Full Stacker

Being a Full Stack Developer

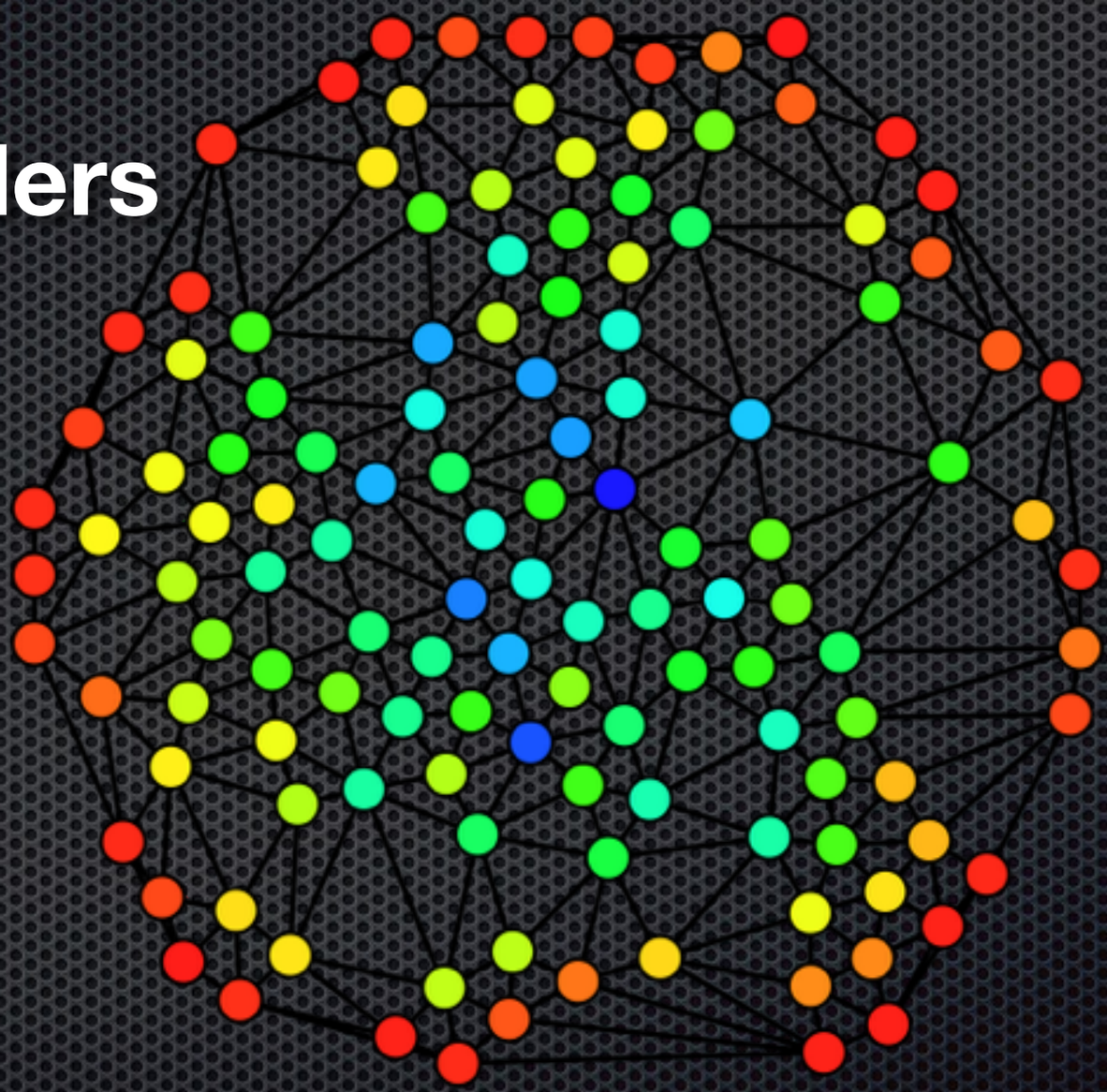
— What does that mean?...

About myself

- Currently - cofounder Yodas
- **Building the graph of products and builders**
- Iteration on: GORMIM

Yodas

Graph of:
products
and
product builders



Work history

Backend @ Totango

Backend @ Outbrain

Frontend @ Outbrain

Frontend @ Google

Frontend @ RawSugar

Security @ Microsoft

Work history

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Frontend @ Outbrain

Frontend @ Google

Frontend @ RawSugar

Security @ Microsoft

And now:

Everything @ Yodas

Work history

OSS

Backend @ Hector

Infra @ FRS

Frontend @ Meteor

BE/FE @ devdev

Extra curricular

Every developer wants this

Fullstack developers FOR DUMMIES®

A Reference for the Rest of Us!®

By Ran Tavory

The names

- Full stack developer
- **Generalist**
- **Polyglot** programmer
- **Jack of all trades**
- Even - **devops**…

The names

- Full stack developer
- **Generalist**
- **Polyglot** programmer
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Did you hear other names?

The Questions

The Questions

- **Am I** a Full Stack developer?

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- **Am I** a Full Stack developer?
- **Do I need** to be a full stack developer?

The Questions

- **Am I** a Full Stack developer?
- **Do I need** to be a full stack developer?
- **What does it take** to become one?

The Other Questions

The Other Questions

- Who needs **Full Stackers**?

The Other Questions

- Who needs **Full Stackers**?
- why not **Domain Experts**?

The Other Questions

- Who needs **Full Stackers**?
  - why not **Domain Experts**?
- How do I **recognize** a fullstacker when I see one?

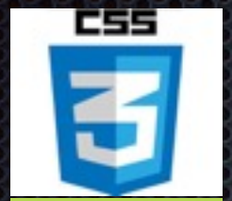
Questions to YOU

- What do **you** want to do when you grow up?

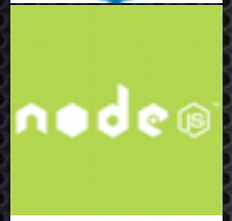
About ME

From bits in the DB to bits in PNGs

On average day I deal with:



CSS



Javascript. In the browser. And on the server

Bits and compression in the database

Deployment automation

Monitoring and alerting

Meteor

node

JS

HTML

CSS

Java

Objective-C

Meteor
node
HTML
JS
CSS
$ fab
Chef
Java
Objective-C
MySQL
Cassandra
mongoDB

Client Side Code
Browser
Server Side Code
Web Server
Database
OS

Things I Like

- Understanding the whole picture
- Shipping
  - Shipping Code
  - Shipping Products that work
- Getting recognized for my work

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  - Shipping Code
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Hint: That's why I do **Yodas**

Things I Dislike

- Throwing code at someone else to run it
- Having heard from someone else that:
  - **Hey dude, your code just fucked up**
- Being a small component in a large machine

Being a Full Stacker

Being a Full Stacker

- You understand the whole picture
  - From user entering text in a box
  - To server transacting on a DB
  - To browser rendering back the response
  - *** To some extent of depth ***

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- **And you love it!**

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  - *** To some extent of depth ***
- **And you love it!**

Example: what-happens-when

What happens when you type google.com

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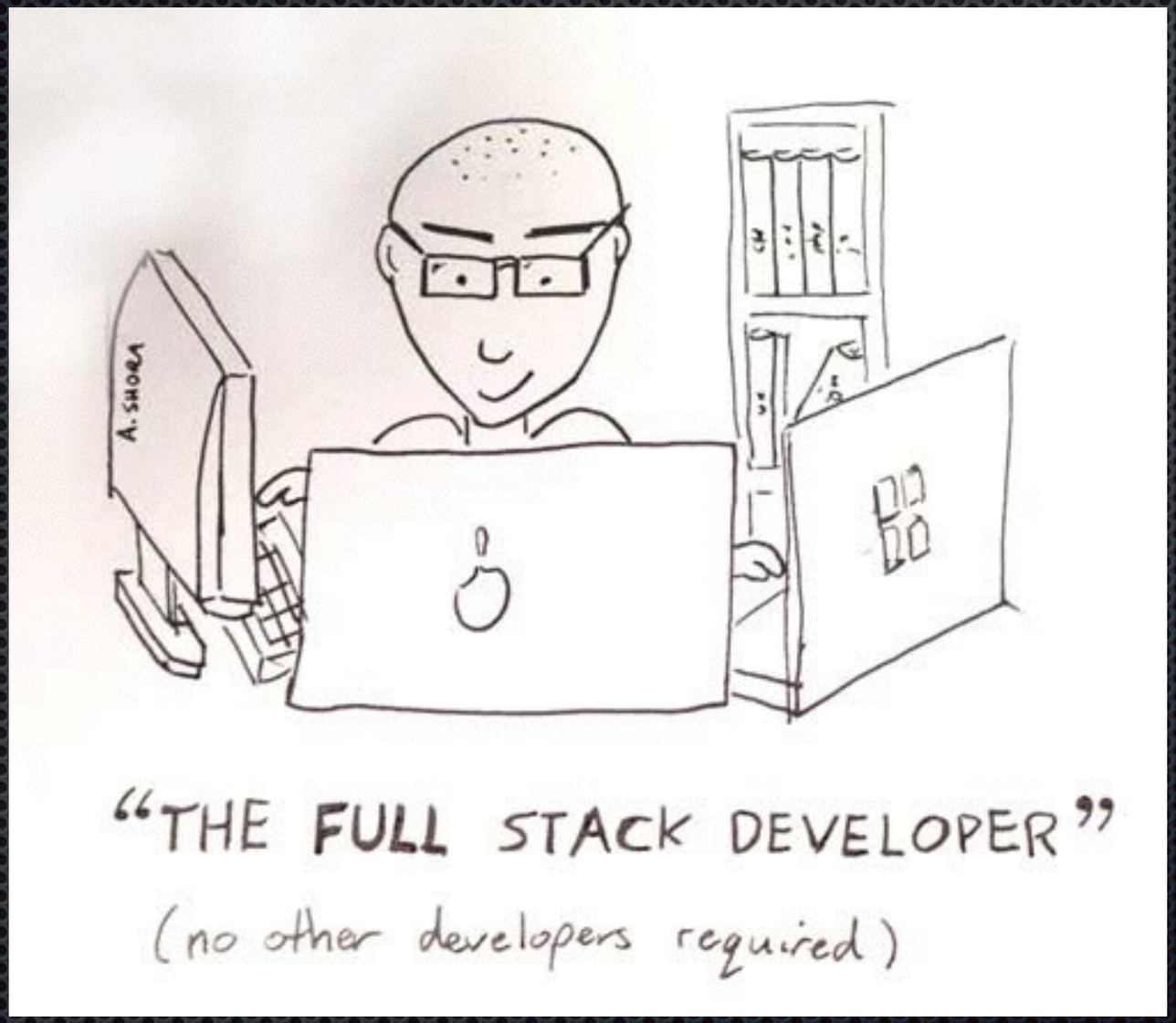
- GPU Rendering
- Window Server
- Post-rendering and user-induced execution

How to be a fullstacker?



What does it take?

How to be a fullstacker?

- Step 1:
  - Be an **expert** in one domain

How to be a fullstacker?

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  - Be an **expert** in one domain

(DNS)

How to be a fullstacker?

- Step 2:
  - Be an expert in one **more** domain

How to be a fullstacker?

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  - Be an expert in one **more** domain

JSF

How to be a fullstacker?

- Step 3:
  - Be an expert in **yet** one more domain

How to be a fullstacker?

- Step 3:
  - Be an expert in **yet** one more domain

Prototype.js

How to be a fullstacker?

- Step 4:
  - Do a few things casually.
    - Not expert level
    - Different domains
    - Different expertise
    - **Step out of your comfort zone**

How to be a fullstacker?

- Step 5:
  - Profit. You're now a **fullstack motherfucker**

How to be a fullstacker?

- Tools and techniques
  - Participate in several out of band projects
    - OSS is best
  - Deliberately **step out of your comfort zone**, again and again. On the job and out of band
  - Read, read, and more read

Example: My reading list

- Devops Weekly
- JavaScript weekly
- NoSQL weekly
- Webdesigner depot
- Web Operations weekly
- HTML5 weekly
- Software Lead weekly
- Hacker Newsletter
- Github Explore
- StackShare weekly
- Meteor forums digest

I even sum it up publicly

Bumpers

reversim podcast

Learn, learn and more learn

coursera

edX

SKILLSHARE

udemy

code school
learn by doing

Becoming a Full Stacker

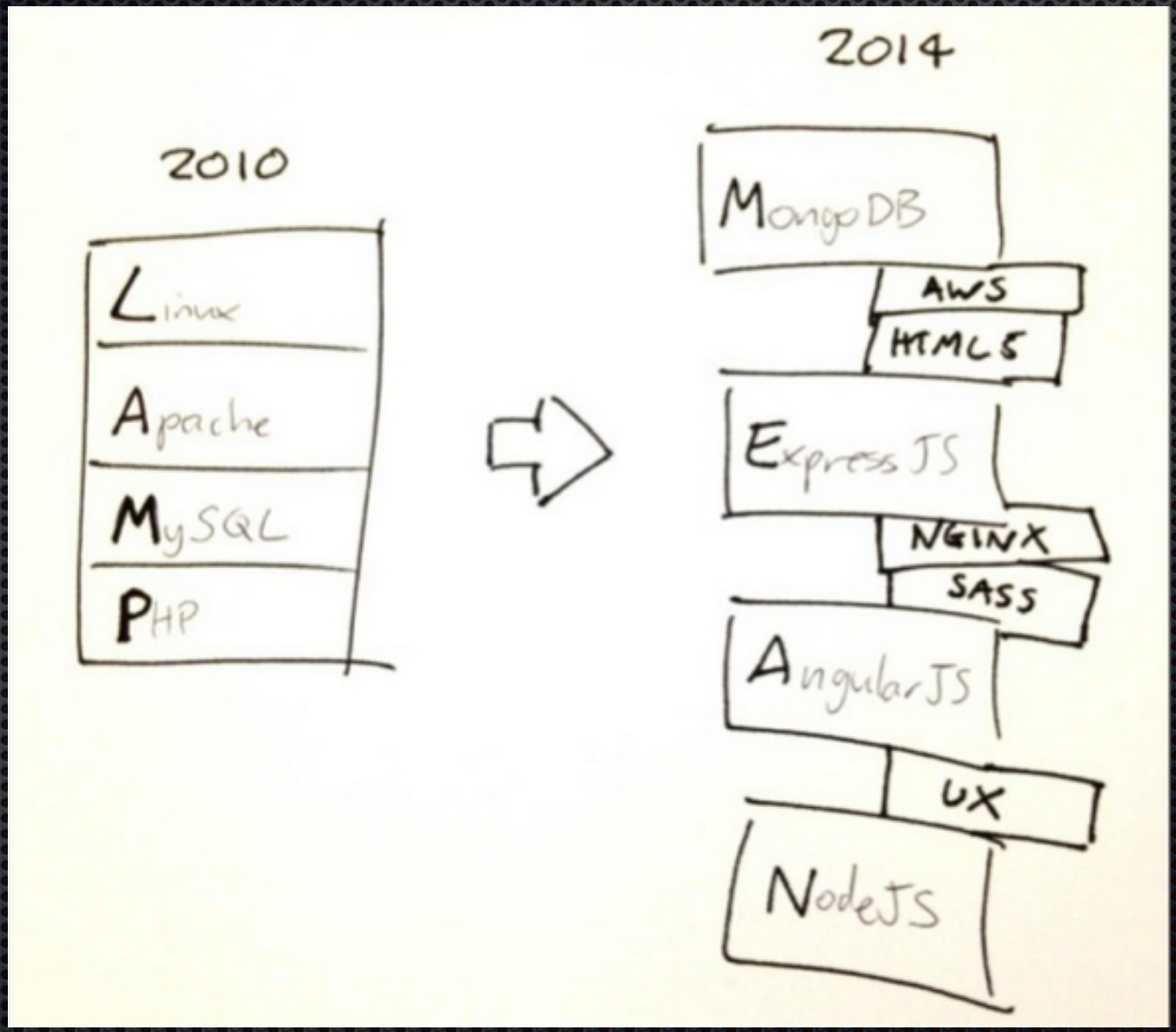
Disclaimer

- You can be expert at one or two fields. Maybe three.
  - **Accept it**
  - You cannot be an expert in all
  - *Remember the saying:*
    - *Jack of all trades, **master of none**.*

Fullstack is not for everyone

- Are you a Raccoon or a Koala?
- **Raccoon eats everything**
  - yes, even garbage
- Koala eats only eucalyptus

It is challenging



Why you might want to become fullstacker?

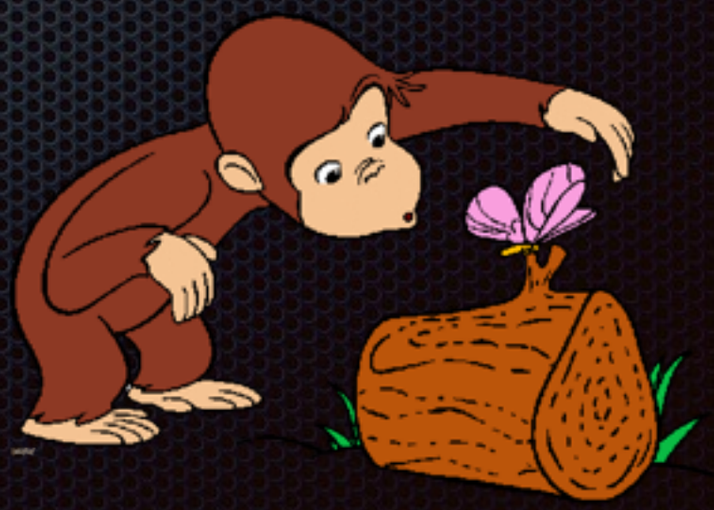
- Teams tend to be smaller and smaller
- Many startups just need generalists to get things done.
  - OTOH if you work for larger companies, you might benefit from specialization.

Characterizing fullstackers

- By nature full stackers are **seniors**
  - They just had to do so many things before

Characterizing fullstackers

- They are **curious**
- They want to step out of their comfort zone
- They might have a listening disorder...
  - This might just even be an advantage...



My personal story

- Desktop dev @ low-tech (boxes factory)
- Web dev @ a startup
- Security @ Microsoft
- Web frontend @ a startup
- Web frontend @ google. And backend...
- Backend @ outbrain. And frontend
- Infrastructure @ outbrain
- Then infrastructure. And dev. All sorts. In many companies...

So I asked myself:
What am I?

- Am I a frontend dev?
- A backend dev?
- Both?
  - That tends to get HR and project managers really confused, BTW…
  - My manager even said: **You have to decide!**
- The term fullstack didn’t exist yet
- **So what am I?**

What am I?

- Me: I am both a fronted and a backend. And Infra.
  - **Why can’t I be both?**

Back to the questions

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- **Am I** a Full Stack developer?
- **Do I need (or want)** to be a full stack developer?
- **What does it take** to become one?
- Can you answer them now?

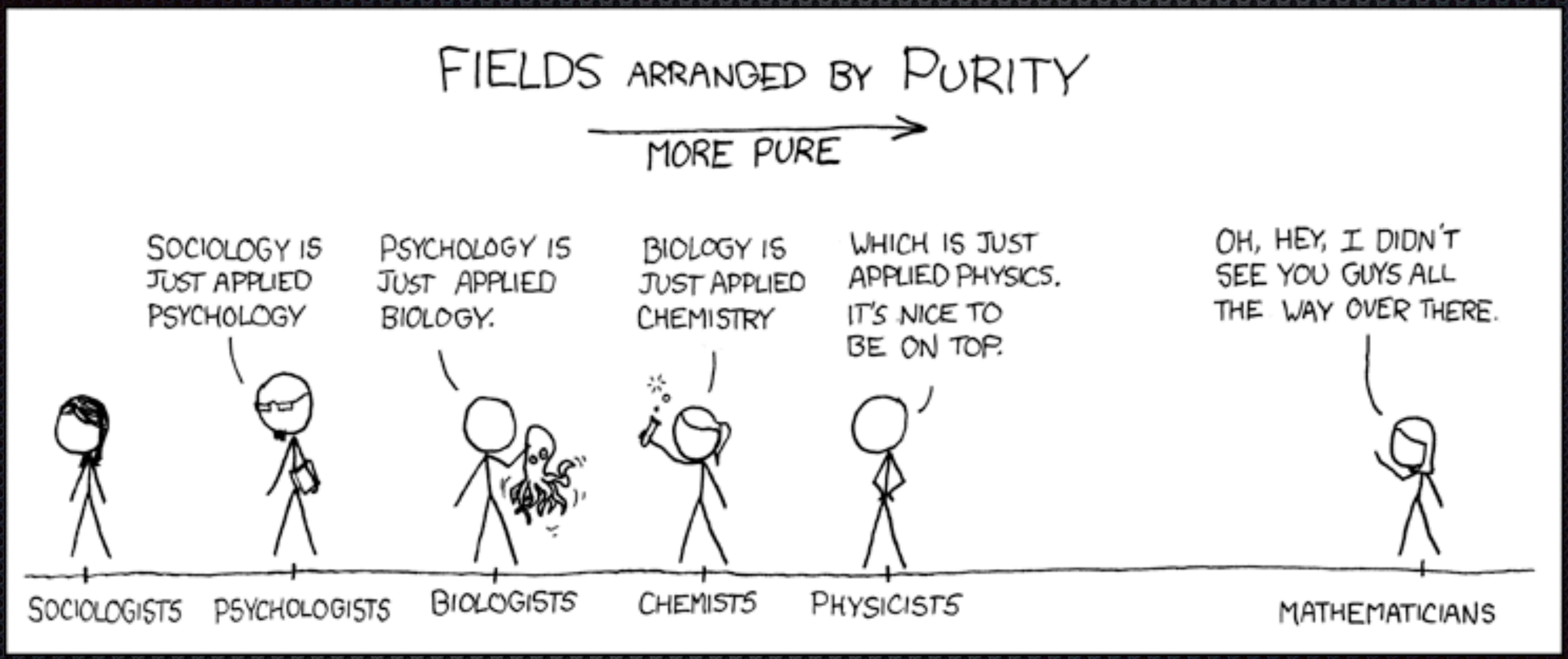
Across industry

- Originally the term meant: **Full stack Web dev**
- But now we see:
  - Fullstack **Product Manager**
  - Fullstack **Designer**
  - Fullstack **Devops**
  - Fullstack **Marketer**
  - Fullstack **Motherfucker**

Proportions

- Is fullstack
  - Web FE-BE?
  - Web FE, BE + ops?
  - Web FE, BE, ops + mobile?
  - Web FE, BE, ops, mobile + design?
  - Web FE, BE, ops, mobile, design + hardware?…

Proportions



https://xkcd.com/435/

Another way to look at it

Basically when people are asking for a full-stack programmer they're looking for the all-singing, all-dancing technical wizard.

Or at least **someone who won't complain too much when asked to do some work outside their normal comfort zone**.

http://qr.ae/RHhys9

Inspiration

- A true full stack developer must be able to mine silicon from raw ore & also pilot a quadcopter to deliver a taco a mile away / @complex

Inspiration

- If you are having fun, enjoy technology and building new things, **there is really no expiration date on software engineers**. (Jeff Nelson)

This presentation

- https://speakerdeck.com/rantav/fullstack-1