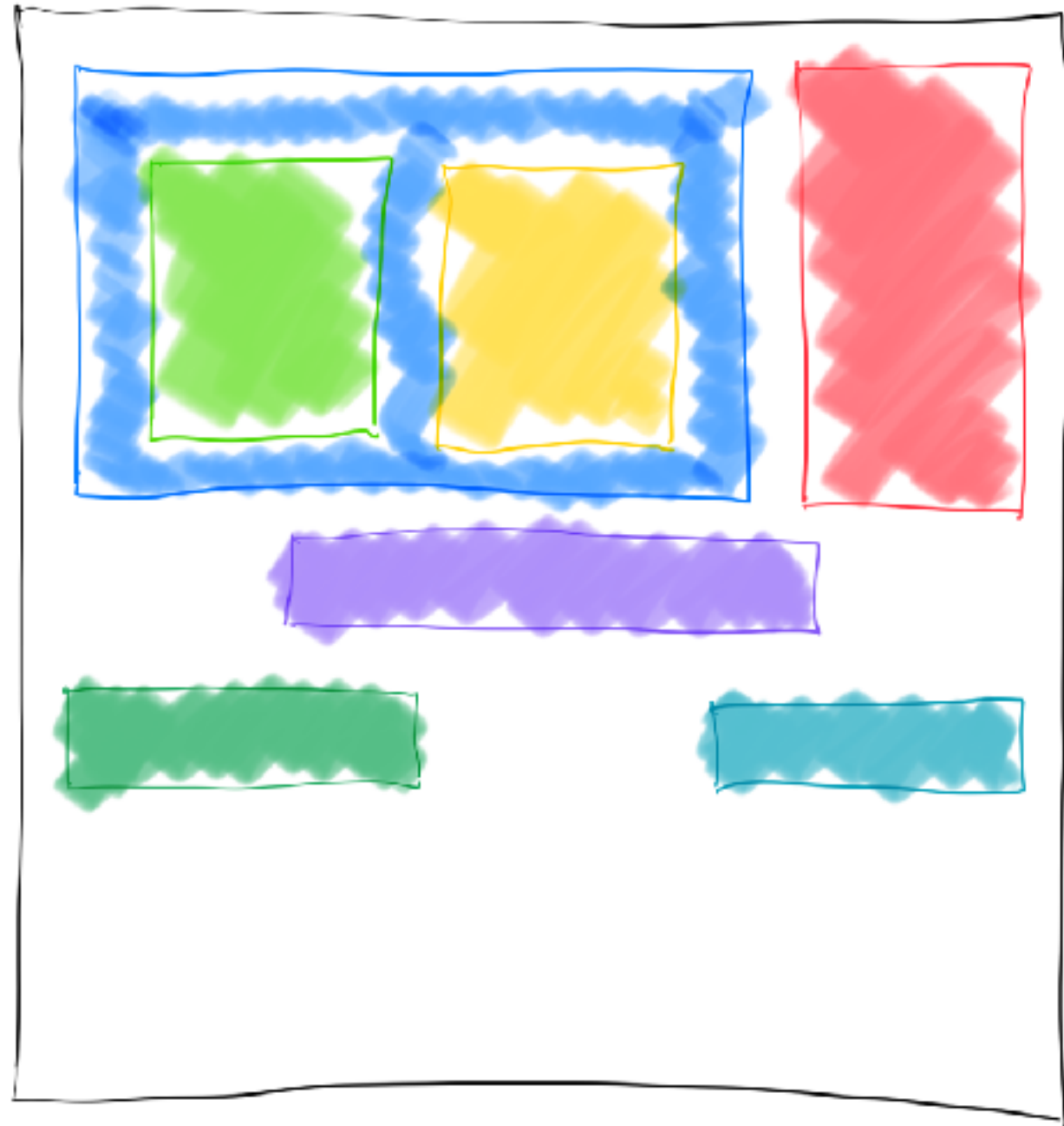
Exercise #1



Exercise #2



Exercise #3

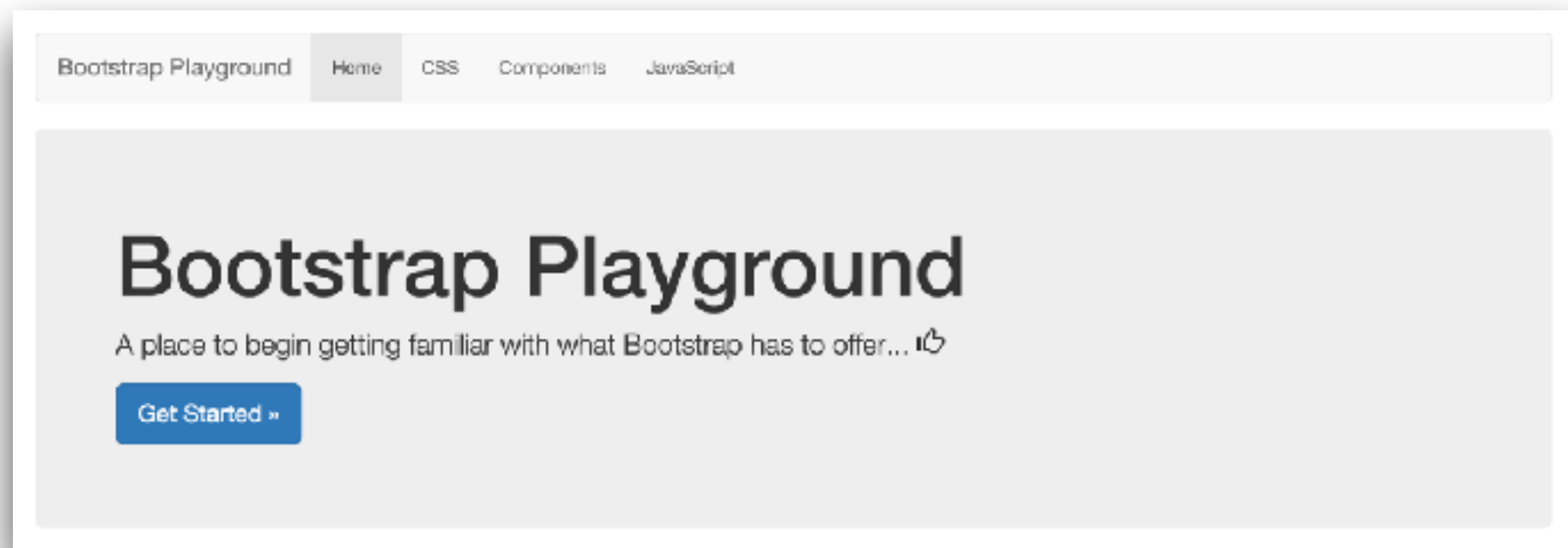


Exercise

Bootstrap Playground

Download the following...

- <https://github.com/kevinbluer/epam-bootstrap>
- Remember the importance of good directory organization



Bootstrap Playground

- Explore the following:
 - CSS
 - Components
 - JavaScript

Exercise

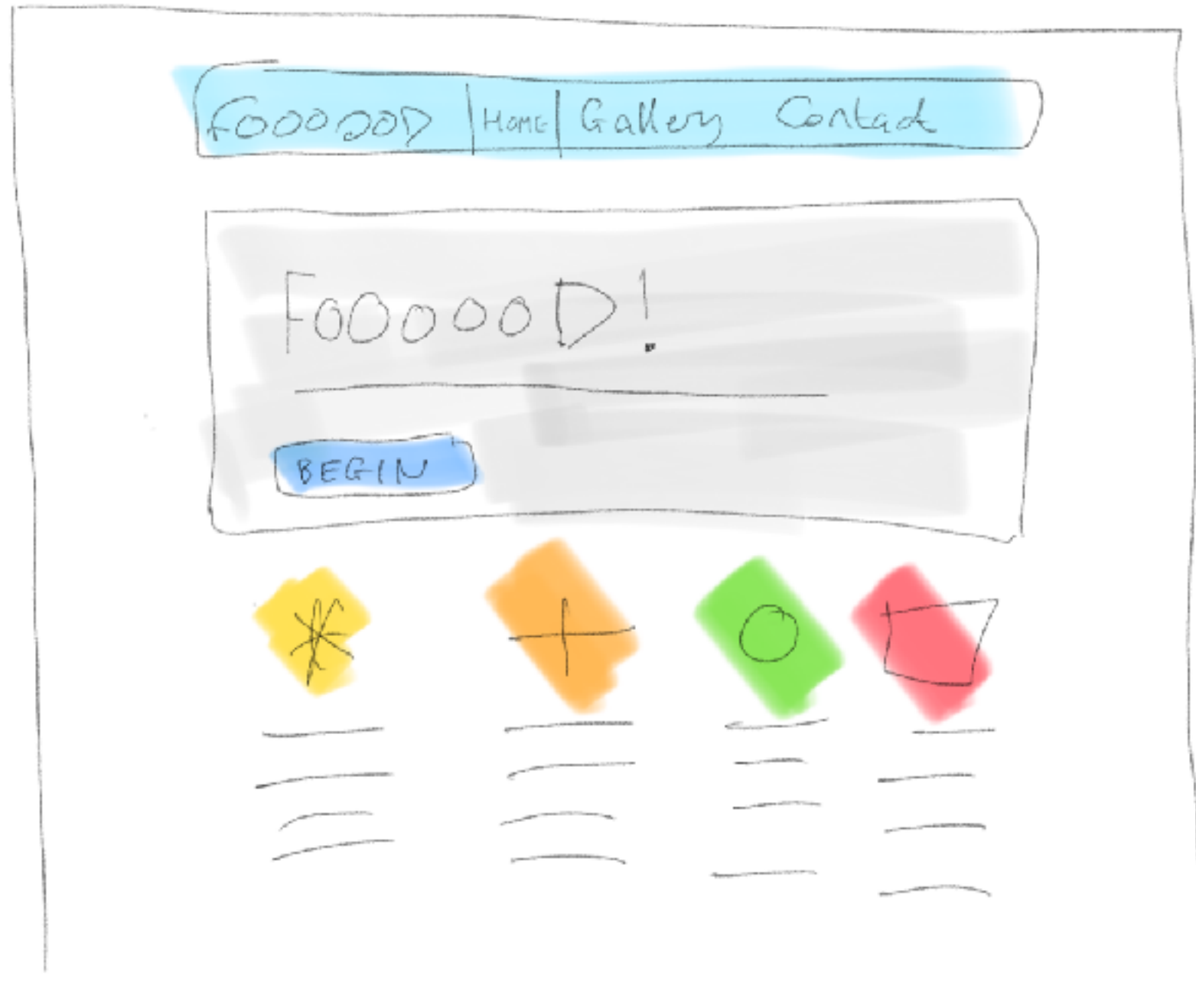
Fooooood 2.0

Fooooood 2.0

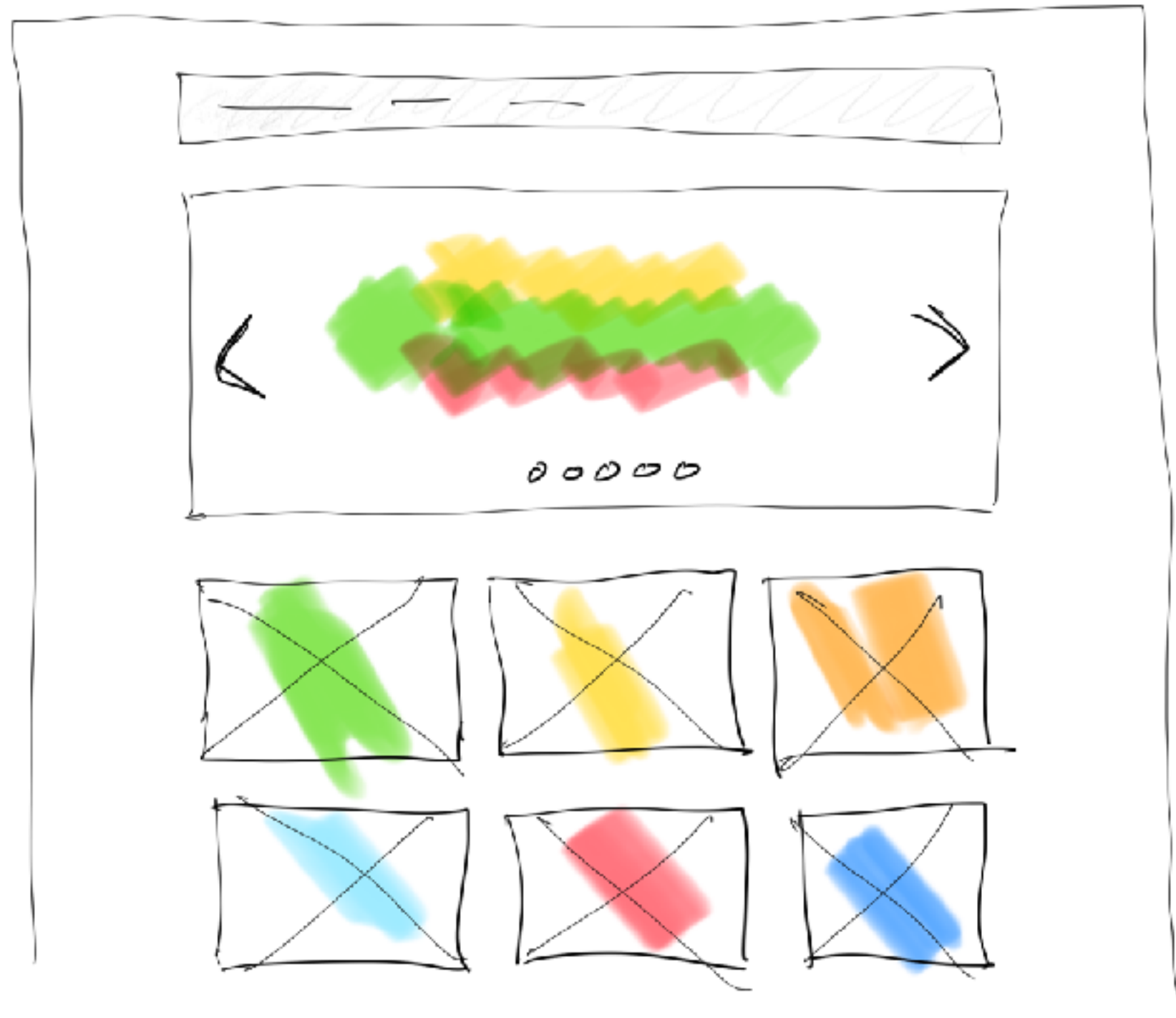
- Let's put some of this into practice!
- 4x pages...
 - Home (Jumbotron and 3 Columns with Glyphs)
 - Gallery (Images Carousel & Grid of Responsive Images)
 - Recipe Page (Table, Checklist for ingredients)
 - Contact Us / Submit Recipe (Form)
- Also...
 - Use a Navbar with embedded Glyphicons :)
 - Feel free to explore other controls too :))
 - <http://getbootstrap.com/getting-started/#examples> :)))



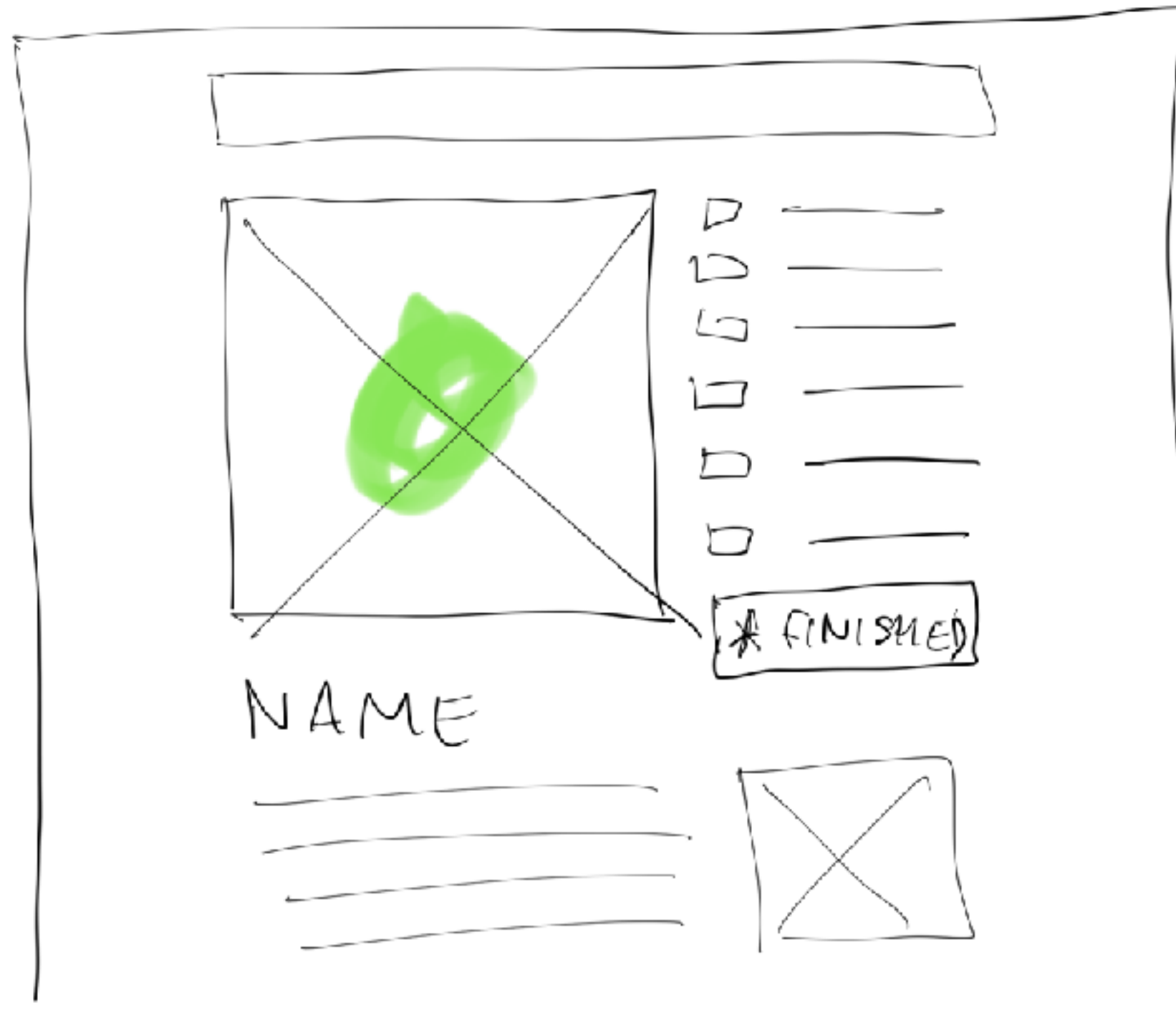
Homepage



Gallery



Recipe Page



Contact Us

A hand-drawn sketch of a form titled "SUBMIT RECIPE". The form is enclosed in a rectangular border. At the top, there is a long horizontal input field. Below it, the title "SUBMIT RECIPE" is written in a simple, hand-drawn font, followed by a horizontal line. Under the line, the word "TITLE" is followed by a horizontal input field. Below "TITLE", the word "INGREDIENTS" is followed by a larger rectangular input field. Below "INGREDIENTS", the word "CUSINE" is followed by a horizontal input field with a small downward-pointing arrow on the right side. Below "CUSINE", the word "ETC" is written in orange. At the bottom right of the form, there is a button labeled "↑SUBMIT".

SUBMIT RECIPE

TITLE

INGREDIENTS

CUSINE

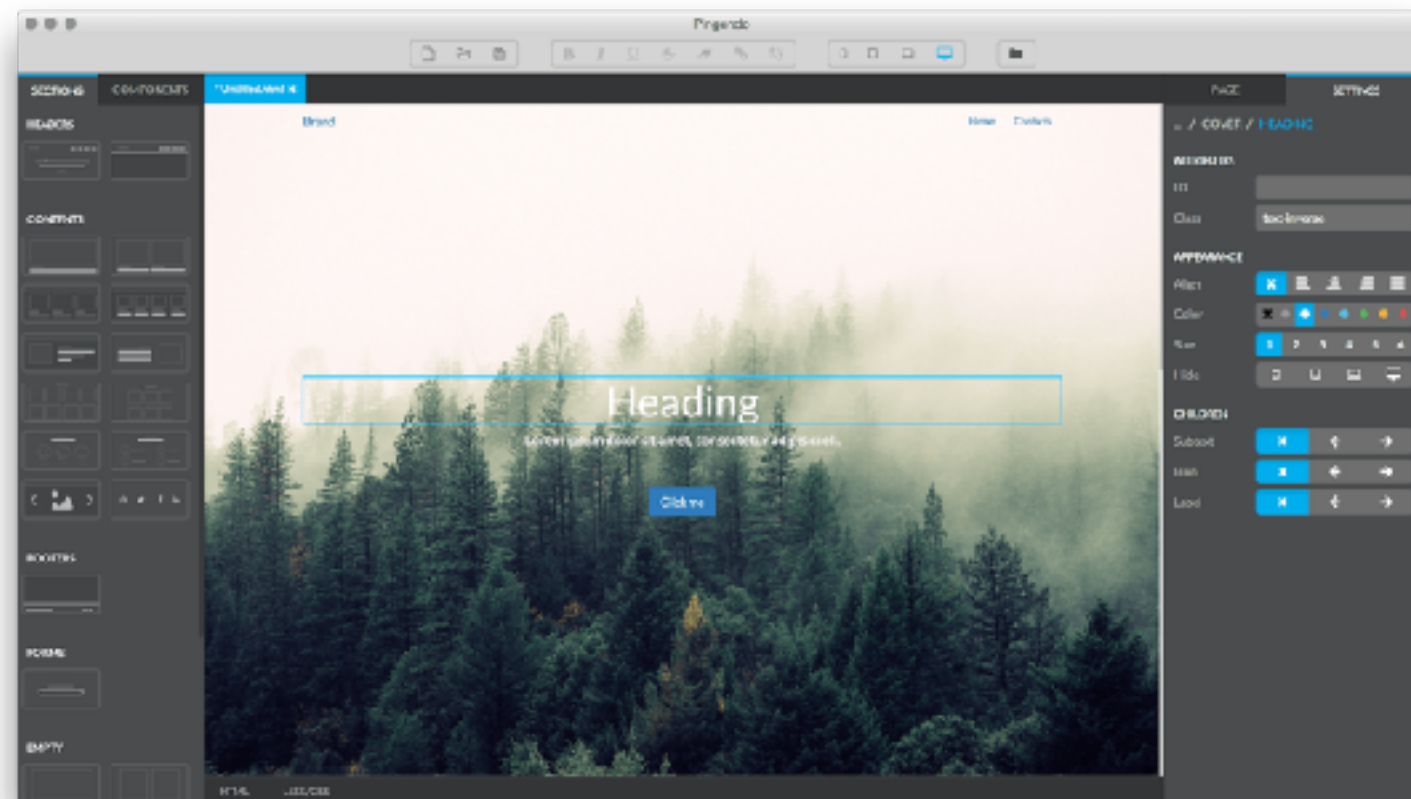
ETC

↑SUBMIT

Bootstrap Prototyping Tools

Bootstrap Prototyping Tools

- Pingendo (<http://pingendo.com>)
- Bootstrap Studio (<https://bootstrapstudio.io>)



Bootstrap 4.0 Alpha

Bootstrap 4.0 Alpha

- <http://blog.getbootstrap.com/2015/08/19/bootstrap-4-alpha/>
- What's New
 - Moved from Less to Sass
 - Improved grid system
 - Opt-in flexbox support is here
 - Dropped IE8 support and moved to rem and em
 - Rewrote all our JavaScript plugins in ES6

Checkout The Themes

© <http://themes.getbootstrap.com>



Summary

Summary

- Bootstrap is a mobile-first framework that contains a huge range of classes and components
- It can dramatically reduce development time
- Make sure it's appropriate for any project you are considering using it with (and that there are many other frameworks out there too)
- Bootstrap 4.0 is coming soon!

Further Reading

Further Reading

- Documentation: <http://getbootstrap.com>
- Code: <https://github.com/twbs/bootstrap>
- Themes: <http://themes.getbootstrap.com>