Assignment 2

IOT Based Smart Crop Protection System for Agriculture

PROBLEM STATEMENT:

Build a python code,assume u gettemperature and humidity values(generated with random function to a variable) andwrite a condition to continuously detect alarm in case of high temperature.

TEAM MEMBERS

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importing the required modules

from tkinter import \*

import datetime as dt

import time

import winsound as ws

# defining the function for the alarm clock

def alarm(setAlarmTimer):

while True:

time.sleep(1)

actualTime = dt.datetime.now()

currentTime = actualTime.strftime("%H : %M : %S")

currentDate = actualTime.strftime("%d / %m / %Y")

the\_message = "Current Time: " + str(currentTime)

print(the\_message)

if currentTime == setAlarmTimer:

ws.PlaySound("sound.wav", ws.SND\_ASYNC)

break

def getAlarmTime():

alarmSetTime = f"{hour.get()} : {minute.get()} : {second.get()}"

alarm(alarmSetTime)

# creating the GUI for the application

guiWindow = Tk()

guiWindow.title("The Alarm Clock")

guiWindow.geometry("464x200")

guiWindow.config(bg = "#87BDD8")

guiWindow.resizable(width = False, height = False)

timeFormat = Label(

guiWindow,

text = "Remember to set time in 24-hour format!",

fg = "white",

bg = "#36486B",

font = ("Arial", 15)

).place(

x = 0,

y = 160

)

add\_time = Label(

guiWindow,

text = "Hour Minute Second",

font = 60,

fg = "white",

bg = "#87BDD8"

).place(

x = 220,

y = 10

)

setAlarm = Label(

guiWindow,

text = "Set Time for Alarm: ",

fg = "white",

bg = "#034F84",

relief = "solid",

font = ("Helevetica", 13, "bold")

).place(

x = 5,

y = 50

)

hour = StringVar()

minute = StringVar()

second = StringVar()

hourTime = Entry(

guiWindow,

textvariable = hour,

bg = "#FEFBD8",

width = 4,

font = (20)

).place(

x = 220,

y = 53

)

minuteTime = Entry(

guiWindow,

textvariable = minute,

bg = "#FEFBD8",

width = 4,

font = (20)

).place(

x = 297,

y = 53

)

secondTime = Entry(

guiWindow,

textvariable = second,

bg = "#FEFBD8",

width = 4,

font = (20)

).place(

x = 390,

y = 53

)

submit = Button(

guiWindow,

text = "Set The Alarm",

fg = "white",

bg = "#82B74B",

width = 15,

command = getAlarmTime,

font = (20)

).place(

x = 140,

y = 100

)

guiWindow.mainloop()