CS 5510
Programming Languages

Fall 2015

Instructor: Matthew Flatt
Course Details

http://www.eng.utah.edu/~cs5510/
Lectures are Online

After today, all slide presentations are online

• Watch the videos before class

• Class is for more examples and homework solutions
  ◦ a.k.a. “recitation”
  ◦ guideline: no new material introduced in class
Programming Language Concepts

This course teaches concepts in two ways:

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

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**

**Lisp ➔ Scheme ➔ Racket**

**Racket** is

- a programming language
- a family of programming languages
- a language for creating programming languages

... including **plai-typed**

**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

Due Friday, August 28