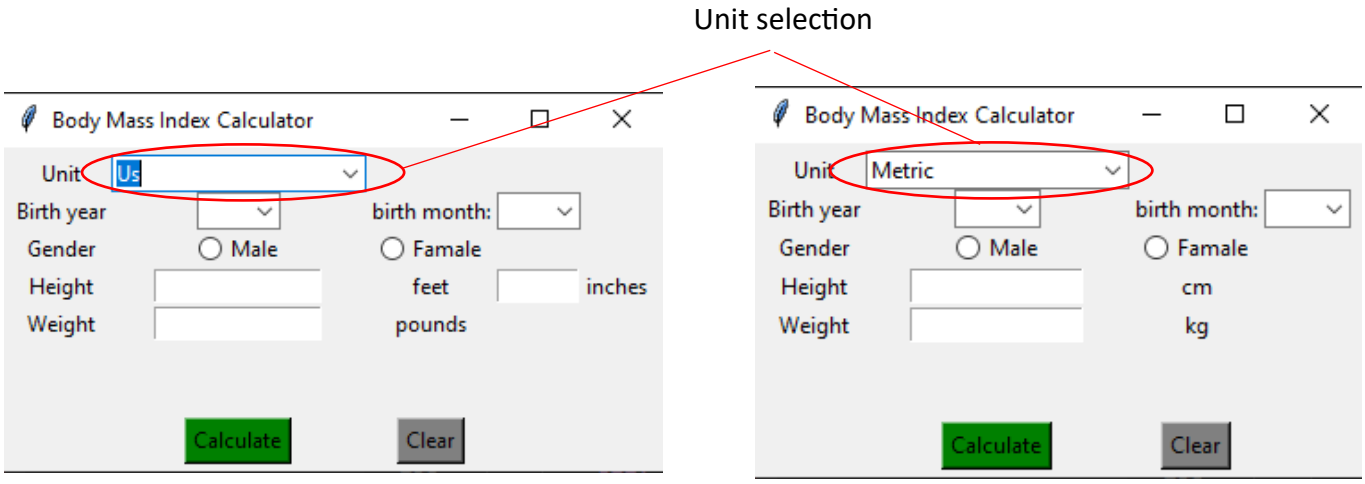
Body-Mass-Index-Calculator

Project description: this is a calculator that serves to analyze the current muscle mass index status of the user who enters the data. Unlike other calculators of the same type, this one works with several parameters, which allows for greater precision, especially in children and young people who must follow a non-regular growth curve. It also works with two types of measurements (metric and us), which makes it easier to use.

Graphical user interface: I have used the python module Tkinter, to make a simple interface that allows the user to interact with the app in a more friendly and simple way.

Unit selection



Functions:

- ***calculate_BMI*** : by means of two parameters indicates the BMI indicated in kg/m2.
- **select_porcentile_range:** selects from a list of ranges, which it receives as a parameter, which corresponds to the calculated BMI, which it also receives as a parameter. It returns a number, between 1 - 9. Each one represents a status. Example: 2 -> Severe Thinness I or 5 -> Normal.
- ***convert_feet_inches_to_cm:*** As its name says, it converts feet and inches to cm. It receives as parameters feet and inches.
- ***convert_pounds_to_kg:*** transform pounds to kg.
- ***calculate_total_months:*** this is a key function for this program, since using the datetime module, it takes the current date and uses the data entered by the user and returns the total of months accumulated up to the date on which the operation is performed.
- **get_bmi_list_csv**: this function is also fundamental in this application, since through it I take the data that are in two CSV files (simulating a kind of database). This allowed me to store the percentile of children and young people between 5 and 20 years old. This function returns a range list, depending on the number of total months of the user.

I created some more functions, but these are the main ones.

Used Python modules:

- **csv**
- **datetime**
- **tkinter**
- **pytest**