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 programming in Java and honestly, 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 another programming language and started building more of a foundation as far as my knowledge of programming goes! In the CSC 320 class we covered the basics of programming. In the beginning we covered what programming is, variables, and how to run code for Java in the Eclipse IDE and understanding how we can use the code to solve problems. In weeks two and three we learned about variables, data types, and dictionaries, and started to grasp a basic concept of what they are. A string can store a sequence of characters, like the word 'Code', this is a string (Lysecky, 2018).

Its common as a programmer to desire to group multiple related variables together, this can be done using Arrays and ArrayLists (Lysecky, 2018). We also learned about decision making in Java with branching and Boolean statements. Branching directs a program to execute either one group of statements or another, depending on the result of an expression (Lysecky, 2018). On top of this we learned how to use for and while loops to be able to iterate threw lists or multiple objects. Its good rule of thumb to use a for loop when the number of iterations is computable prior to the beginning of the loop, also when counting down from X to 0 (Lysecky, 2018). Using while loops are more for when the number of iterations is unknow prior to entering the loop, as well as when iterating until a user enters a particular character (Lysecky, 2018).

We also learned a lot about object-oriented programming towards the end the class. This includes the use of functions, classes, and modules. A function is a series of statements, used to break down code and help with readability (Lysecky, 2018). Classes also help with grouping

certain variables, methods, and object together, improving the readability of code and supporting extremely high-level programs with thousands of lines of code. Classes and methods also aid in simplifying code, as a certain class from a file can be implemented in other code for use, saving time, money, and effort for other programmers (Lysecky, 2018). This was 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 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 my foot in the door to the with Java and with object-oriented programming and I am excited to continue my education in computer science. Thank you Dr. Mazen Alkhatib for everything this trimester.

References

Lysecky, R., & Lizarraga, A. (2018). Programming in Java with zyLabs. Wiley.