## Agenda for CSCE 590 class meeting of 2020-10-20 (Class 18: 1 of Week 9; Online)

## 1. Remember to record the session!

| WEEK | TOPIC | SOURCE |
| :---: | :---: | :---: |
| $1(8 / 20,8 / 25)$ | Introduction and the GHC Compiler and Haskell Platform | Chs. $1 \& 2[\mathrm{H}]$ |
| $2(8 / 27,9 / 1)$ | Types and Classes | Ch.3 [H] |
| $3(9 / 3,9 / 8)$ | Defining Functions and List Comprehensions | Chs. $4 \& 5[\mathrm{H}]$ |
| $4(9 / 10,9 / 15)$ | Recursive Functions | Ch. $6[\mathrm{H}]$ |
| $5(9 / 17,9 / 22)$ | Higher-Order Functions | $[\mathrm{B}] \&$ Ch.7 [H] |
| $6(9 / 23,9 / 29)$ | Declaring Types and Classes and the Countdown Problem | Chs. 8 and 9 [H] |
| $7(10 / 01,10 / 6)$ | Review and the Countdown Problem (was: Review and Midterm) | Chs. 8 and 9 [H] |
| $8(10 / 08,10 / 13)$ | Midterm and a Simple Sudoku Solver | Ch. $5[\mathrm{TFWH}]$ |
| $\mathbf{9 ( 1 0 / 1 5 , 1 0 / 2 0 )}$ | The Countdown Problem; Denotational Semantics | Ch.9 [H], Notes |
| $9(10 / 15,10 / 20)$ | A Simple Sudoku Solver; the Countdown Problem; Interactive | Chs. $9,10 \& 11[\mathrm{H}] ;$ |
|  | Programming and Two-person Games | Ch. $5[\mathrm{TFWH}]$ |
| 10 | Functors, Applicatives, and Monads | Ch. 12 [H] |
| 11 | Monadic Parsing | Ch. $13[\mathrm{H}]$ |
| 12 | Foldables and Lazy Evaluation | Chs. $14 \& 15[\mathrm{H}]$ |
| 13 | Reasoning about Programs | Chs. $16 \& 17[\mathrm{H}]$ |
| 14 | Functional (Persistent) Data Structures | Notes |
|  | Final Exam: December 10, 9 a.m. |  |

2. Check email to see whether students are emailing reports of trouble.
3. Ask student to use chat for questions and mute audio and video on their side, to limit clutter and bandwidth.
4. Virtual Office Hours. I expect to have virtual office hours on Blackboard Collaborate Ultra from 1500-1800 on Mondays. Office hours are canceled until further notice. Please email me for meetings.
5. HW9: Exercises 1-5 Ch. 9 [H], due on Thursday, October 22.
6. Ch. $9[\mathrm{H}]$ : The Countdown Problem, continued.
7. Formal semantics, with an emphasis on denotational semantics. A presentation based on Ch. 9 ("An Introduction to Formal Semantics") of: Carlo Ghezzi and Mehdi Jazayeri. Programming Language Concepts, $2^{\text {nd }}$ ed. Wiley, 1987.
8. Ch. $10[\mathrm{H}]$ : Interactive Programming.
9. Make sure that the students are fine and wait for questions before ending the session.
