

assign 2.py - C:/Users/ELCU1/AppData/Local/Programs/Python/Python39/assign 2.py (3.9.0b3)

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#1 import
try:
    import configparser
except:
    from six.moves import configparser

import smtplib
from email.mime.multipart import MIMEMultipart
from email.mime.text import MIMEText

#2 variable related to weather API
weather_dict = {'freezing_rain_heavy': 'Heavy rain and snow', 'freezing_rain': 'Rain and snow', 'freezing_rain_light': 'Light rain and snow', 'freezing_drizzle': 'Light rain and snow', 'freezing_drizzle': 'Light rain and snow'}
url = "https://api.climacell.co/v3/weather/nowcast"

querystring = {"lat": "1.29027", "lon": "103.851959", "unit_system": "si", "timestep": "60", "start_time": "now", "fields": "temp, humidity, weather_code", "apikey": "xxxx"}

#3 class
class EmailSender():
    #4 initialization
    def __init__(self):
        self.cf = configparser.ConfigParser()
        self.cf.read('./config.ini')
        self.sec = 'email'

        self.email = self.cf.get(self.sec, 'email')
        self.host = self.cf.get(self.sec, 'host')
        self.port = self.cf.get(self.sec, 'port')
        self.password = self.cf.get(self.sec, 'password')

#5 main function to send email
def SendEmail(self, recipient):
    title = "Home Sweet Home"

    #6 create a new multipart mime object
    msg = MIMEMultipart()
    msg['Subject'] = '[Weather Notification]'
    msg['From'] = self.email
    msg['To'] = ', '.join(recipient)

    #7 call weather API using requests
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#6 create a new multipart mime object
msg = MIMEMultipart()
msg['Subject'] = '[Weather Notification]'
msg['From'] = self.email
msg['To'] = ', '.join(recipient)

#7 call weather API using requests
response = requests.request("GET", url, params=querystring)
result = ""

json_data = response.json()
#print(json_data)

#8 loop over each data and check for abnormal weather (rain, snow)
for i in range(len(json_data)):
    if(json_data[i]['weather_code']['value'] in weather_dict):
        if(i == 0):
            result = "%s at the moment. Current temperature is " % (weather_dict[json_data[i]['weather_code']['value']])
        else:
            result = "%s in %s hour(s) time. Forecasted temperature is " % (weather_dict[json_data[i]['weather_code']['value'], i)

        result += "%s while the humidity is about %s" % (json_data[i]['temp']['value'], json_data[i]['temp']['units'], json_data[i]['humidity']['value'], )

    msgText = MIMEText('<b>%s</b><p>%s</p>' % (title, result), 'html')
    msg.attach(msgText)

#9 authenticate and send email
with smtplib.SMTP(self.host, self.port) as smtpObj:
    smtpObj.ehlo()
    smtpObj.starttls()
    smtpObj.login(self.email, self.password)
    smtpObj.sendmail(self.email, recipient, msg.as_string())
    return "Success"

    return "Failed"
    break

import weather_email
email_obj=weather_email.EmailSender()
email_obj.sendemail(["email@gmail.com", "ashikainbaraj@gmail.com"])
```