

CS4450 Lecture 1 Notes

Monday, August 20, 2018

3:12 PM

One midterm: October 5th, 25% of our grade

Written Homeworks + Programming: 40%

Final: 35%

Regrade Policy: Requests for regrades MUST be given via email 7 days from when the grade was given.

Office: 318 EBN

Office hours: By appointment, email first!

We will be writing compilers and interpreters in this course.

Interpreter: Not a translation like machine language, just evaluating it and holding on to the source program while doing it. Useful for exploring ideas in programming languages.

Note: Harrison will only answer emails from 9am-5pm Monday through Friday!

Advice:

- Read the assigned readings carefully
- Start early

In Haskell, you can't get into an int or char like you can in C (e.g. flipping bits with a `uint_8t` like in OS), so it's considered a "type safe" language.

Functions are Haskell's main thing. When you're writing Haskell, you're using functions.

First-class value: A value that you can pass around.

Can't pass a function in C. You can pass a function pointer in C but not a function. There are no good ways to pass functions out as values.

In a functional programming language, functions are first-class values.

You don't have assignment in Haskell. You don't have program variables whose value changes over time. How do you assign values in Haskell? You use a Monad.