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Sending Emails Using API in Flask-Mail

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Python, being a powerful language don't need any external library to import and offers a native library to send emails- "SMTP lib". "smtplib" creates a Simple Mail Transfer Protocol client session object which is used to send emails to any valid email id on the internet. This article revolves around how we can send bulk customised emails to a group of people with the help of Flask.

Installation :

Three packages are required for flask mail to work, Install them using pip,

1) virtualenv:

```
pip install virtualenv
```

2) Flask:

```
pip install Flask
```

3) Flask-Mail :

```
pip install Flask-Mail
```

After installing the packages, we have to use **virtualenv** (optional)

1) Create a virtualenv

Open cmd

Go to the folder you want to use for your project.

Write the following code:

```
python3 -m venv env (macOS/Linux)
py -m venv env (Windows)
```

Here **env** is name of your environment.

2) Activate the environment

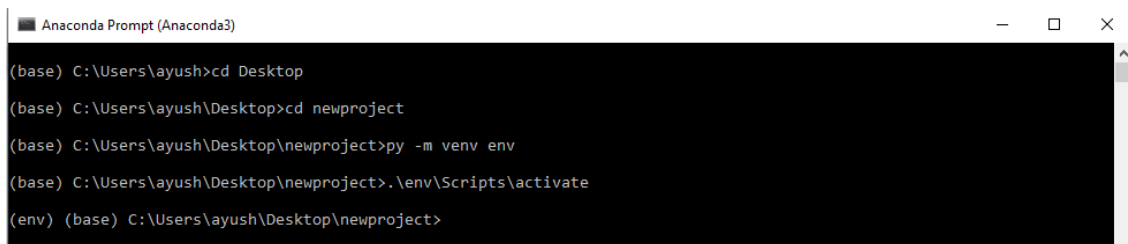
On windows :

```
.\env\Scripts\activate
```

On macOS/ Linux:

```
source env/bin/activate
```

3) Make sure you get the (env) in the beginning displayed in picture below :



```
Anaconda Prompt (Anaconda3)
(base) C:\Users\ayush>cd Desktop
(base) C:\Users\ayush\Desktop>cd newproject
(base) C:\Users\ayush\Desktop\newproject>py -m venv env
(base) C:\Users\ayush\Desktop\newproject>.\env\Scripts\activate
(env) (base) C:\Users\ayush\Desktop\newproject>
```

Configuring Flask-Mail

Flask-Mail is configured through the standard Flask config API. These are the available options (each is explained later in the documentation):

- 1) **MAIL_SERVER** : Name/IP address of the email server.
- 2) **MAIL_PORT** : Port number of server used.
- 3) **MAIL_USE_TLS** : Enable/disable Transport Security Layer encryption.
- 4) **MAIL_USE_SSL** : Enable/disable Secure Sockets Layer encryption
- 5) **MAIL_DEBUG** : Debug support. The default is Flask application's debug status.
- 6) **MAIL_USERNAME** : Username of the sender
- 7) **MAIL_PASSWORD** : The password of the corresponding Username of the sender.
- 8) **MAIL_ASCII_ATTACHMENTS** : If set to true, attached filenames converted to ASCII.
- 9) **MAIL_DEFAULT_SENDER** : sets default sender
- 10) **MAIL_SUPPRESS_SEND** : Sending suppressed if app.testing set to true
- 11) **MAIL_MAX_EMAILS** : Sets maximum mails to be sent

Note : Not all of the configuration is to be set.

Sending Emails using Flask-Mail

Classes in Flask-Mail:

Mail Class : Manages email-messaging requirements

Message Class: encapsulates an email message

Let's get our hands on the code.

Python3

```
# importing libraries
from flask import Flask
from flask_mail import Mail, Message

app = Flask(__name__)
mail = Mail(app) # instantiate the mail class

# configuration of mail
app.config['MAIL_SERVER']='smtp.gmail.com'
app.config['MAIL_PORT'] = 465
app.config['MAIL_USERNAME'] = 'yourId@gmail.com'
app.config['MAIL_PASSWORD'] = '*****'
app.config['MAIL_USE_TLS'] = False
app.config['MAIL_USE_SSL'] = True
mail = Mail(app)

# message object mapped to a particular URL '/'
@app.route("/")
def index():
    msg = Message(
        'Hello',
        sender='yourId@gmail.com',
        recipients=['receiver'sid@gmail.com']
    )
    msg.body = 'Hello Flask message sent from Flask-Mail'
    mail.send(msg)
    return 'Sent'

if __name__ == '__main__':
    app.run(debug = True)
```

Save it in a file and then run the script in Python Shell or CMD & Visit <http://localhost:5000/>.

Note :

Due to Google's built-in security features, Gmail service may block this login attempt. You may have to decrease the security level. Visit <https://myaccount.google.com/lesssecureapps?pli=1> to decrease security.

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