### WEB APP DEVELOPMENT

Bootstrap + Angular

#### Website

#### Static pages:

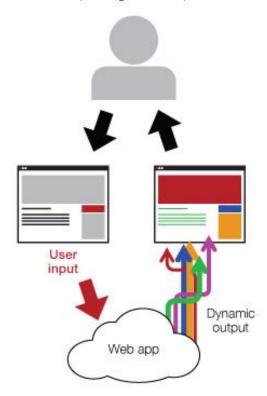
Every user sees the same information each time



### Web App

#### Dynamic pages:

Every user sees the different information depending on their input









## WHY FRAMEWORKS?

Start with boilerplate code and working examples

Easy to customize, reuse, and take apart

Visual design is already well-coordinated

Often a lot of documentation, extensions, and projects to browse

## **WHAT'S IN A FRAMEWORK?**

A nifty file structure

Boilerplate code

Browser & device support (CSS resets, media queries)

Grid system

Themed elements (styling, animations, colors, assets)

# WHAT'S IN A FRAMEWORK? BOILERPLATE CODE

- Modular
- Best practices
- Styling (CSS)
- Common elements
- Animations
- Interaction design

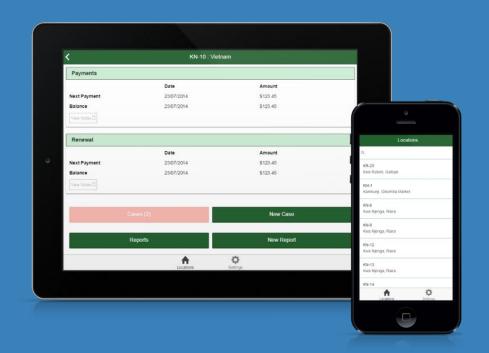
# Welcome



## WHAT'S IN A FRAMEWORK?

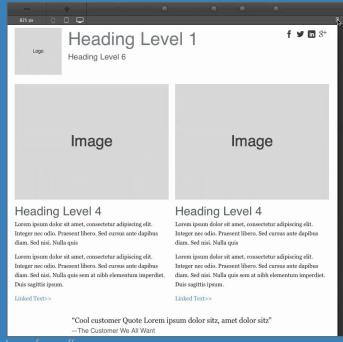
## **BROWSER & DEVICE SUPPORT**

- CSS reset
- JS shims
- Mobile-first
- Responsive
- Hybrid approach



# WHAT'S IN A FRAMEWORK? GRID SYSTEMS

- Visual cues
- Content chunking
- Responsive
- Scalable/Flexible
- Many choices





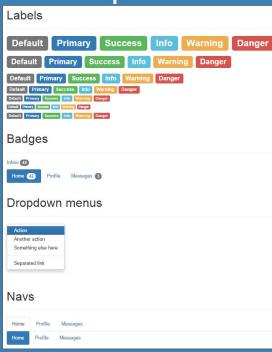
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<u>Image from Ionic</u>

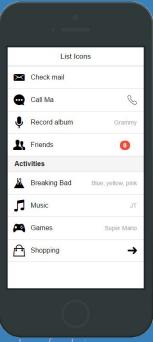
# WHAT'S IN A FRAMEWORK? THEMED ELEMENTS

- Styling
- Color scheme
- Buttons & labels
- Animations
- Assets

Bootstrap



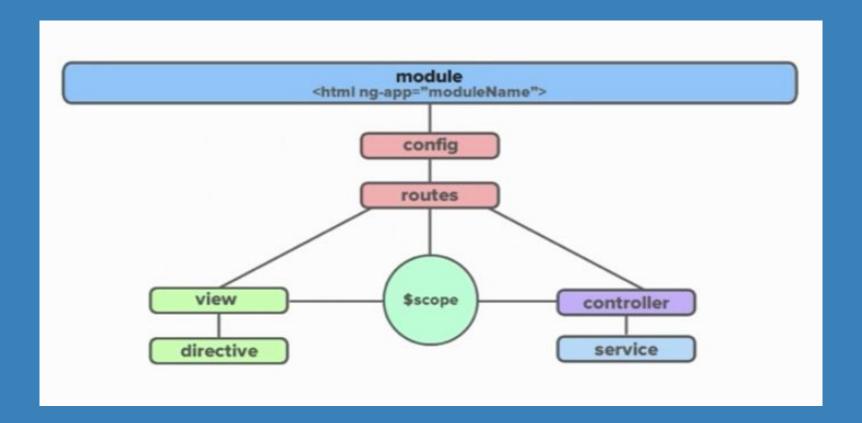
### lonic



<u>Image trom Ionic</u>



# The big picture





# **Questions?**

### WHAT'S IN A FRAMEWORK?

## A NIFTY FILE STRUCTURE

- Pre-compiled
- Organized
- Contextual
- Consistent

```
- api.php
   - scss/
   - www/
    — index.html
    — css/
    — lib/
     ionic/
  L— partials/
     tabs.html
```

## **IONIC: PROS & CONS**

### Good for:

- Hybrid apps
- AngularJS front-end
- Designs similar to iOS 7

### Bad for:

- Desktop-size websites/apps
- Ember/Backbone front-end
- Windows Phone, FirefoxOS

**Examples:** ionicframework.com/docs/components

# WALKTHROUGH IONIC: GETTING STARTED

### 1. Get Ionic

- a. Download & unzip the latest release from code.ionicframework.com
- b. Install it, follow instructions at ionicframework.com/getting-started

### 2. Browse boilerplate code

- 2.1. Go to codepen.io/ionic/public-titles-asc, click "Side Menu and Navigation"
- 2.2. Click "Share" button, then "Export .zip"

### 3. Merge boilerplate code into your Ionic project

- 3.1. Unzip Codepen export, copy contents into your project folder (myApp/www/)
- 3.2. Edit index.html, remove all instances of "//code.ionicframework.com/nightly/
- 3.3. Open index.html in a browser

# WALKTHROUGH IONIC: CONCEPTUAL OVERVIEW

docs.angularjs.org/guide/concepts

# WALKTHROUGH IONIC: CODE WALKTHROUGH

github.gatech.edu/anelson35/ng-comments

gtjourney.gatech.edu/live/gt-devhub/about

