

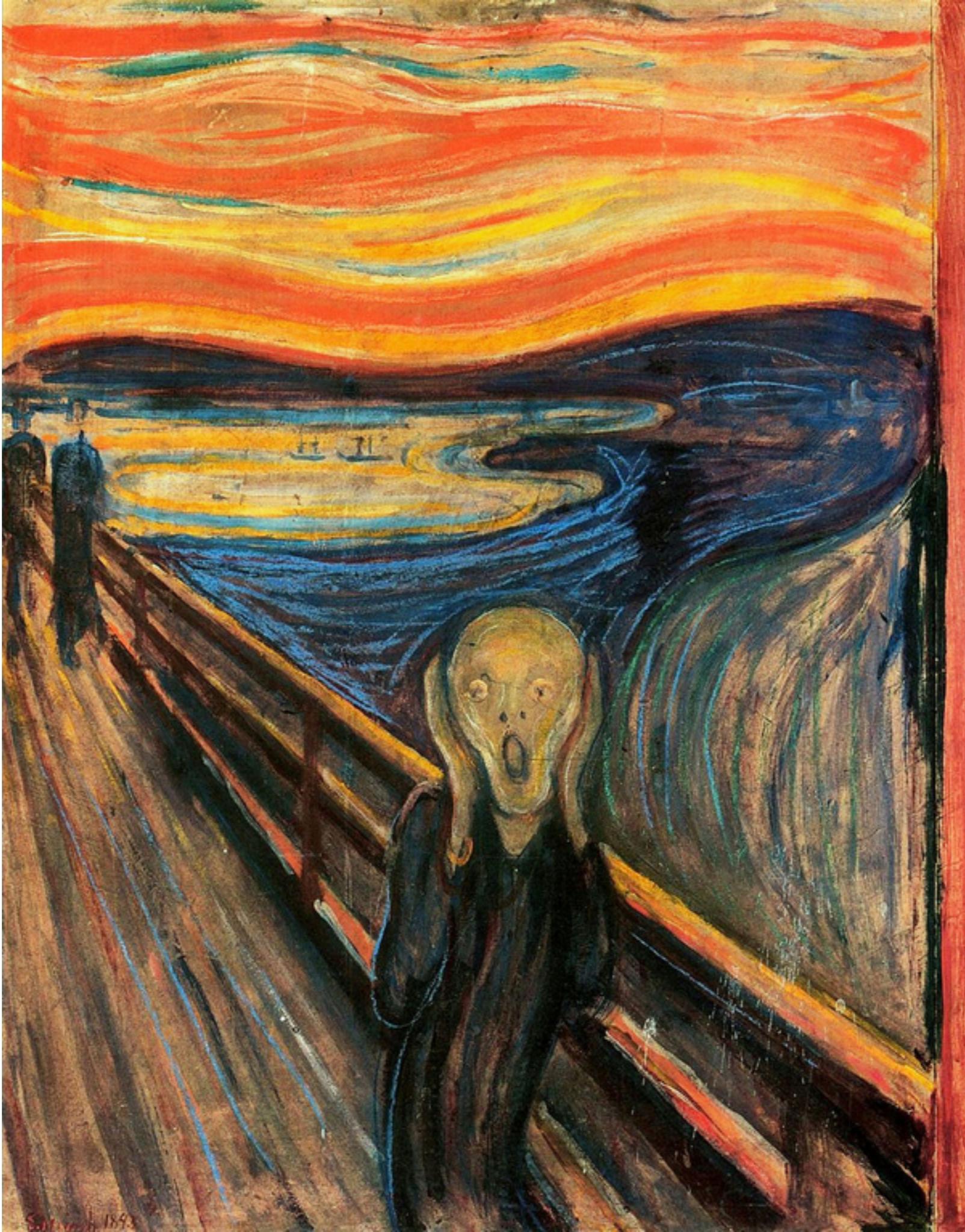
5-10-15-... lat kariery Java developera

Wojciech Seliga

wojciech.seliga@spartez.com Twitter: @wseliga



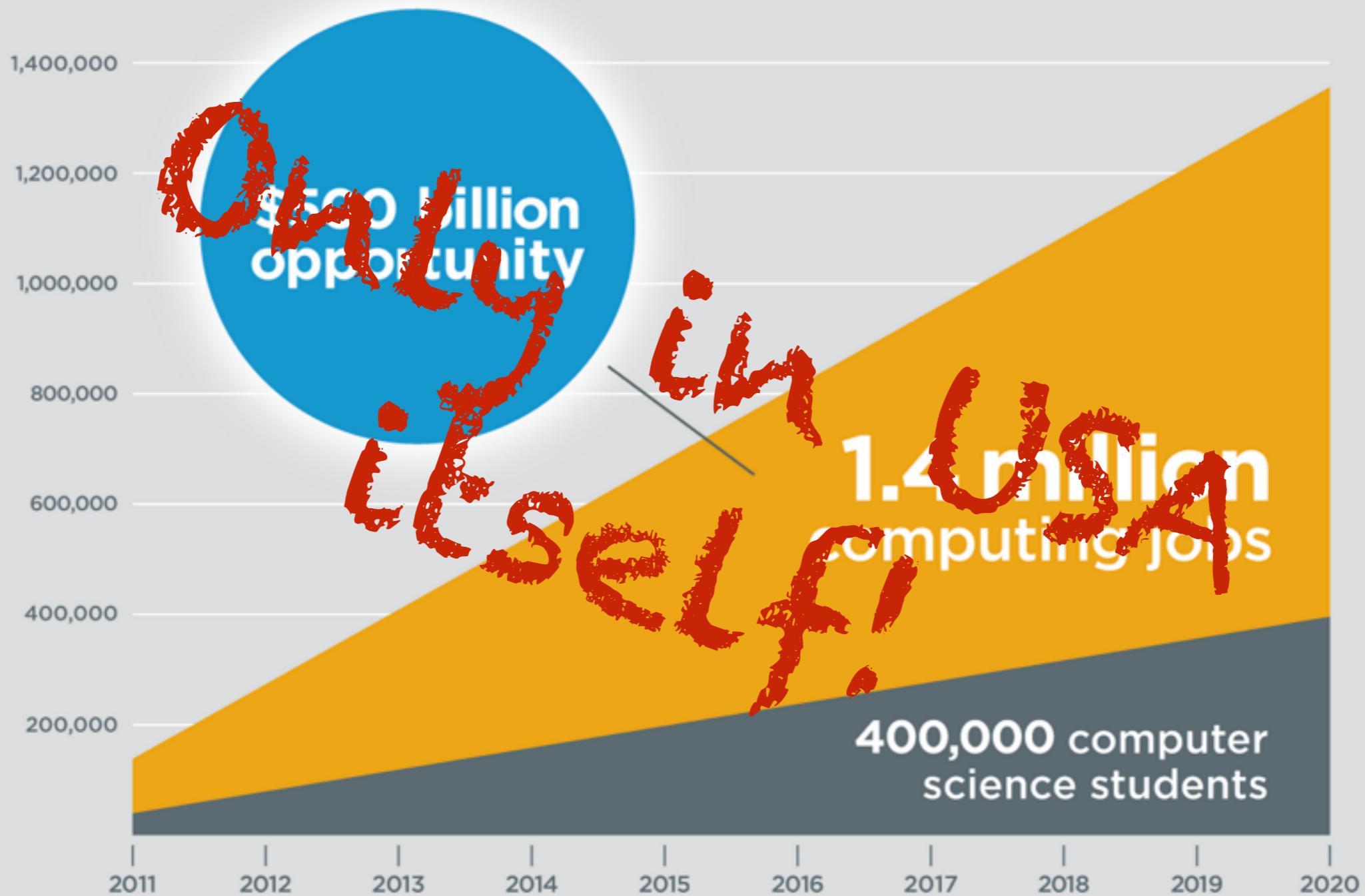
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Scream 1893

Good(?) News

1,000,000 more jobs than students by 2020



from code.org

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No balance between
supply and demand in
our job market



It's easy to earn a lot

Photo by [Andrew Magill](#) - Creative Commons Attribution 2.0



It's more difficult to earn
a shitload

Manager / Director

“The computer industry is the only industry that is more fashion-driven than women's fashion.”

–Richard Stallman

0

years

Why Java?

- Popular (unis, internet, literature, open source, free)
- Cross-platform
- Relatively idiot proof
- Good (free) tools
- Good job market (salaries)
- Sexy???



First Java thoughts and behaviours

- The language rather simple and easy to learn
- Well, it's quite backward and I cannot boost my ego with fancy idioms; a lot of crap in the language dated to 200x's or 199x's.
- Easy to (re)write lots of code (ideally from scratch), yeah!!!





- They often need to, but are afraid to ask
- Focus on how to write something tersely, neatly, in a geeky way
- Concentration on “I” - their own education, benefits, perspective, feelings

```
// an awesome trick from  
// http://stackoverflow.com/questions...  
// which allows us to make it way! faster.  
  
// the code follows here . . .
```

“They are stupid.
They have fucked up this
code”



Focus on low level code quality

- naming convention,
- whitespaces,
- checkstyle rules
- unit test coverage,
- some low level metrics



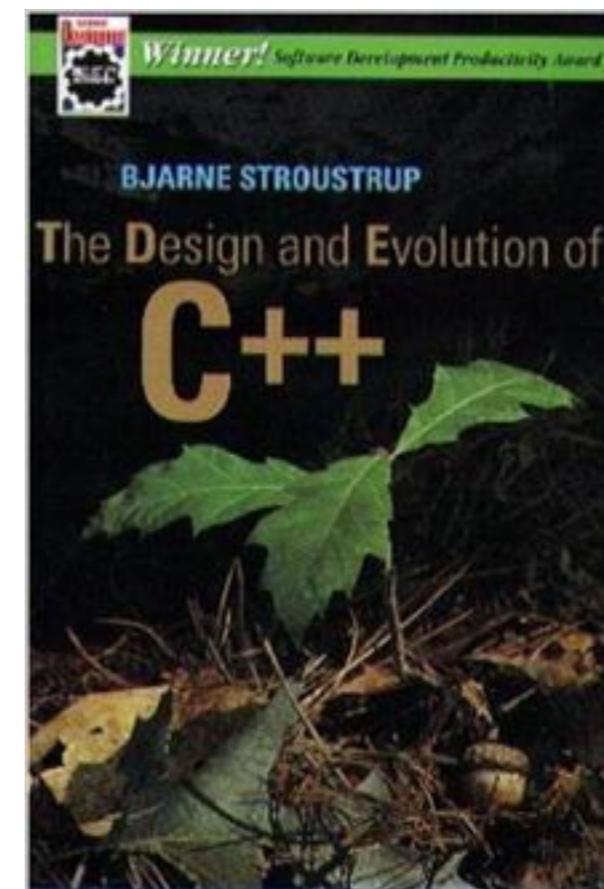
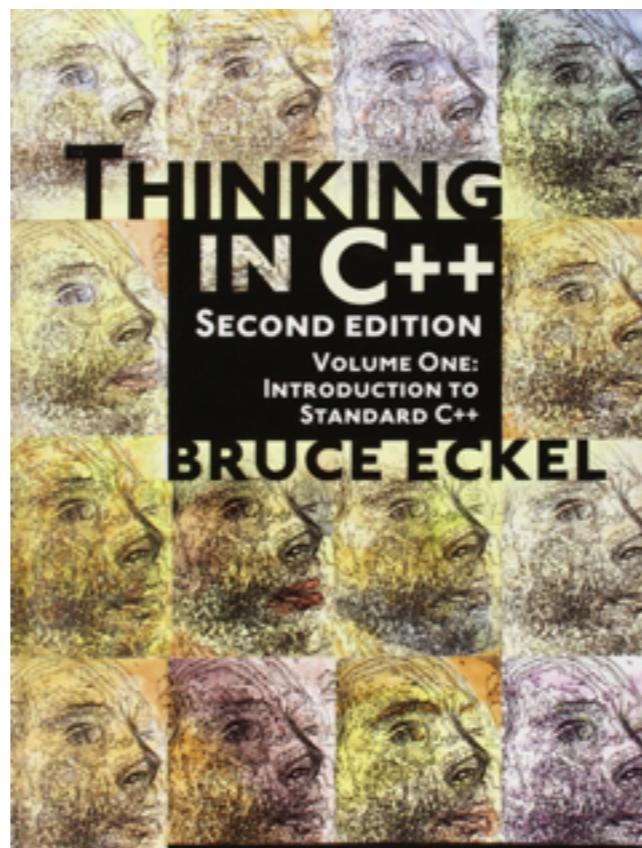
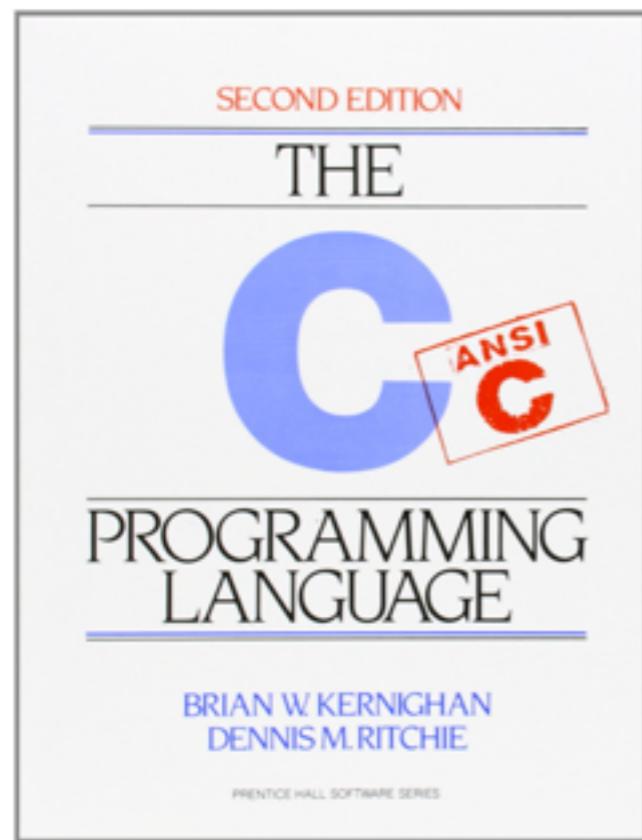
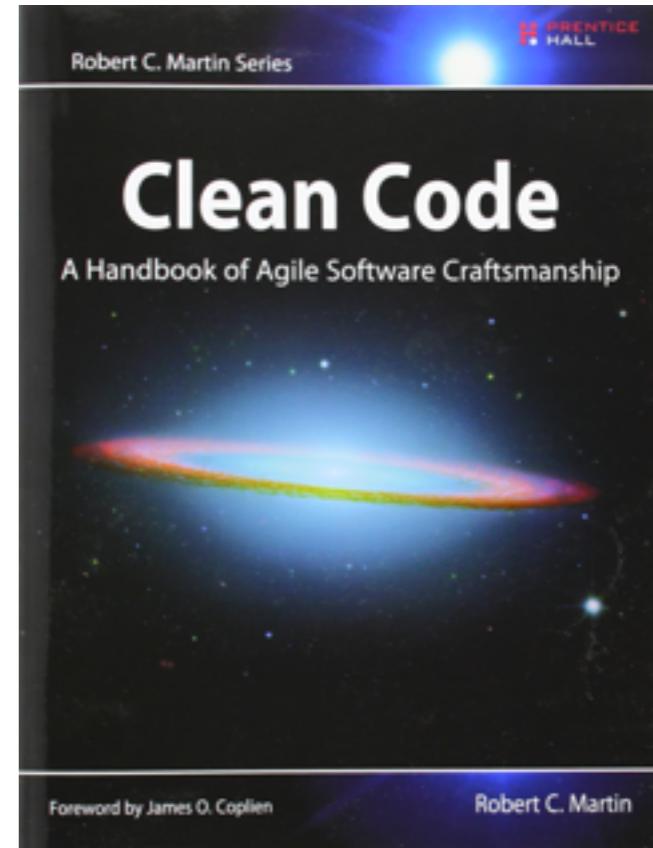
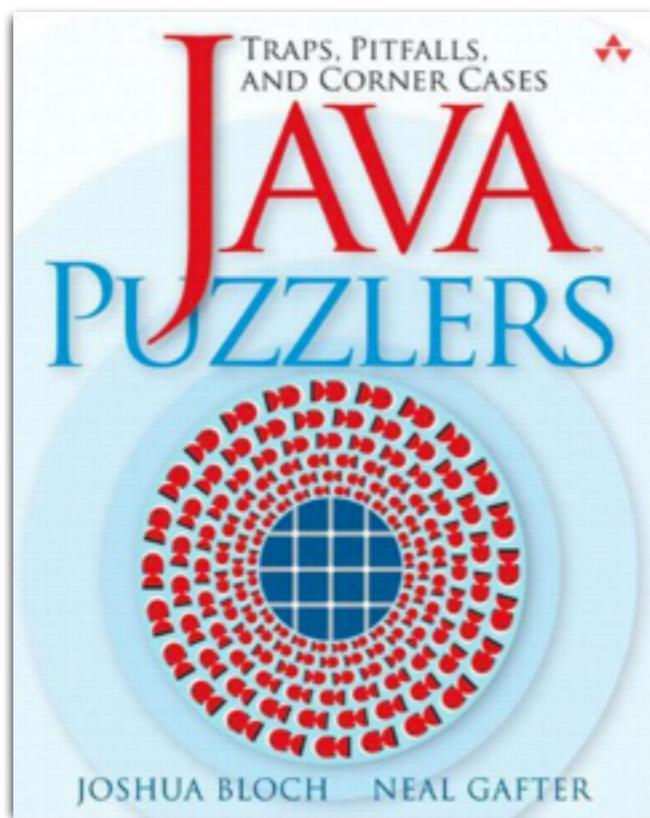
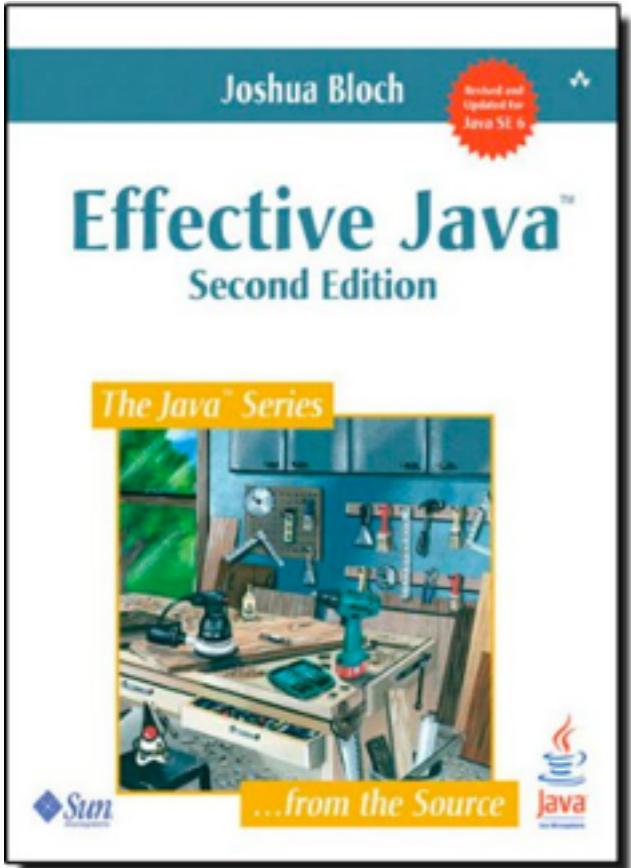
Predictions provided
quickly, optimistically
and eagerly (rule of thumb)



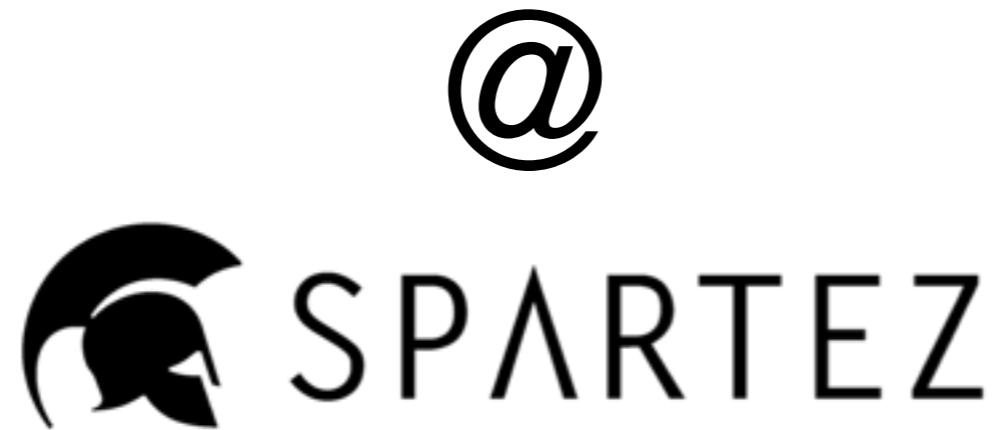
Shallow expansion



Zdjęcie [jeffreyw](#) - Creative Commons BY 2.0

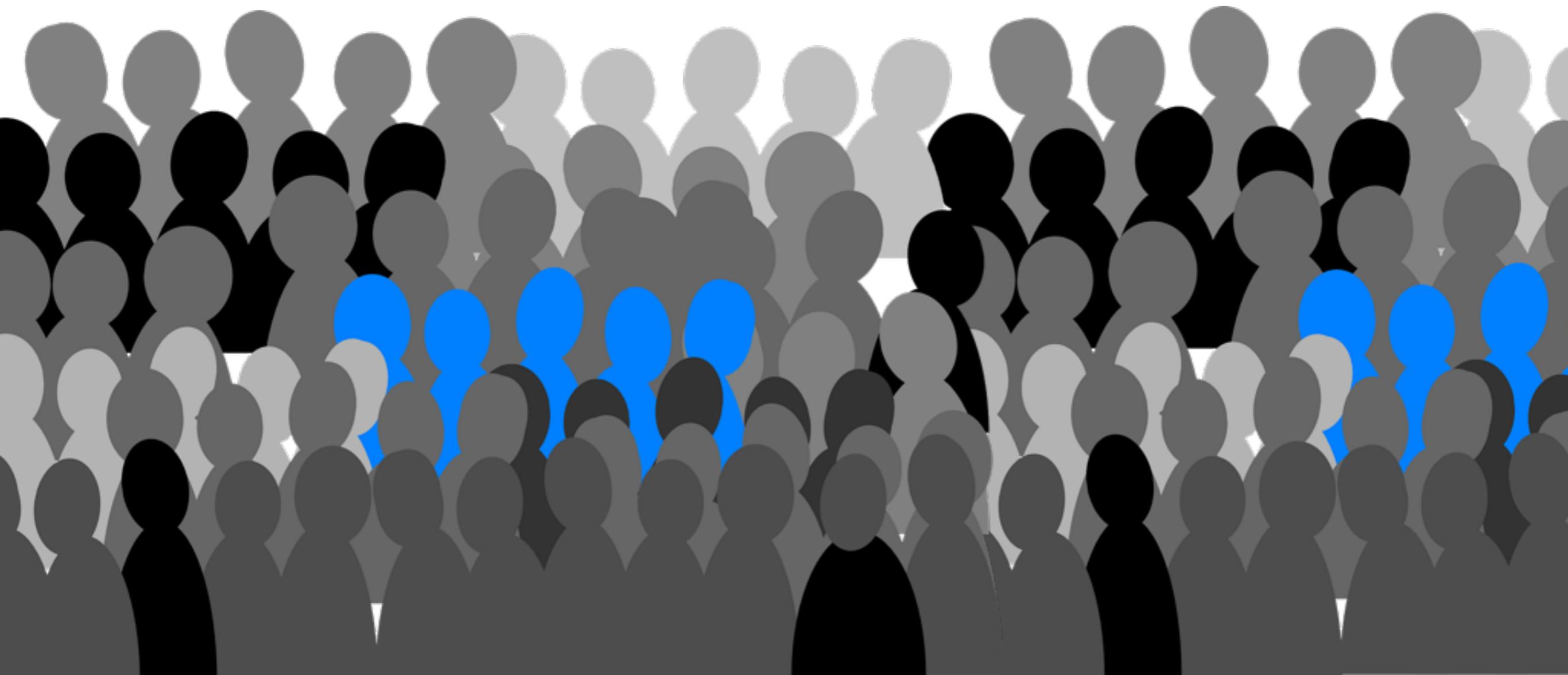


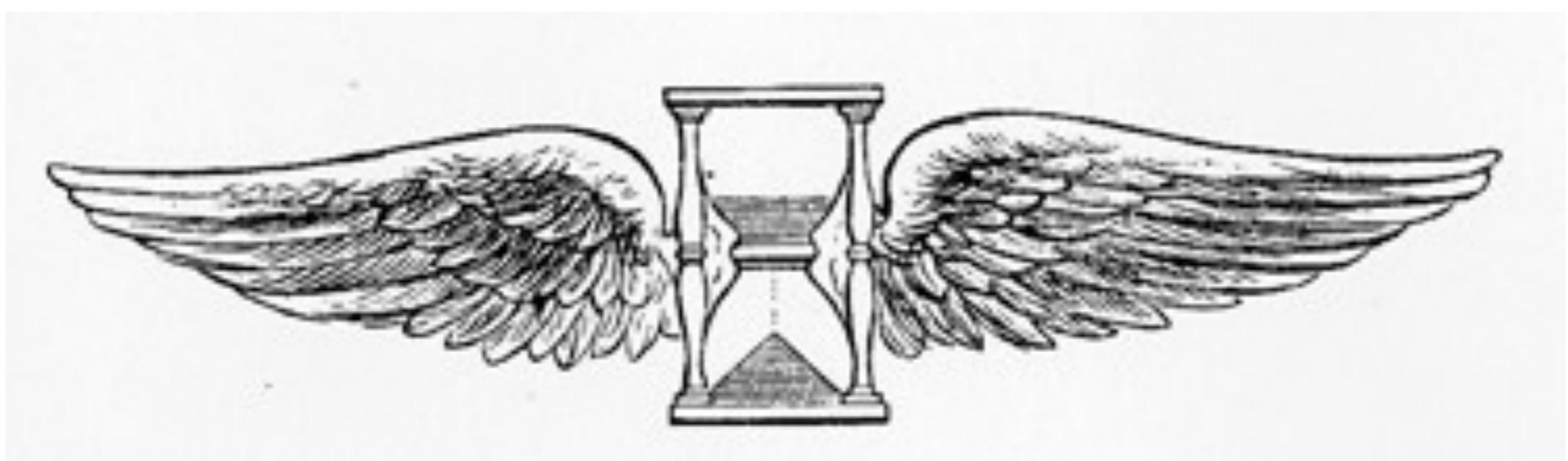




We call them juniors
or grown-up juniors
(mids)

The most numerous group





5
years

Java afterthoughts and behaviours

- Quite verbose and explicit language actually makes it easier to understand and maintain the code
- Then Language supports the understanding that coding is about “write once, read many times”
- Remembering when writing code that it will be read 100x more often
- Backward compatibility is not that bad after all...





- They need to ask others more seldom, but still are reluctant as it if would reveal their weakness
- “We and Them Language” (devs vs. customers/ users or “the business”/management)
- Concentrated on the product and the domain

```
// it's safe to apply a simplified formula  
// and thus reduce the complexity  
// from  $O(n)$  into  $O(\log(n))$ , which does help  
// a lot for long-haul flights.  
  
// the code follows here ...
```

“This code looks broken.
Let’s see if we can fix it.”

UTSL
Use the Source, Luke
Use The Force,
Read The Source



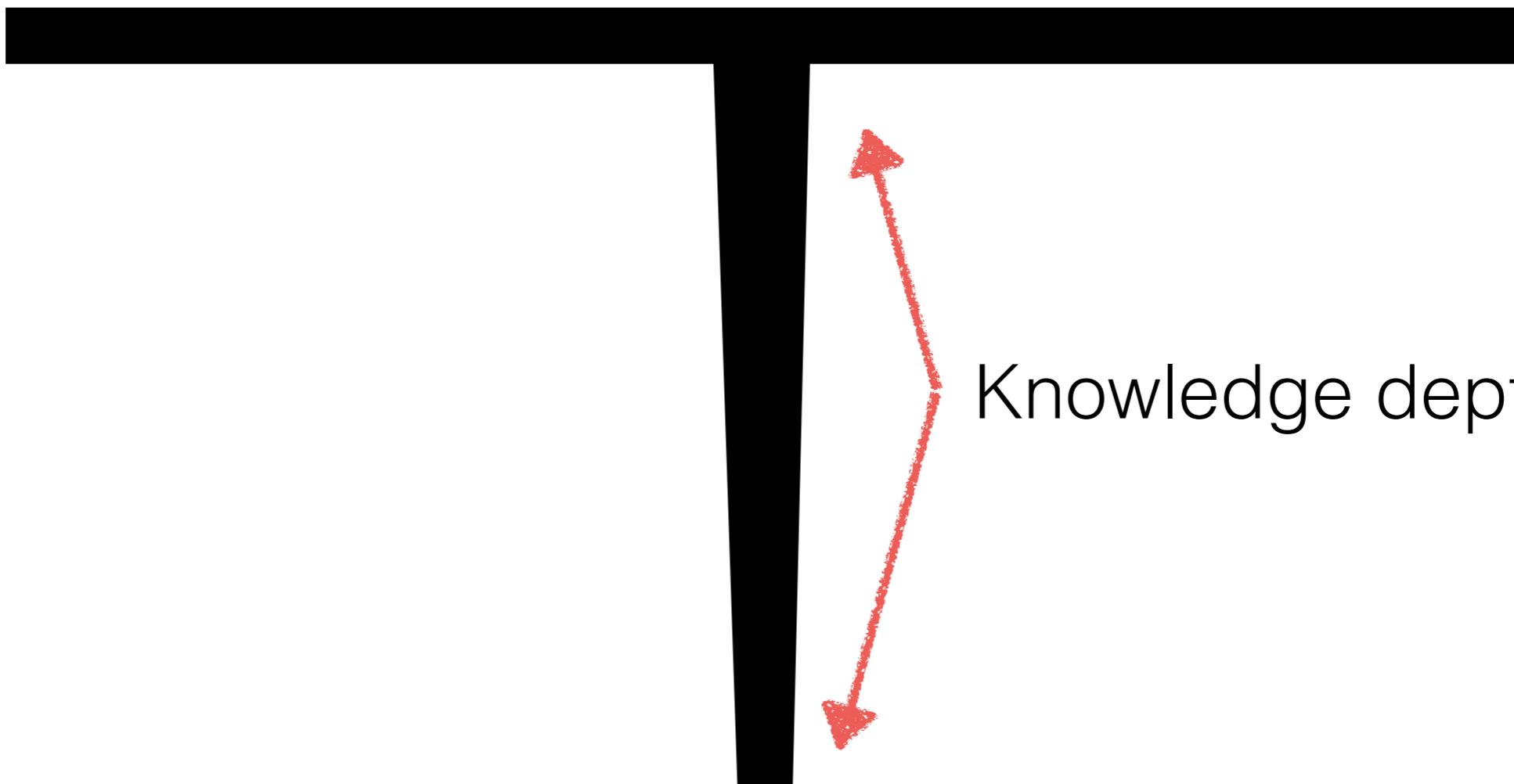
Focus on higher level code quality

- correct design
- consistency
- adherence to requirements
- functional test coverage,
- security
- maintainability

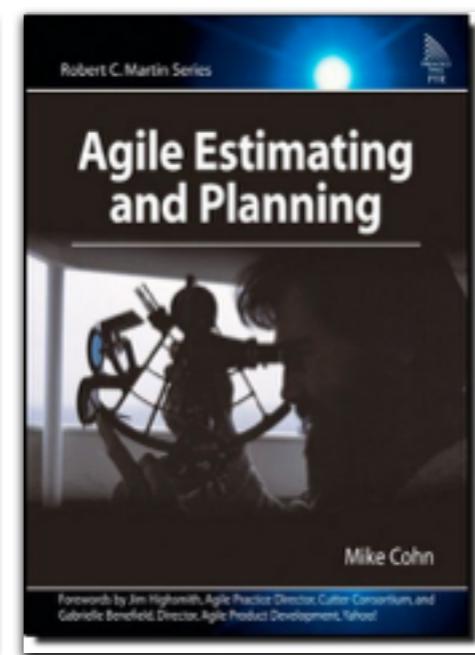
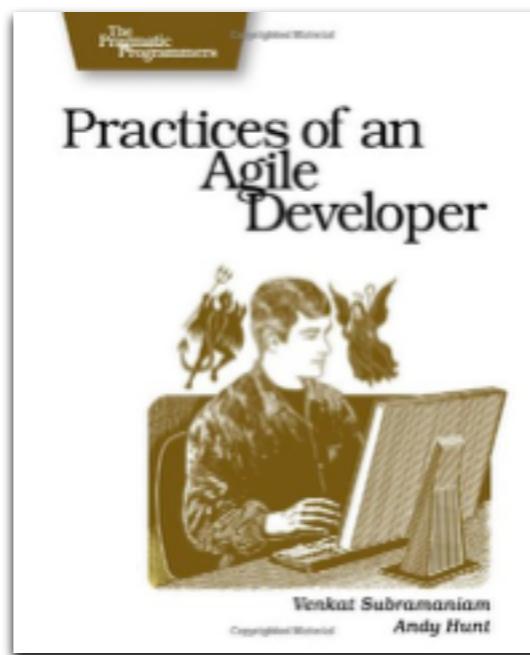
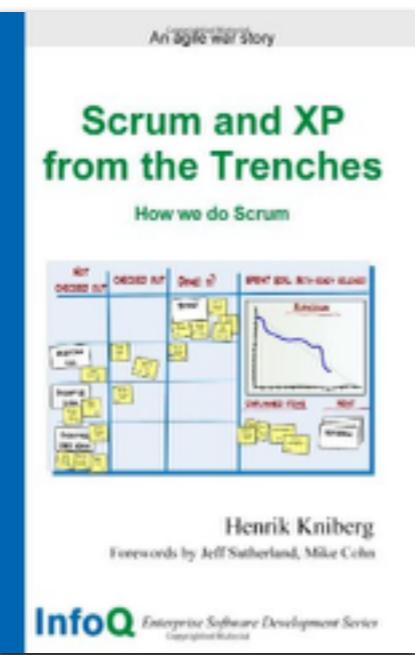
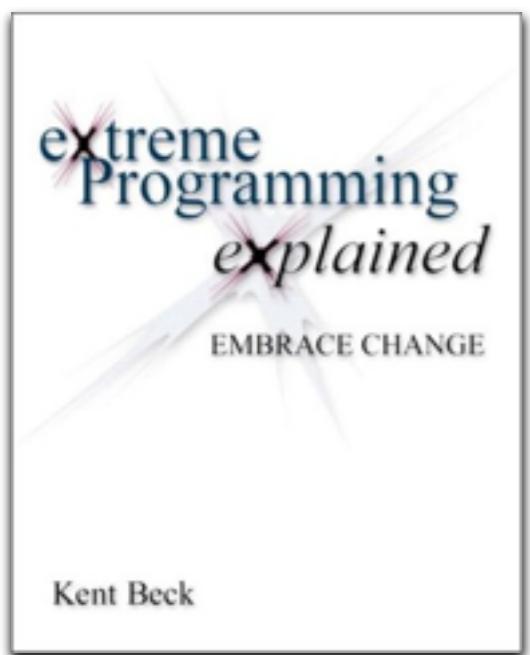
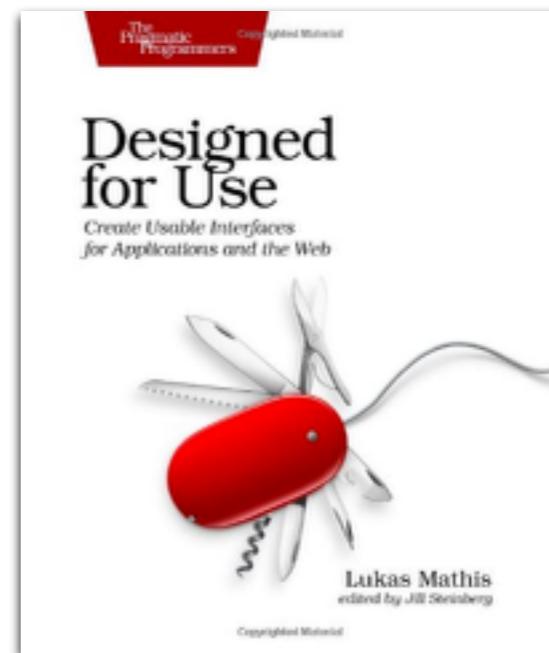
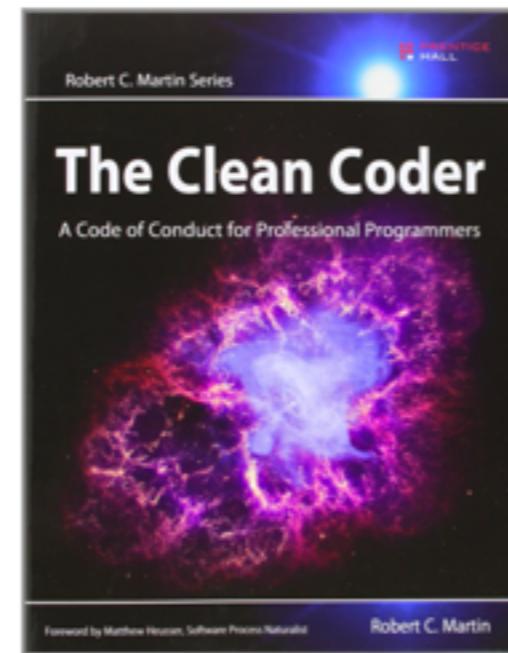
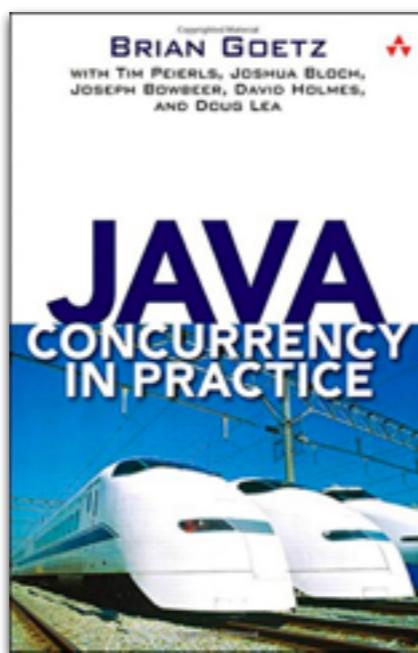
FUTURE

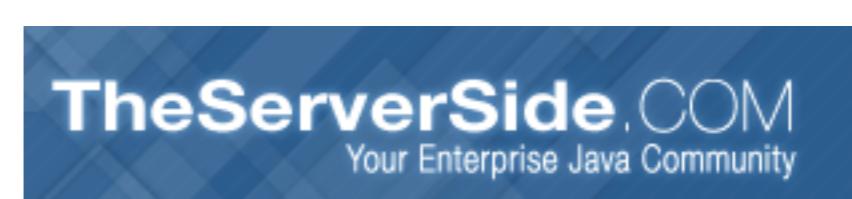


- provide predictions more carefully
- involve others
- think about happy and unhappy paths
- try to predict unpredictable



T-shaped man





@



SPARTEZ

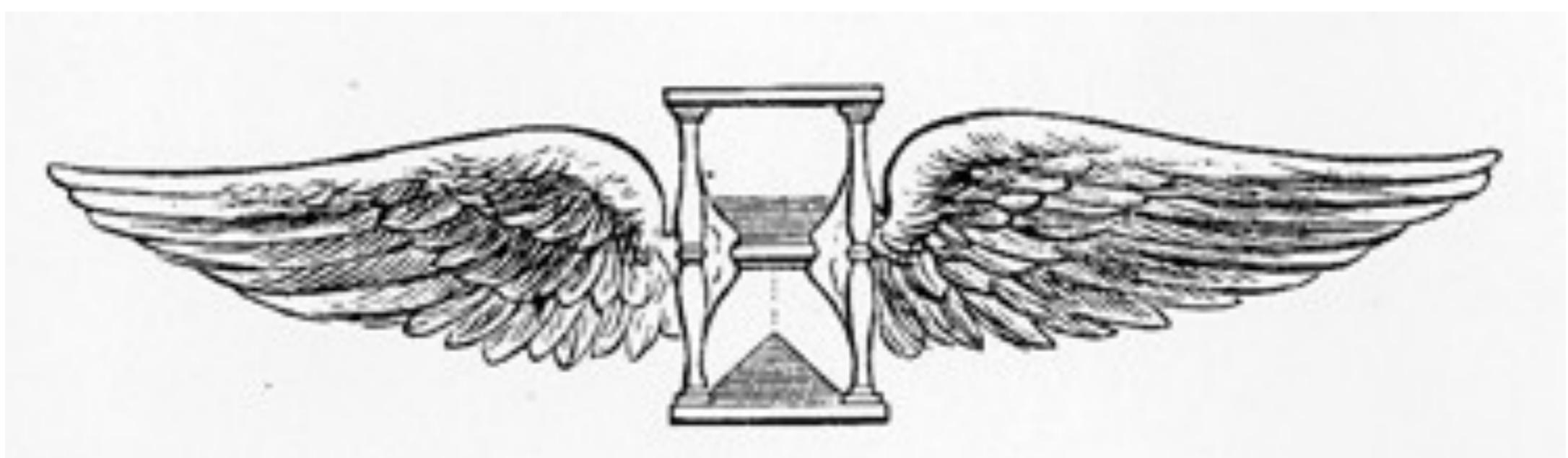
We call them seniors

Seniors take
responsibility

The group where most of
us consider themselves
to belong

And where the majority stops...



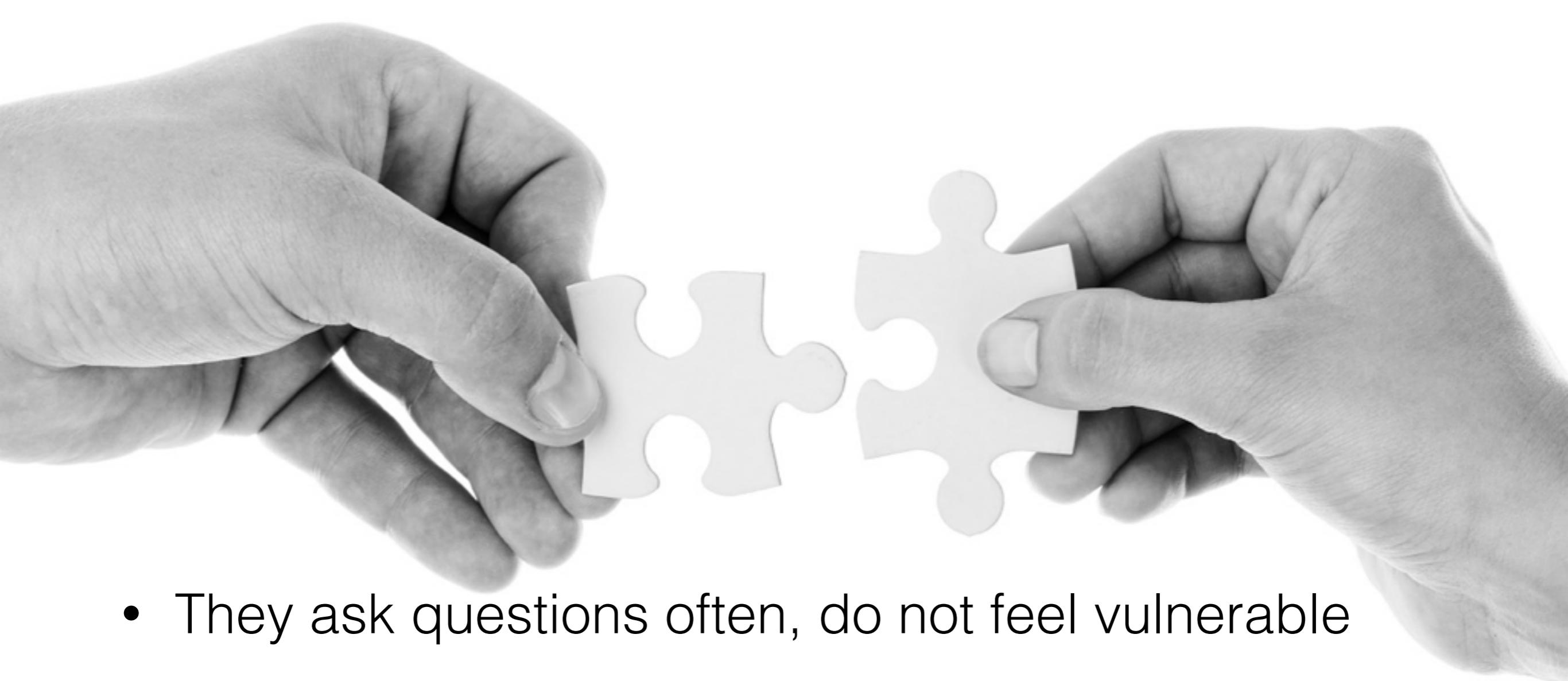


10
years

Further afterthoughts about Java

- Quite verbose and explicit language actually makes it easier for newbies to pick up modules of non-trivial size and understand them
- Good debuggers, stack traces, thread/heapdumps and diagnosis tools are life savers.
- Backward compatibility (maybe not 10+ years back...) is a really good thing in the wild (Scala, I am looking at you...)





- They ask questions often, do not feel vulnerable
- “It depends” guys
- “We together” language (his dev team + business/management + customers/users)
- Concentration their team and the users

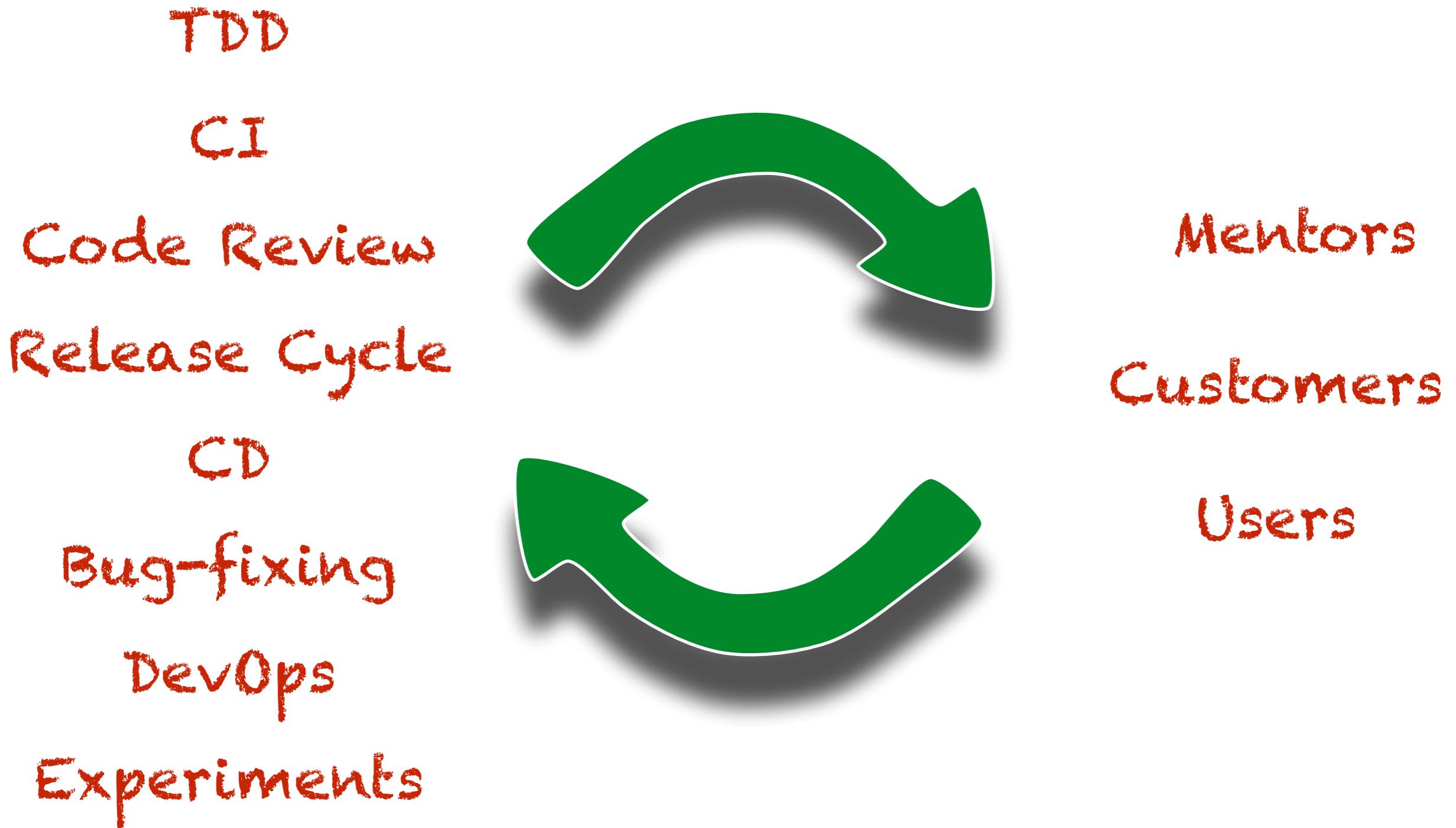
```
// Because JAA aviation rules allow  
// a simplified check here, together with  
// aircraft performance department we decided  
// (look at http://wiki....)  
// to use a simplified formula which allows us  
// to reduce  $O(n)$  complexity into  $O(\log(n))$   
// and thus make it acceptably fast  
// for long-haul flights.  
  
// the code follows here ...
```

“This code looks strange. Let’s find out why they decided to implement it in this way”



- Fitting into the big picture
- Response to Market Trends
- Discovering real (often hidden) problems
- Addressing business risks
- Usability
- User adoption
- Upgrades/migrations
- Future usage growth
- **Constant Learning**

Feedback Loop





The only difference between a rut and a grave
is their dimensions.

–Ellen Glasgow

Right photo by [Neil Smith](#) - Creative Commons BY-NC-SA 2.0

Left photo by [Creda's Hill](#) - Creative Commons BY 2.0

Great Team Player != Yes Man





The ability to say “no” is the
sign of true professionalism

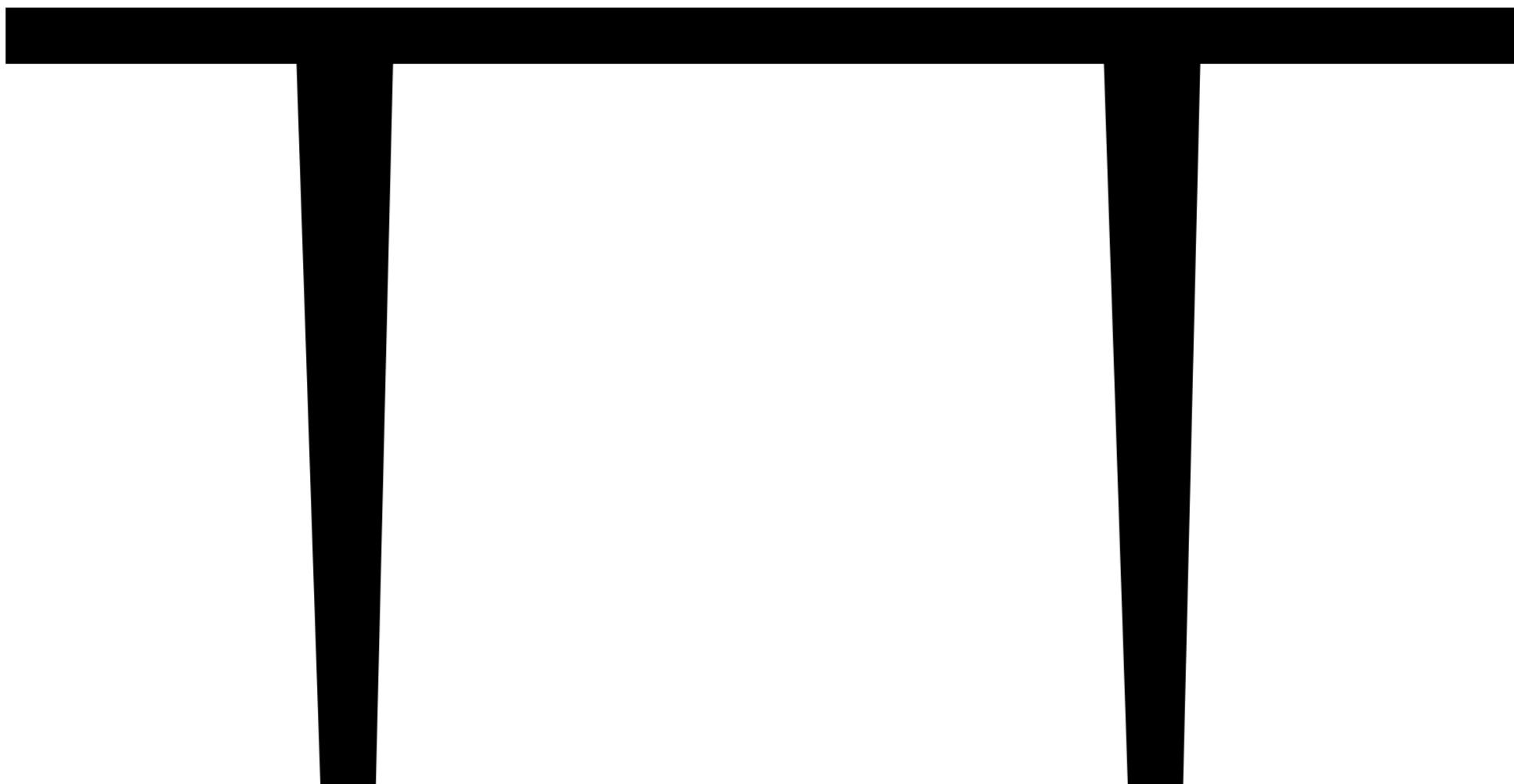
FUTURE

- very reluctant to provide any estimations upfront
- eager to operate with ranges and probability
- narrow down the estimates along the way



“Prediction is very difficult,
especially about the future”

–Niels Bohr



Pi-shaped man



Eat like a bird and poop like an elephant

Guy Kawasaki

10000

hours

5.5 years

8 hours per day

14.7 years

3 hours per day

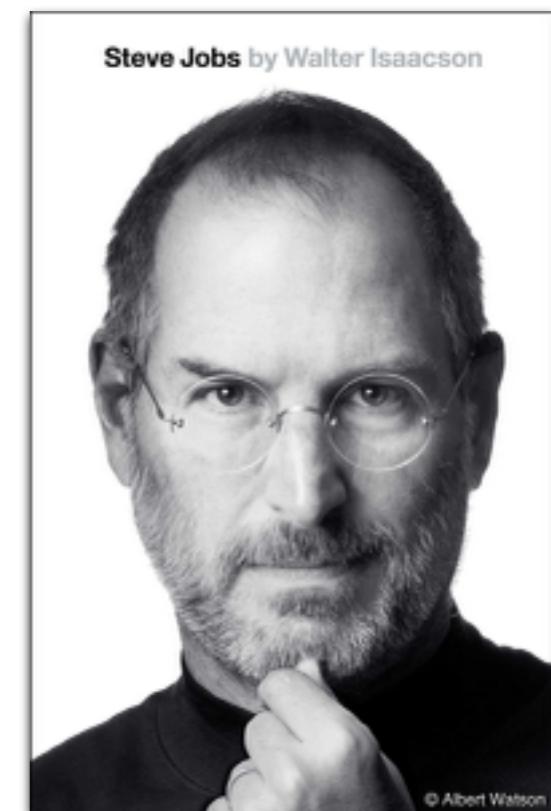
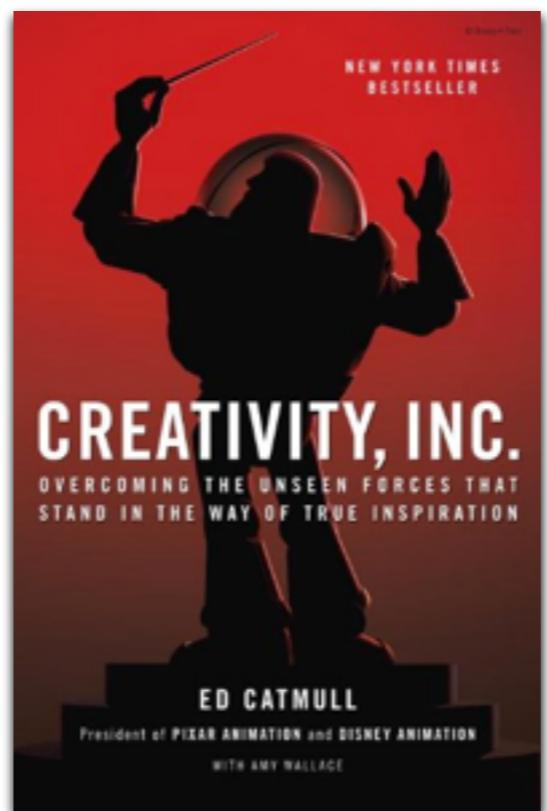
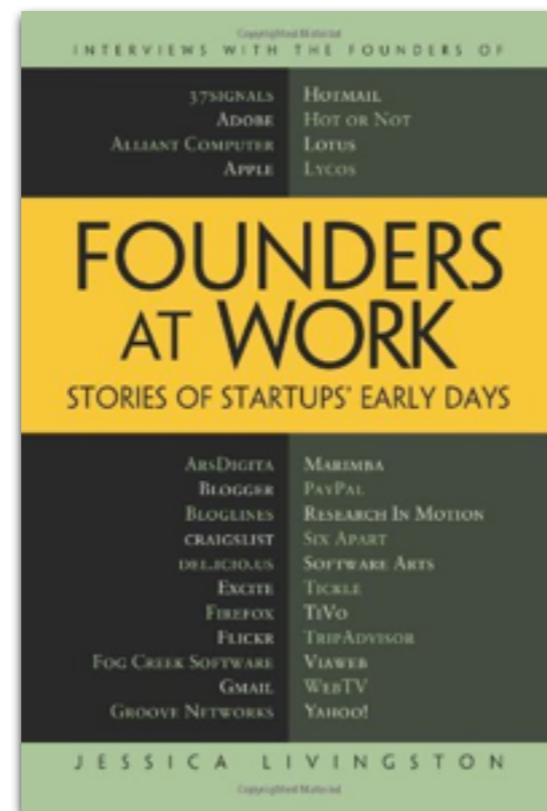
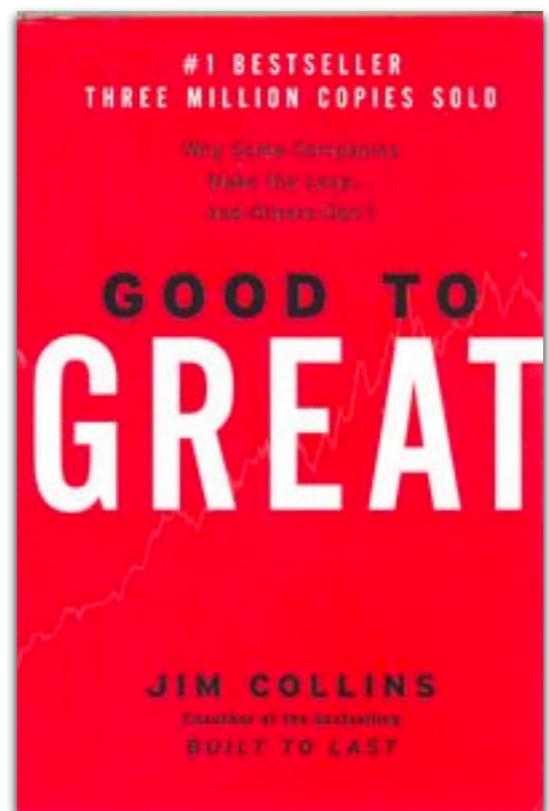
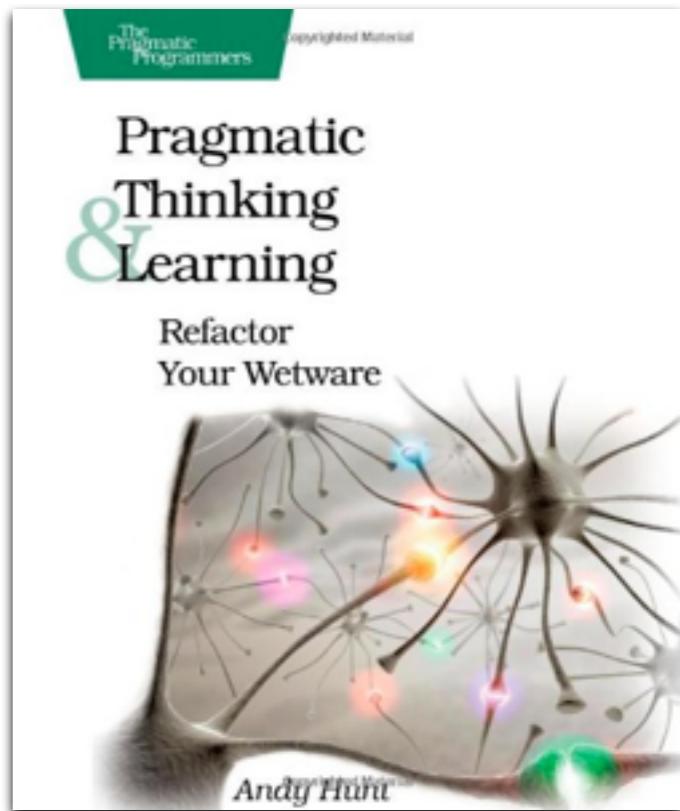
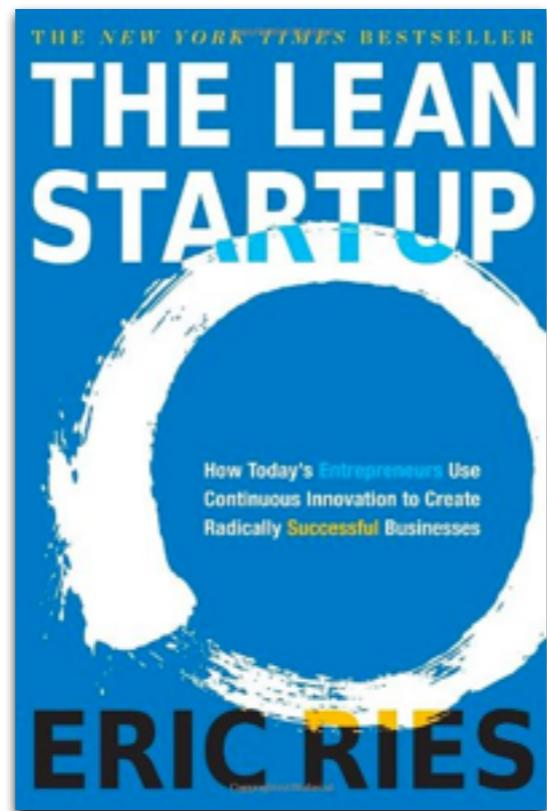
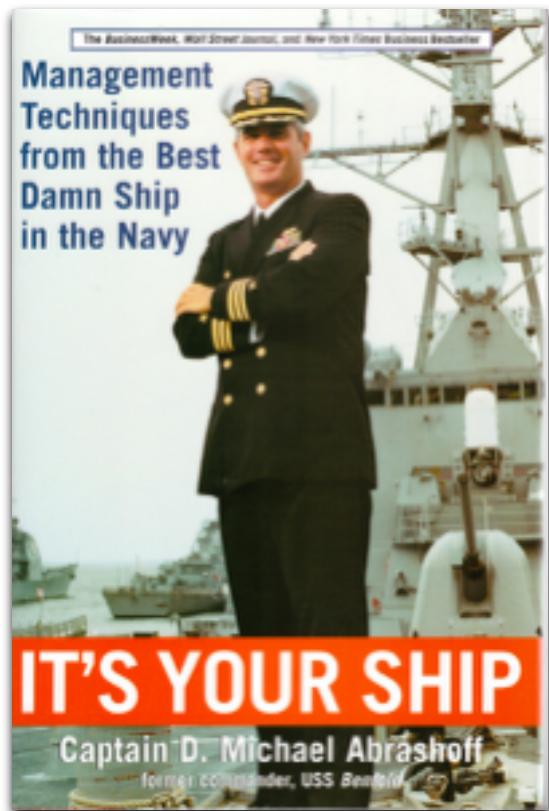
Meetings

Procrastination

E-mails

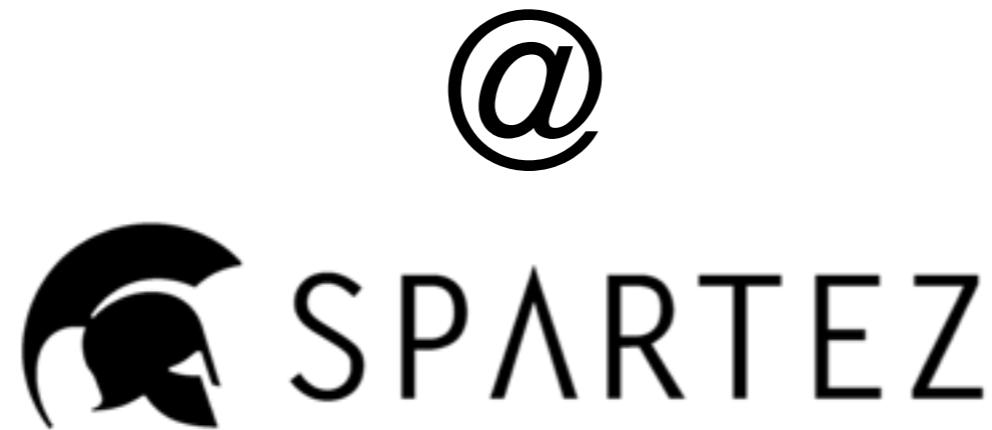
Processes

Methodology
Overhead





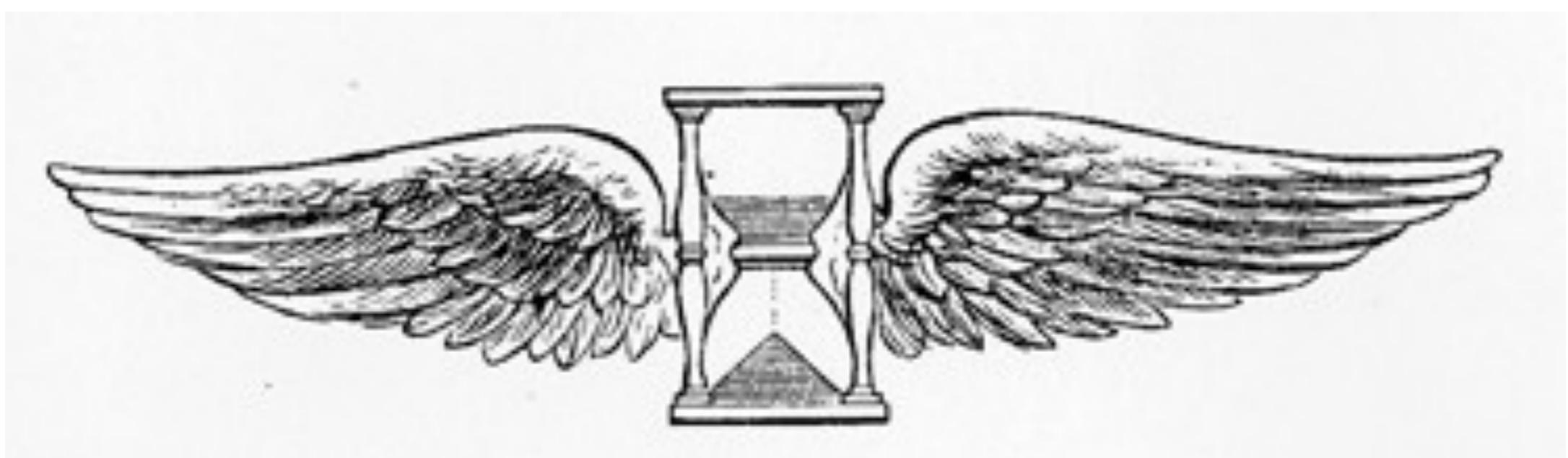
www.paulgraham.com/



We call them leaders
and/or principals

The group where most of
us aspire to belong, but
many will never be





15
years

Current afterthoughts about Java

- It's a truly powerful platform. The language itself hasn't really changed, but the whole ecosystem has changed tremendously!
- Amazing tools!
- No serious successor today for enterprises
- Java 8 finally brought well balanced language changes



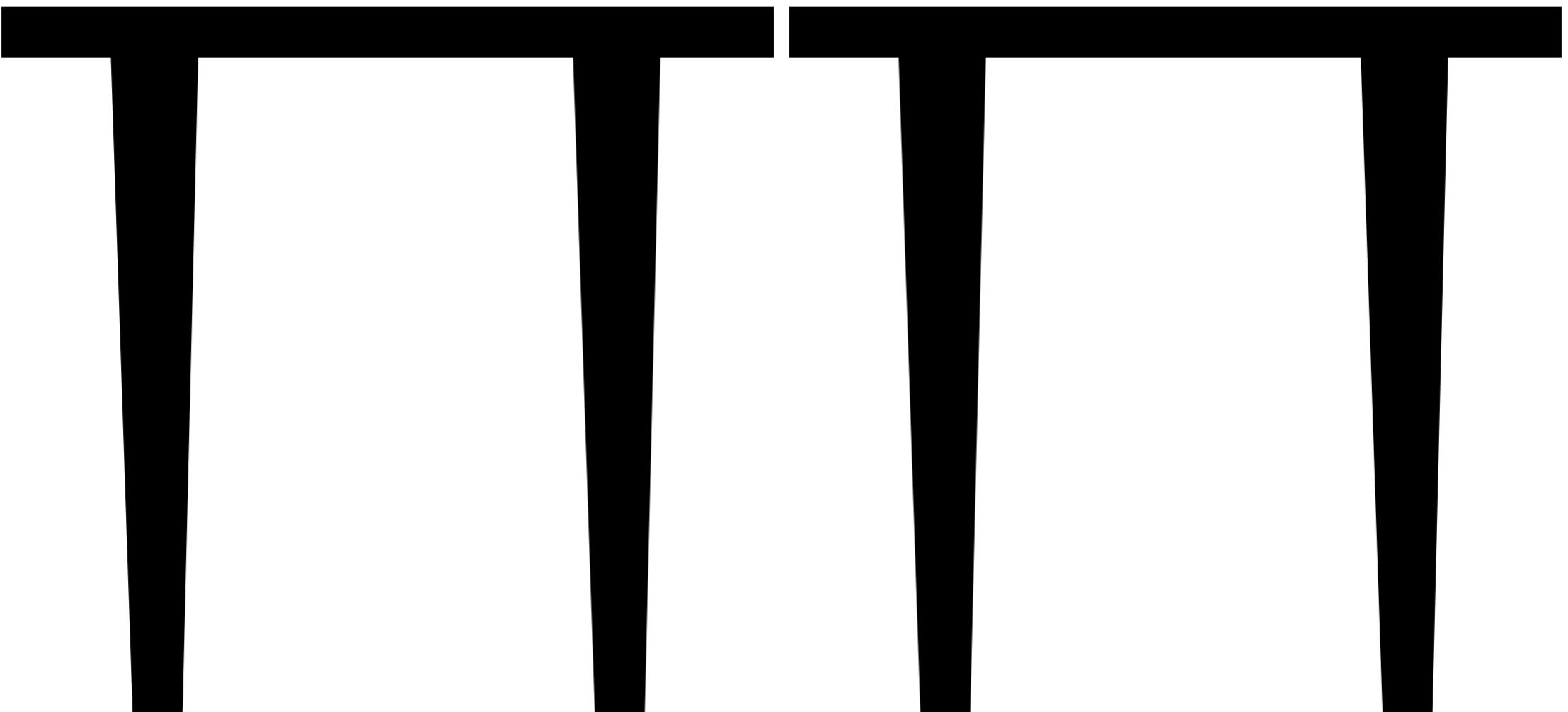


Focus on true customer needs, people around them and their growth

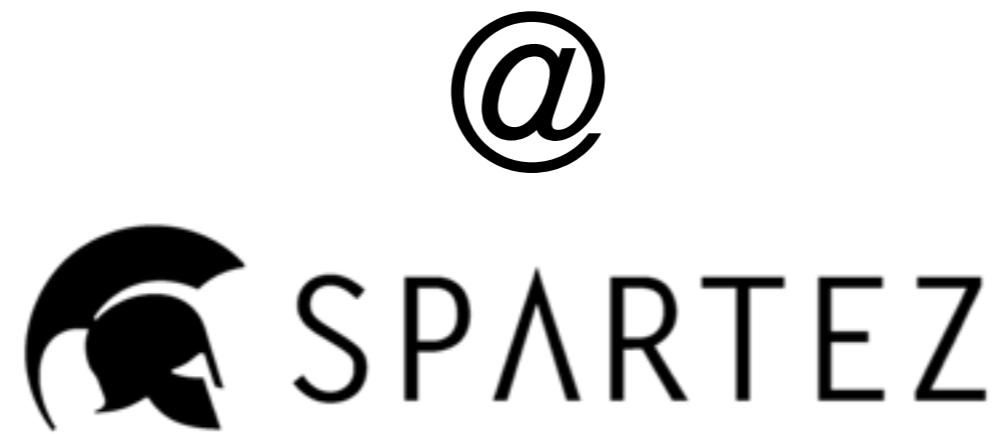
“Wow, such an unusual code.
I didn’t think about it in this
way. Maybe I was wrong...”



- Noticing the changes of the trends
- Creating new trends
- ???



PiPi-shaped Man



We call them unicorns

Tabela 3. Wynagrodzenie całkowite osób o różnym stażu pracy w IT w 2013 roku

staż	wielkość próby	25% zarabia poniżej	mediana 2013 rok	25% zarabia powyżej
1 lub mniej	1 173	2 500	3 250	4 390
2 - 3	2 143	3 100	4 400	6 000
4 - 5	2 238	3 800	5 500	8 000
6 - 8	3 284	4 211	6 500	9 500
9 - 10	1 527	4 663	7 400	11 200
11 - 15	2 416	5 000	7 780	12 000
16 i więcej	2 027	4 000	6 500	11 000

Źródło: Raport „Wynagrodzenia na stanowiskach IT w 2013 roku”



“There is nothing permanent except change.”

–Heraclitus

Don't concentrate on
mastering *only*
a technology

Learn to learn
constantly

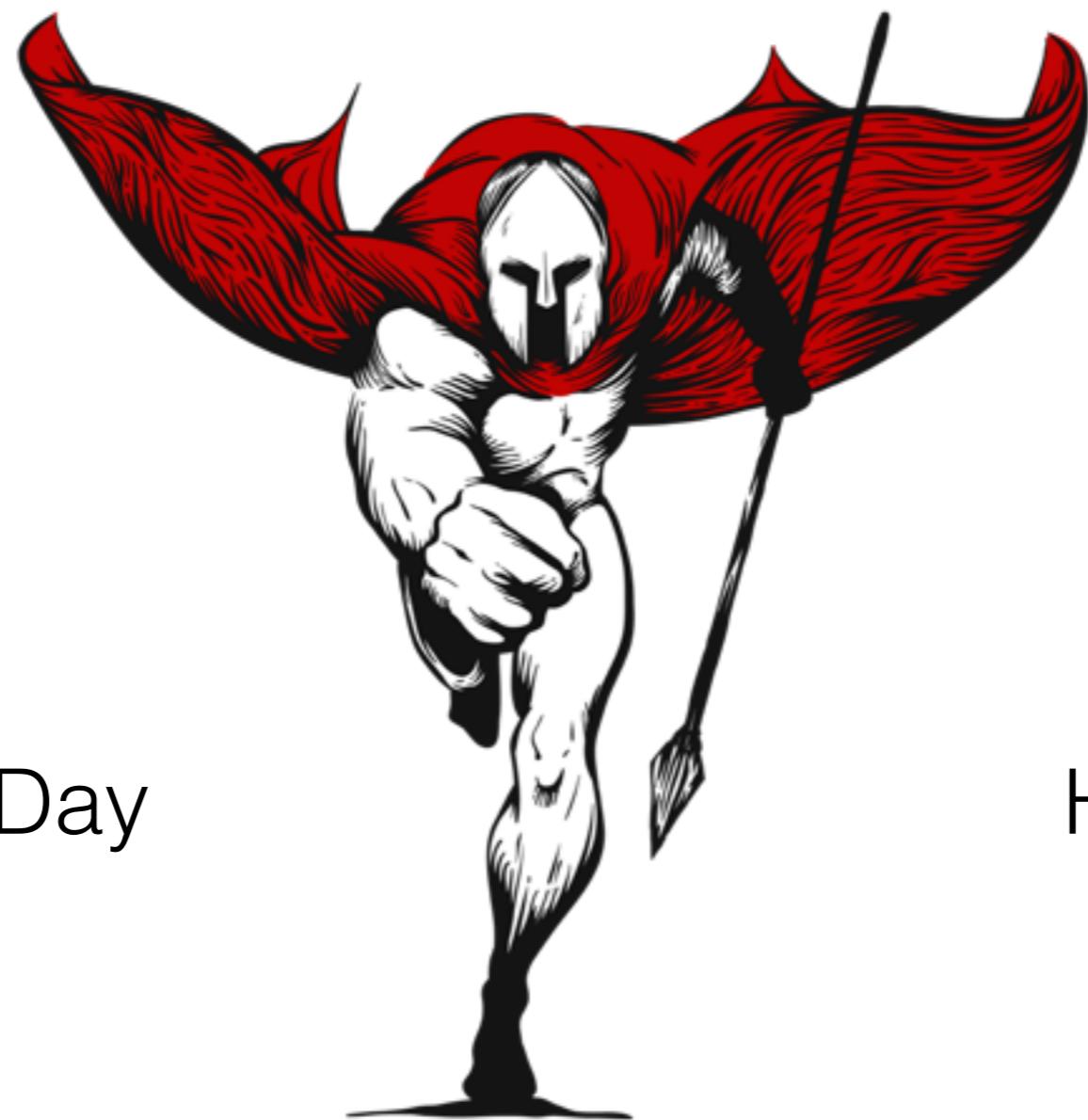
Summary

- Juniors assume other people ignorance, principals assume their own ignorance
- Java as a platform and a language is far from dead
- Mastering only Java puts you in a rut. Rut turns silently into a grave. The job market is your secret enemy.

“Live as if you were to die tomorrow. Learn as if you were to live forever.”

–Mahatma Gandhi

We are hiring in Gdańsk



13.03.2015
Spartez Open Day

10.03.2015
Hackergarten

spartez.com/careers



Questions

Twitter: @wseliga