



Graphic Era

HILL UNIVERSITY

Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under section 2(f) of UGC Act, 1956

Mini Project

Name : Praveen Kumar

Sec : F

ID : 200111214

University roll no. : 2018567

Semester : 3rd

Teacher : Dr. Mahesh Manchanda

Introduction :

The report has been written as a requirement to complete the mini project for **Automation of Mail Sending using Python**. The objective of the project is to make a GUI to send a automated mail. And It is asked to use Python programming language. Python has a lot of libraries to help in making of the project.

The application I made sends a automated mail after 10 seconds, everytime we send a mail to someone. My thinking of sending mail is that, We sell pictures and when someone buys pictures from us we send those (best quality) in their mail and after 10 seconds the app we use to send mail it automatically sends another mail which contains our top rated pictures.

Objectives :

- # Gathering all the information and writing the code
- # Designing the GUI
- # Making it a '.exe' application

About the project :

1) **Libraries used**

- a) smtp : this library helps to logging in to the Email account and sending the mail
- b) EmailMessage : this library helps to hold all the information in a single object.
- c) tkinter : this library helps to create GUI
- d) time : this library helps to slow down some process.
- e) os : this library helps in using the environment variables

Code :

```
from tkinter import *
import os
import smtplib
from email.message import EmailMessage # its a class to send messages in a better way. We no need to creater
everything seperately
import tkinter
from tkinter import filedialog
import time

root = Tk()

win_icon = PhotoImage(file='P:\Docs\VS code\Python\mini_project\icon\win_icon.png')
root.iconphoto(False, win_icon)

send_btn = PhotoImage(file='P:\Docs\VS code\Python\mini_project\icon\send_button.png')
files_btn = PhotoImage(file='P:\Docs\VS code\Python\mini_project\icon\\file.png')

root.maxsize(800, 600)
root.minsize(800, 600)

root.title('Python Mail Sender')

to = tkinter.StringVar()
cc = tkinter.StringVar()
bcc = tkinter.StringVar()
message = tkinter.StringVar()
sub = tkinter.StringVar()
```

```
EMAIL_ADDRESS = os.environ.get('acc')
EMAIL_PASSWORD = os.environ.get('pass')

msg = EmailMessage() # created an object of 'EmailMessage' class
#msg.set_content('Sending some images...')
mg = EmailMessage()

# attach files
files = [] # an empty list
#files = ['P:\Docs\VS code\Python\mini_project\\result.pdf']

def select_file():
    root.filename = filedialog.askopenfile(initialdir="/c", title="Select a file")
    files.append(str(root.filename.name))

def send():
    with smtplib.SMTP_SSL('smtp.gmail.com', 465) as smtp:
        msg['Subject'] = sub.get()
        msg['From'] = EMAIL_ADDRESS
        msg['To'] = to.get()
        if(cc.get()):
            msg['Cc'] = cc.get()
        if(bcc.get()):
            msg['Bcc'] = bcc.get()
```

```
mssg = message.get()
msg.set_content(mssg)

for file in files:
    with open(file, 'rb') as f: # 'rb' = read bytes
        file_data = f.read() # getting access
        #file_type = imghdr.what(f.name) # 'f.name' will give the exact file type in which it got into it.
        # We can change it in any like '.png'
        file_name = f.name
    msg.add_attachment(file_data, maintype='application', subtype='octet-stream', filename=file_name) #
    # for pdf : maintype = 'application', subtype = 'octet-stream' and for images : maintype='image',
    # subtype=f.name

smtp.login(EMAIL_ADDRESS, EMAIL_PASSWORD)
smtp.send_message(msg)
smtp.quit()

#
time.sleep(60) # time delay for 60 seconds
subj = "Images you may like"
msg = "Greetings Sir\n\nThis is an automated mail.\nYou bought some images from us, we do have many more
images you can check them out.\nHere are some of our top rated images."
img_files = ['P:\Media\Wallpapers\wallpapers\art.jpg', 'P:\Media\Wallpapers\wallpapers\evening.jpg',
'P:\Media\Wallpapers\wallpapers\tornado.jpg']
```



```
with smtplib.SMTP_SSL('smtp.gmail.com', 465) as smtp:
    mg['Subject'] = sbj
    mg['From'] = EMAIL_ADDRESS
    mg['To'] = to.get()

    mg.set_content(msge)

    for file in img_files:
        with open(file, 'rb') as f:
            file_data = f.read()
            file_name = f.name
            mg.add_attachment(file_data, maintype='application', subtype='octet-stream', filename=file_name) # for
            pdf : maintype = 'application', subtype = 'octet-stream' and for images : maintyp='image', subtype=f.
            name

    smtp.login(EMAIL_ADDRESS, EMAIL_PASSWORD)
    smtp.send_message(mg)
    smtp.quit()

#
```



```
label_email = Label(root, text='To', font=('calibre', 13), pady=10, padx=40)
email_entry = Entry(root, textvariable=to, font=('calibre', 8, 'normal'), width=40, fg='grey')

label_message = Label(root, text='Type your message', font=('calibre', 13), pady=10)
message_entry = Entry(root, textvariable=message, font=('calibre', 8, 'normal'), width=40, fg='grey')

label_sub = Label(root, text='Subject', font=('calibre', 13), pady=10)
sub_entry = Entry(root, textvariable=sub, font=('calibre', 8, 'normal'), width=40, fg='grey')

label_cc = Label(root, text='Cc', font=('calibre', 13), pady=10)
cc_entry = Entry(root, textvariable=cc, font=('calibre', 8, 'normal'), width=40, fg='grey')

label_bcc = Label(root, text='Bcc', font=('calibre', 13), pady=10)
bcc_entry = Entry(root, textvariable=bcc, font=('calibre', 8, 'normal'), width=40, fg='grey')

btn = Button(root, image=send_btn, padx=15, command=send, relief=FLAT)

label_email.place(relx=0.25, rely=0.02)
email_entry.place(relx=0.4, rely=0.04)

label_sub.place(relx=0.25, rely=0.078)
sub_entry.place(relx=0.4, rely=0.1)

label_cc.place(relx=0.29, rely=0.14)
cc_entry.place(relx=0.4, rely=0.16)
```

```
label_bcc.place(relx=0.28, rely=0.195)
bcc_entry.place(relx=0.4, rely=0.218)

label_message.place(relx=0.5, rely=0.45, anchor=CENTER)
message_entry.place(relx=0.5, rely=0.52, anchor=CENTER, width=600, height=20) # height=80

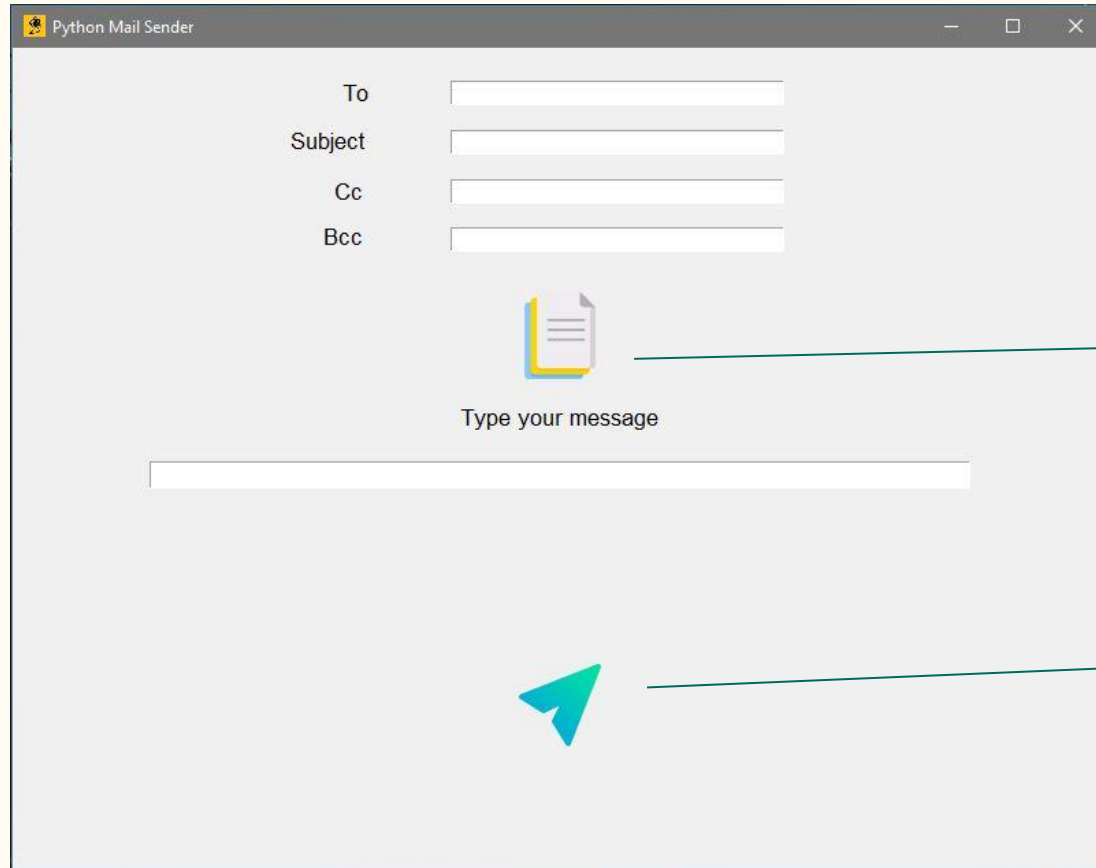
btn_files = Button(root, image=files_btn, pady=5, padx=40, command=select_file, relief=FLAT)
btn_files.place(relx=0.5, rely=0.35, anchor=CENTER)

# btn.grid(row=5)
btn.place(relx=0.5, rely=0.8, anchor=CENTER)

root.mainloop()

# to make it a '.exe' file
# 1) install pyinstaller 'pip install pyinstaller'
# 2) then type 'pyinstaller --onefile --icon=email.ico -w new.py'
#    --icon=email.ico, if you want to use icon for the exe file
#    -w to disable the window when we open the .exe file
#    new.py is the name of the file(code)|
```

GUI :



Button for
selecting files

Send
button

Reference :

I made this mini project with the help of my project teacher Dr. Mahesh Manchanda and Internet.