Functional Programming for Business



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What is Functional Programming?

Not Object Oriented

Loosely related collection of concepts and techniques

Math

Immutable data

Abstraction using functions

For the video and transcript of this presentation, click here:

https://lispcast.com/functional-programming-for-business/

It's all about the biz

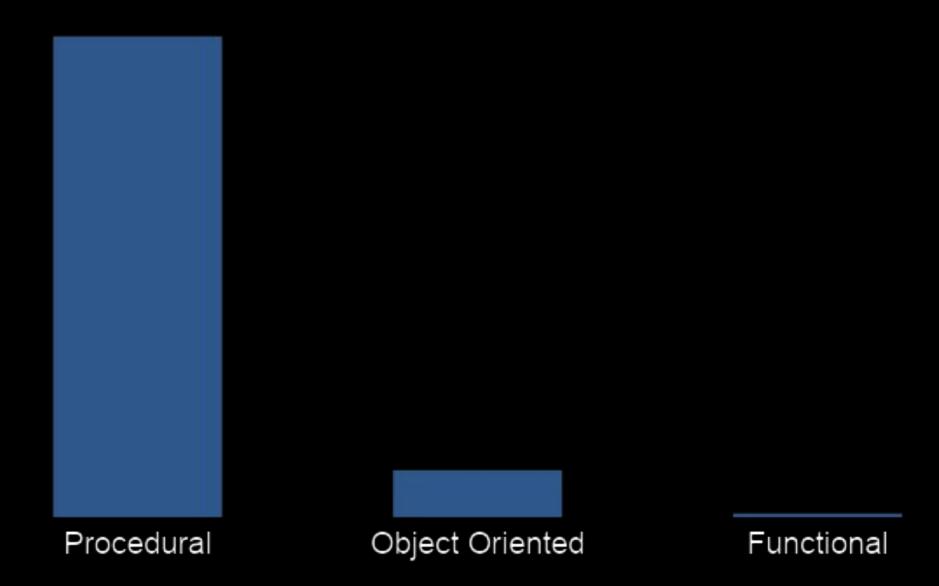
Hiring

Relative number of programmers



Functional

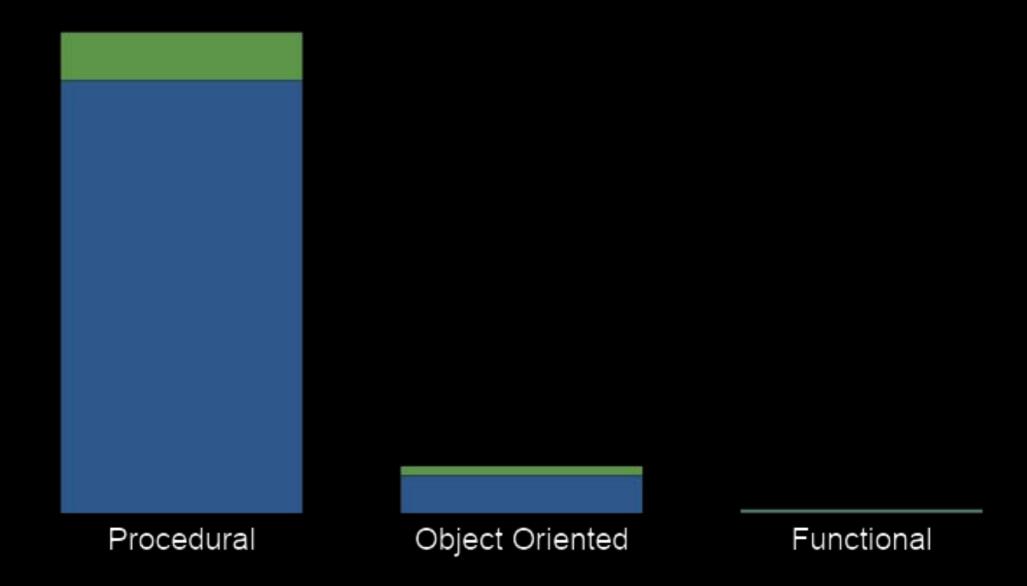
Relative number of programmers



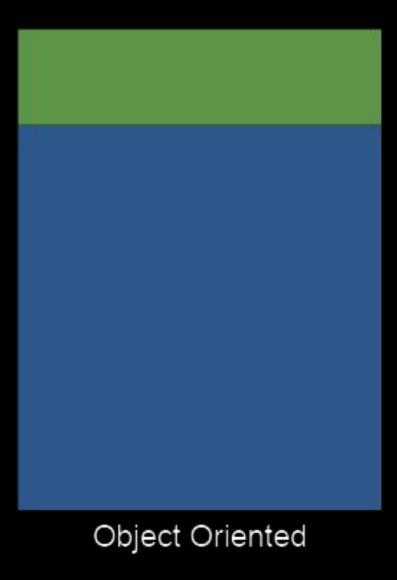
Is it harder to find functional programmers?

Is it harder to find *good* functional programmers?

Relative number of programmers



Relative number of programmers



Functional

Good programmers only matters for *hard problems*

Functional programmers are a little more expensive (on average)

(citation needed)

But you need fewer to do the same work

(citation needed)

Code Quality

of bugs is correlated with lines of code (defect density)

Functional code is often significantly smaller (by orders of magnitude)

(citation needed)

... FP results in fewer bugs

(citation needed)

Business Cases

Auditing

- Accounting
- Banking
- Medical records
- Airplanes
- Science

Mathematical

- Accounting
- Banking
- Finance
- Science
- Advertising
- Web analytics

Distributed/Parallel

- Big Data
- Realtime analytics
- Communications
- Banking

Hard Problems

FP sometimes succeeds where other methods have failed

(citation needed)



How to Use Real Computer Science in Your Day Job http://bit.ly/FPSucceeds

No pre-existing solutions

Incredibly complex

GUIs

Summary

Hard Problems

Smart People

Sharp Tools



Eric Normand LispCast

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