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"""Body Mass Index
mthorman_bodymassindex.py
6/12/2017
CSCI 23000
Create an application which prompts the user for his or her height and
weight. Use this
information to calculate the user's body mass index and provide feedback.
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from tkinter import *

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class bmiAPP(Tk):      #Create a GUI that will determine BMI of user
    def __init__(self):
        Tk.__init__(self)
        self.headerFont = ("Helvetica", "18")

        self.title("Body Mass Index (BMI) Calculator")
        self.setInfo()

        def setInfo(self):      #Create labels/text fields for inputing height
and weight, as well as a button for calculating BMI
            Label(self, text = "Body Mass Index (BMI) Calculator",
fg="blue",
                                font = self.headerFont).grid(columnspan
= 7)

            #Label for height in feet
            Label(self, text = "Height(ft):", fg="blue",
font=("Helvetica", 12)).grid(row = 1, column = 0)
            self.textHeightFt = Entry(self, font=("Helvetica", 12))
            self.textHeightFt.grid(row = 1, column = 1 )

            #Label for height in inches
            Label(self, text = "Height(in):", fg="blue",
font=("Helvetica", 12)).grid(row = 1, column = 2)
            self.textHeightIn = Entry(self, font=("Helvetica", 12))
            self.textHeightIn.grid(row = 1, column = 3)

            #Label for weight
            Label(self, text = "Weight(lbs):", fg="blue",
font=("Helvetica", 12)).grid(row = 1, column = 5)
            self.textWeight = Entry(self, font=("Helvetica", 12))
            self.textWeight.grid(row = 1, column = 6)

            #Button for calculating BMI
            self.buttonCalc = Button(self, text = "Calculate BMI",
fg="blue", relief="raised", font=("Helvetica", 12), bg = "light blue")
            self.buttonCalc.grid(row = 2, columnspan = 7)
            self.buttonCalc["command"] = self.calcBMI
            #Label for BMI output
            Label(self, text = "BMI:", fg="blue", font=("Helvetica",
12)).grid(row = 3, column = 1)
            self.labelBMI = Label(self, bg = "#fff", anchor = "w",
relief = "ridge", font=("Helvetica", 12))

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        self.labelBMI.grid(row = 3, column = 2, sticky = "we")
        #Label for status output
        Label(self, text = "Status:", fg="blue",
font=("Helvetica", 12)).grid(row = 3, column = 3)
        self.labelBMISStatus = Label(self, bg="#fff", anchor =
"w", relief = "ridge", font=("Helvetica", 12))
        self.labelBMISStatus.grid(row = 3, column = 5, sticky
="we")

    def calcBMI(self):
        #Function for determing BMI of user.
        feet = int(self.textHeightFt.get())
        inches = int(self.textHeightIn.get())
        totalHeight = (12 * feet) + inches    #the totalheight is
= to the height in feet and height in inches
        weight = float(self.textWeight.get())
        bmi = weight * 703 / (totalHeight * totalHeight) #formula
for determining BMI
        self.labelBMI["text"] = "%.2f" % bmi

        #Provides the user with their status, which is going to
be underweight, normal,
        #overweight, or obese.
        if bmi < 18.5:
            self.labelBMISStatus["text"] = "Underweight"
        elif bmi < 24.9:
            self.labelBMISStatus["text"] = "Normal"
        elif bmi < 29.9:
            self.labelBMISStatus["text"] = "Overweight"
        else:
            self.labelBMISStatus["text"] = "Obese"

def main():    #Main function
    a = bmiAPP()
    a.mainloop()

if __name__ == "__main__":
    main()

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