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**CMSC 203**

**Assignment 1**

**WiFi Diagnosis Implementation**

**A screenshot of a social media post

Description automatically generated**

***A screenshot of a cell phone

Description automatically generatedScreen shot of application running in Eclipse IDE (run #1)***

***Screen shot of application running from the command prompt (run #1)***

***A screenshot of a social media post

Description automatically generated***

***A screen shot of a social media post

Description automatically generatedScreen shot of application running in Eclipse IDE (run #2)***

***Screen shot of application running from the command prompt (run #2)***

Assignment 1 (Pseudocode) Final Design

Begin:

{

Creating a class and naming it WiFiDiagnosis.java as the driver class

Given and displayed main method public static void main(String args[]).

Variable Declarations/Initializations – String choice\_One = “yes”; choice\_Two = “no”;

String user\_InputRead;

Display and print message “If you have a problem with internet connectivity, this WiFi Diagnosis might work.”

Introduce and print Scanner – Using the scanner method (java.util.Scanner) For user input scan of a string variable choice of a yes or no to the option if the WiFI diagnosis for each (\*necessary step is required).

Display and print message “First step: reboot your computer”

Display and print message “Are you able to connect with the internet? (yes or no)”

Scanning user input choice for preparation of decision making structure – Using variable name.nextLine(); to scan the user’s input from keyboard.

**if(user\_InputRead.equals (choice\_One))**

{

Display and print message “Rebooting your computer seemed to work”;

System.exit(0);

}

**else if(user\_InputRead.equals(choice\_Two))**

{

Display and print the message “Second step: reboot your computer”;

Display and print message “Now are you able to connect with the internet? (yes or no) (User will either enter a yes or no as it serves for user input if the WiFi diagnosis, depending on what step proficiently works.

**if (user\_InputRead2.equals (choice\_One))**

{

Display and print message “Rebooting your router seemed to work”;

System.exit(0);

}

**else if(user\_InputRead2.equals(choice\_Two))**

{

Display and print message “Third step: make sure the cables to your router are plugged in firmly and your router is getting power;

Display and print message “Now are you able to connect with the internet? (yes or no)”;

}

**if(user\_InputRead3.equals (choice\_One))**

{

Display and print message “Checking the router’s cables seemed to work”;

Display and print message ("\n\n" + "Programmer Name: " +programmer\_Name);

System.exit(0);

}

**else if(user\_InputRead3.equals(choice\_Two))**

{

Display and print message “Fourth step: move your computer closer to your router “

Display and print message “Now are you able to connect with the internet? (yes or no)”

}

**if(user\_InputRead4.equals (choice\_One))**

{

Display and print message “Moving the computer closer to the router seemed to work”.

Display and print message ("\n\n" + "Programmer Name: " +programmer\_Name);

System.exit(0);

}

**else if(user\_InputRead4.equals(choice\_Two))**

{

Display and print message “Fifth step: contact your ISP”.

Display and print message “Make sure your ISP is hooked up to your router.”.

Display and print message ("\n\n" + "Programmer Name: " +programmer\_Name);

System.exit(0);

}

}

}

**End**

Screen shot of WiFiDiagnosis.java in GitHub repository

A screenshot of a computer

Description automatically generated

A screenshot of a social media post

Description automatically generated

Reflection Paragraphs

In this assignment I got to learn a lot about new different things specifically about the Java Programming language. I learned about creating objects from a imported class like the scanner class for scanning user input, and others as well. This project/assignment has taught me how to use decision controlled structure like the use of if statements, else if statements, and the use of the .equals() method for comparing strings instead of using the == operator for strings itself. I learned that starting early on programming assignments makes your programming assignments better and gives you a greater advantage on getting better feedback and more of an upper hand in understanding the big fundamentals of programming even more. I highly noticed the syntax and the basics and advanced language semantics of Java programming language was easier to understand and comprehend then C++ the language I had experience with when I was taking CMSC 140 last semester.

The things I struggled with are the command prompt and getting that to work while running my Wi-Fi diagnosis java application. I kept getting a lot of help to run my application on the command prompt. I also struggled with what specific conditional decision structures to type for my programming assignment, I was confused on to use only if/else statements or using if else if statements with the entirety of the code. I only struggled with these two things all in all. On my next project what I would do differently is to prepare a flowchart of myself on what I would exactly for my next project so I know what specifics to use and how to come up with a non-problematic confusion of error on what to say and do for the project so I have no issues/problems at all to worry about. I would make a full proper Pseudocode design so I can base my whole project from the brainstorm Pseudocode design without doing other unnecessary confusing things.

The parts of the project/assignment I was successful at was processing the whole application to work at very first glance. I learnt somewhat of the Java programming language in the summer, so I was fully prepared to tackle assignment 1 with great ease. I was successful at developing great comments, so I could’ve understood my programming assignment 1 in the future if I had to. I was successful at getting user input and output using the Scanner class and creating the object of the related scanner class because of things. I resolved my biggest issue which was getting the programming assignment 1 to successfully run on both eclipse IDE and command prompt. Finally, this project proved to be a great and excellent experience of Java Programming, and how to use the syntax, the semantics, and other things of Java successfully.