**CMSC203 Assignment 2 Design**

Class: CMSC203 CRN 21456

Program: Assignment # 2

Instructor: Dr. Ahmed Tarek

 Summary of Description: This file will generate a random number between 1 and 100. The class should use 4 methods rand, resetCount, getCount, and inputValidation.

 Due Date: 09/13/2021

 Integrity Pledge: I pledge that I have completed the programming assignment independently.

 I have not copied the code from a student or any source.

**Part1: Pseudo Code:** Here is a pseudo code for Assignment 2 program:

**Display a greeting and prompt the user for a number between 0 and 100.**

**Check user input to determine if user typed an integer.**

**If input is not an integer**

**Display error message for invalid input.**

**Else**

**Compare user input to the random number.**

**If the number is correct**

**Display message saying “Congratulations you guessed correctly. Try again? (yes or no)”**

**If user says yes**

**Restart Program**

**Else**

**end program**

**Else if the number is too high**

**Display message “Your guess is too high.”**

**Prompt user to enter a number between their guess and**

**the lower bounds**

**Else if the number is too low**

**Display message “Your guess is too low.”**

**Prompt user to enter a number between their guess and**

**the upper bounds**

**Part2: Comprehensive Test Plan**

A good test plan should be comprehensive. This means you should have a few test cases that test when the input is in and out of range, division by 0, incorrect Data type, etc. (Provide valid and invalid input)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Cases | Input | Expected Output | Actual Output | Did Test Pass? |
| Case 1 | Integer | Congratulations you guessed correctly. Try again? | TBD |  |
| Case 2 | Integer | Your guess is too high | TBD |  |
| Case 3 | Integer | Your guess is too low. | TBD |  |
| Case 4 | String | Error Message. | TBD |  |