

ALARM CLOCK USING PYTHON

A Project Report Submitted By,

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Introduction

This is a simple program for alarm clock using python. Python then combined with tkinter to create a GUI application.

The objective of our project is to implement an alarm clock using Python. Python consists of some very innovative libraries such as datetime and tkinter which help to build the project using the current date and time as well as to provide a user interface to set the alarm according to the requirement in 24-hour format.

Python code

```
#                               *Welcome to Alarm Clock*

#Importing all the necessary libraries to form the alarm clock:
from tkinter import *
import datetime
import time
from playsound import playsound

def alarm(set_alarm_timer):
    while True:
        time.sleep(1)
        current_time = datetime.datetime.now()
        now = current_time.strftime("%H:%M:%S")
        date = current_time.strftime("%d/%m/%Y")
        print("The Set Date is:",date)
        print(now)
        if now == set_alarm_timer:
            print("Time to Wake up")
            playsound("/Users/manojbhat/Downloads/Alarm-Clock.mp3")
            break

def actual_time():
    set_alarm_timer = f"{hour.get()}:{min.get()}:{sec.get()}"
    alarm(set_alarm_timer)

clock = Tk()
clock.title("Alarm Clock Using Python")
clock.geometry("400x200")
time_format=Label(clock, text= "Enter time in 24 hour format!",
fg="black",bg="white",font="Arial").place(x=60,y=120)
addTime = Label(clock,text = "Hour  Min  Sec",font=60).place(x = 110,y=10)
setYourAlarm = Label(clock,text = "When to wake you up",fg="blue",relief =
"solid",font=("Helevetica",10,"bold")).place(x=2,y=0)

# The Variables we require to set the alarm(initialization):
```

```

hour = StringVar()
min = StringVar()
sec = StringVar()

#Time required to set the alarm clock:
hourTime= Entry(clock,textvariable = hour,bg = "pink",width = 15).place(x=110,y=30)
minTime= Entry(clock,textvariable = min,bg = "pink",width = 15).place(x=150,y=30)
secTime = Entry(clock,textvariable = sec,bg = "pink",width = 15).place(x=200,y=30)

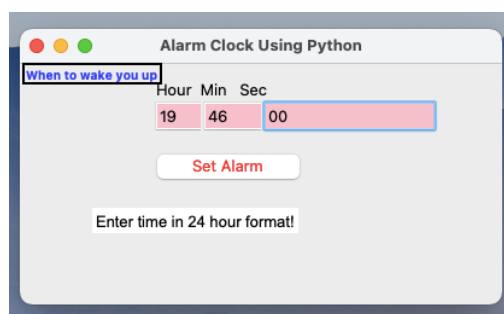
#To take the time input by user:
submit = Button(clock,text = "Set Alarm",fg="red",width = 10,command =
actual_time).place(x =110,y=70)

clock.mainloop()
#Execution of the window.

```

Output

The input is given in 24 hours format and **Set Alarm** button is pressed



The command window will start counting the time along with seconds until it matches with the current time. When it matches the output will be displayed as shown below,

```

The Set Date is: 01/06/2022
19:45:56
The Set Date is: 01/06/2022
19:45:57
The Set Date is: 01/06/2022
19:45:58
The Set Date is: 01/06/2022
19:45:59
The Set Date is: 01/06/2022
19:46:00
Time to Wake up ←

```

along with the **alarm sound in the speaker out.**