Building Apps with DrupalGap

http://drupal.org/u/tyler.frankenstein

- Drupal Developer *(8+ Years)*
- Drupal Contributor *(14 Modules)*
- DrupalGap *(Creator / Lead Developer)*
- U.M. Library Drupal Developer *(Feb 2011 - May 2013)*
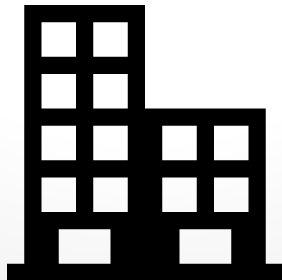- Easy Street 3 Co-Founder *(June 2010 - Present)*

Build 2 Example Applications

1. *Mobile App - GeoTag a Photo and Upload it*

2. *Web App - Get Nearby Content and Show on Map*

What's the difference?

Mobile App vs. Web App

- **Mobile Applications**
  - Downloaded by user (App Store, Google Play, ...)
  - Installed on mobile device
- **Web Applications**
  - Accessible via URL
  - Runs in any modern browser

App #1 - Mobile App
Tools Involved + DrupalGap 1.x

Why Drupal?

Drupal let's us easily manage our...

Users   Content   Files

Why PhoneGap?

It let's us utilize familiar web technologies like...

and then ...

Compiles them into Mobile Apps

Android (JAVA)

PhoneGap

(Objective-C, Swift)

If we know HTML, CSS and JavaScript, then...

```html
<html>
  <body>
    <h1>My Custom App</h1>
    <ul>
      <li><a href="#">Button #1</a></li>
      <li><a href="#">Button #2</a></li>
    </ul>
    <p>Hello World</p>
    <h2>www.example.com</h2>
  </body>
</html>
```
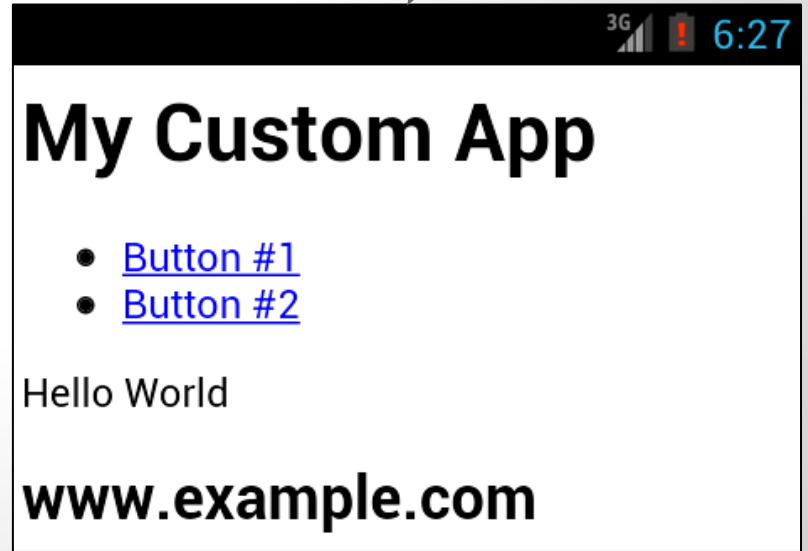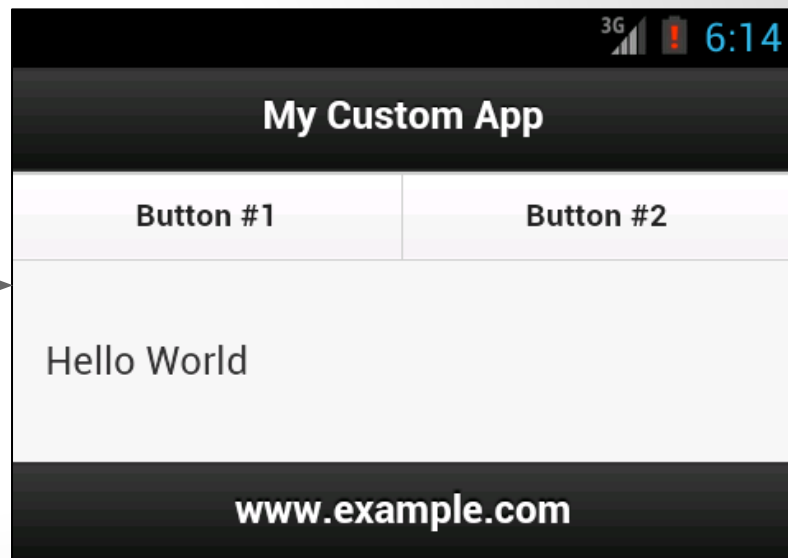
PhoneGap

3G 6:27

My Custom App

- [Button #1](#)
- [Button #2](#)

Hello World

www.example.com

… we can build mobile apps.

Why jQuery Mobile?

jQuery Mobile takes simple HTML and...

… makes it pretty, and mobile friendly.

jQuery Mobile's HTML Markup

```html
<html>
  <head><!-- jQuery Mobile includes go here --></head>
  <body>
    <div data-role="page">
      <div data-role="header"><h1>My Custom App</h1></div>
      <div data-role="navbar"><ul>
        <li><a href="#">Button #1</a></li>
        <li><a href="#">Button #2</a></li>
      </ul></div>
      <div data-role="content"><p>Hello World</p></div>
      <div data-role="footer"><h2>www.example.com</h2></div>
    </div><!-- page -->
  </body>
</html>
```
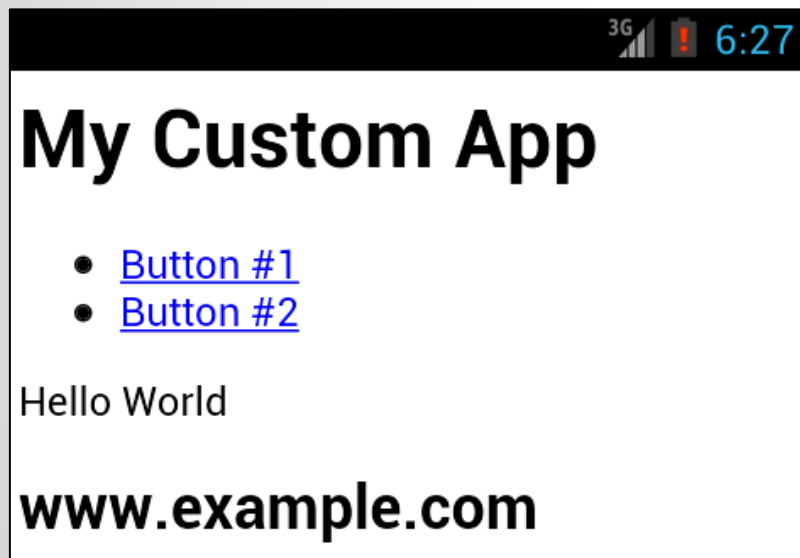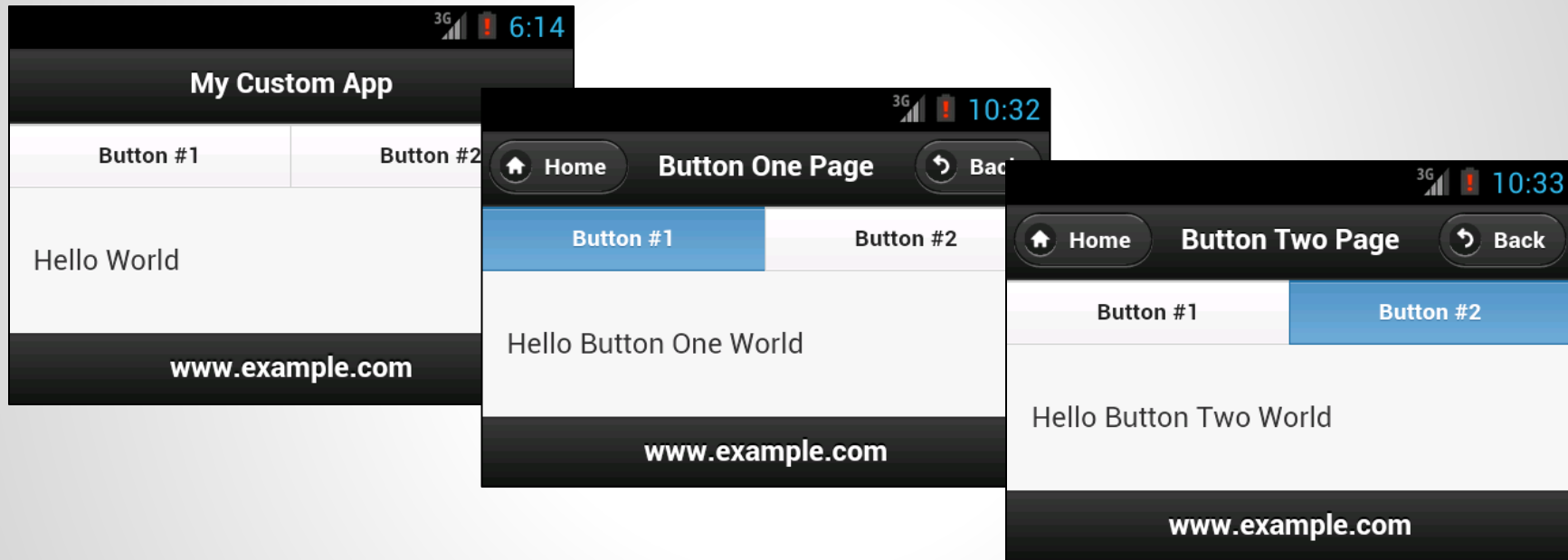
That's great, but...

… how do we handle multiple pages?

Are we going to copy and paste?

No thanks...

Say "Hello World" to DrupalGap

An *open source* application development kit for Drupal

We use Drupal to easily build our websites...

… so let's use DrupalGap to easily build our apps.

Easily build apps, you say?

Let's see it to believe it…
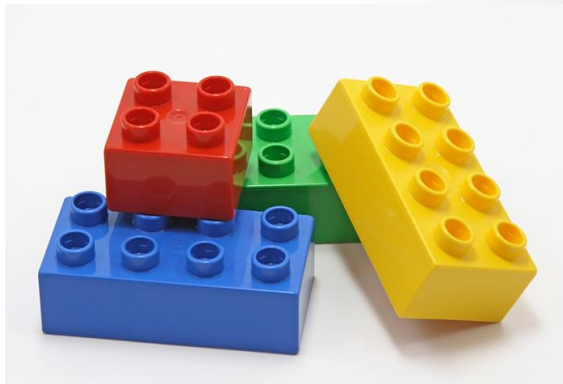
App #1: Mobile App - GeoTag a Photo and Upload it

http://tylerfrankenstein.com/code/build-mobile-app-geo-tag-photo

Neat-o! How does it work?

"DrupalGap inherits Drupal development concepts like…"

- modules
- hooks
- themes
- regions
- blocks
- menus

"… but uses JavaScript instead of PHP."

Interesting, tell me more...

"DrupalGap has easy access to our Entities and Views, ..."

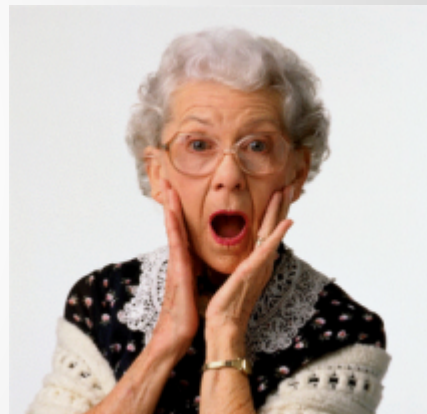"... plus built in support to navigate between, and display all of our users, content and taxonomy."

But wait, there's more...

"For ~~only $19.95~~ *free*, it also comes with..."

- Contributed modules
- Forms API
- Render arrays/objects
- Widgets
- Localization (multilingual support)
- Lots of other goodies

"... so we can easily build our apps!"

App #2 - Web App
Tools Involved + DrupalGap 2.x
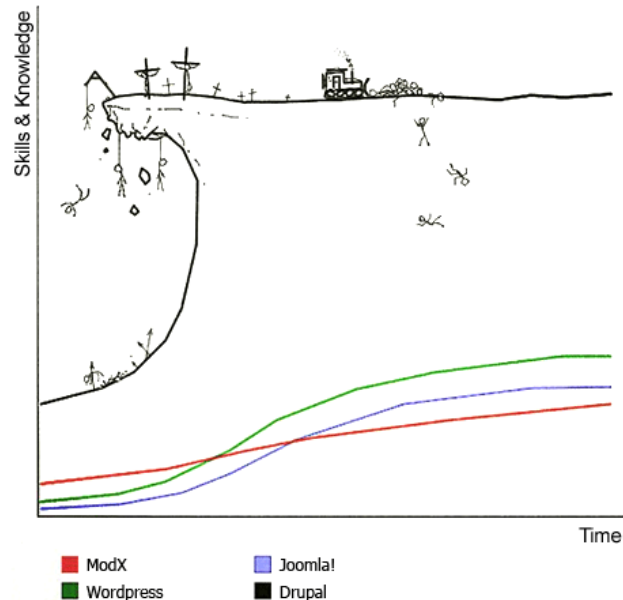
Why AngularJS?

JavaScript Learning Curves

jQuery   Node.js   AngularJS

Learning curve for popular CMS

Skills & Knowledge

Time

ModX   Joomla!
Wordpress   Drupal

"I'm not the best person to ask, but after just a few weeks, I'm blown away by the power of even the introductory features. With a similar learning curve to Drupal, I'll safely assume the power will continue to grow."
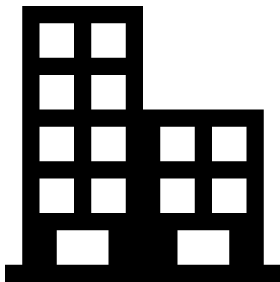
Why CSS 3?

- Pick a Framework
  - Bootstrap, Foundation, Ionic…
- Design from scratch
  - Use your own CSS chops

"A big complaint about DrupalGap 1 is that it is tightly coupled with jQuery Mobile, and made it difficult for designers to work with. AngularJS doesn't force you into a design framework, it let's you pick your own, if any."

Enough already...

Get Nearby Content and Show on Map

http://tylerfrankenstein.com/code/headless-drupal-web-app-angular-js-and-drupalgap

Awesome, how do I get started?

DrupalGap Module

- https://drupal.org/project/drupalgap

DrupalGap SDK

- https://github.com/signalpoint/DrupalGap

Hello World

- http://drupalgap.org/hello-world

Drupal 8 and beyond...

- REST API in D8 Core
  - Greatly reduces dependencies
  - Increases feature set
- DrupalGap has the "D8CX" pledge
  - DrupalGap 8 will be released the same day as Drupal 8
- Continue onward with AngularJS
  - Support other JS frameworks…?
- Add support for Ionic and Zurb Foundation
  - Support other CSS frameworks…?

Questions / Comments ?

- https://drupal.org/u/tyler.frankenstein
- https://github.com/signalpoint
- http://tylerfrankenstein.com
- *@FrankensteinTJ*

"Thank you!"