#### CAKEFEST 2016

# CAKEPHP 3

AS A POWERFUL BACK-END API





## INTRODUCTION

- Avinash Joshi
- From Bengaluru, India
- Currently live in Dallas, Texas, United States
- Software Engineer @ 2M Companies
- Passionate about Free & OpenSource Software
- Outside of work & code:
  - Spend time with my wife (who also codes at work)
  - Volunteer at Embracing the World, a global network of charitable and social service organizations

### TALK DESCRIPTION

[INCASE YOU  $\heartsuit$  TO READ]

Many are looking to build beautiful mobile and interactive web applications. We all love CakePHP for what it is - a clean, simplistic, and powerful MVC framework!

But with technologies evolving and people moving to build API based applications, we need to leverage the batteries that CakePHP provides. In this talk / workshop, I will dive in to how you can enable CakePHP to be used as a powerful REST API, various ways of structuring your project to enable the use of CakePHP with a front-end web application like AngularJS.

### THE NEXT HOUR

- back-end  $\rightleftharpoons$  front-end separation & integration
- CakePHP 3 as a powerful backend (API) framework
- ideas & experiences on going modular
- example separation/folder structure(s)

### WHAT I WON'T BE TALKING ABOUT

- 1. Implementing API in CakePHP
- What's the best front-end technology i.e.,
   Angular vs Ember vs Backbone vs React vs other front-end out there

"Always remember that you are absolutely unique.

Just like everyone else."

-MARGARET MEAD

### WHAT DO I MEAN BY

### FRONT-END

- Part user sees, touches and experiences
- Not just Photoshop anymore!

### **BACK-END**

Supports the front-end: Server, Application, Database

### THE RIGHT WAY

### MONOLITHIC

CakePHP is your MVC guru — handles back-end business logic & generates front-end user interface that may have Javascript plugins

## MODULAR / MICRO-WEB

You have a separation of back-end & front-end (two completely different technologies)



No! Try not!

DO or DO NOT,

there is no try.

### GO MODULAR

- Light-weight
- A better API-driven architecture
- Token based Authentication (JWT)
- {Multi,Re}-use in Web, Mobile, and Desktop Apps
- And many more that I may have missed out on...

### THE SEPARATION

CAKEPHP

# MVC becomes MC | V

**ANGULARJS** 

## Types:

- A. Complete Separation
- B. Integrated Separation

### COMPLETE SEPARATION

- Two separate repositories
- Independently code, build, test & deploy
- Host your front-end on a CDN for faster delivery
- Spin multiple EC2 / EB instances for back-end
- Prepare for CORS (Cross-Origin Resource Sharing)

### REPOSITORIES

myGitHost.ext/username/project-frontend

- Hosts your front-end code
- yourApp.com

myGitHost.ext/username/project-backend

- Hosts your back-end CakePHP API code
- api.yourApp.com

## FRONT-END REPO

```
<u>frontend</u>
    bower.json
    bower_components/
   components
    L— home
        ├─ homeController.js
        -- homeView.html
   index.html
    scripts
    ├─ app.controller.js
    ├── app.factory.js
    ├─ app.module.js
    config.router.js
    styles
    └─ style.css
  - tpl
    ├─ footer.html
        header.html
```

### BACK-END REPO

```
backend (your CakePHP Code)
   src
       Controller
       ── AppController.php
       ── BlobsController.php
      Model
       ├─ Behavior
           — empty
       ├─ Entity
           └─ Blob.php
       └─ Table
           □ BlobsTable.php
       Routing
       └─ Filter
```

### INTEGRATED SEPARATION

#### Front-end

yourApp.com

#### Back-end

- yourApp.com/api OR
- yourApp.com/\_api OR
- yourApp.com/\_/api OR
- Whatever you prefer!

## INTEGRATED REPOSITORY

```
_api (CakePHP)
   src
    ├─ Console/
        Controller
        ├─ AppController.php
        ├─ Component/
        └─ V1

    □─ BlobsController.php

_ui (AngularJS)
   bower.json
    bower_components
  - components/
├─ scripts/
├─ styles/
└─ tpl/
index.html
```

"Talk is cheap. Show me the code."

-LINUS TORVALDS

### TIPS

- Think about using AWS S3 to store files
- AngularJS lazyload
- If SEO is important, use <u>prerender.io</u>
- Use CRUD github.com/ADmad/cakephp-jwt-auth
- Use CRUD github.com/friendsofcake/crud

## QUESTIONS?

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