Readings for CSCI 241

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Note: I have found a wonderful free Data Structures in Java book that we will be using the rest of the quarter:

http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html

29 March: Big Oh.

- Building Java Programs, chapter 13.
- Introduction to Algorithms, chapters 2 and 3.
- http://dept.cs.williams.edu/~bailey/JavaStructures/Book_files/JavaStructures.pdf, chapter 5.
- https://rob-bell.net/2009/06/a-beginners-guide-to-big-o-notation/
- https://www.interviewcake.com/article/java/big-o-notation-time-and-space-complexity

April 3: Merge sort,

- http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html Chapter 6
- https://en.wikipedia.org/wiki/Logarithm
- Building Java Programs, chapter 13.
- Introduction to Algorithms, chapters 2 and 7.
- https://en.wikipedia.org/wiki/Merge_sort

April 10: Quicksort

- http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html, Chapter 6
- https://en.wikipedia.org/wiki/Quicksort

April 11: Binary Trees

• http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html, Chapter 12

April 19 Priority Queues

 $\bullet \ \mathtt{http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html} \ , \ \mathtt{Chapter} \ 13$

April 24 Search Trees

- http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html, Chapter 14
- https://en.wikipedia.org/wiki/Red-black_tree

May 4 Maps

• http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html, Chapter 15

May 15 Graphs

• http://www.cs.williams.edu/~bailey/JavaStructures/Welcome.html, Chapter 16