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**Pseudo code – Banks Group**

Init GUI

* 3 textbox input fields for height and weight
* Radio button to select male/female.
* 1 textbox output field, read only.
* 1 button for calculating the result .
* 2 buttons for Reset, and Exit.

Button:

* Validate that textbox inputs are good.
  + If invalid, error message box.
    - (Positive integers)
    - inches < 12
* Calculate BMI.
  + 703 \* (weight) / height ^2
  + Round ()
* Output BMI result in textbox
  + If(underweight)
  + Else if (normal weight)
  + … etc.
* Display message box with conditional results based on health categories.
  + Button to webpage link for more information.
  + Symbol and message based on result.

**Code**

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace BMIGroupPrpoject

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

private void Form1\_Load(object sender, EventArgs e)

{

}

private void label1\_Click(object sender, EventArgs e)

{

}

private void label3\_Click(object sender, EventArgs e)

{

}

private void textBox2\_TextChanged(object sender, EventArgs e) //INCHES TEXTBOX

{

}

private void computeBMI\_Click(object sender, EventArgs e) //BUTTON FOR COMPUTING BMI

{

double feet, inch, weight, bmi = 0 ;

bool valid1 = double.TryParse(feetBox.Text, out feet);

bool valid2 = double.TryParse(inchesBox.Text, out inch);

bool valid3 = double.TryParse(lbsBox.Text, out weight);

if (valid1 == false || valid2 == false || valid3 == false)

MessageBox.Show("Inputs not valid. Please try again","Error");

else if (feet < 0 || inch < 0 || weight < 0)

MessageBox.Show ("Inputs should be positive. Please try again","Error");

else if (inch >= 12)

MessageBox.Show("12 inches = 1 foot. Please try again","Error");

else

{

inch = inch + feet \* 12;

bmi = Math.Round((703 \* weight ) / (inch \* inch), 1);

outputBox.Text = Convert.ToString(bmi);

switch (bmi)

{

case double i when i < 18.5 && i > 0:

MessageBox.Show("Underweight", "BMI CATEGORY",MessageBoxButtons.OK,MessageBoxIcon.Warning,0,0, "https://familydoctor.org/healthy-ways-to-gain-weight-if-youre-underweight/");

break;

case double i when i < 25 && i >= 18.5:

MessageBox.Show("Normal weight", "BMI CATEGORY", MessageBoxButtons.OK, MessageBoxIcon.Information, 0, 0, "https://www.nhlbi.nih.gov/health/educational/lose\_wt/index.htm");

break;

case double i when i < 30 && i >= 25:

MessageBox.Show("Overweight", "BMI CATEGORY", MessageBoxButtons.OK, MessageBoxIcon.Warning, 0, 0, "https://www.niddk.nih.gov/health-information/weight-management/adult-overweight-obesity/treatment");

break;

default:

MessageBox.Show("Obesity", "BMI CATEGORY", MessageBoxButtons.OK, MessageBoxIcon.Exclamation, 0, 0, "https://www.niddk.nih.gov/health-information/weight-management/adult-overweight-obesity/treatment");

break;

}

}

//MESSAGE BOX SWITCH STATEMENT

//CHECK IF MALE OR FEMALE FIRST, CATEGORIES ARE DIFFERENT

}

private void textBox1\_TextChanged(object sender, EventArgs e) //FEET TEXTBOX

{

}

private void textBox3\_TextChanged(object sender, EventArgs e) //LBS TEXTBOX

{

}

private void textBox4\_TextChanged(object sender, EventArgs e) //BMI OUTPUT TEXTBOX

{

}

private void maleCheckbox\_CheckedChanged(object sender, EventArgs e)

{

if (femaleCheckbox.Checked)

{

computeBMI.BackColor = Color.Pink;

}

else if (maleCheckbox.Checked)

{

computeBMI.BackColor = Color.Blue;

}

}

private void femaleCheckbox\_CheckedChanged(object sender, EventArgs e)

{

if (femaleCheckbox.Checked)

{

computeBMI.BackColor = Color.Pink;

}

else if (maleCheckbox.Checked)

{

computeBMI.BackColor = Color.Blue;

}

}

private void checkBox1\_CheckedChanged(object sender, EventArgs e)

{

computeBMI.BackColor = Color.White;

}

private void button1\_Click(object sender, EventArgs e)

{

Close();

}

private void button2\_Click(object sender, EventArgs e)

{

feetBox.Text = "";

inchesBox.Text = "";

lbsBox.Text = "";

}

}

}

Graphical user interface, text, application

Description automatically generated