

Lessons Learned

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Lessons Learned

This was an awesome programming class, at first, I wasn't sure what to expect as I came into it, this was my first-time experimenting with upper-level programming, I've never worked with GUI or data structures like this before. I was a little worried as I didn't know how well I would adjust. But after completing this course and going through the weeks to complete the course I am very happy I got to learn more about java and deal with more high-level coding! In the CSC 372 class we covered more in-depth topics of programming. In the beginning we covered how we can use our code repeatedly through Inheritance. In week two and three we learned creating graphical user interfaces in Java with both the java FX and java swing. Unfortunately, Java FX was discontinued by Oracle because there was a desire to pull out noncore modules from the JDK and instead make them independent modules (Krill, 2018).

Java is an object-oriented programming language, so we learned about abstract classes and interfaces. An abstract class in Java is a superclass that can't be instantiated and is used to declare or define overall characteristics (Techopedia, 2011). We also learned about Recursion and working with recursive functions in Java. Recursion is the method of making a function call itself repeatedly to until the function does something you want (Java, n.d). Recursion is a way to break complicated problems down into smaller problems that are less complicated to solve (Java, n.d). Recursion was a method I was never very fond of, and often I opt to go with other methods over recursion to solve problems, but this class gave me a better understanding of it all and more comfortable working with recursive functions.

We also learned a lot about sorting and searching the end the class. Some common searching methods are Linear Search, Binary Search, and Interval Search (Searching, n.d). Some common sorting methods are Merge Sort, Heap Sort, Insertion Sort, and Selection Sort (04, n.d).

We also touched on Collections. Java has many Collections, some of the ones we learned about were Hash Maps, Tree Maps, and Linked Lists. Linked list was my favorite to learn about, as I have been using array lists since I first started programming in java, so it was a nice twist. Finally, we also learned about exception handling, stacks, and queues. This was all ultimately to prepare us for the classes we will have going forward, as they get more advanced and difficult, understanding how to manage the code and theories will be critical to our success.

In conclusion, we learned a lot in 8 weeks about programming, a lot of theories and ideas were shared between our professor and the students. This class was extremely helpful in getting a better understanding of programming in Java and becoming more of an object-oriented programmer and I am excited to continue my education in computer science. Thank you, Professor Thakkar, for everything this trimester.

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