Criterion A: Planning

Defining the problem:

The client, Lintao Yin (myself) often uses the built in windows task manager in order to view the performance of his computer during times in which his computer has issues with running a program in order to deduce a problem. However, often he finds the lack of options with task manager infuriating.

The lack of features such as the ability to adjust the length of time data can be viewed as well as the inability to record data to analyze later make him require a program that's more flexible in the acquisition and handling of recording computer performance.

Since the client does not have a large amount of free cash he decided to enlist me (himself) in order to create a program that will allow him to view the performance of his computer in greater detail.

I also view this project as being beneficial to a large majority of tech-savvy individuals with interest in the performance of their computer which is why I am doing this project.

Rationale for solution:

I decided on creating a simple application which uses GUI elements to interact with the user. This allows graph display to be easy to use as well as easy to modify. The program although flexible should work toward keeping its impact low. The graph that will be displayed should also be easy to see.

I am using C# as my programming language as:

-I am experienced in Java and the syntax is similar

-I have an IDE already installed

-It has multiple built-in libraries available

-compatible with the system I use as well as many other popular ones

-performance is a big plus as it lowers the chance of the program contaminating the data

-has an easy to use studio which allows me to create a simple clean G.U.I.

The program will keep track of a list of data and will record data in one second and then send it to be graphed real-time. This will allow me store and graph at the same time. The list will be accessed to export data into a simple text file. I will then have another display that loads the graphs on to a different display in order to view any trends.

Criteria for success:

- A graph that responds real-time to performance issues
- The graph should be adjustable in order to fit large amounts of data points as well be able to zoom in on irrational areas
- The program should be able to store and read different values from a text document and display them layered over each other
- The display shouldn't be cluttered with the graph taking up the majority of the space.
- The Menu should be easy to use and understand

Word count 461