**CMSC203 Assignment 1 Implementation**

Programmer: Ryan Tran

Class: CMSC203 CRN 30376

 Program: Assignment 1 Implementation

Instructor: Professor

 Summary of Description: (an application that is used to help solve possible problems to restores someone’s internet connection.).

 Due Date: 2/13/2023

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

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

**Part1: Pseudo Code:** Here is a pseudo code for Assignment 1 program:

DISPLAY "If you have a problem with internet connectivity this WiFi Diagnosis might work."

DISPLAY "First step: Reboot your computer"

DISPLAY "reply if this fixed the issue with (yes or no)"

READ answer

IF answer is not "yes" or answer is not "no"

DISPLAY invalid\_answer

ELSE IF answer is "yes"

DISPLAY "Problem fixed"

ELSE

DISPLAY "Second step: Reboot your router"

DISPLAY "reply if this fixed the issue with (yes or no)"

READ answer

IF answer is not "yes" or answer is not "no"

DISPLAY invalid\_answer

IF answer is "yes"

DISPLAY "Problem fixed"

ELSE

DISPLAY "Third step: Make sure the cables to your router are properly connected and cable modem is getting power"

DISPLAY "reply if this fixed the issue with (yes or no)"

READ answer

IF answer is not "yes" or answer is not "no"

DISPLAY invalid\_answer

ELSE IF answer is "yes"

DISPLAY "Problem fixed"

ELSE

DISPLAY "Fourth step: Move your computer closer to your router"

DISPLAY "reply if this fixed the issue with (yes or no)"

READ answer

IF answer is not "yes" or answer is not "no"

DISPLAY invalid\_answer

ELSE IF answer is "yes"

DISPLAY "Problem fixed"

ELSE

DISPLAY "Fifth step: Contact your ISP"

DISPLAY "Programmer: Ryan Tran”

**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 | yes | You have solved the problem. | You have solved the problem. | yes |
| Case 2 | no  yes | Second step: Reboot the router and try to connect.  Did that fix the problem? (yes or no)  You have solved the problem. | Second step: Reboot the router and try to connect.  Did that fix the problem? (yes or no)  You have solved the problem. | yes |
| Case 3 | no  no  yes | Second step: Reboot the router and try to connect.  Did that fix the problem? (yes or no)  Third step: Make sure the cables between the router and modem are plugged in firmly.  Did that fix the problem? (yes or no)  You have solved the problem. | Second step: Reboot the router and try to connect.  Did that fix the problem? (yes or no)  Third step: Make sure the cables between the router and modem are plugged in firmly.  Did that fix the problem? (yes or no)  You have solved the problem. | yes |
| Case 4 | no  no  no  no | Second step: Reboot the router and try to connect.  Did that fix the problem? (yes or no)  Third step: Make sure the cables between the router and modem are plugged in firmly.  Did that fix the problem? (yes or no)  Fourth step: Move the router to a new location and try to connect.  Did that fix the problem? (yes or no)  Fifth step: contact your ISP  You have solved the problem. | Second step: Reboot the router and try to connect.  Did that fix the problem? (yes or no)  Third step: Make sure the cables between the router and modem are plugged in firmly.  Did that fix the problem? (yes or no)  Fourth step: Move the router to a new location and try to connect.  Did that fix the problem? (yes or no)  Fifth step: contact your ISP  You have solved the problem. | yes |

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

**Case 1** **Text

Description automatically generated**

**Case 2**

**Text

Description automatically generated**

**Case 3**

**Text

Description automatically generated**

**Case 4**

**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.

What have you learned?

What did you struggle with?

What would you do differently on your next project?

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

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** |  |
|  | * 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** |  |