

MANARAT INTERNATIONAL UNIVERSITY

Course: Software Development

Course_Code: CSE 312

Project Report

Team Name: Team 07

Project Name: Unit converter

Github Repository: [Click here](#)

Video Link: [Promo video](#)

TEAMMATES-

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Objectives

Our main objective is to build a converter from one to another unit easily.

Introduction

The present age is the age of information technology. Unit Converter enables you to convert from over 1,000 different units of Area, Basal Area (Forestry), Circular, Circular Area, dbh (Forestry), Energy/Work, Flow, Force, Length, Power, Pressure/Stress, Temperature, Time, Velocity, Volume, and Weight/Mass, for a total of over 100,000 possible conversions.

Project Description

Programming Language: Python

Platform: Sublime Text3

Libraries: unitconvert

Features:

Easy to use: The Unit Converter can immediately be used without any adjustments of settings or installations. The usage is intuitive and self-explaining.

- Variety of Units and Categories: The Unit Converter directly provides 4500 units from 33 categories with which you can work immediately.
- Numbers, Terms and Fractions: The Unit Converter can not only work with numbers. You can also use fractions like "1/3" or terms like "1+2/3-4" as values.
- Custom Units and Categories: In addition, it is possible to add your own unit to the Unit Converter. The own units can be added directly to one of the existing categories or you can create new categories for them.
- Number Formatting: If you like, you can change the number formatting to work in your own format.
- Character Formatting: also, the character formatting can be adjusted to your individual needs.
- Prefixes: Each unit can be combined with a prefix like femto-, nano-, milli- or mega-. With this you can also carry out converting within the same unit like conversions between milligram and micro-gram.

Contribution:

1. Abida: Design the app, set the tkinter, help to write code.

2. Sadia: Help to write and understand the code.

```
Unit Converter
File Edit Selection Find View Help Tools Project Preferences Help

1 from tkinter import *
2 from tkinter import ttk
3 from unitconvert import lengthunits
4
5 root = Tk()
6 root.title("Unit Converter")
7
8
9 userin = IntVar()
10 resultin = IntVar()
11 uf = StringVar()
12 us = StringVar()
13
14 def conv():
15     a = lengthunits.lengthUnit(userin.get(),uf.get(),us.get()).convert()
16     resultin.set(a)
17     clearfunc()
18     userin.set(0)
19     resultin.set(0)
20
21 head = Label(root, text="Length converter", font=('comic sans', 30))
22 head.grid(row=0, column=0)
23
24 userInput = Entry(root, textvariable=userin, font=('comic sans', 20), width=30)
25 userInput.grid(row=1, column=0, padx=10, pady=10)
26
27 unitfirst = ttk.Combobox(root, textvariable=uf, font=('comic sans', 20), width=15)
28 unitfirst['values'] = ['m', 'km', 'mi', 'ft', 'in', 'yd', 'mi']
29 unitfirst.grid(row=1, column=1, padx=10, pady=10)
30
31 result = Label(root, textvariable=resultin, font=('comic sans', 30))
32 result.grid(row=2, column=0, padx=10, pady=10)
33
34 unitsecond = ttk.Combobox(root, textvariable=us, font=('comic sans', 20), width=15)
35 unitsecond['values'] = ['m', 'km', 'mi', 'ft', 'in', 'yd', 'mi']
36 unitsecond.grid(row=2, column=1, padx=10, pady=10)
37
38 submit = Button(root, text="Submit", font=('comic sans', 15), command=conv)
39 submit.grid(row=3, column=0, padx=10, pady=10)
40
41 reset = Button(root, text="Reset", font=('comic sans', 15), command=clearfunc)
42 reset.grid(row=3, column=1, padx=10, pady=10)
43 root.mainloop()
```

