Class: CMSC203 CRN XXXX

 Program: Assignment 01

Instructor: Dr. Ahmed Tarek

 Summary of Description: This is a program which helps user fix their device connection with their Wi-Fi router. And to do it, I used While loop and nested loop. Also used user input so that the program can react based on the individual’s response.

 Due Date: 02/08/2021

 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:**

Wifi diagnosis system.

Ask to reboot the computer.

If YES, internet connects,

Print rebooting computer worked.

If NO, reboot the router.

If YES, rebooting router connects internet,

Print Rebooting router worked.

If NO, check if the router cables are plugged in firmly and getting power.

If YES, internet connects.

Print plugged in worked.

If NO, move your computer close to router.

If Yes, connects to the internet.

Print Moving computer closer to router worked.

If NO,

Print contacts your ISP.

**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 | no, no, no, no | Fifth step: Contact your ISP | Fifth step: Contact your ISP | Yes. |
| Case 2 | no, yes | Rebooting your router seemed to work. | Rebooting your router seemed to work. | Yes |
| Case 3 | no, no, yes | Checking the router's cables seemed to work. | Checking the router's cables seemed to work. | Yes |
| Case 4 | Yes, Yes, Yes, Yes | Fifth step: Contact your ISP | Fifth step: Contact your ISP | No |

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

**Case 1**

**Graphical user interface, text, application

Description automatically generated**

**Text

Description automatically generated**

**Case 2**

**Graphical user interface, text, application

Description automatically generated**

**Text

Description automatically generated**

**Case 3**

**Graphical user interface, text, application

Description automatically generated**

**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.

Thoughout the assignment I’ve to get the user input via eclipse IDE and command prompt. I’ve learnt to use the command prompt. Also learned to use nested loop in java. The part where I struggled the most was, using the CMD prompt and getting the exact file info. For future reference, I would start working on projects earlier so that I have time to review each the code and make it more organized. As I’ve practiced getting the user input via eclipse, It I was able to get it so easily. But, the response after getting the user input was complicated to me. But I was able do it watching couple videos and the example code that my professor has provided.

Video resource: https://www.youtube.com/watch?v=r3GGV2TG\_vw&t=7290s

**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** |  |