cs151

Final Comments

Data Structures

- Objects
- Array
- ArrayList
- Maps / Hashtables
- Stacks and Queues
  - **Priority Queues**
- **Heaps**
- **Linked Lists**
- **Trees**
- ~~Graphs~~

Programming techniques and concepts

- Object oriented programming
  - inheritance, generics, …
- **Searching**
  - **binary search**
  - **Binary Search Trees**
- **Sorting**
  - **insertion, selection, merge**
- Recursion
- Analysis

Course Goals

1. Become a better computer scientist
2. Learn about common data structures
    1. Implementation
    2. How and when to use each
3. Understand Object Oriented program design and its implementation in Java
4. Develop an understanding of UNIX
5. Become a better Java programmer