Recitation 8 (10/24- 10/28)

Midterm Solutions

Go over any questions.

Greedy Algorithms

Build final solution piece by piece
Being short sighted on each piece (can't see the future and don't care)
Never undo a decision

Interval Scheduling

Input: n intervals, s(i) is the start time of each interval, f(i) is the finish time for each interval
Output: valid schedule with the max # of intervals

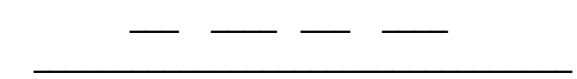
valid - has no conflicts
conflict - intervals i and j conflict if they overlap in times

Go over the 4 examples of i and j overlapping

Talk about different ways to sort the algos:

Shortest interval
Counterexample of suboptimal:

Earliest start time
Counterexample of suboptimal:



Conclude with the correct answer:
Sort all of the intervals by finish time & go over example on board.

Ex. Page 119 of textbook

If there is extra time, go over Minimizing Max Lateness