Project Title: Smart BMI Calculator

Introduction: The body mass index or BMI is an indicator used to define whether a person is underweight, fit or overweight. It is your body weight with respect to your height. BMI is also used to calculate body fat percentage in some cases.

Purpose: Like we mentioned above, your weight is not the sole indicator to know if you’re fit or not. Your height is an equally important factor to consider. Being underweight and being overweight are both considered to be unhealthy. By using this calculator, you’ll know whether you need to gain weight or lose weight. These measurements are typically done at research facilities or hospitals.

Scope: The National Institutes of Health recommends using BMI to assess whether your weight is in a healthy range. In general, BMI is a reliable indicator of your total body fat content. There are, however, well-documented exceptions. For example, a man is likely to have less body fat than a woman with the same BMI because men typically have greater bone and muscle mass. Men with a bulky, muscular physique may actually have a BMI in the overweight range, despite a low percentage of body fat. Age also factors into how well BMI correlates to body fat; older people usually have more body fat than younger people with the same BMI.

Advantages: The procedure does not measure your body fat right, nevertheless the measurement does link with an immediate measure of body fat. Using a BMI measurement is recognized as very cheap and easy compared to the alternative of paying an organization to execute a direct body fat test.

Software Tools: Visual Studio2013

External Interface Requirements:

* User interface: Html, CSS, Java-script.php
* Hardware Interface: Windows

Mathematical BMI Formula:

Depending on the units of measurement you use, there are 2 formulae used to calculate BMI:

**US Units (lbs and inches):**

BMI = 703 x weight/height2

**Metric Units (kg and cm):**

BMI = weight/height2

Input / Output and System Modes:

* Data input

We assume that data input will occur only via the keyboard and the mouse. Entry of a numeric quantity via either of these methods is terminated by clicking a button representing an operation.

* Data output

Output display: All output will appear in a text display area similar to a calculator’s LCD screen.

Output events: Clicking a button representing an operation causes the display area to be updated. Results will be presented to at most ten decimal places accuracy.

Conclusion:Overall, it’s important for men, women, children, and teenagers to know their BMI. When you calculate your BMI, you get to determine the state of your health and recognize the aspects of your life that need some improvement.