Class: CMSC203 CRN XXXX

 Program: Assignment 02

Instructor: Dr. Ahmed Tarek

 Summary of Description: This is a program, where computer selects a number, and the user has to guess it. The user will have infinite attempt to guess the correct number.

 Due Date: 02/22/2021

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

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

Programmer: Sandro Costa

**Pseudocode:**

Ask for a guess.

Check if the input is in between.

If not in range,

Ask again.

If in range,

Check if the input matched the random number that was generated.

If the guessed number is greater than the generated number,

Print “your guess is too high.”

If the guessed number is inferior to the generated number,

Print “your guess is too low.”

If it meets the auto generated number

Print “Congratulations, you guessed correctly. Try again (yes or no)?

If “NO”

Print “thanks for playing.”

If “yes”

Resume the program from step 1

**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 | 60, 30, 15, 20, 29, 25.  1  60, 40, 20, 15, 7, 5, 4, 3, 2 | Congratulations, you guessedd currectly  Try again? press 1 for 'yes' and 2 for'no'  Congratulations, you guessedd currectly  Try again? press 1 for 'yes' and 2 for'no' | Congratulations, you guessedd currectly  Try again? press 1 for 'yes' and 2 for'no'  Congratulations, you guessedd currectly  Try again? press 1 for 'yes' and 2 for'no' | Yes. |
| Case 2 | 60, 10, 40, 50, 45, 43, 42 | Congratulations, you guessedd currectly  Try again? press 1 for 'yes' and 2 for'no' | Congratulations, you guessedd currectly  Try again? press 1 for 'yes' and 2 for'no'. | Yes |
| Case 3 | 50.64 | Compiler error | Compiler error | No |

**Part3: Screenshots related to the Test Plan:**

**Case 1**

**Graphical user interface, application

Description automatically generated**

**Case 2**

**Graphical user interface, text, application, Word

Description automatically generated**

**Case 3**

Text

Description automatically generated

**Lessons Learned** <Provide answers to the questions listed below>**:**

Write about your Learning Experience, highlighting your lessons learned and learning experience from working on this project.

Throughout the assignment I learn to use methods from another class. I got to use loops some mathematical operations to have the correct program. Loops were very important for this project. The part where I am still struggling is, I am having problem getting the user input using string. Which I would like my professor to assist me with.

**Check List:** <Provide answers to the column Y/N or N/A >**:**

|  |  |  |  |
| --- | --- | --- | --- |
| **#** |  | **Y/N** | **Comments** |
|  | **Assignment files:** |  |  |
|  | * FirstInitialLastName\_ Assignment#\_Moss.zip | **Yes or No** |  |
|  | * FirstInitialLastName\_Assignment#.docx/.pdf | **Yes or No** |  |
|  | * Source java files | **Yes or No** |  |
|  | **Program compiles** | **Yes or No** |  |
|  | **Program runs with desired outputs related to a Test Plan** | **Yes or No** |  |
|  | **Documentation file:** |  |  |
|  | * Comprehensive Test Plan | **Yes or No** |  |
|  | * Screenshots related to the Test Plan | **Yes or No** |  |
|  | * Screenshots of your GitHub account with submitted Assignment# (if required) | **Yes or No or N/A** |  |
|  | * UML Diagram (if required) | **Yes or No or N/A** |  |
|  | * Algorithms/Pseudocode (if required) | **Yes or No or N/A** |  |
|  | * Flowchart (if required) | **Yes or No or N/A** |  |
|  | * Lessons Learned | **Yes or No** |  |
|  | * Checklist is completed and included in the Documentation | **Yes or No** |  |