CSCI 132: Basic Data Structures and Algorithms

Final Study Guide

Logistics

- Monday, May 8th @ 2:00 PM 3:50 PM in Norm Asbjornson Hall 165
- Time length: 110 minutes. This exam is designed to be completed in 60-75 minutes.
- Open notes. You are allowed to use your laptop, your IDE, any notes, slides, lecture examples. This exam can be completed without a laptop.
- You are NOT allowed to use the internet to access external resources (Google, Stack Overflow, W3 Schools, etc)
- The midterm exam will consist of different types of question, such as:
 - Multiple choice questions
 - o True/False
 - Short answer
 - Illustrate the steps of sort
 - O What does the stack/queue look like after X operations?
 - o Complete the line of code so that X happens.
 - O What does this (recursive) method do?

Content

The following topics are all fair game for the midterm exam.

- Basic Java Classes, Class Structure, Methods, Operations, if statements, loops,
 OOP
- Basic Linked Lists
- Big-O Notation, How to determine running time of an algorithm
- Stacks
- Queues
- Bubble Sort
- Selection Sort
- Merge Sort
- Quick Sort
- Linear Search/Binary Search
- Recursion

Sample Exam Questions

(Coming Soon)