Create A Countdown Timer Using Python

Features To Include

Reset/ Stop

Pause /Resume

import time

from tkinter import \*

from tkinter import messagebox

# creating the Tk window

root = Tk()

# set geometry of tk window

root.geometry("300x250")

# Using title() to display a message in # the dialogue box of the message in the

# title bar.

root.title("Time Counter")

# Declare variables

hour=StringVar()

minute=StringVar()

second=StringVar()

# setting the default value as 0

hour.set("00")

minute.set("00")

second.set("00")

# Using Entry class to take input from the user

hourEntry= Entry(root, width=3, font=("Arial",18,""), textvariable=hour)

hourEntry.place(x=80,y=20)

minuteEntry= Entry(root, width=3, font=("Arial",18,""), textvariable=minute)

minuteEntry.place(x=130,y=20)

secondEntry= Entry(root, width=3, font=("Arial",18,""), textvariable=second)

secondEntry.place(x=180,y=20)

def submit():

try:

# the input provided by the user is # stored in here :temp

temp = int(hour.get())\*3600 + int(minute.get())\*60 + int(second.get())

except:

print("Please input the right value")

while temp >-1:

# divmod(firstvalue = temp//60, secondvalue = temp%60)

mins,secs = divmod(temp,60)

# Converting the input entered in mins or secs to hours,

# # mins ,secs(input = 110 min --> 120\*60 = 6600 => 1hr :

# # 50min: 0sec)

hours=0

if mins >60:

# divmod(firstvalue = temp//60, secondvalue

# # = temp%60)

hours, mins = divmod(mins, 60)

# using format () method to store the value up to

# # two decimal places

hour.set("{0:2d}".format(hours))

minute.set("{0:2d}".format(mins))

second.set("{0:2d}".format(secs))

# updating the GUI window after decrementing the

# # temp value every time

root.update()

time.sleep(1)

# when temp value = 0; then a message box pop's up

# # with a message:"Time's up"

if (temp == 0):

messagebox.showinfo("Time Countdown", "Time's up ")

# after every one sec the value of temp will be decremented

# # by one

temp -= 1

def pause():

time.sleep(5)

def resume():

submit()

# button widget

btn = Button(root, text='start', bd='2',command= submit)

btn.place(x = 112,y = 120)

btn = Button(root, text='stop', bd='2', command= root.destroy)

btn.place(x = 70,y = 150)

btn = Button(root, text='pause', bd='2',command= pause)

btn.place(x = 150,y = 150)

""" infinite loop which is required to run tkinter program infinitely until an interrupt occurs

"""

root.mainloop()

**OUTPUT:**

