

# Building Apps with DrupalGap



**Drupal Camp PA 2015**

**@ The University of Pittsburgh**

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*by: Tyler Frankenstein*

*<http://drupalcamppa.org/session/building-apps-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)*



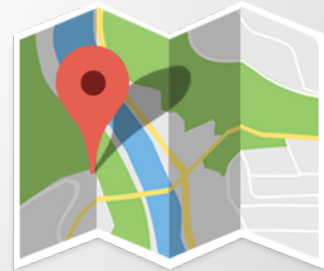
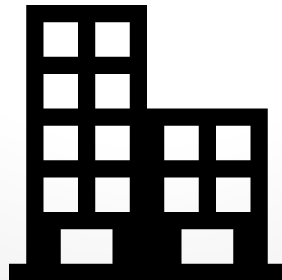
Complete portfolio available at [tylerfrankenstein.com/portfolio](http://tylerfrankenstein.com/portfolio)

# 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...*



Phone**Gap**

**HTML**



**JS**



**CSS**



*and then ...*

# Compiles them into Mobile Apps

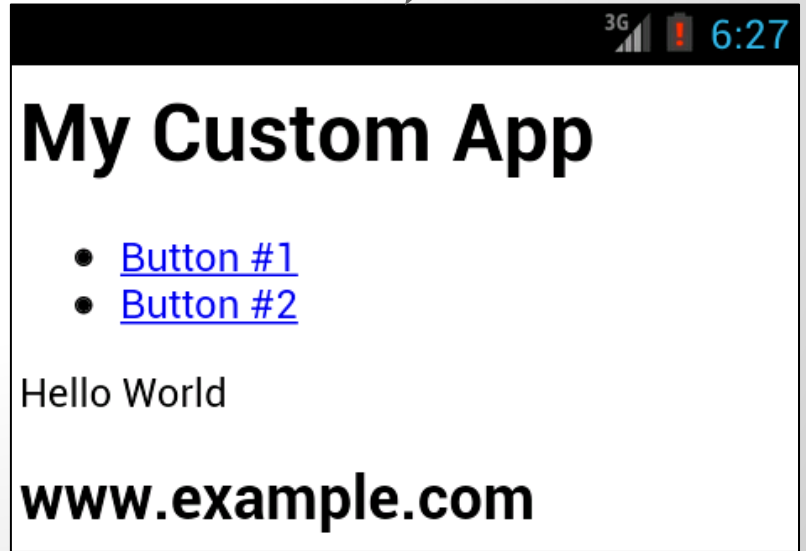


# If we know HTML, CSS and JavaScript, then...

```
<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

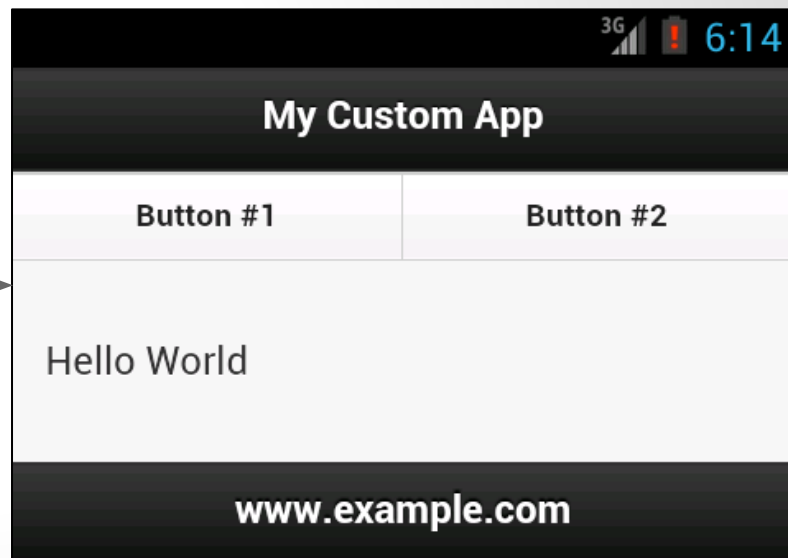
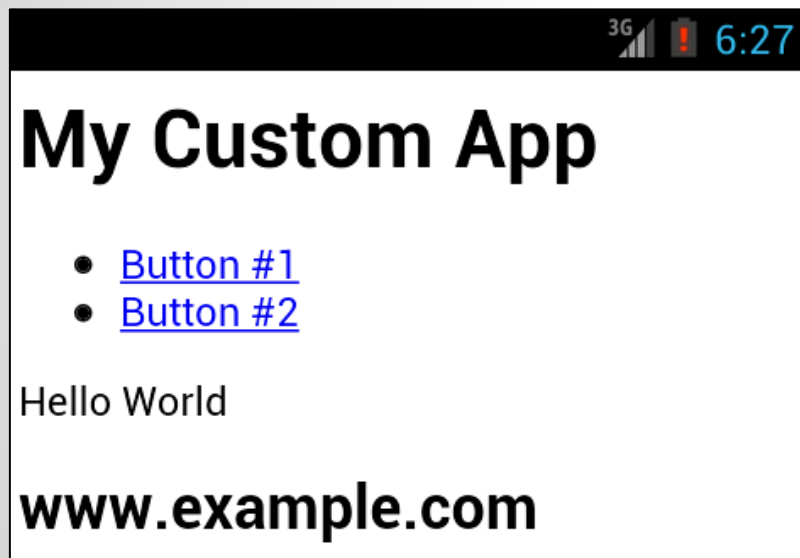


... we can build mobile apps.

# Why jQuery Mobile?



*jQuery Mobile takes simple HTML and...*

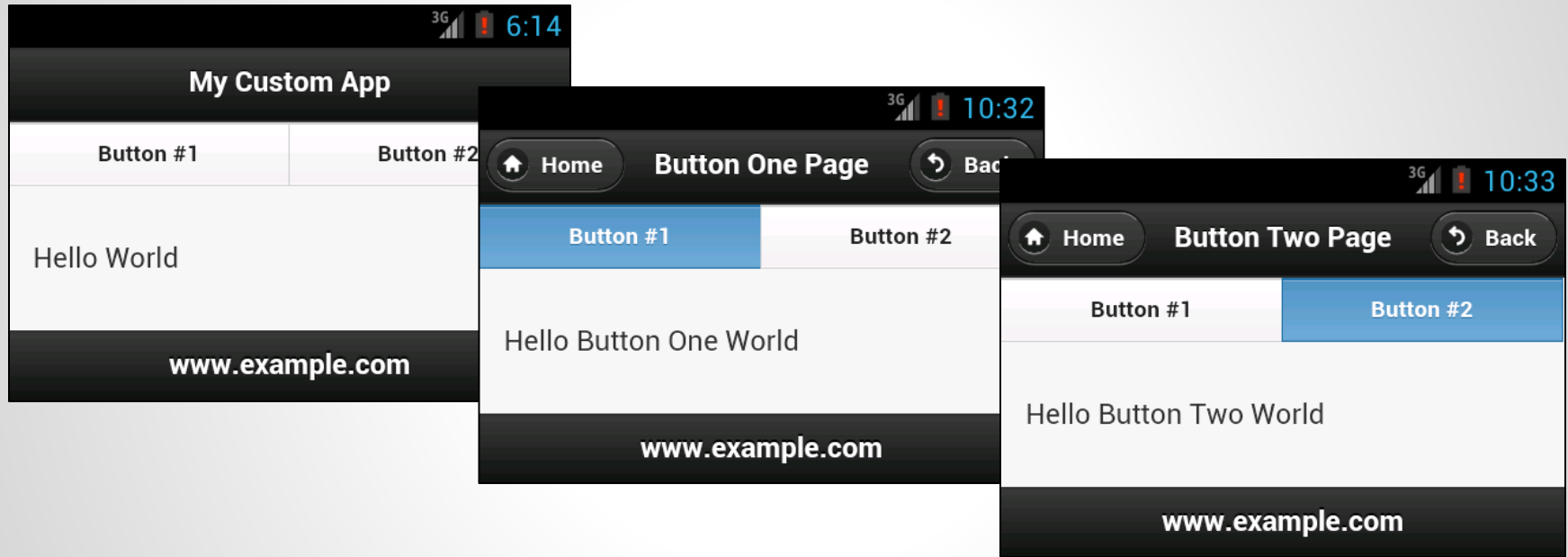


*... makes it pretty, and mobile friendly.*

# jQuery Mobile's HTML Markup

```
<html>
  <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*

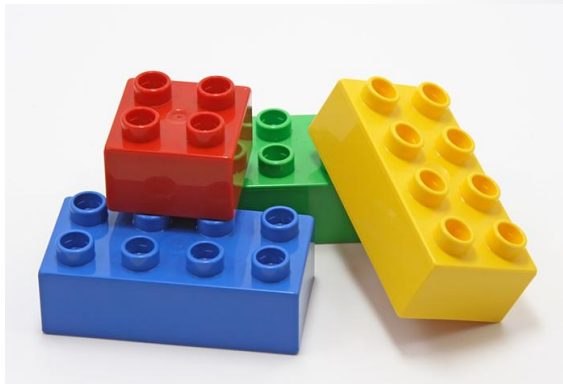


<http://tylerfrankenstein.com/code/build-mobile-app-geo-tag-photo>

# 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, ...”

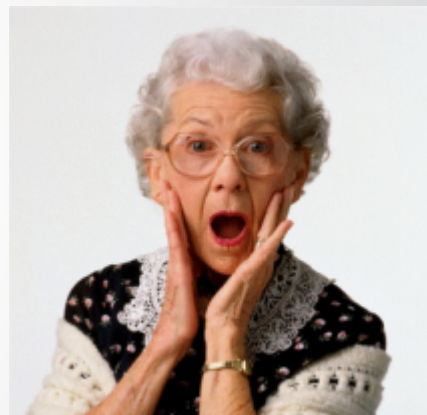


“... plus built in support to navigate between, and display all of our users, content and taxonomy.”

# 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

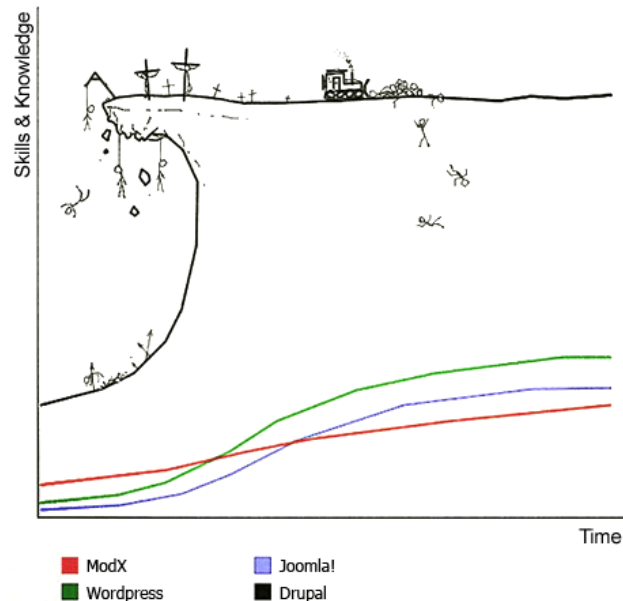


Node.js



AngularJS

Learning curve for popular CMS



*“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?

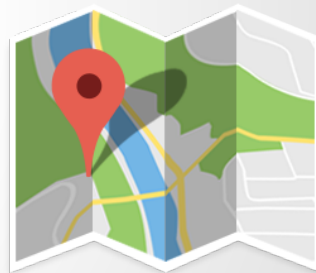
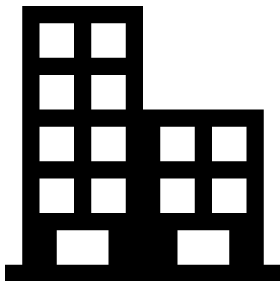
- Pick a Framework
  - Bootstrap, Ionic, Foundation...
- Design from scratch
  - Use your own CSS chops

“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...

## Example #2 - Web App

*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!”

