AS91907 - Use complex processes to develop a digital technologies outcome

Documentation.

**Introduction:**

Discuss the problem or scenario:

I want to create a simple text-based calories calculator that allows users to input the type of food they have eaten and the quantity and then output the total calorie intake.

**Solution**

List down the possible solutions:

* Create a list or dictionary containing various food items along with their corresponding calorie counts
* During the program's introduction, show the user the available food items and their calorie values
* Calculate the total calories for the entered food item by multiplying the food's calorie count and adding a running total of calories

**Purpose**

What is the purpose of your chosen solution:

The goal of using a list or dictionary of food items with their calorie counts is to make the process easier for the user. Instead of entering the calorie count for each food item, the program can simply use a list of common foods and their calorie values.

**Implications**

What will be the implications of your design?

The accuracy of the calorie calculator depends on the correctness of the data in the list or dictionary

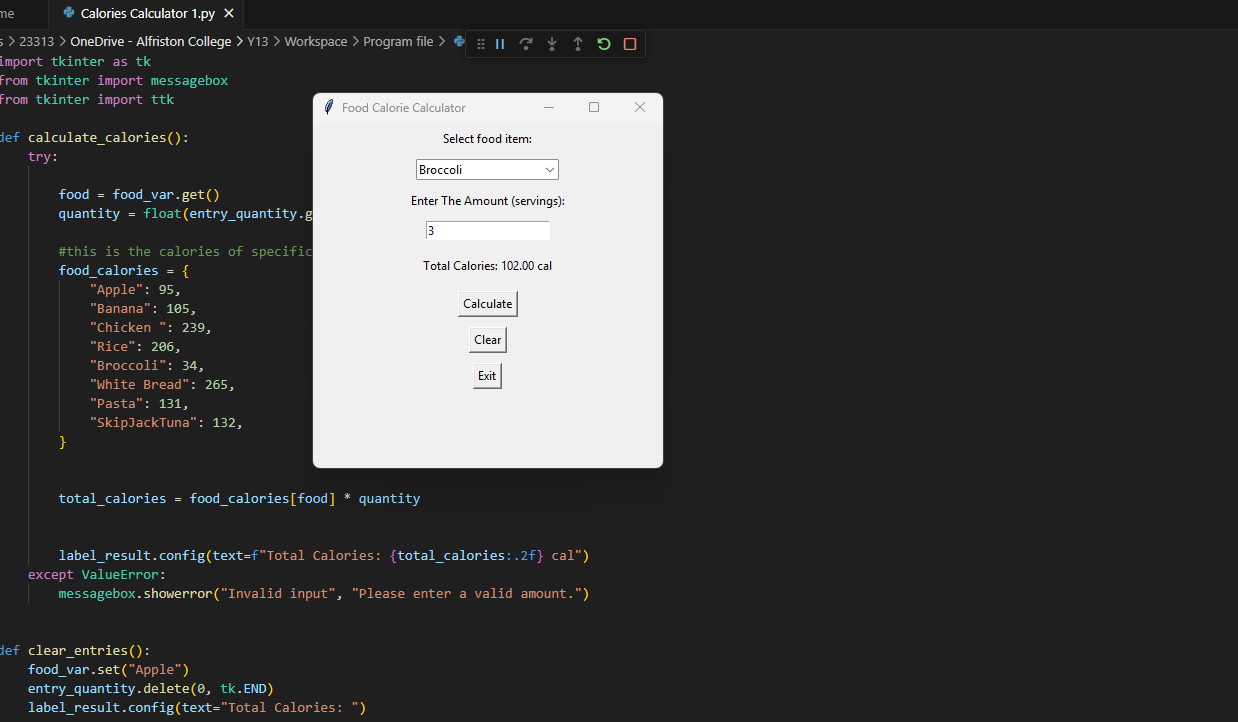
**Progress**

What I have achieved so far is that I learnt the basic programming structure and used it towards my project creating a basic programming calculator that adds up the calories of each serving using the tkinter extension on Visual studio

End-user Feedback:

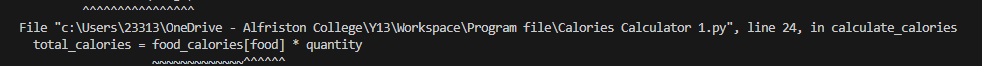
The feedback that I received was that my GUI V1 wasn’t appealing but could be refined to make a modern type of GUI.

Test Table:



|  | Input | Expected Output | Output | Pass/fail |
| --- | --- | --- | --- | --- |
|  | Apple/2 servings | 190 calories (95x2) | 190 Calories | Pass |
|  | Banana, 1 serving | 105 calories | 105 Calories | Pass |
|  | Chicken breast, 0.5 servings | 82.5 calories | 82.5 calories | Pass |
|  | Pasta/invalid food input | Error or prompt | program crashes | Fail |

Debug Table:

A black screen with white text

AI-generated content may be incorrect.



Minor Error Fixed: It was somewhere in the food selection that didn’t match with the food variable.

| Bug description | Cause | fixes |
| --- | --- | --- |
| Food input not matching the dictionary variable | food names were Uppercase | Used .lower() to normalize input |
| GUI layout was not aligned | tkinter grid misused | updated to use proper grid() placement |
| Program crashed with unknown food input. | no error handling for invalid input | added try/except and input validation or deleted it. |