**Herman Mann**

**CMSC 203**

**Assignment 2**

**Random Number Guesser Implementation**

**A picture containing text

Description automatically generated**

A picture containing graphical user interface

Description automatically generated

***== Example Run 1 (one iteration) ===========***

A picture containing table

Description automatically generated

***== Example Run 2 (one iteration, one guess over the limit) ===========***

A picture containing table

Description automatically generated

***Text

Description automatically generated***

== Example Run 3 (two iterations) ===========

Screen shot of RandomNumberGuesser Assignment 2

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Reflection Paragraphs

In this assignment I got to learn a lot about new different things specifically a lot about how to really do the concept of input validation and how to really put this into use. I learnt a lot about the different programming concepts that I have seen being utilized so far throughout this course. Utilized a lot of small methods to create this random number guessing game, used a lot of loops and found out how to really use them very well in this context of things. I learnt the use of classes, methods to modularize your code, and looping makes programming projects/assignments so better and convenient to deal with and use itself. I learnt a lot about the different conditional statements we can use even more to implement this specific project like if, if-else-if, and then the else followed by a single if statement. Loops, conditional statements like I said before, the use of methods, and classes make programming so much more useful and more non repeating of things more happening. The use of objects and calling object with the instance of a class name, in this specific project the RandomNumberGuesser randomGuesser = new RandomNumberGuesser creates a new instance of the class of the random class project and I could call any method within the project class I created. So, the use of objects are so important in the programming world, and throughout major computer science projects all in all.

Throughout the completion of the Random number guessing assignment (Assignment 2), I struggled with on how to accurately use some of the methods from the RNG class that was given to us, like the RNG.getCount, and the RNG.resetCount methods. I played around with it here and there with the use of the conditional statements and with the use of do-while loops to solve my problem to accurately use these two methods properly in my overall assignment. I struggled with allowing the user to enter a yes or no to continue iterating the random number guessing game again and again, and it wasn’t working until I used a do-while loop and created extra variable declarations within the method of the user to enter a yes or no String choice to continue again or no and initialized extra boolean declarations to solve my problem within the do-while loop processing of this specific part/method of the assignment. I would study more about the concepts and use them even more before I start my next project to make my next project’s experience better and more efficient. I would instantiate more projects and use more conceptual thinking, with loops to make my life easier and to do the next project even better and successfully.

For this assignment the parts I was successful at was I was modularizing different smaller methods to make this assignment into smaller and smaller parts to fully develop a great working program algorithm. I was successful at using different conditional decision structures along with repetition structures like the do-while loop almost each time I used the methods I was dealing with for this project. I was successful at creating great spacing, indentation, naming convention, and the use of different specified names to make my Random number guessing assignment so successful any programmer reading my assignment will greatly understand what this assignment was all about and what were the specifics we were doing throughout this project all in all. I wasn’t successful at doing my assignment all in one method, the main driver method I needed smaller methods that would’ve worked efficiently to develop my assignment with less straining, and I was successful at this, so there were few to no parts of the project/assignment I had difficulty with.