Final Review

Details

- December 15 at 8:00-10:00am, same class
- 120 minutes
- close everything
- comprehensive
  - but biased heavily towards material after midterm

Topics

- core location
- persistence
  - core data
  - cloudkit
  - file systems / sandboxes
  - firebase
- concurrency
  - URLRequests
  - queues
    - ios
    - sync/async ops
    - serial/concurrent
    - dispatch groups
    - barriers
  - semaphores
  - problems
    - deadlock
    - priority inversion
- Memory conflicts / memory safety
  - what is a conflict?
  - how do they arise?
    - under what circumstances?

new stuff
- ARKit
  - basics of how one creates a scene
  - understand the demo
  - how objects created, specified
  - how objects recognized: horizontal vs vertical
- Core ML
  - generalities: what kind of learning are we talking about?
- Big things from before
  - how does SwiftUI work?
    - how does communication in SwiftUI work
      - how do you wire in a model?
      - how do you cause the UI to be updated?

There Will Be Coding
- work examples queue / concurrency section / memory safety in detail

Different ways to look at the exam:
- problem type:
  - 95 points short answer
  - 55 points coding
- subjects (very rough estimate)
  - how does swift work: 30 pts
  - persistence: 45 pts
  - concurrency: 50 pts
  - AR/ML: 25 pts

Grades
We currently have 60% of the grades in, i.e. 60 pts.
- Ignore “overall” column on grades.cs, no idea what it means.
- you can figure out where you are now by adding up pts:
  - 1 pt for each quiz (divide your score by the max)
  - 10 pts for each assign 1-10 (again, you will have to relate to max score)
- 10 pts for the midterm
- current stats are:
  - average of 50.4
  - stdev of 6.8
  - Implies:
    - A 57.2
    - C 43.6
    - *averages way higher than they will be after all grades in*
      - stdev of final project will be relatively high
      - stdev of the final will be high
  - In the worst case there will be no curve
    - I do not expect this to be the case