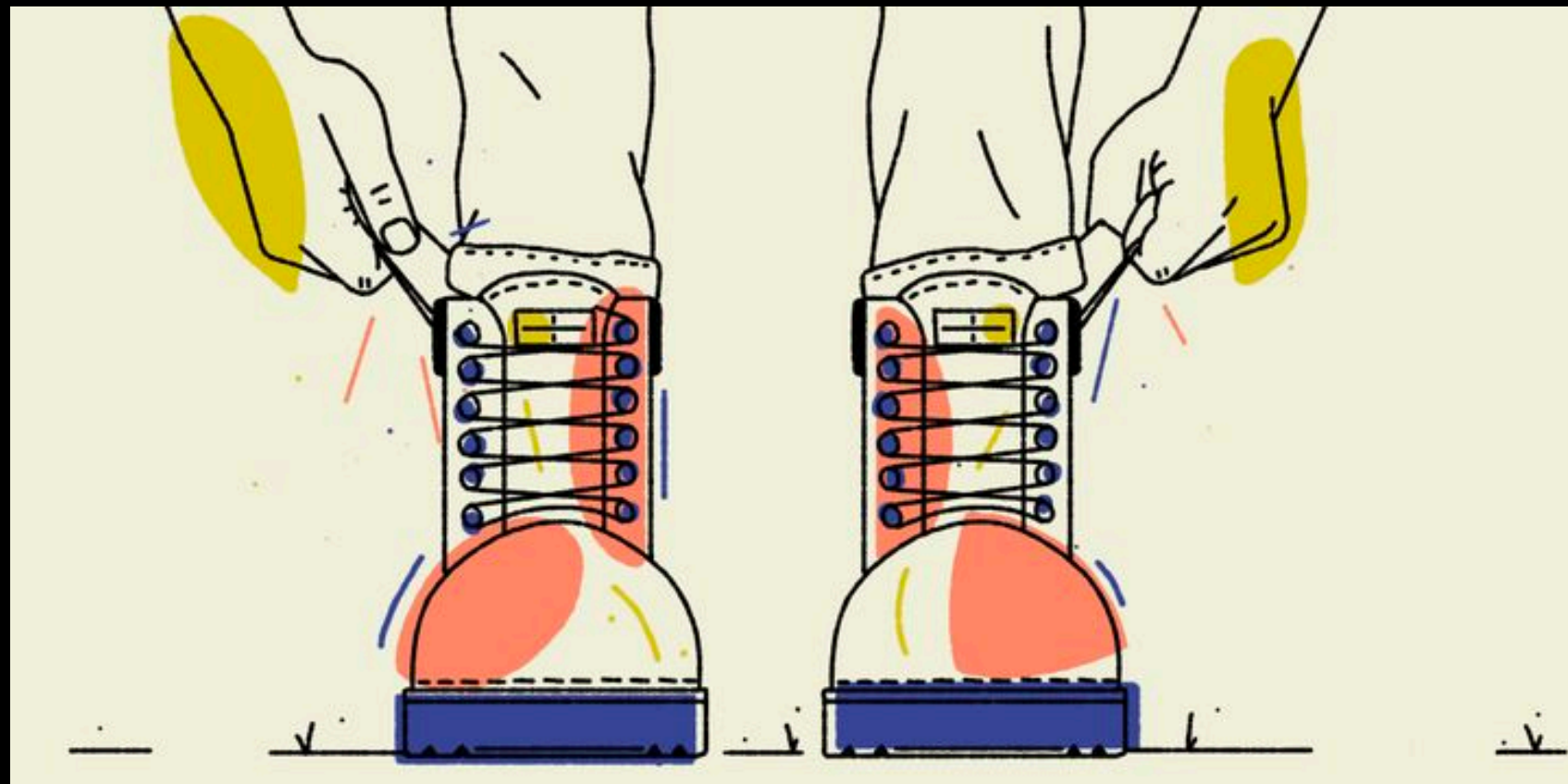




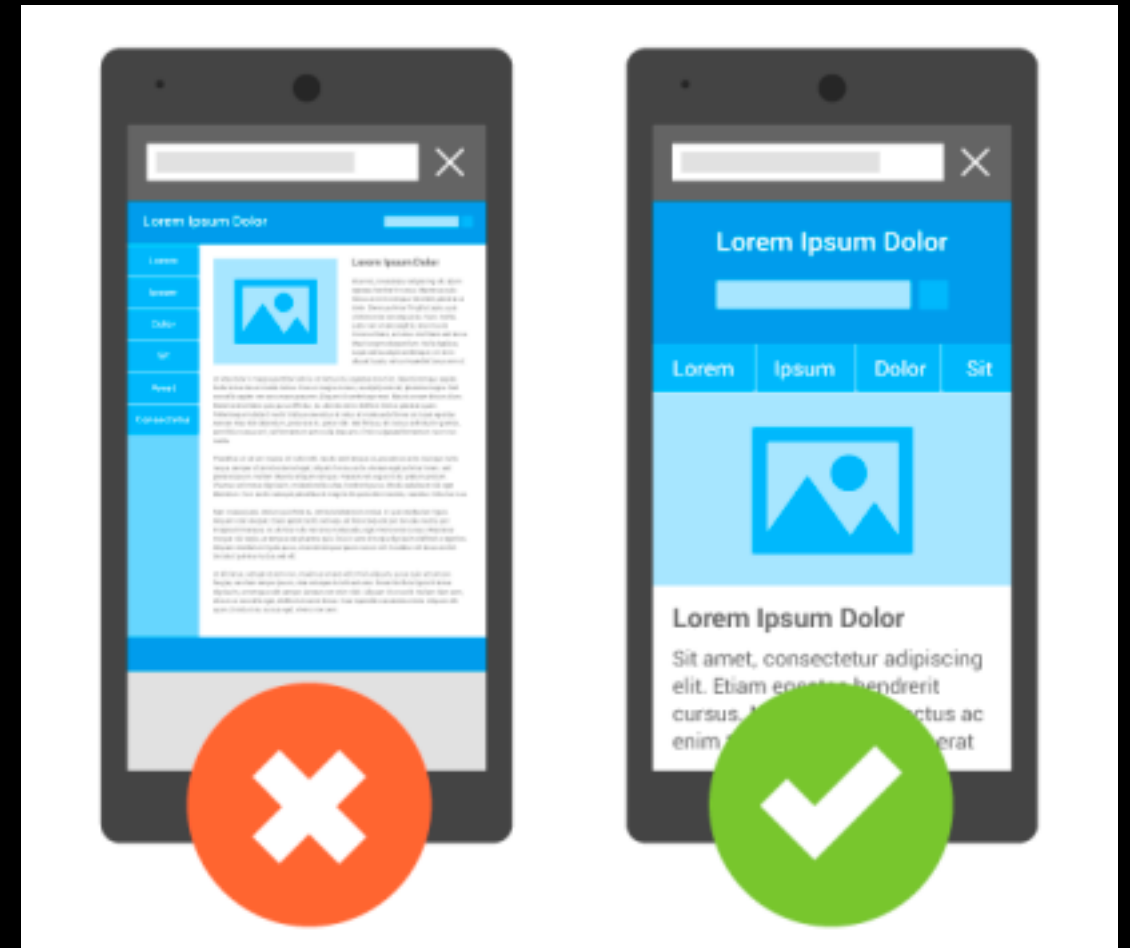
Responsiveness & Bootstrap



What is responsiveness and why is it important?

Because it is.
You want to design for
more than just a
desktop or laptop.

Think how nasty it'd
be to view a desktop-
styled website on your
small mobile screen...



So how do we
make our
websites
responsive?

Media Queries & Bootstrap

Anatomy of a media query:-

```
@media (max-width:____) {  
  
    element {  
        CSS styling  
    }  
}
```

> Makes part of your CSS styling

> Helps you adjust the appearance and layout of your website depending on different screen sizes

Example

```
@media (max-width:600px) {  
  
    #header-img {  
        width:80%;  
        height:80%;  
    }  
}
```

> For screen sizes from 0px to 600px, my image will take up 80% width and height of the div it is contained in

> RULES OF PRECEDENCE: the last styling rule will always win so PUT YOUR MEDIA QUERIES AT THE BOTTOM OF YOUR CSS OTHERWISE YOUR REGULAR CSS WILL NOT WORK

Now it's your turn!

- Get into pairs
- Build a simple static website (maybe include a header image and some text boxes/divs)
OR use the page you created yesterday
- Make it responsive on multiple mobile devices i.e. desktop, tablet and mobile phone



Now it's time for Bootstrap!

Get ready to have your mind BLOWN



So. What is Bootstrap?

> It's a Front-End Framework (i.e. a library made with CSS to help make your website responsive).

> It makes building your websites a LOT (like, a LOT, bruh) faster and significantly reduces the amount of CSS that you need to use to make your elements look good.

Bootstrap utilities

- You define them within the class of your element
- But in the case of Bootstrap, they're already pre-defined, which means that in the Bootstrap library, the class already has a predetermined "styling" to it
- For example:-

```
<button>I am a Basic Button</button>
```

I am a Basic Button

```
<button class="btn btn-primary">I am a Bootstrap Button</button>
```

I am a Bootstrap Button

There are lots of utilities for different elements

These are some examples:-

Font-colour

`.text-primary`

`.text-secondary`

`.text-success`

`.text-danger`

`.text-warning`

`.text-info`

`.text-light`

`.text-dark`

`.text-muted`

`.text-white`

Text-alignment

`.text-left` - I am aligned to the left

`.text-center` - I am aligned to the center

`.text-right` - I am aligned to the right

Margin

`mb-4` - I have a bottom margin of 4 (i.e. about 1.5rem)

`mb-5` - I have a bottom margin of 5 (i.e. about 3rem)

I'm just here for perspective

The Grid Layout

- > Starts with a `.container` class. Make sure you wrap everything within this
- > The `.container-fluid` class takes up 100% of the screen regardless of the width of the screen
- > And inside your `container/container-fluid` is where your `.rows` and `.columns` go
- > EVERYTHING in Bootstrap is made up of rows and columns and they're made with Flex so you can easily make your website responsive

Rows & Columns

```
<div class="container-fluid">  
  <div class="row">  
  
    <div class="col">Content </div>  
    <div class="col">Content </div>  
    <div class="col">Content </div>  
  
  </div>  
</div>
```

I am a Column

I am a Column

I am a Column

Each row is comprised of 12 columns

.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1
.col-xs-2		.col-xs-3			.col-xs-7						
.col-xs-4				.col-xs-4				.col-xs-4			
.col-xs-5					.col-xs-7						
.col-xs-6						.col-xs-6					
.col-xs-12											

*NOTE: writing “col” is the same as writing “col-xs”

Column Responsiveness

- > The `col` class can take in the number of columns this specific column will fill and a breakpoint, i.e. a screen size
- > This helps you predetermine the width of your columns depending on the device and screen size

`col-8` - on an extra-small screen, this column will take up 8 out of 12 columns

`col-s-6` - on a small screen, this column will take up 6 out of 12 columns

`col-md-4` - on a medium screen, this column will take up 4 out of 12 columns

`col-lg-2` - on a medium screen, this column will take up 2 out of 12 columns

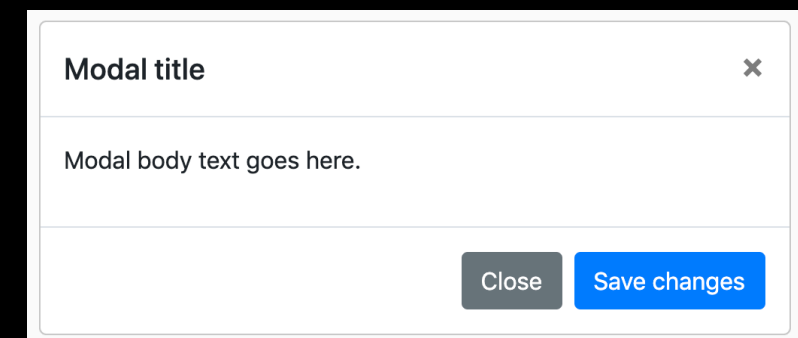
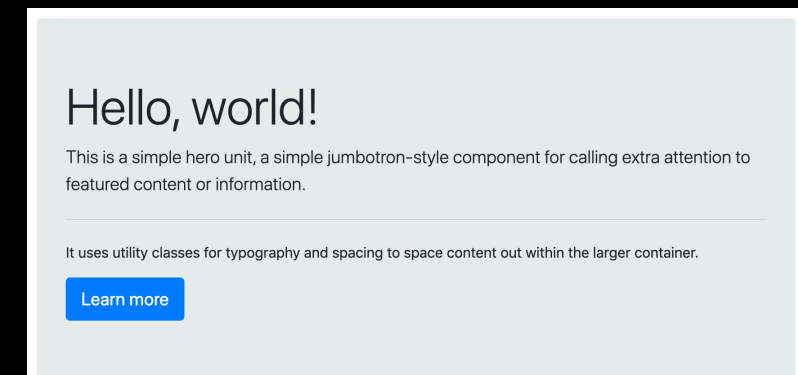
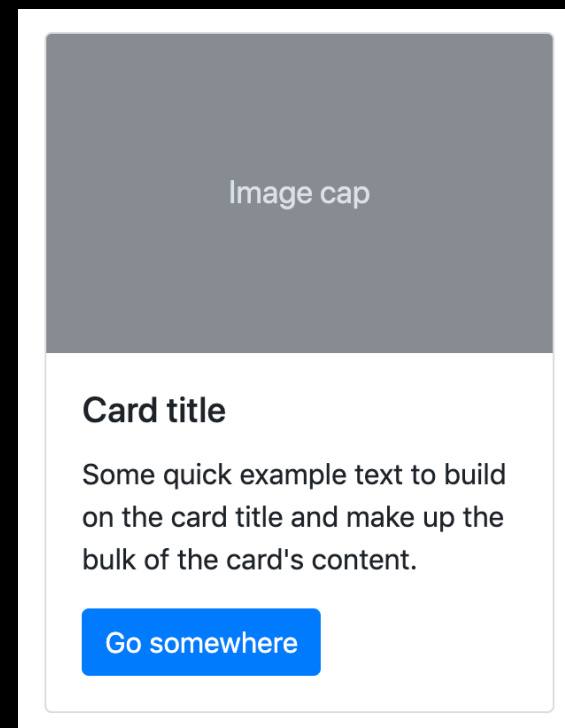
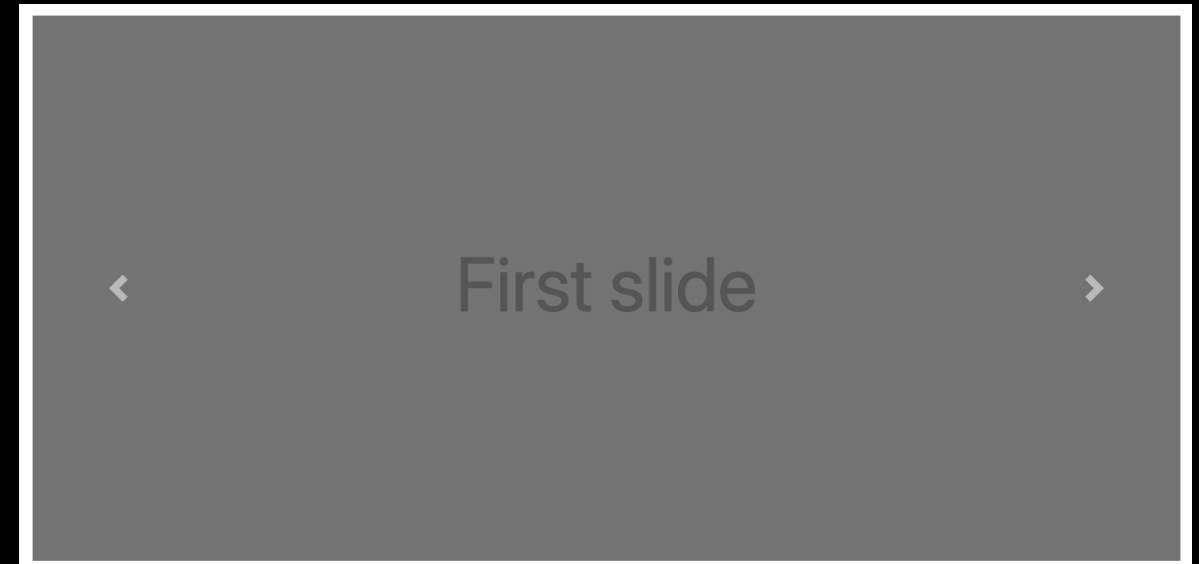
Flex in Bootstrap?

- The answer is yes.
- And it works almost exactly like normal CSS Flex
- We use the `.d-flex` class to flexify our columns

```
<div class="d-flex flex-wrap">  
  <div class="box"  
    style="500px"> Content  
  </div>  
  <div class="box"  
    style="500px"> Content  
  </div>  
</div>
```

Components!

- LOTS of components with the code available for you on the Bootstrap website
- Buttons and Cards and Carousels (oh my!)
- Go to the Bootstrap website and go to town on your website
- Experiment, play around, customise



How to get started with Bootstrap

<https://getbootstrap.com/docs/4.3/getting-started/introduction/>

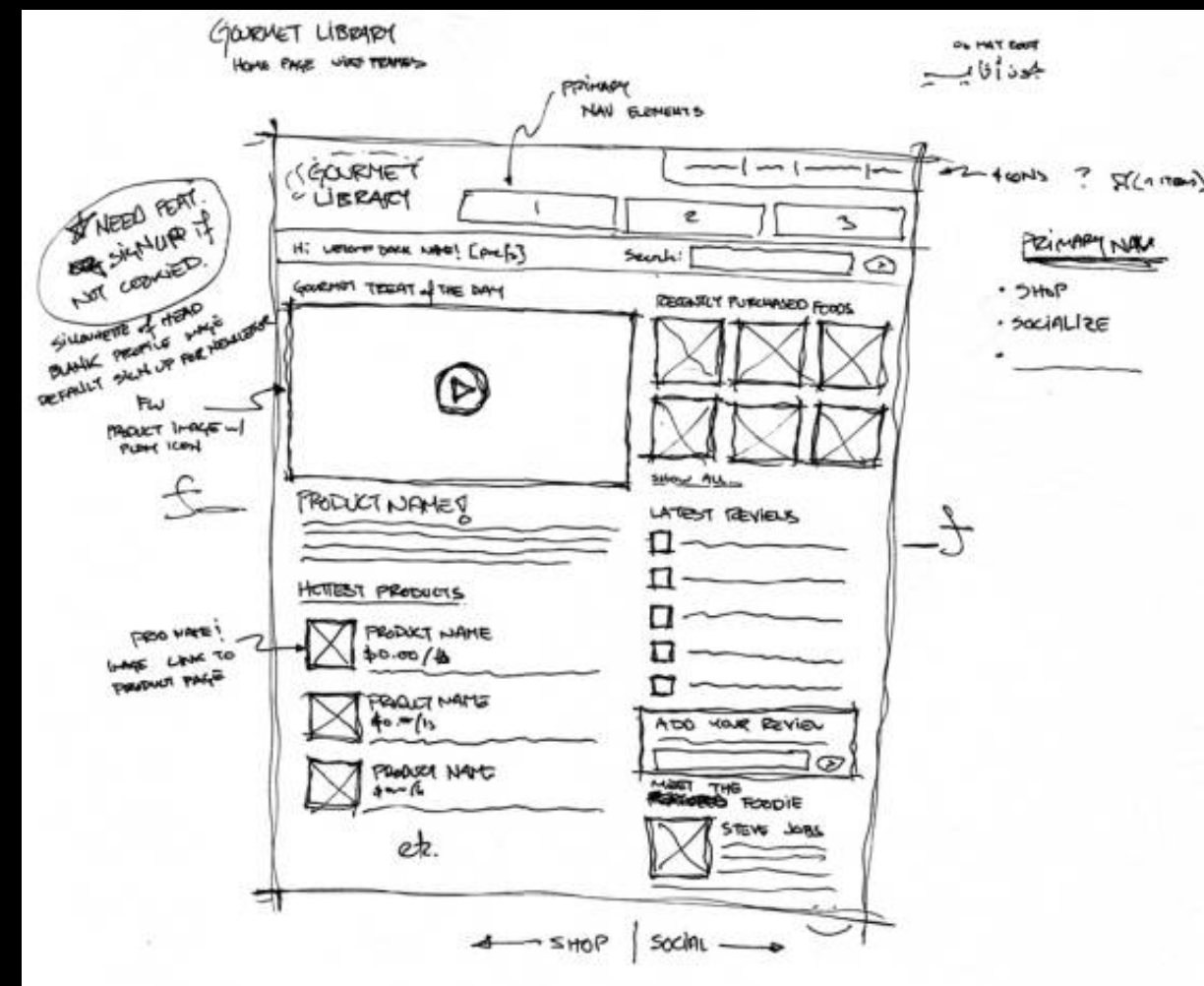
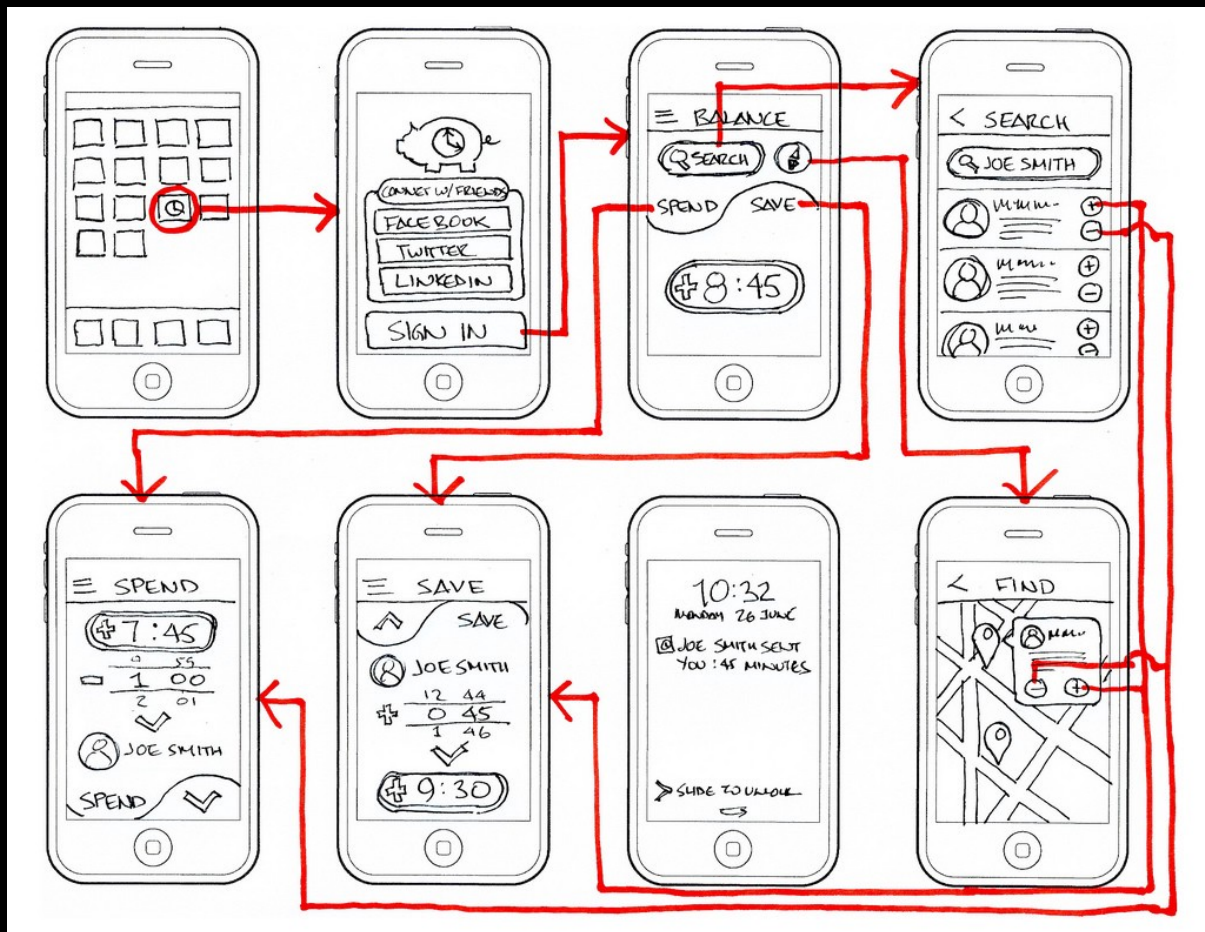
CSS

```
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" integrity="sha384-gg0yR0iXcBMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQU0hcWr7x9JvoRxT2MZw1T" crossorigin="anonymous">
```

Javascript/JQuery - goes BEFORE your closing </body> tag

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965Dz00rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo" crossorigin="anonymous"></script>  
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js" integrity="sha384-U02eT0CpHqdSJO6hJty5KVphtPhzWj9W01cLHTMGa3JDZwrnQq4sF86dIHNDz0W1" crossorigin="anonymous"></script>  
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js" integrity="sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy60rQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM" crossorigin="anonymous"></script>
```

A brief note on wire framing





GO FORTH AND CREATE