CIS 5520
Advanced Programming

Fall 2024

This week

- HW #2 due Thursday

- Today: discussion about Type Classes

- Wednesday: In-class exercises
  - IOExercise: practice with Monad syntax
  - Semigroup, Monoids and Foldable exercise
  - read SortedList problem from HW #2 *before* class

Next week

- Monday's topic: QuickCheck
  - follow along in the Terminal (stack repl QuickCheck.hs)
- HW #3 released Monday, with new partners
  - QuickCheck
  - Persistent Data Structures

- Wednesday: class replaced by video due to Fall break
- In-class exercise about QuickCheck on **Monday, Oct 7th**

Best practices for **Homework**

- Searching for online answers
  - Not ok: finding HW solutions online, asking CoPilot / ChatGPT
  - Ok (with caution): StackOverflow for syntax/library questions
  - Best: hoogle, online library documentation
- Asking for help
  - Not ok: your friend who took the course last year
  - Ok (with caution): your homework partner
  - Better: public questions on Ed
  - Best: TAs + Professor questions in class and during OH

Type Classes Discussion

- Short video (apologies in advance)

- What are examples of overloaded functions and operators?

- Quiz: Eq instance for Trees

- What properties should instances of `Ord` satisfy?

[5 min break]

- Questions about Functors and Kinds

- Questions about Monad syntax and do notation