

BUILDING PROGRESSIVE WEB APPS







MATT RAIBLE / @MRAIBLE





Who is Matt Raible?



Father, Skier, Mountain Biker, Whitewater Rafter

Web Framework Connoisseur

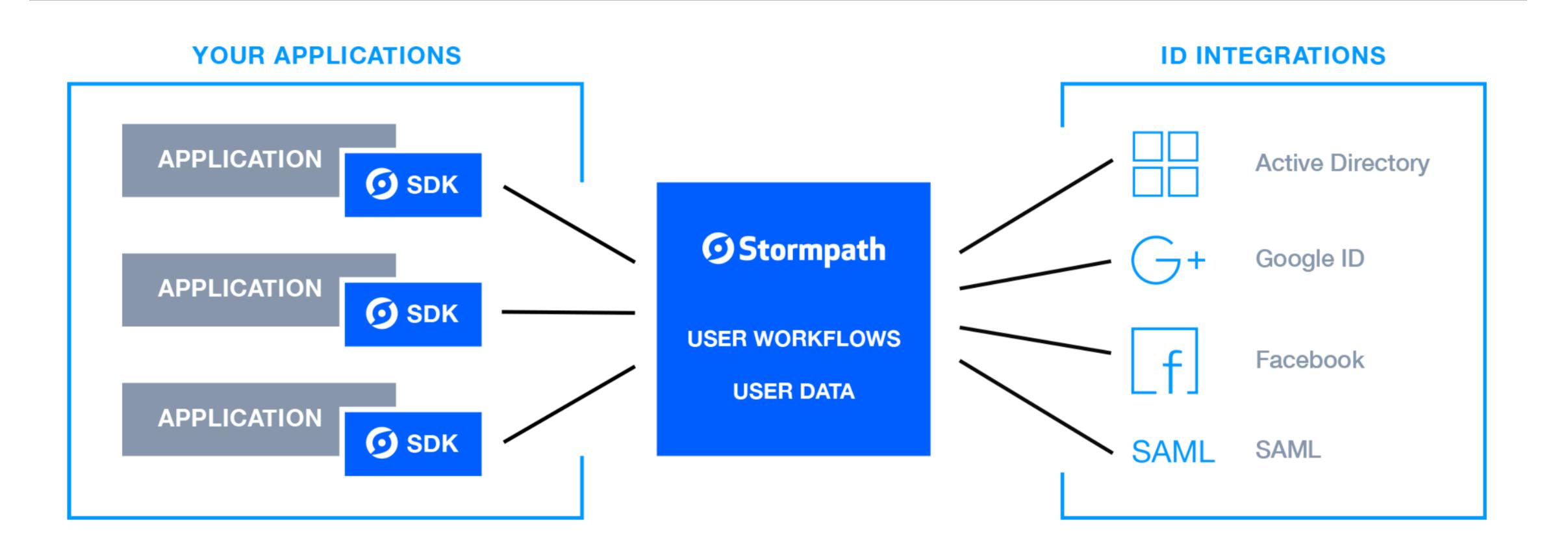
Ul Architect and Java Champion Stormpath Developer Evangelist



Blogger on raibledesigns.com

Stormpath

Stormpath User Management





























Spring Boot

Automatically configures Spring whenever possible

Provides production-ready features such as metrics, health checks and externalized configuration

Absolutely no code generation and no requirement for XML configuration

Embeds Tomcat, Jetty or Undertow directly

SPRING INITIALIZR @ start.spring.io

1. bash

```
75% [mraible:~] $ curl start.spring.io
```

:: Spring Initializr :: https://start.spring.io

This service generates quickstart projects that can be easily customized. Possible customizations include a project's dependencies, Java version, and build system or build structure. See below for further details.

The services uses a HAL based hypermedia format to expose a set of resources to interact with. If you access this root resource requesting application/json as media type the response will contain the following links:

++				
	Rel		Description	
+		+		-+
	gradle-build		Generate a Gradle build file	
	gradle-project	I	Generate a Gradle based project archive	
	maven-build		Generate a Maven pom.xml	1

The top open source framework for building amazing mobile apps.

Ionic is the beautiful, free and open source mobile SDK for developing native and progressive web apps with ease.

Get started

Explore the docs

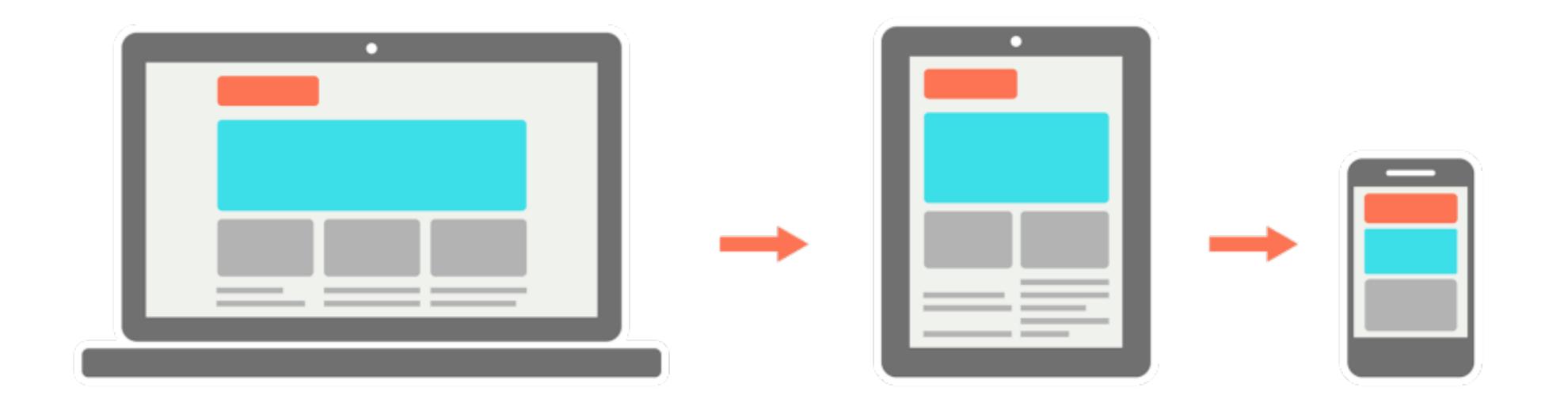
v2.0.0 / 2017-01-25 / MIT Licensed / Release Notes





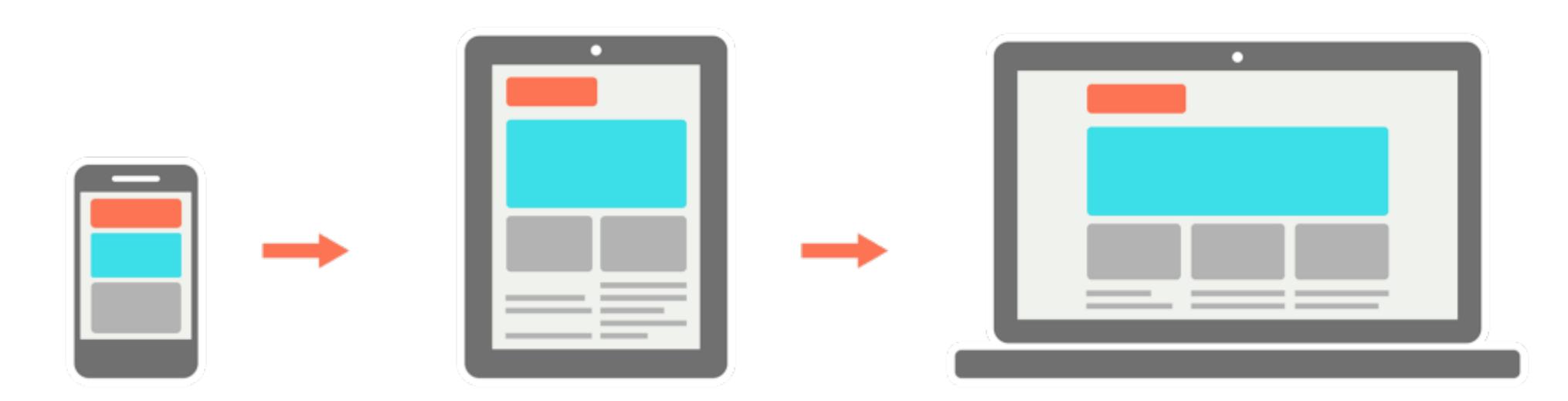
One framework.

Mobile and desktop.



Responsive Web Design

Mobile First Web Design



"We've failed on mobile"

— Alex Russell https://youtu.be/K1SFnrf4jZo

Mobile Hates You!

How to fight back:

Implement PRPL

Get a ~\$150-200 unlocked Android (e.g. Moto G4)

Use chrome://inspect && chrome://inspect?tracing

Lighthouse

DevTools Network & CPU Throttling

The PRPL Pattern

Push

Render

Pre-cache

Lazy-load

The PRPL Pattern

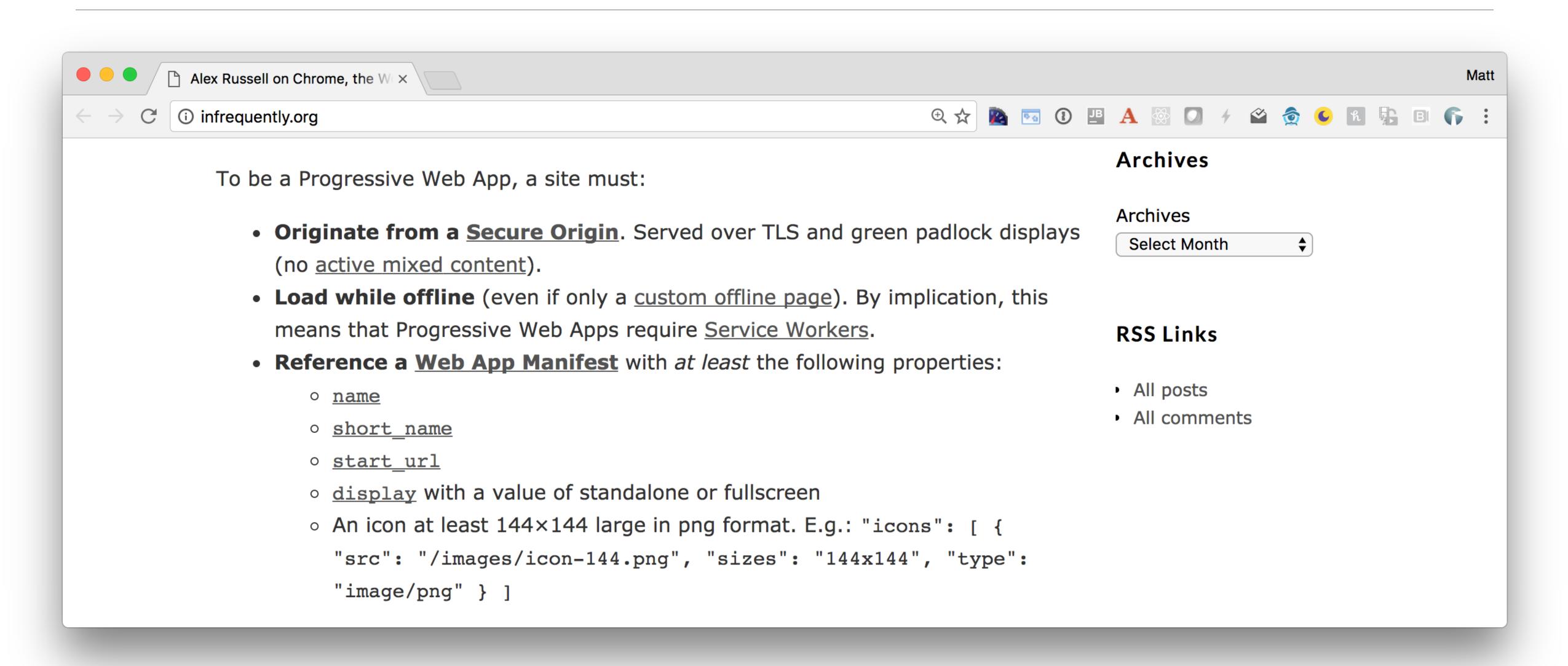
Push critical resources for the initial URL route

Render initial route

Pre-cache remaining routes

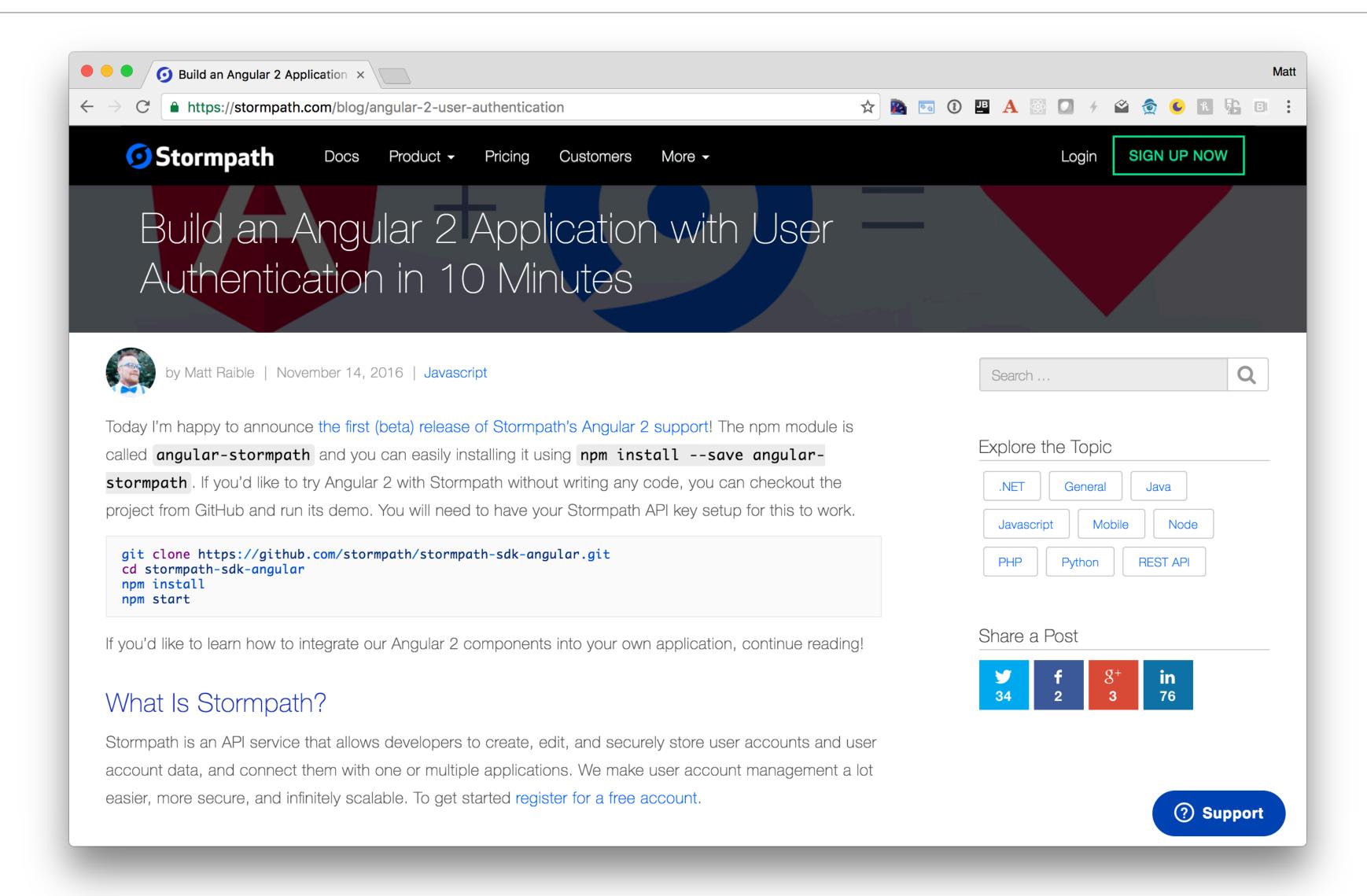
Lazy-load and create remaining routes on demand

Progressive Web Apps



Stormpath SDK for Angular





Live Coding!

Create D API



Create UI



Add Stormpath



Deploy to iOS



```
beer.ts - stormpath-spring-boot-ionic-example - [~/dev/stormpath-spring-boot-ionic-example]
  stormpath-spring-boot-ionic-example \ client \ src \ pages \ beer \ beer \ beer.ts
                                             🔻 🕀 🚔 | 🌣 🖟 🖊 📇 package.json × 🕌 TUTORIAL.md × 📥 DEMO.md × 🕌 app.module.ts × 📒 beer.html × 📇 beer.ts × 🗾 deploy.sh ×
                                                                                                     port { Component } from '@angular/core';
                                                                                                import { ModalController, ToastController } from 'ionic-angular';
                                                                                                import { BeerService } from '../../providers/beer-service';
           ▼ laclient
                                                                                                import { GiphyService } from '../../providers/giphy-service';
                                                                                                import { BeerModalPage } from './beer-modal';
                ▶ mode_modules library root
                ▶ platforms
                                                                                                   selector: 'page-beer',
                ▶ ■ plugins
                                                                                                   templateUrl: 'beer.html'
                ► resources
                                                                                                   providers: [BeerService, GiphyService]
                ▼ src
                                                                                                Jexport class BeerPage {
                                                                                                   private beers: Array<any>;
                                   app.component.ts
                                   app.html
                                                                                                    constructor(public beerService: BeerService, public giphyService: GiphyService,
                                                                                                                             public modalCtrl: ModalController, public toastCtrl: ToastController) {
                                   app.module.ts
                                   app.scss
                                   📇 main.ts
                                                                                                    ionViewDidLoad() {
                       assets
                                                                                                        this.beerService.getGoodBeers().subscribe(beers => {
                                                                                                           this.beers = beers;
                       ▼ pages
                                                                                                            for (let beer of this.beers) {
                            ▶ about
                                                                                                               this.giphyService.get(beer.name).subscribe(url => {
                            ▼ beer
                                                                                                                   beer.giphyUrl = url
                                         abeer.html
                                        beer.scss
                                         deer.ts
                                        beer-modal.html
                                        beer-modal.ts
                                                                                                    openModal(beerId) {
                                                                                                       let modal = this.modalCtrl.create(BeerModalPage, beerId);
                            contact
                                                                                                       modal.present();
                            ▶ home
                                                                                                        // refresh data after modal dismissed
                            ▶ tabs
                                                                                                        modal.onDidDismiss(() => this.ionViewDidLoad())
                       providers
                       ► theme
                                                                                                    remove(beer) {
                             declarations.d.ts
                                                                                                       this.beerService.remove(beer.id).subscribe(response => {
                             index.html
                                                                                                          for (let i = 0; i < this.beers.length; i++) {</pre>
                                                                                                              if (this.beers[i] === beer) {
                                                                                                                   this.beers.splice(i, 1);
                                                                      Terminal A Problems TypeScript 2.0.9
                                                                                                                                                                                                                                                                                                                      Event Log
        6: TODO 9: Version Control
                                                                                                                                                                                                                                                                                1:1 LF

UTF-8

Git: master

To represent the control of the contro
Frameworks detected: Android framework is detected in the project Configure (a minute ago)
```

Resources







Demo Code

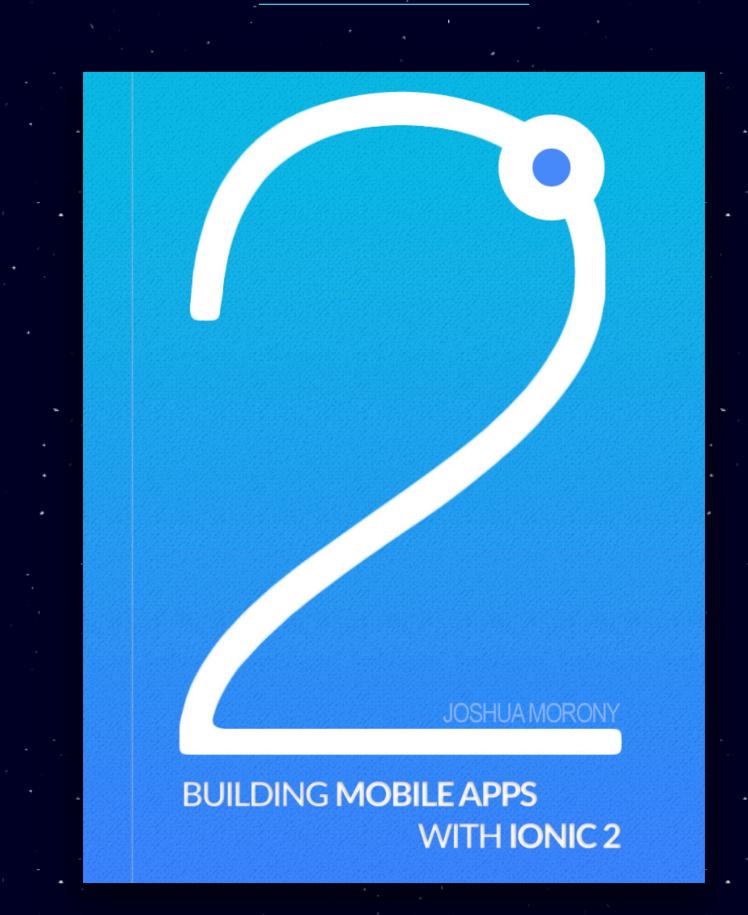
https://github.com/stormpath/ stormpath-spring-boot-ionic-example

Step-by-step Tutorial

https://github.com/stormpath/ stormpath-spring-boot-ionic-example/ blob/master/TUTORIAL.md



LEARNIONIC



Shortcut to becoming an lonic Expert

Shortcut to becoming an lonic Expert



Questions?

Keep in touch!







linkedin.com/in/mraible

Presentations

slideshare.net/mraible

Code

github.com/mraible



