# Web Development – Mr. Turner

# Project – Calorie Counter

## Project Overview

The Calorie Counter program will give the user the ability to create "meals" and determine the number of calories a meal holds.

The user will be asked to provide information for 3 foods (appetizer, entrée, and dessert).

The information needed for each food is as follows:

- The user will be asked to enter the number of grams of fat in the food.
- The user will be asked to enter the number of grams of carbohydrates in the food.
- The user will be asked to enter the number of grams of protein in the food.

The page will continuously update, displaying the number of calories for each course and for the whole meal.

## Display

The list below includes the essential elements of the page.

- An appetizer section
    - A plus and a minus button for adding and subtracting proteins to and from the appetizer.
    - A display of the number of proteins in the appetizer.
    - A plus and a minus button for adding and subtracting carbohydrates to and from the appetizer.
    - A display of the number of carbohydrates in the appetizer.
    - A plus and a minus button for adding and subtracting fat to and from the appetizer.
    - A display of the number of fats in the appetizer.
    - A display of the number of calories in the appetizer.
- An entree section
    - A plus and a minus button for adding and subtracting proteins to and from the entree.
    - A display of the number of proteins in the entree.
    - A plus and a minus button for adding and subtracting carbohydrates to and from the entree.
    - A display of the number of carbohydrates in the entree.
    - A plus and a minus button for adding and subtracting fat to and from the entree.
    - A display of the number of fats in the entree.
    - A display of the number of calories in the entree.

- An dessert section
    - A plus and a minus button for adding and subtracting proteins to and from the dessert.
    - A display of the number of proteins in the dessert.
    - A plus and a minus button for adding and subtracting carbohydrates to and from the dessert.
    - A display of the number of carbohydrates in the dessert.
    - A plus and a minus button for adding and subtracting fat to and from the dessert.
    - A display of the number of fats in the dessert.
    - A display of the number of calories in the dessert.
- A display of the total number of calories in the meal.

**Functionality**

As the user clicks on the buttons, the appropriate number of grams (protein, carbohydrates, fats) will change by 1 (up or down). These numbers should start at 0 and may not fall below 0.

The display will update.

The number of calories for the food will also change. The number of calories in a food is (fat * 9) + (carbohydrates * 4) + (protein * 4).

The display will update.

The total number of calories for the meal will also change. It is calculated as the sum of the calories of all three foods.

**Enhancements**

- Create a Reset button for each food and one for the entire the program.
    - When the user clicks on the reset button, all values for the appropriate food, or the whole meal, will go back to 0 and the display will update.
- Add plus and minus 5 buttons to the page.
    - The user will now have the ability to change the values of the grams of fat, protein, and carbohydrates for each food by 5.

**Programming Skills**

- Comprehension of the specifications sheet.
- Use of Javascript events to drive the sequence of execution.
- Separation of back end variables from front end display.