**CMSC203 Assignment 2 Implementation (Documentation)**

Class: CMSC203 CRN **31569**

 Program: Assignment **#2**

Instructor: **Professor Tarek**

 Summary of Description: **A high and low game where a user can guess to find a random number between 0 and 100.**

 Due Date: 02/21/2023

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

 I have not copied the code from a student or any source. **Aaron Espana Rubio**

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

**/\***

**\*Create a random number between 0 and 100.**

**\*Ask the user to enter their first guess.**

**\*Check if the guess was correct.**

**\*If correct, congratulate the user and terminate program,**

**\*Else, tell the user if their guess is above or below the random number and allow them to guess again.**

**\*Once done with the game, ask the user if they want to play again.**

**\*If yes, restart the game.**

**\*Else, terminate the program.**

**\*/**

**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 | 50, 75, 85, 92 | Congratulations! You guessed the correct number: 92. | Congratulations, you guessed correctly! | YES |
| Case 2 | 50, 25, 35, 30, 27, 26 | Congratulations! You guessed the correct number: 26. | Congratulations, you guessed correctly! | YES |
| Case 3 | 50, 75, 62, 56, 59, 57 | Congratulations! You guessed the correct number: 57. | Congratulations, you guessed correctly! | YES |
| Case 4 | 102, 108, 500, -45, -3 | Guess must be between 0 and 99. | Congratulations, you guessed correctly! | YES |

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

**Case 1 & Case 2:Text

Description automatically generated**

**Case 3:**

**Text

Description automatically generated**

**Case 4**

Text

Description automatically generated

**Git Hub Screenshot:**

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

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

What have you learned?

**I learned how to create a driver to successfully use and test a class.**

What did you struggle with?

**Making my code readable when coding for programs that are becoming increasingly complex.**

What would you do differently on your next project?

**Create a function that resets the game variables.**

What parts of this assignment were you successful with, and what parts (if any) were you not successful with?

**I believe I was successful in quickly learning how the RNG class of functions work and quickly creating a driver class to test them.**

Provide any additional resources/links/videos you used to while working on this assignment/project.

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

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