INTRO:

Hello, my name is Scott, and for our project we created an interactive calorie and macronutrient tracker. The objective of this program is to help users reach their desired weight goal by providing recommendations for correct amounts of caloric intake per day, and by providing recommended amounts of each major macronutrient. This program is useful for many purposes, for example if somebody was trying to shed some weight right before the summer season, this program provides them a way to build a rudimentary timeline for them to be able to do that. Another use of this program could be somebody trying to bulk up or gain weight. And a third possible use for this program could be for someone who is happy with their current weight and wants to maintain that moving forwards.

Before we get into any examples of the program in action, lets show a class diagram of the program.

CLASS DIAGRAM:

I created this diagram on the website “Creately”. A link will be in the video description for others to use if they’d like. This diagram shows a rudimentary class diagram of all the classes in our program. Unlike most of the class diagrams I showed in class, this diagram does not contain all of the variables our program uses. The reason for this is the PersonalInformation class uses a TON of variables, to the point that putting them in the diagram would be confusing. However, when we delve into the code I will show them in greater detail.

To initialize the program, we must first fire the main method. This main method is not very different from most main methods we used in class for graphic user interfaces. It loads up the SetupView and initializes the Setup Controller.

Next, the Setup View window appears. This window allows the user to input data such as their biological sex, age, current weight, etc. It also allows the user to set a weight goal and a timeframe they’d like to achieve said weight goal. If all the data inputted by the user is accurate, the Setup View transfers the data to the Personal Info class, and then fires up the Visualization class.

The visualization class then shows a big pie chart with recommended macronutrient intakes for the user to be able to achieve their inputted goal. The visualization also has a few other stats, such as your BMI, otherwise known as your body mass index, and your BMR, otherwise known as your basal metabolic weight.

What your BMI is is a measure on how over or underweight you are. If your BMI is under 18.5, you are classified as underweight, if it’s over 25 you are overweight, and if it’s over 30 you are obese. Obviously the BMI is not completely accurate, but it is a good tool to give the user a general idea of where they stand. Your BMR describes a predicted amount of calories your body

burns by just existing. Think of it like your base amount of calories burned each day. It does not include extra calories burned by doing things like exercise.

When the user is done viewing their data, they can hit the return button on the visualization screen to return to the setup screen, where they can change the data if they'd like or they can close the program.

SETUP SCREEN:

This is an example of a blank setup screen. There are imperial and metric buttons so the user can easily swap between units at ease. I don't personally understand using metric when it comes to body measurements, however I know that in areas outside of North America, most people use metric.

The average calories

EXAMPLE 1:

EXAMPLE 2:

EXAMPLE 3: