# CS 5510
# Programming Languages

Fall 2016

Instructor: **Matthew Flatt**

TA: **William Hatch**

# Course Details

http://www.eng.utah.edu/~cs5510/

# Lectures are Online

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- Class is for more examples and homework solutions
  - a.k.a. "recitation"
  - guideline: no new material introduced in class

# Programming Language Concepts

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By implementing **interpreters**

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By implementing **interpreters**

  ○ new concept $\Rightarrow$ new interpreter

By using **Racket** and variants

  ○ we don't assume that you already know Racket

# Interpreters

An ***interpreter*** takes a program and produces a result

- ○ DrRacket
- ○ x86 processor
- ○ desktop calculator
- ○ **`bash`**
- ○ Algebra student

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A ***compiler*** takes a program and produces another program

In the terminology of programming languages, someone who translates Chinese to English is a *compiler*, not an *interpreter*.

# Racket and `plai-typed`

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- a family of programming languages

- a language for creating programming languages

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**Racket** ➡ `plai-typed` ⬅ **ML**

PLAI = *Programming Languages: Application and Interpretation*, the textbook

# plai-typed

See **quick-ref.rkt**

# Homework 0

- Create handin account

- Racket/**plai-typed** warm-up exercises

<div align="center">Due Friday, August 26</div>