Criterion A: Planning

An app to help Client C with her friends when splitting the bill after going to a restaurant as a group.

Criterion A
Identifying the Problem

Adviser Mrs. C – A fellow student at school

The client, C, likes to have study sessions with her friends at places like Panera, Boba, etc. She goes to places with her friends where they have a high bill at least every week but the friend group all pools in money so there is some equality between all of them. They all enjoy their service at these certain places but when it comes down to tip % they do not know much money is given until the total price is given and tends to be in disagreement when splitting the bill because some of her friends may think they are overpaying with this they feel like the money for the person driving is less.

Currently, she uses a calculator to divide the bill among friends and has to find how much money was given in the tip after the calculation is made, normally she does 5% but she and her friends want to reward the employees with more.

This is insufficient, as the money can be rounded to a higher value which causes tension between the groups or they to feel they have to pay more money than expected. They have to find the amount of money given by the tip after they pay but this may vary between amounts of money spent.

C has discussed with me and asked if I could make a computer program that as a human interface so she can have fun with her friend while they know how to properly pay the correct amount of money. In this, she can share the computer program with her friends who could use it for other friend groups.

272 words

Rationale
My decision was to help her out as this can benefit more people rather than her friend group. This feature is minimized to websites and the apple watch but even with this they are not smooth so creating a program would help.

I am going to use java because I find coding in this language easy and GUI drag and drop on certain IDE such as eclipse makes the progress fast and easy. Along this this I have been using java for a while so I know the lines of code which will give a precise measurement to the 2nd decimal. Java also can be easily accessed if a person has a JVM, which is easy and inexpensive as there are many online.

123 words

Criteria for Success

- To be able to help a user navigate easily in the app without trouble by having a GUI which is simple and condensed.
- To be able to give the user a preview of the money they would give with 2 decimal places.
- To be able to correct the user when they make a mistake in the program
- To be able to store the values for later uses in the program
- To be able to print out all the information at the end