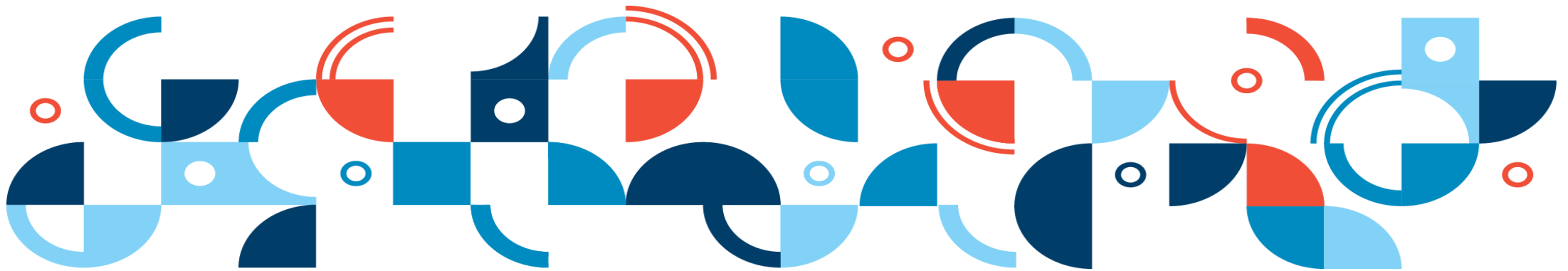# Engaging with developers @ IBM

7/20/2016  Lennart Frantzell alf@us.ibm.com

# Lennart Frantzell





- Working with developers and startups in Silicon Valley
- Bluemix architect
- Love Hackathons

# The global developer community

Sau Paolo

Berlin

San Francisco

Beijing

Common tools,
Common languages,
Common concepts,
Common values

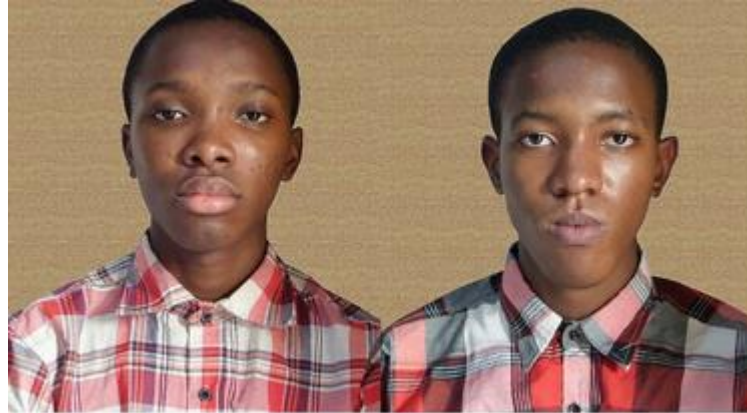CLOUD COMPUTING

open source ™

Nairobi

Mumbai

Ho Chi Minh City

Stockholm

# The global developer community



- Anesi and Osine Ikhianosime
- **13 & 15 Yrs Old, Nigerian Brothers**

http://bit.ly/2afe7PL
https://youtu.be/kuonjPPNSxs

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http://www.bludoors.com/

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- **13 & 15 Yrs Old, Nigerian Brothers**
- **Built Mobile Web Browser, an alternative To Google Chrome**
- A16z podcast from Andreessen Horowitz, Silicon Valley's leading VC firm

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# The IT revolution around the Year 2K, Cloud, open source, mobile, social networks

**iPhone**
**Launched 2007**

Y Combinator

**Accelerator**
**https://news.ycombinator.com**
**Launched 2005**

GitHub

**Code hosting site**
**Launched 2008**

amazon web services™

**Launched 2006**

KICKSTARTER

**Crowdfunding**
**Launched 2005**

stackoverflow

**Q/A site for programmers.**
**Launched 2008**

HEROKU

**Launched 2007**

open source ™

**Launched 2006**

**Launched 2002**

**Launched 2004**

meetup

**Hackathons**
**Launched ~2000**

API

**Tech usergroups**
**Launched 2002**

# The secret of using GitHub to gain leverage



**Code hosting site**
**Launched 2008**

- You can put documents in HTML (Markdown) and PDF format on GitHub
- By showing that you use GitHub you suddenly establish street cred in talking to developers

## Blogging with Jekyll

Using Jekyll, you can blog using beautiful Markdown syntax, and without having to deal with any databases. Learn how to set up Jekyll.



YEOMAN
THE WEB'S SCAFFOLDING TOOL FOR MODERN WEBAPPS

Get started and then find a generator for your webapp. Generators are available for Angular.

# The Meetup Movement is competing with the IT conferences

## SILICON VALLEY NEWTECH

| | |
|---|---|
| SVNewTech'rs | 13,760 |
| Group reviews | 162 |
| Upcoming Meetups | 1 |
| Past Meetups | 128 |
| Our calendar | 📅 |

## Silicon Valley Startup: Idea to IPO

Palo Alto, CA
Founded Feb 1, 2010

| | |
|---|---|
| Silicon Valley Entrepreneurs | 15,813 |
| Group reviews | 173 |
| Upcoming Meetups | 34 |
| Past Meetups | 1,587 |
| Our calendar | 📅 |
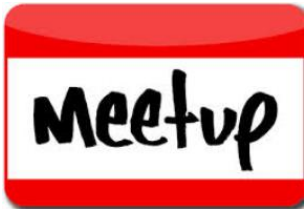
# Becoming a trusted influencer at a Meetup, a healthcare example



**SVHealth Monthly Meetup**

- Participated in technical discussions
- Provided suggestions for upcoming talks
- Provided sponsorship
- Was identified as an IBM'er without behaving as an IBM advocate
- Could recommend IBM technologies where it made sense
- Perceived as an objective technical expert
- "We didn't know IBM did healthcare!"

# Open source is inherently social and builds global social networks



https://github.com/IBM-Swift/Kitura

# The developer world, new concepts, new terminology, new methods. Bottom Up rather than Top Down

APIs

# The developer world, new concepts, new terminology, new methods. Bottom Up rather than Top Down



```
2011    April      Creation        by EvanSpiegel, Bobby Murphy and Reggie Brown
2011    July       Creation        Snapchat first launches from Spiegel's father living room
2012                                under the name Pictaboo app.
2012    March/April                Funding
2012    May 12     Userbase        Snapchat is processing about 25 images a second
```

# The developer world, new concepts, new terminology, new methods. Bottom Up rather than Top Down



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2016: Snapchat is raising more money around $20 billion valuation

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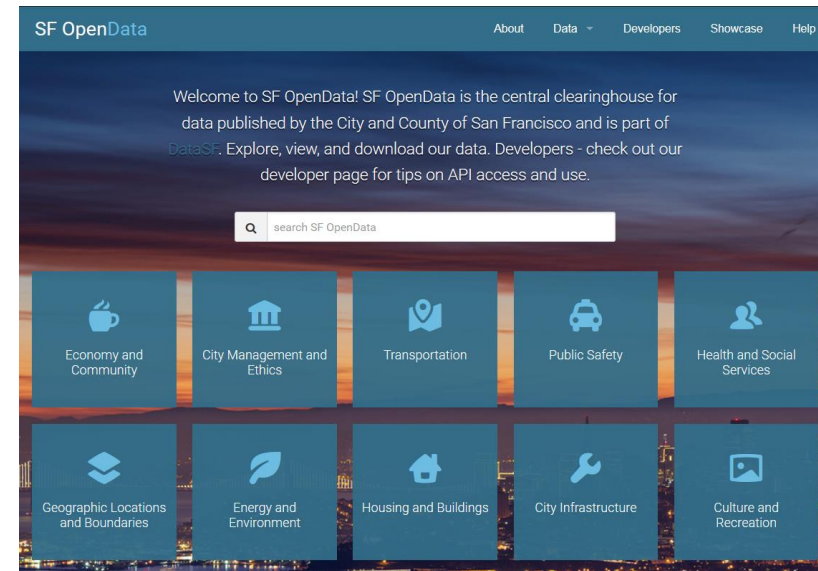2016: Snapchat is raising more money around $20 billion valuation

# Developing apps with The API Economy



## FlySFO.com API Documentation

The FlySFO.com API enables you to get detailed information about SFO's:

- Airlines
- Restaurants
- Shops
- Activities and things to do
- Additional passenger services such as ATMs, shoe shines, yoga rooms and more



## MOST POPULAR CATEGORIES

| 1. Travel | Track this Category | 6. eCommerce | Track this Category |
| 2. Mapping | Track this Category | 7. Financial | Track this Category |
| 3. Social | Track this Category | 8. Photos | Track this Category |
| 4. Sports | Track this Category | 9. Search | Track this Category |
| 5. Music | Track this Category | 10. Video | Track this Category |

**API NEWS**

VIEW ALL

# Developing apps with The API Economy

- Select a cloud vendor
- Select an open source stack
- Check out APIs with https://www.getpostman.com/ or cURL
- Add services from APIs

(who can be hosted on other clouds)

- Only pay for what you can't get in open source

  Such as Watson cognitive services

- Work at incubators who often recommend

  Cloud services and APIs

POSTMAN

## 1.5  UNDERSTANDING CURL

Make cURL more readable:

```
curl -i \
    -H "Accept: application/json" \
    -X POST \
    -d "{status:MIA}" \
    http://personsreport.com?status \
```
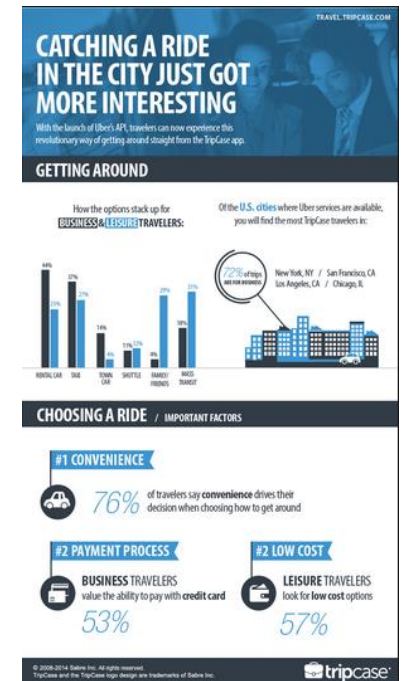
# Uber and APIs



Uber is a perfect example. It didn't have to build its own mapping, payment, or communications services. Instead, Uber is a composite of what it considers the best of those programs and more —

- Google Maps,
- Braintree (payment),
- Twilio (for mobile SMS),
- Oracle, etc.

Uber was able to quickly connect to these systems using little pieces of code called APIs.

http://for.tn/29ZCUr1

# Cloud computing is all about APIs.



**Personality Insights**

Gain insight into how and why people think, act, and feel the way they do. This service applies linguistic analytics and personality theory to infer attributes from a person's unstructured text.
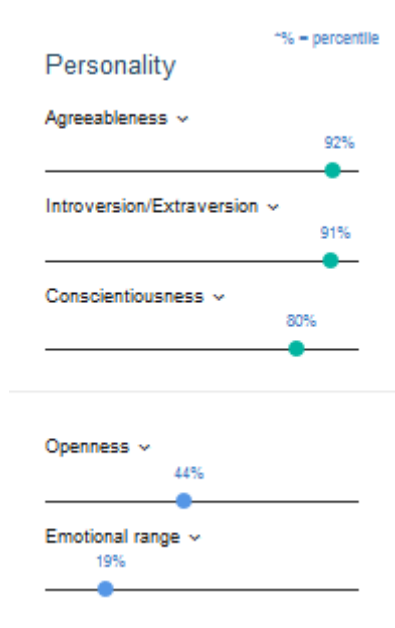
🔗 Resources:

API Reference    Documentation    Fork on Github    Fork and Deploy on Bluemix

**Personality**                                    ^% = percentile

Agreeableness ⌄
                                                92%

Introversion/Extraversion ⌄
                                                91%

Conscientiousness ⌄
                                            80%

Openness ⌄
                                    44%

Emotional range ⌄
                    19%

Replace {username} and {password} with your service credentials.

```
curl -u "{username}":"{password}"
"https://gateway.watsonplatform.net/personality-insights/api/
v2/{method}"
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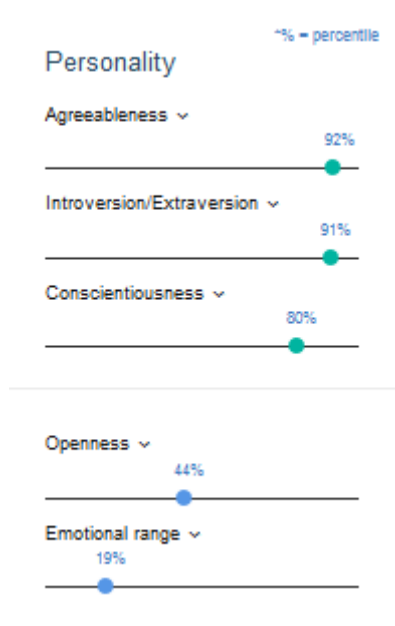
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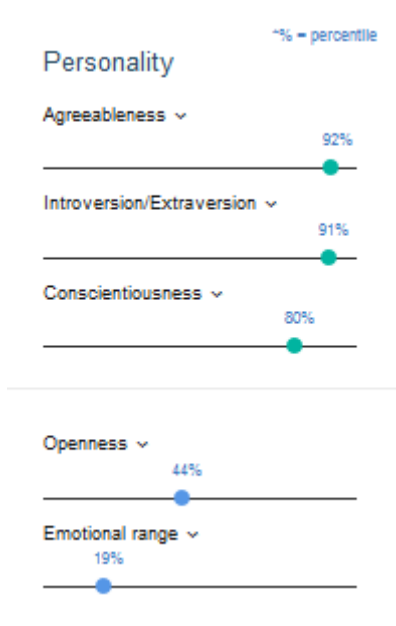
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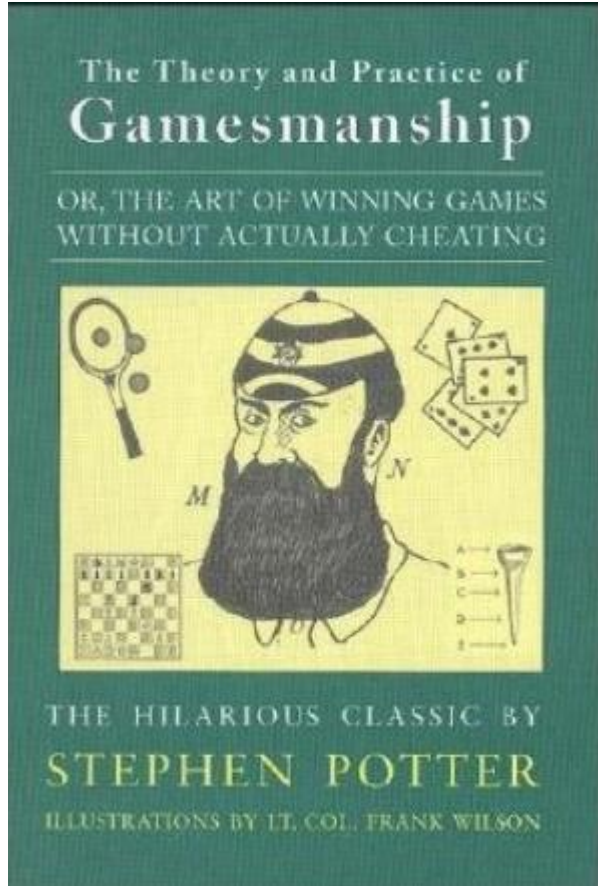Conscientiousness ⌄
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```

# Takeaway: learn about APIs
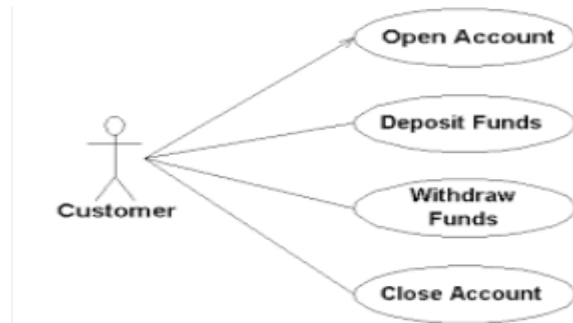
# Stephen Potter, the 12 Factor APP and Use Cases



The Theory and Practice of
Gamesmanship
OR, THE ART OF WINNING GAMES
WITHOUT ACTUALLY CHEATING

THE HILARIOUS CLASSIC BY
STEPHEN POTTER
ILLUSTRATIONS BY LT. COL. FRANK WILSON

- Yes but is it true in the south?

# Two key concepts to engage with today's developers



THE TWELVE-FACTOR APP

**http://bit.ly/2a5sN0c**



## 12 Factor App

- ► **Codebase** - One codebase tracked in revision control, many deploys
- ► **Dependencies** - Explicitly declare and isolate dependencies
- ► **Config** - Store config in the environment
- ► **Backing Services** - Treat backing services as attached resources
- ► **Build, release, run** - Strictly separate build and run stages
- ► **Processes** - Execute the app as one or more stateless processes
- ► **Port Binding** - Export services via port binding
- ► **Concurrency** - Scale out via the process model
- ► **Disposability** - Maximize robustness with fast startup and graceful shutdown
- ► **Dev/prod parity** - Keep development, staging, and production as similar as possible
- ► **Logs** - Treat logs as event streams
- ► **Admin processes -** Run admin/management tasks as one-off processes

**Use Cases:** https://en.wikipedia.org/wiki/Use_case

# Today's developers will get their information from:

- Their social networks
- Stack Overflow
- LinkedIn
- Github
- Meetups
- YouTube
- A16Z
- Twitter

# To do: key concepts and actions, a cheat sheet to the Developer World

1. Join a Meetup
2. Set up a GitHub repository
3. Attend a Hackathon
4. Learn about the 12 Factor Apps Manifesto from a high level
5. Check out Stack Overflow about the product(s) you support
6. Start using Twitter
7. Learn about APIs
8. Learn about Agile
9. Learn about Use Cases

# Thank You!