Get Hip with JHipster!

Matt Raible • http://raibledesigns.com



Photos by McGinity Photo

RAIBLE DESIGNS
ENTERPRISE OPEN SOURCE CONSULTING



Who is **Matt Raible**?

Father, Skier, Mountain Biker, Whitewater Rafter

Web Framework Connoisseur

Founder of AppFuse

Bus Lover

Blogger on raibledesigns.com

What about **YOU**?

Are you a Java Developer?

How long have you been doing web development?

Do you like JSF? Do you like GWT?

Do you like JavaScript?



Java™

DEVOXX™

Do you want to be a hip Java Developer?

Java 8



Parallel Collections

JSR 310 Date and Time API

Functional Interfaces with default method

Lambda Expressions (a.k.a. Closures)

```
// sort a list by lastName
List<Person> persons = ...;
persons.sort((p1, p2) ->
    p1.getLastName().compareTo(p2.getLastName()));
```

Nashorn JavaScript Engine

Hipster

n. noun

1. One who is exceptionally aware of or interested in the latest trends and tastes.



Latest trends in JavaLand?

Annotations

Environments: dev, test, production

Microservices

Container-less Deployment

Monitoring



Spring Boot



Create stand-alone Spring applications

Embeds Tomcat, Jetty or Undertow directly

Provides opinionated 'starter' POMs to simplify your Maven configuration

Also supports/promotes using Gradle

Spring Boot



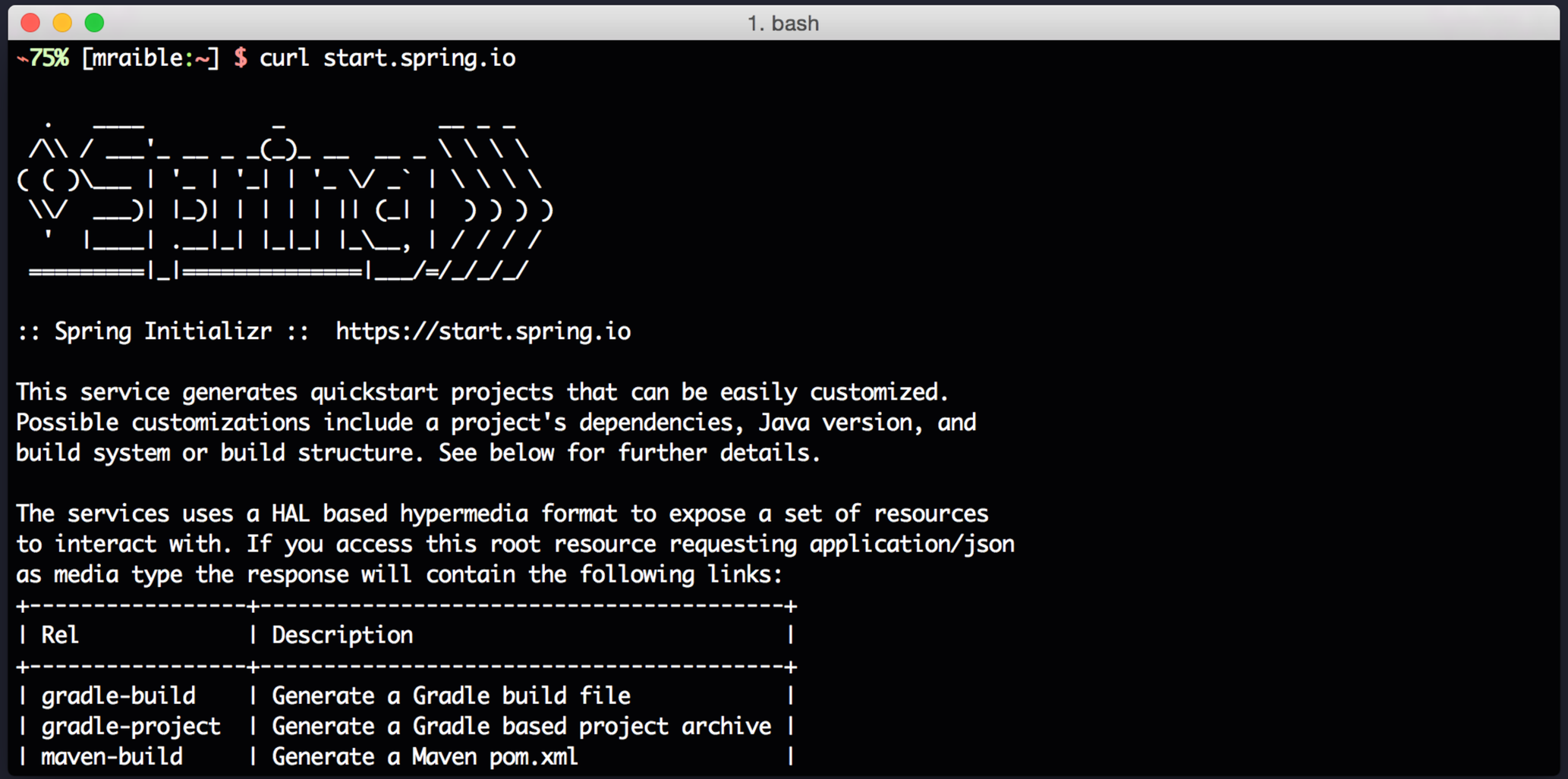
Automatically configures Spring whenever possible

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

Absolutely no code generation and no requirement for XML configuration

Grails 3.0 is based on Spring Boot

SPRING INITIALIZR @ start.spring.io





Spring Boot Demo

Latest trends in Web Development?

JavaScript MVC Frameworks

CSS 3 with Animations

Mobile First

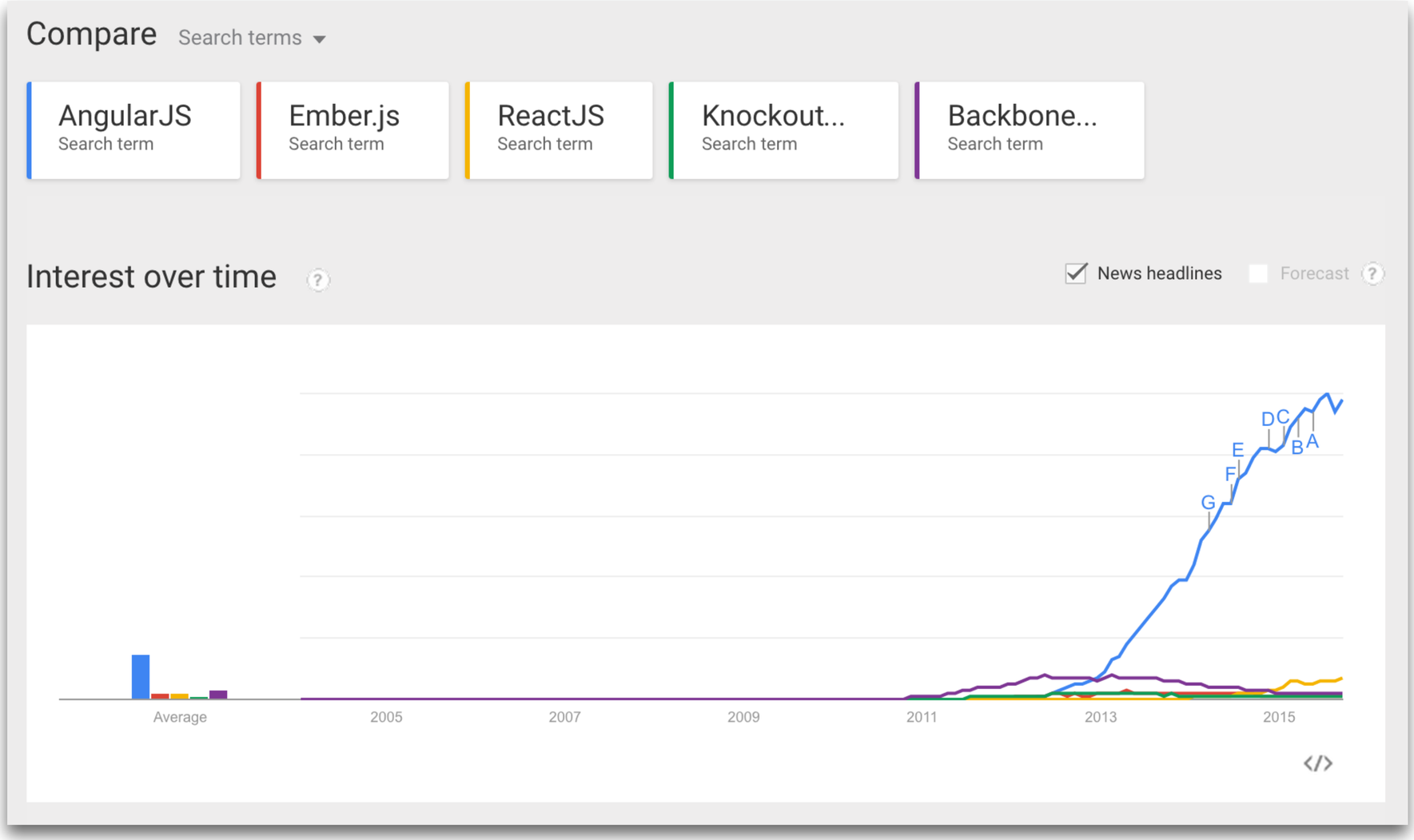
Front-End Optimization

REST APIs

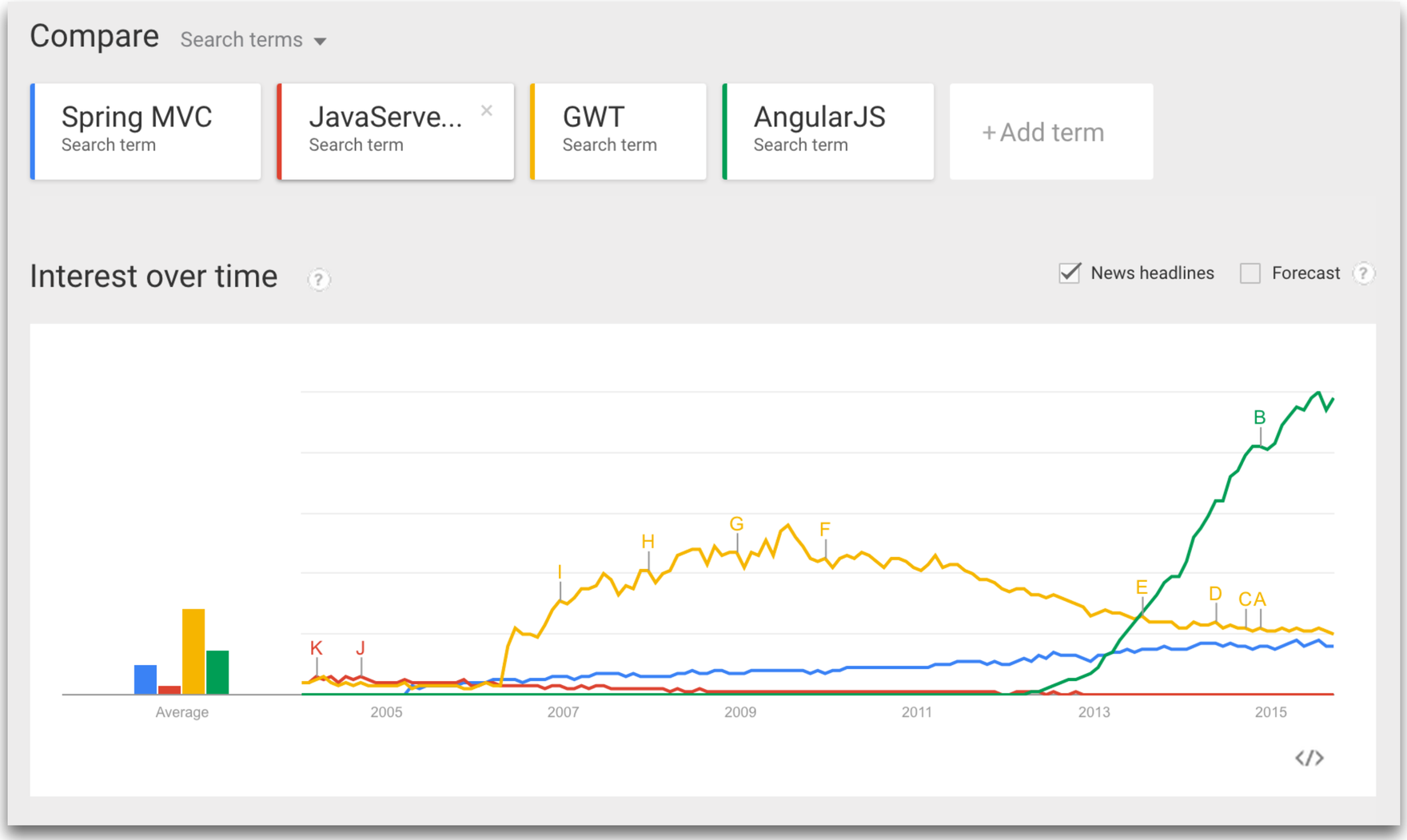



ANGULARJS
Google

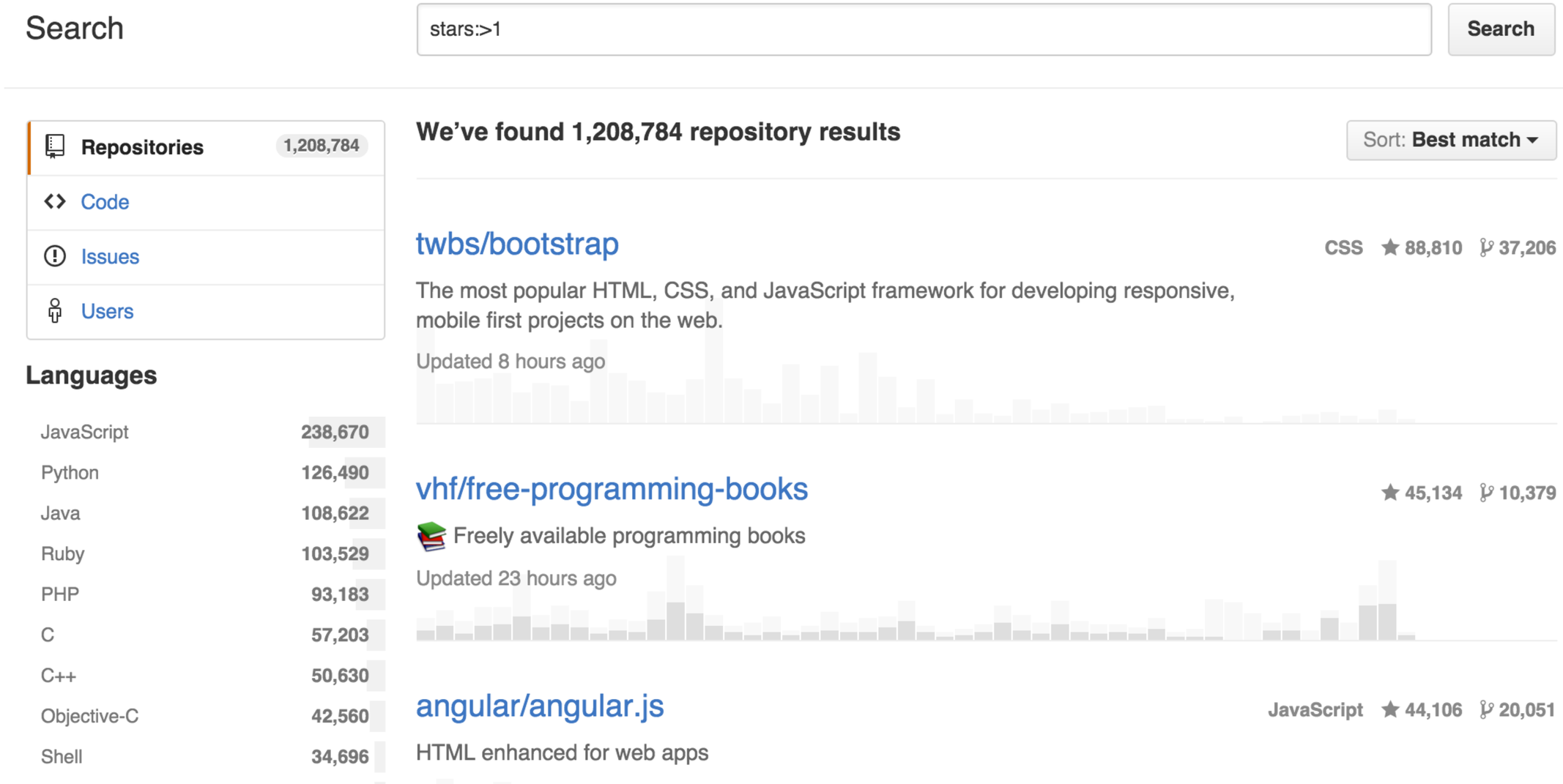
Google Trends



Google Trends

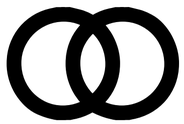


The most starred project on GitHub?



Wouldn’t it be hip if…?













JHipster

http://jhipster.github.io/

Greetings, Java Hipster!



JHipster is a
Yeoman generator,

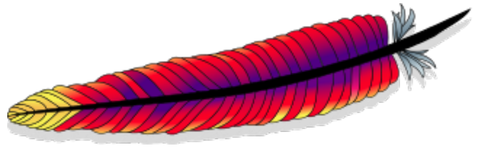


used to create a
Spring Boot + **AngularJS**
project.





JHipster Project



Web Statistics, October 2015

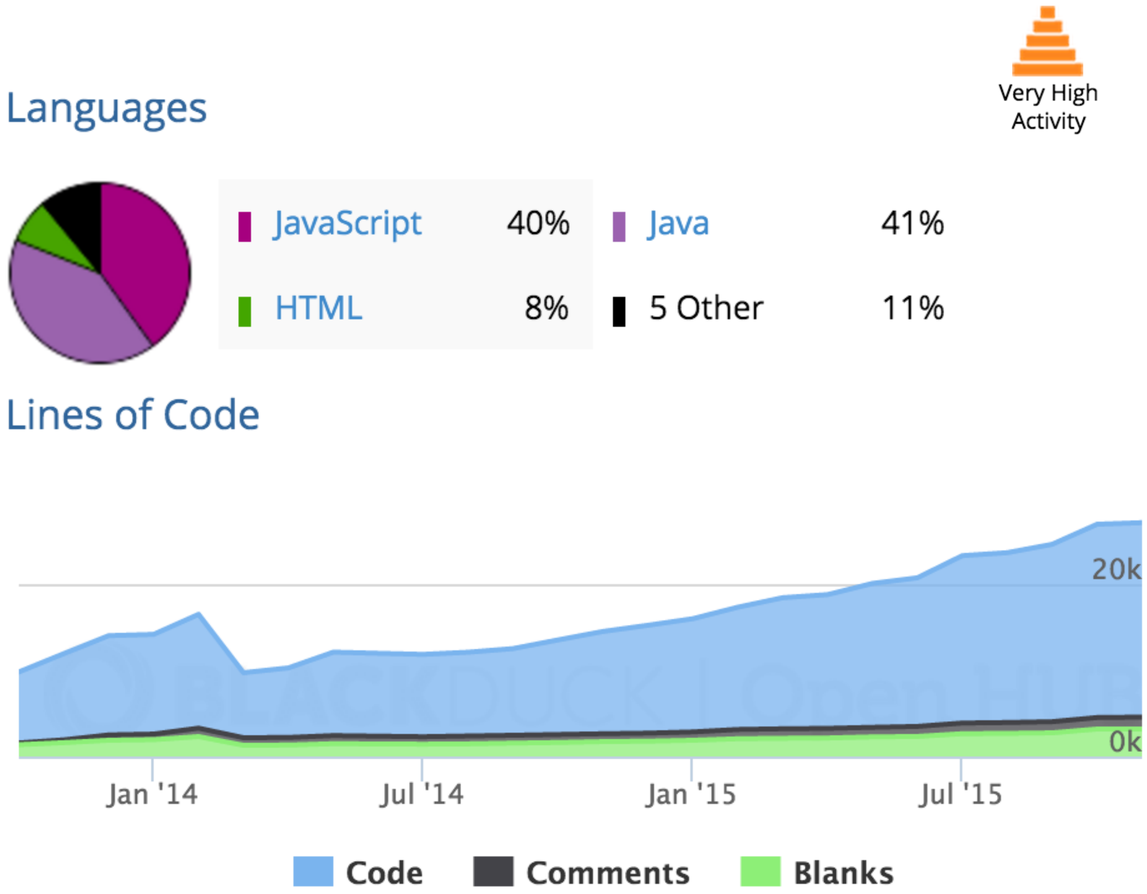
275K Page Views

10K Downloads

GitHub Statistics

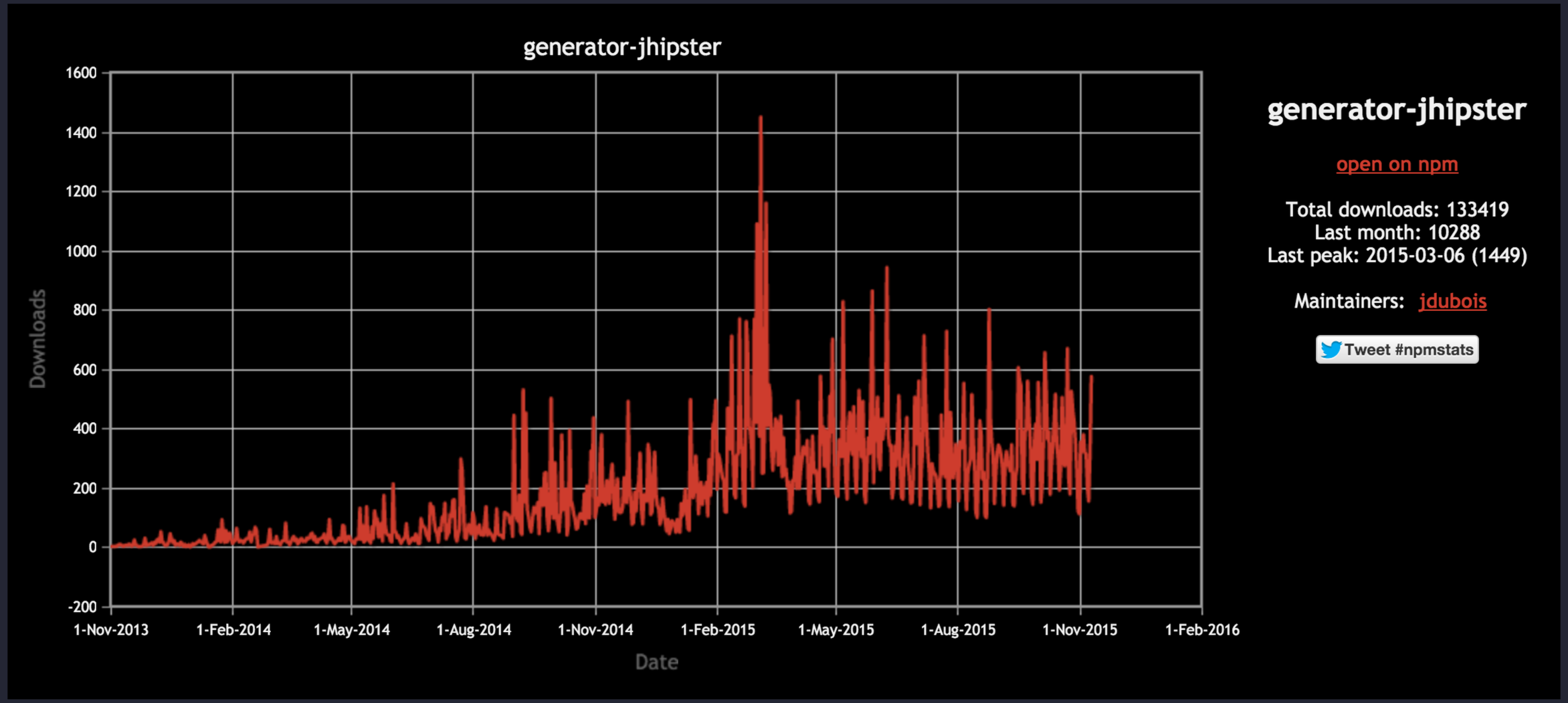
2961 Stars

159 Contributors



https://www.openhub.net/p/generator-jhipster

JHipster Downloads





JHipster

Foundational Frameworks

Spring Boot

Spring Security

AngularJS

Bootstrap

Metrics

Project Options

Maven or Gradle

Authentication Type: cookie-based (with Social), token-based or OAuth2

Type of Database: SQL or NoSQL

Caching: EhCache or Hazelcast

Grunt or Gulp.js

JHipster Features

Authentication and Security

Spring Boot Metrics Dashboard

Bootstrap and AngularJS Integrated

REST API with Spring MVC

JPA Support and NoSQL Support

CRUD Generation

Internationalization



Yeoman

http://yeoman.io/

The web's scaffolding tool for modern webapps

Helps you kickstart new projects

Promotes the Yeoman workflow

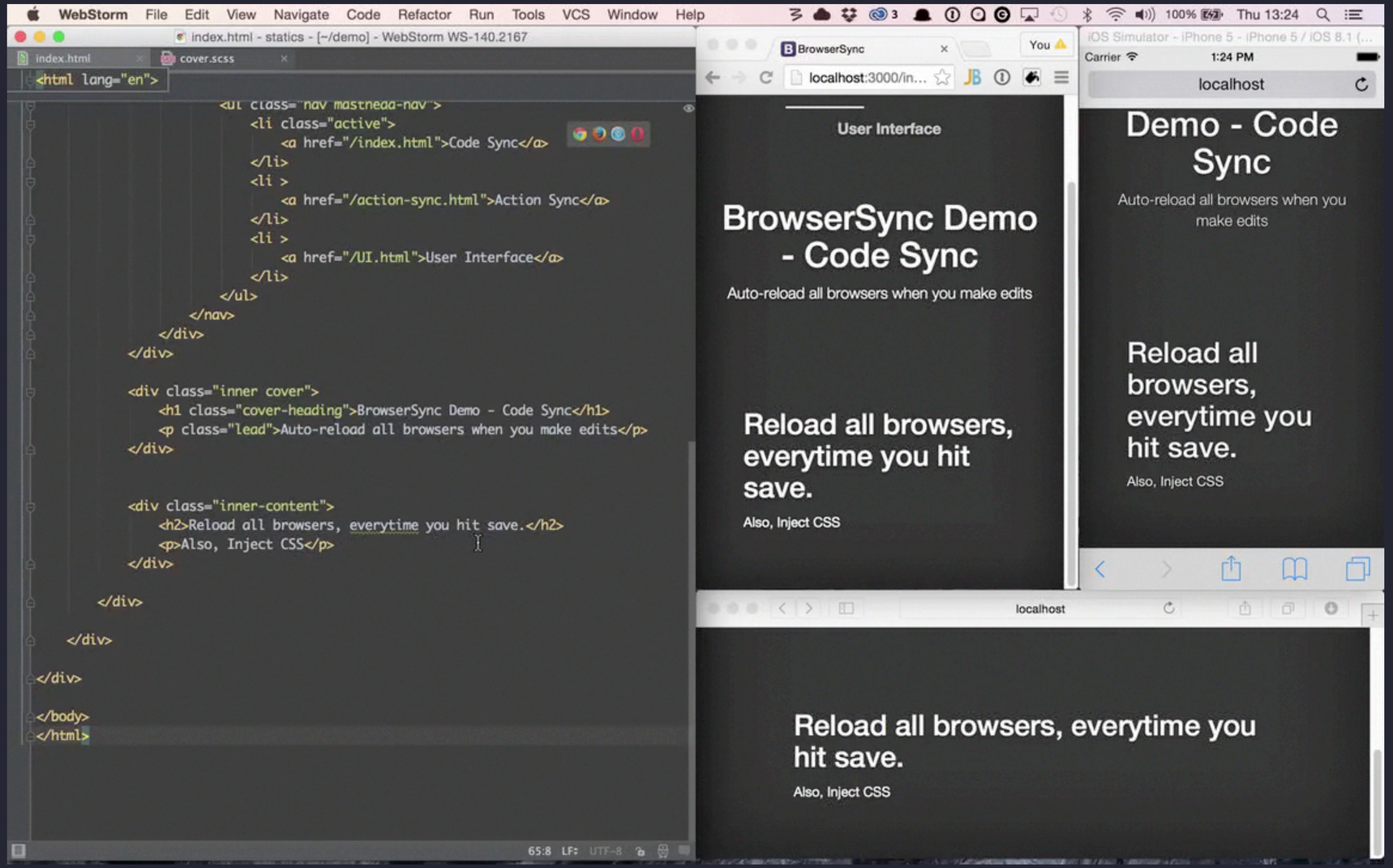






Browsersync

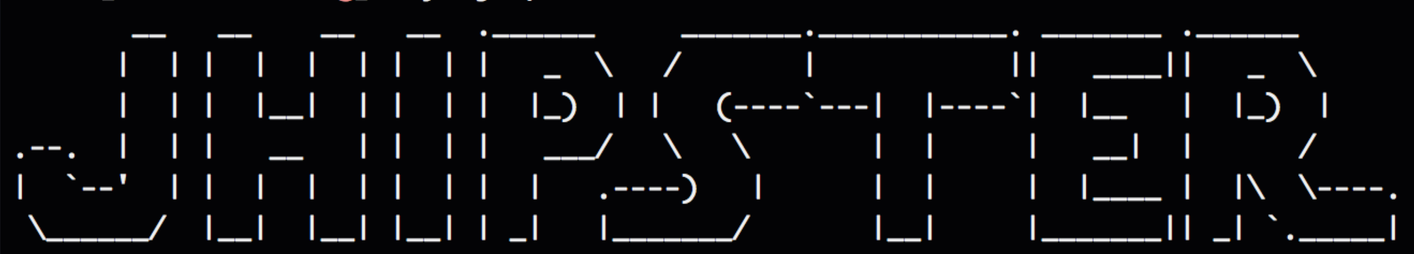
http://www.browsersync.io/



Demo Time!

1. node

```
~63% [mraible:~/blog] $ yo jhipster
```



```
                    http://jhipster.github.io

Welcome to the JHipster Generator v2.23.1

? (1/15) What is the base name of your application? blog
? (2/15) What is your default Java package name? org.jhipster
? (3/15) Which *type* of authentication would you like to use? HTTP Session Authentication (stateful, default Spring Sec
? (4/15) Which *type* of database would you like to use? SQL (H2, MySQL, PostgreSQL, Oracle)
? (5/15) Which *production* database would you like to use? (Use arrow keys)
? (5/15) Which *production* database would you like to use? PostgreSQL
? (6/15) Which *development* database would you like to use?
  H2 with disk-based persistence
  H2 with in-memory persistence
❯ PostgreSQL
```



Demo Goals

Generate a basic blog application

Look at its configuration



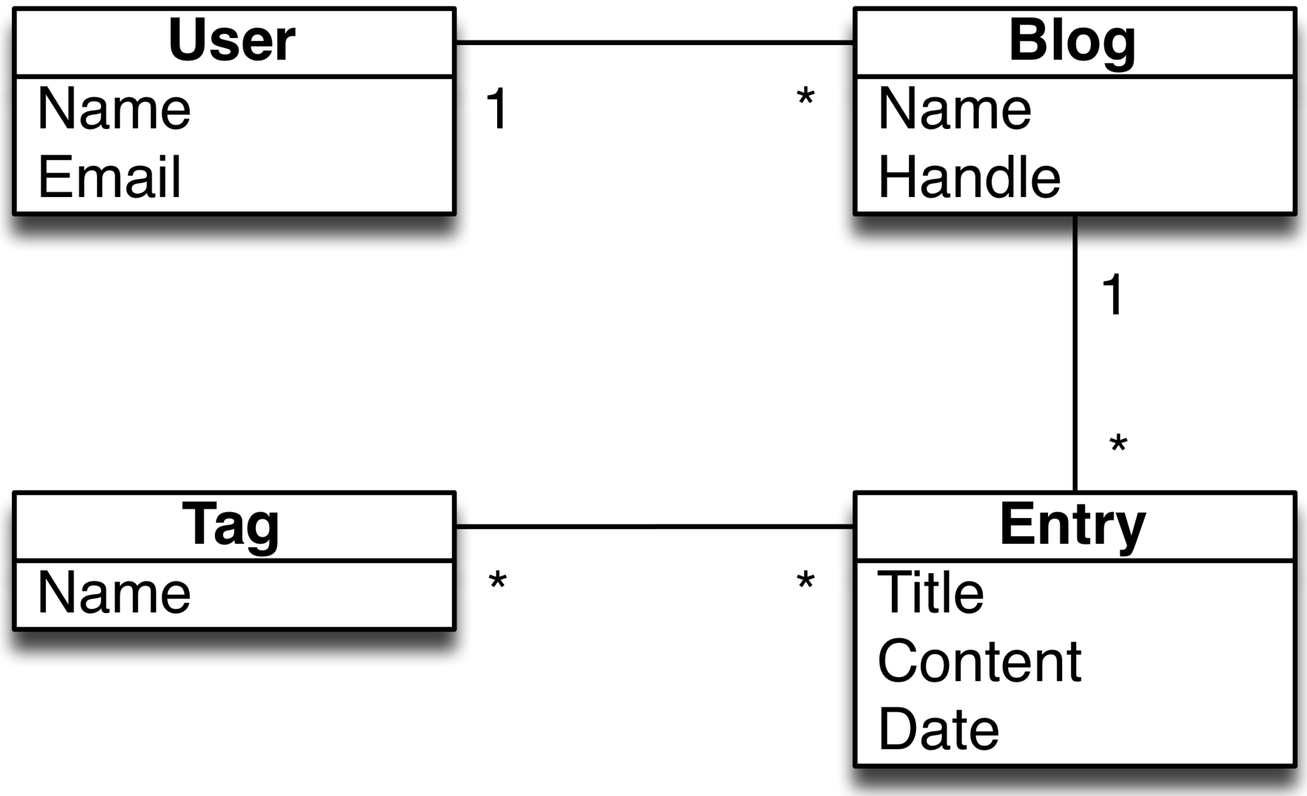
Generate the CRUD entities

Limit blogs to current user, allow HTML

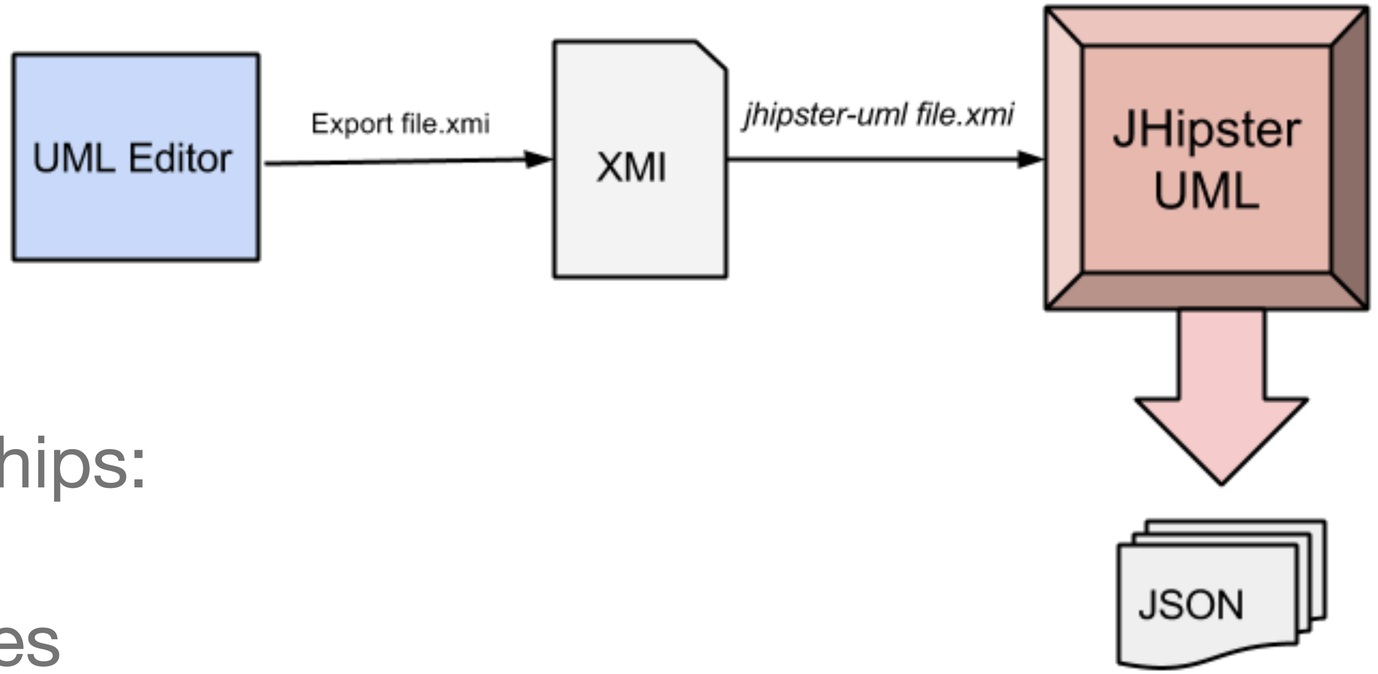
Deploy to heroku

… all in 30 minutes!

Demo Entity Diagram



JHipster UML



12 entities, 17 relationships:

JHipster: 1h 15 minutes

JHipster UML: 30 minutes

http://www.ipponusa.com/blog/jhipster-uml/

JHipster UML



Supported UML Editors

- Modelio
- UML Designer
- GenMyModel (not free)
- Visual Paradigm (not free, but proposes a community edition)

http://jhipster.github.io/jhipster_uml.html

Load Testing with Gatling



High Performance

Scala, Akka and Netty

Nice HTML-based Reporting

Scenario Recorder

```
val scn = scenario("Test the Blog entity")
    .exec(http("First unauthenticated request")
    .get("/api/account")
    .headers(headers_http)
    .check(status.is(401)))
    .pause(10)
    .exec(http("Authentication")
    .post("/api/authenticate")
    .headers(headers_http_authentication)
    .formParam("username", "admin")
    .formParam("password", "admin")
    .check(jsonPath("$.token").saveAs("x_auth_token")))
    .pause(1)
    .exec(http("Authenticated request")
    .get("/api/account")
    .headers(headers_http_authenticated)
    .check(status.is(200)))
    .pause(10)
    .repeat(2) {
        exec(http("Get all blogs")
        .get("/api/blogs")
        .headers(headers_http_authenticated)
        .check(status.is(200)))
        .pause(10 seconds, 20 seconds)
        .exec(http("Create new blog")
        .put("/api/blogs")
```

What about UI Testing?



Jasmine



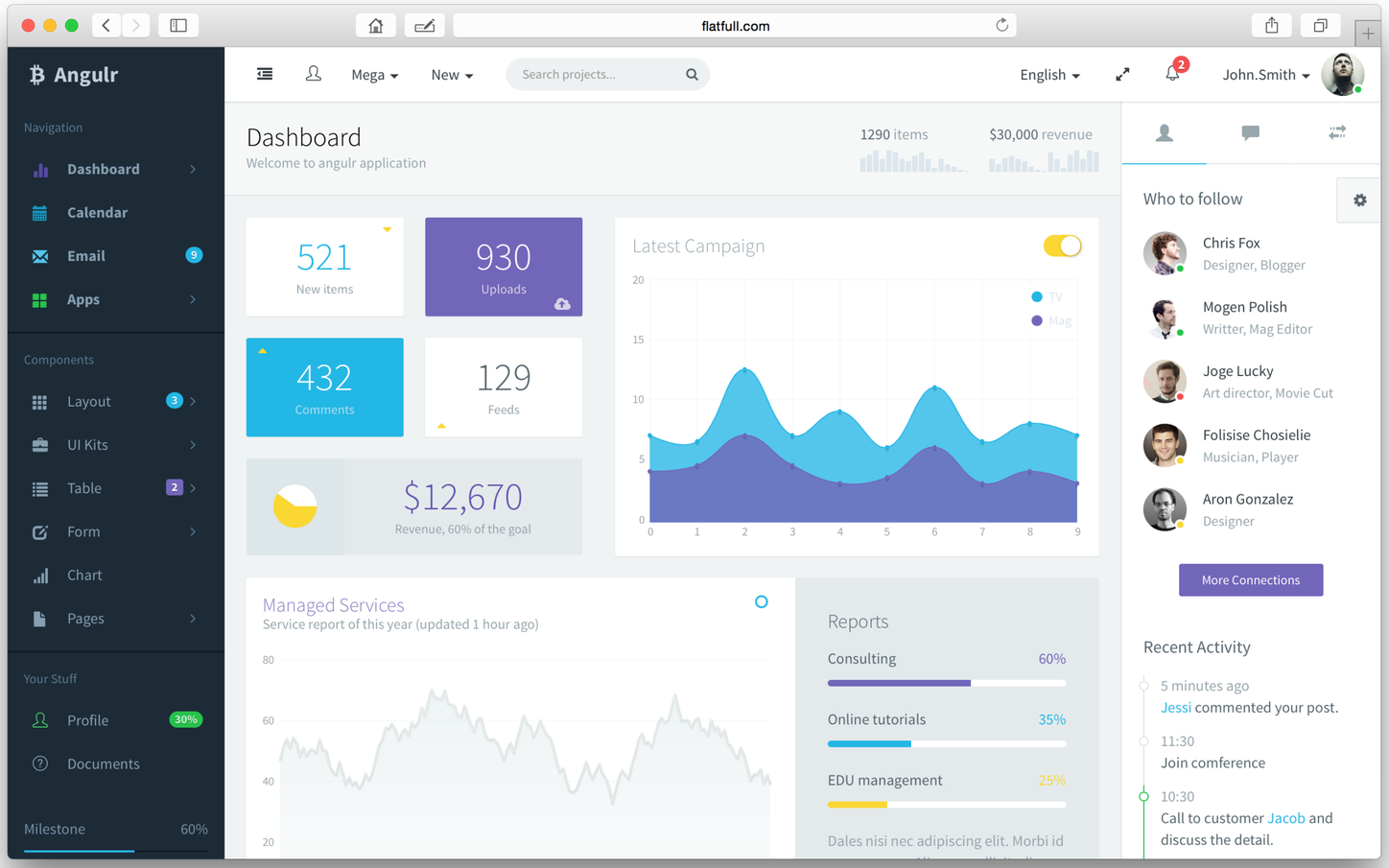
Protractor

end to end testing for AngularJS

http://www.jhipster-book.com/#!/news/entry/adding-protractor-tests

How sweet is JHipster?!

AngularJS, Java 8, Microservices - what more could you want?



Angular 2.0

```
<input type="text" [value]="firstName">

<button (click)="addPerson()">Add</button>

<input type="checkbox" [checked]="someProperty">
```

Concepts Eliminated in Angular 2.0

Controllers

Directive Definition Object

$scope

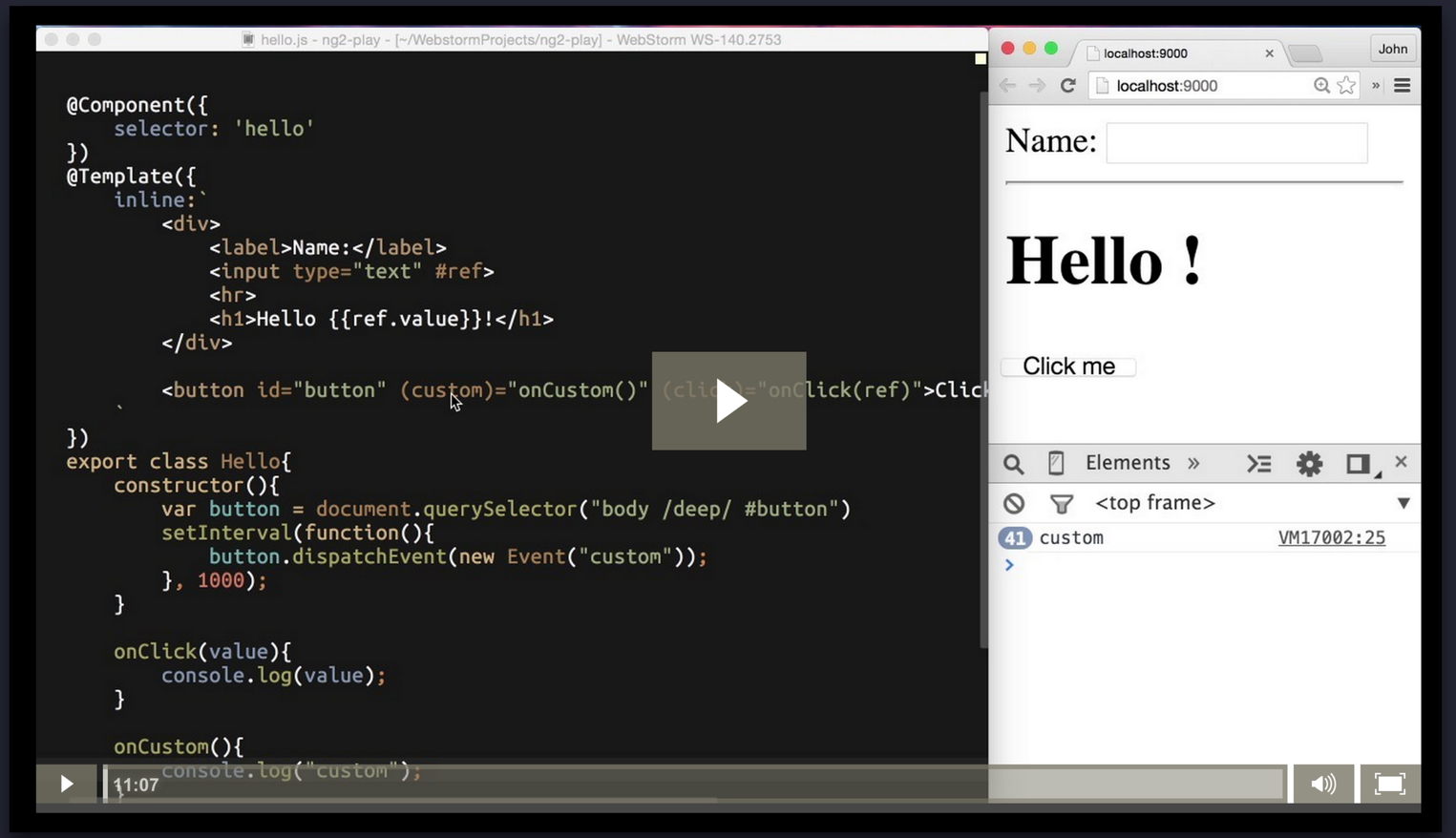
angular.module

jqLite



Angular 2: Template Syntax

Egghead.io



https://egghead.io/lessons/angularjs-angular-2-template-syntax

The JHipster Mini-Book

Written with Asciidoctor

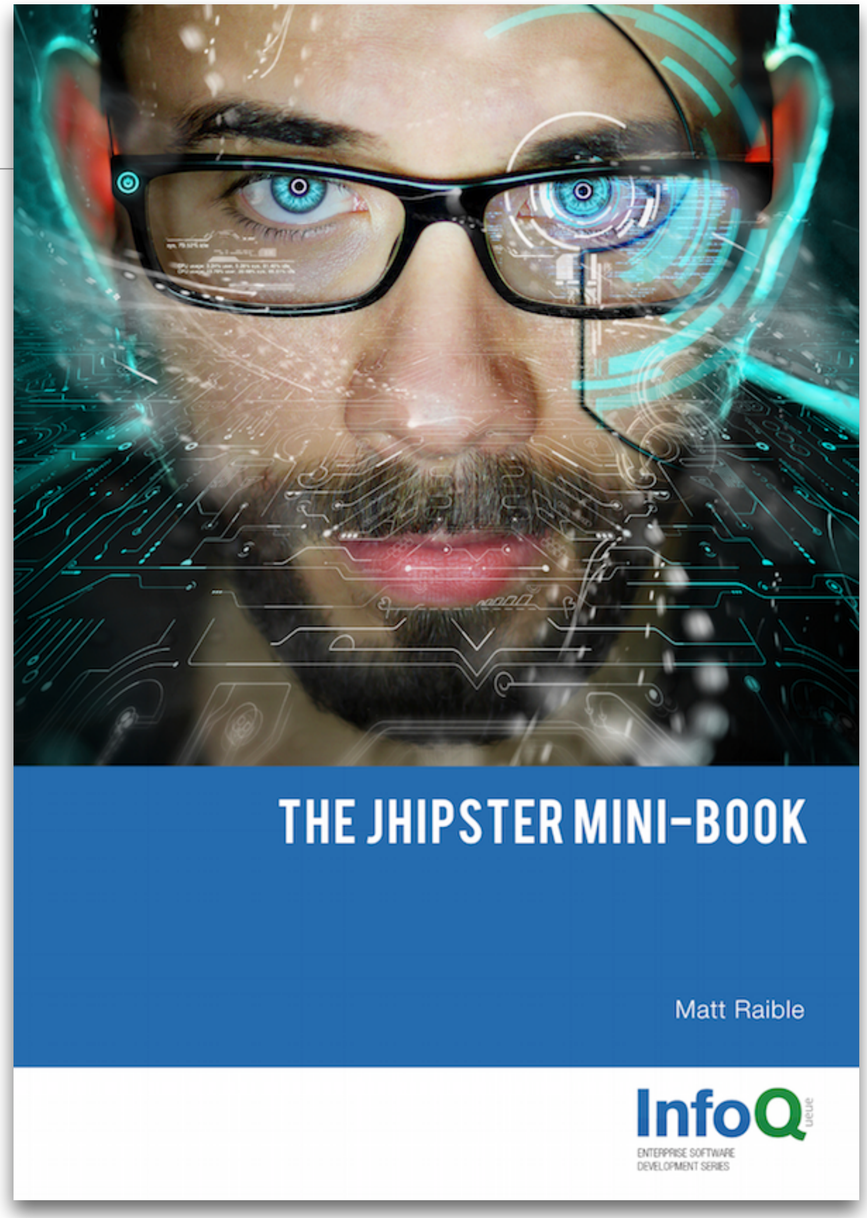
Quick and to the point, 130 pages

Developed a Real World App:

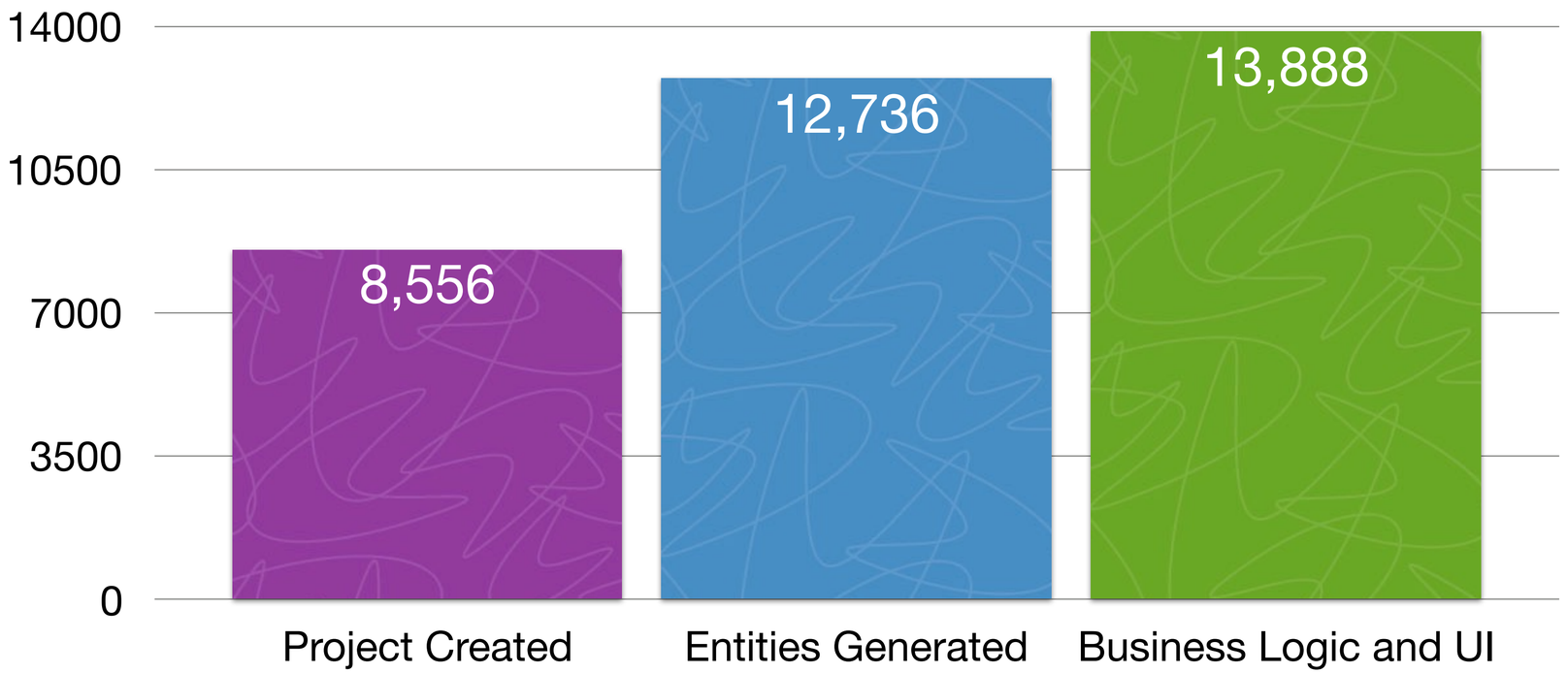
www.21-points.com

Free Download from InfoQ

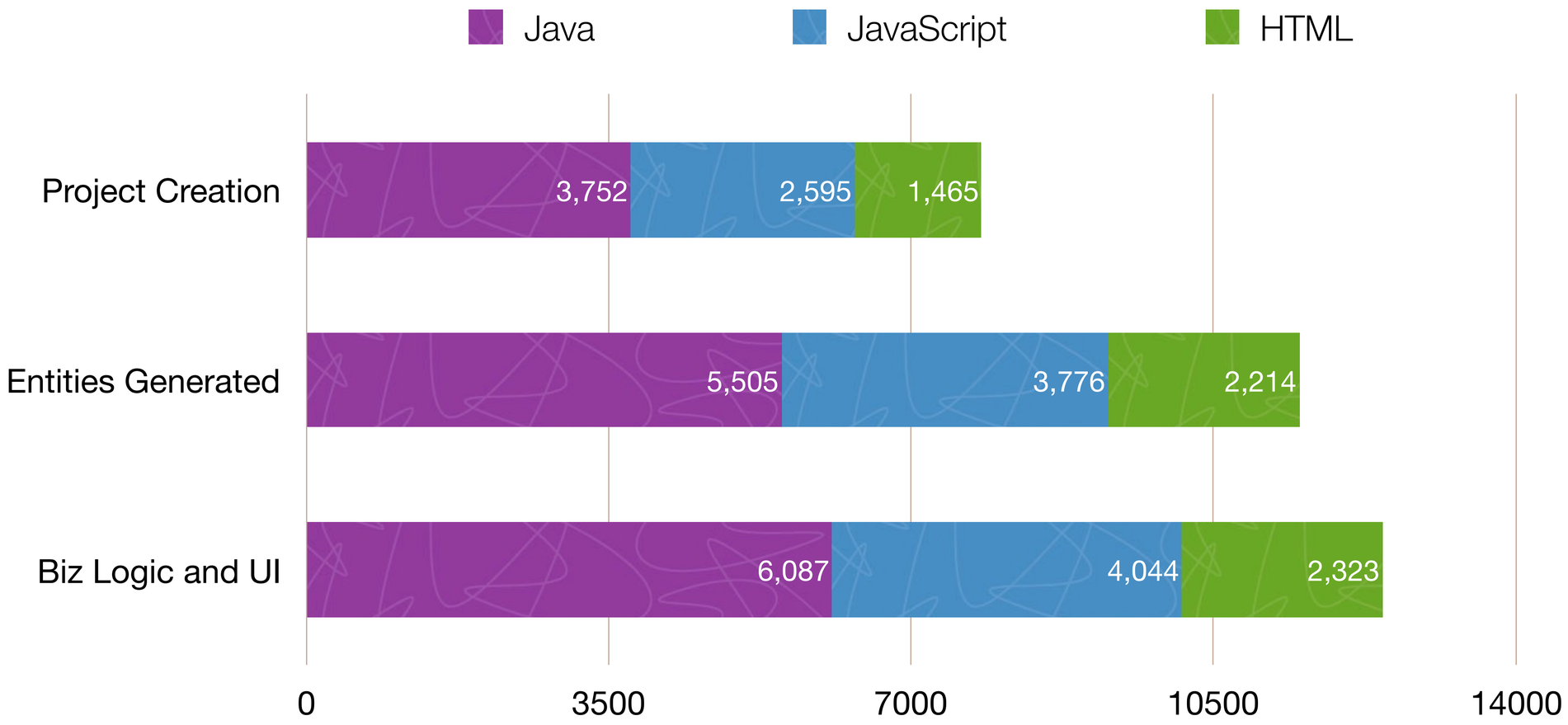
http://www.infoq.com/minibooks/jhipster-mini-book



Lines of Code in 21-Points



Lines of Code by Language



Learn More



https://twitter.com/java_hipster

http://jhipster.github.io/



https://github.com/jhipster/generator-jhipster



https://www.youtube.com/watch?v=R3jm2qmqctI



https://angularjs.org

The JHipster Mini-Book

1.0 Release on October 30



http://jhipster-book.com



http://21-points.com



@jhipster_book



Questions?

Stay hip by following me!

- http://raibledesigns.com
- @mraible

Presentations

- http://slideshare.net/mraible

Code

- http://github.com/mraible

