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ALARM CLOCK BY USING PYTHON

This **Python Alarm Clock** also includes a downloadable **Python Alarm Clock Code** for free. To start creating this simple project **Alarm Clock Using Python**, make sure that you have **Pycharm IDE** installed on your computer.

## How To Make a Simple Alarm Clock in Python:

### Code Explanation

#### 1. The Code Given Below Is For Importing Modules

Code:

Explain

```
from tkinter import *  
import datetime  
import time  
import winsound
```

#### Explanation:

In the given code which is importing all modules that are being called in executing the program.

#### 2. The Code Given Below Is For The Module Actual Time

Code:

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

#### Explanation:

In this module which is the actual or the current time that is being called when setting the alarm.

#### 3. The Code Given Below Is For The Module Of Setting The Alarm

Code:

Explain

```
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")
    winsound.PlaySound("sound.mp3",winsound.SND_ASYNC)
    break

```

### Explanation:

In this module which is the setting of alarm that is being executed.

### 4. The Code Given Below Is For The GUI Code:

Explain

```

clock = Tk()
clock.title("DataFlair Alarm Clock")
clock.geometry("400x200")
time_format=Label(clock, text= "Enter time in 24 hour format!",
fg="red",bg="black",font="Arial").place(x=60,y=120)
addTime = Label(clock,text = "Hour   Min   Sec",font=60).place(x = 110)
setYourAlarm = Label(clock,text = "When to wake you
up",fg="blue",relief =
"solid",font=("Helevetica",7,"bold")).place(x=0, y=29)

```

# 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.

### Explanation:

In this module which is the design or the graphical user interface or (GUI) of this project.

### Complete Source Code

Explain

#Importing all the necessary libraries to form the alarm clock:

```
from tkinter import *
import datetime
import time
import winsound
```

```
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")
            winsound.PlaySound("sound.mp3",winsound.SND_ASYNC)
            break
```

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

```
clock = Tk()
clock.title("DataFlair Alarm Clock")
clock.geometry("400x200")
time_format=Label(clock, text= "Enter time in 24 hour format!",
```

```

fg="red",bg="black",font="Arial").place(x=60,y=120)
addTime = Label(clock,text = "Hour  Min  Sec",font=60).place(x = 110)
setYourAlarm = Label(clock,text = "When to wake you
up",fg="blue",relief =
"solid",font=("Helevetica",7,"bold")).place(x=0, y=29)

# 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.

```