# Lab 2 Body Mass Index Plan

## Request

The client has requested additional validation for the original Body Mass Index software. This will be in the form of input validation for the height and mass of their customer between a range of numbers.

## Process

### Output Requirements

The program should output a message that states that the user did not enter the correct information once submitted.

Additionally, if everything is entered correctly the software must now not only calculate their Body Mass Index but output if the information submitted considered severely, underweight, healthy, overweight, or obese.

### Input

* User Input for Height and saved in a variable for height.
* User Input for Weight(Mass) and saved in a variable for weight
* Calculated Body Mass Index Rounded to the 1st decimal place. To be validated to determine what category the customer is in.

### Process

* Check User Input (Range of 5” to 120”) and store in variable on success.
* Check User Input (Range of 0.5 lb to 999 lb) and store in variable on success.
* Provide appropriate message if validation fails.
* Calculate the Body Mass Index with the following formula and store in variable on success.
* Take the Calculated Body Mass Index and display text based on the following conditions
  + BMI of less than 16 is considered “severely underweight”
  + A BMI of 16 up to less than 18.5 is considered “underweight”.
  + A BMI of 18.5 up to less than 25 is considered “healthy”.
  + A BMI of 25 up to less than 30 is considered “overweight”.
  + A BMI of 30 or over is considered “obese”.
* Display Body Mass Index and appropriate category for provided information