

CS 5470: Compilers

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Why take compilers?

It's meta.

It's ubiquitous.

It's theoretical.

It's practical.

It's hard.

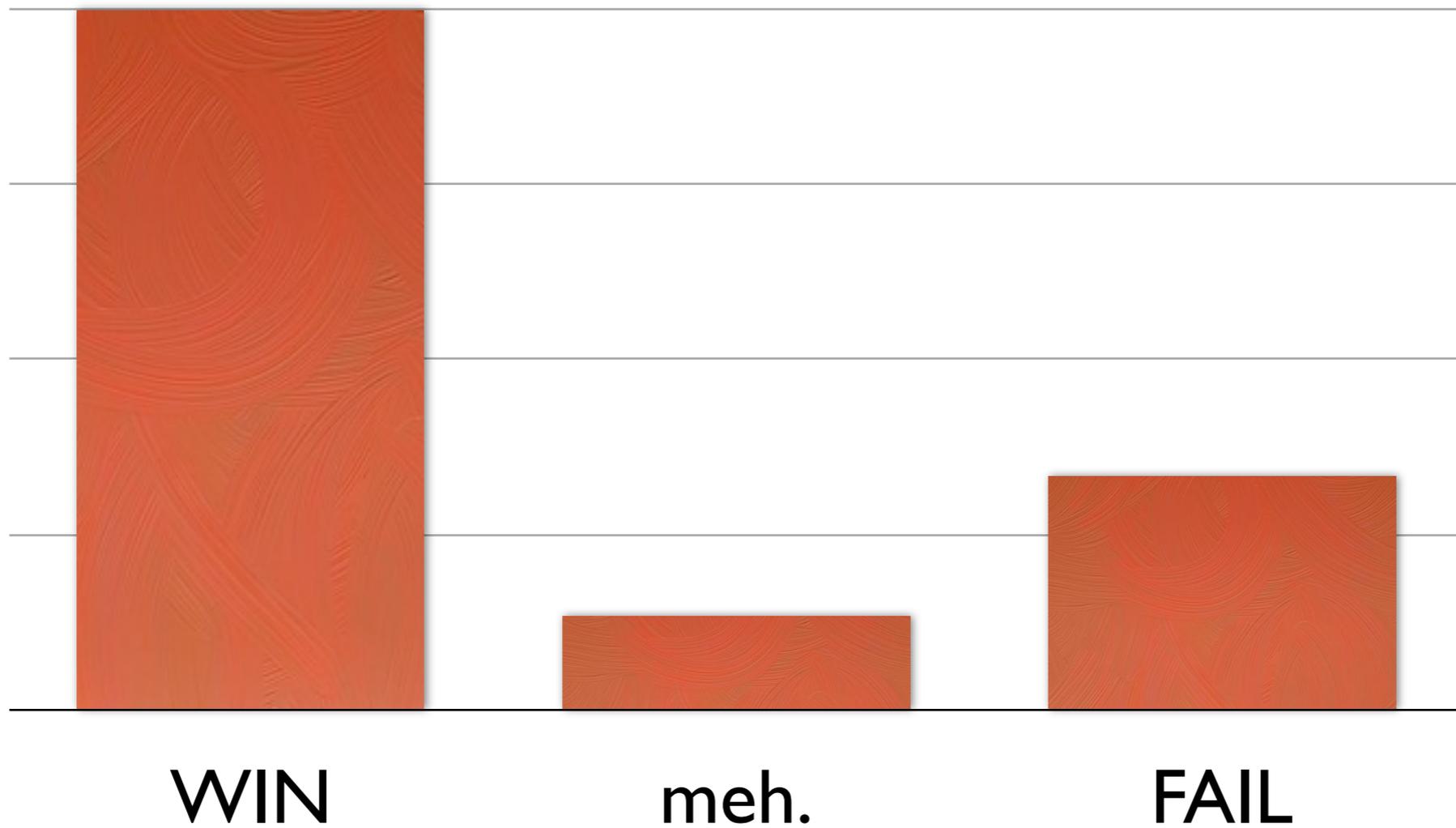
It's rewarding.

Menu

- Lexical analysis
- Syntactic analysis
- Semantic analysis
- Transformation++
- Static analysis
- Optimization
- Code generation
- Register allocation
- Garbage collection
- Virtual machines

No textbook

Grades



Grading

- About six projects
- Optional final exam
- Lots of extra credit

max(ProjectAverage, Final)

WARNING

The final exam is evil.

Six projects

Python compiler!

Lexical analyzer

Parser

High-level translator

Normalizer/transformer

Low-level translator

Code emitter

What language?

Not recommended

- Java, C#
- C, C++

Recommended

- Racket
- OCaml / SML
- Scala
- Haskell*

First assignment?

Learn Python 3.1