Emailing in Python

THW 04/16/2014

No Motivation Required...

http://steel11kane.blogspot.com/2012/04/1-han-solo-vs-2-luke-skywalker.html

- Notification
  - Have scripts notify you of job statuses
  - Send form emails to many recipients

http://kristendomblogs.com/2012/01/darth-vader-dies/

- The Dark Side: Spamming
  - Badger customer service into taking action
  - Disproportionate representation with your congress-person

SMTP

- Smart mail transfer protocol
  - Delivery protocol only: for sending mail, not general mail use (POP3, IMAP)
  - SMTP mail submission port = **587**
- If you have a gmail account, you have access to an SMTP server!
  - Limitations of Gmail smtp server
    - 99 emails per account per 24-hour period
    - Message size must be <= 20Mb
  - More info: https://www.digitalocean.com/community/articles/how-to-use-google-s-smtp-server

Python Module for SMTP: smtplib

- Create an SMTP Client with smtplib.SMTP(‘<hostname here>’)
  - e.g. the gmail smtp server:
  - “smtp.gmail.com:587”

Example: smtp_simple.py

Message Composition: MIME

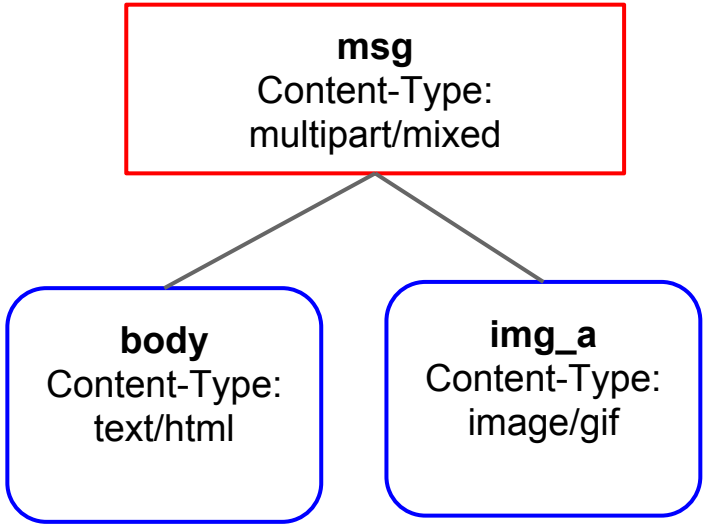
- More complex things you might want in your email messages:
  - Non-ascii characters
  - Multi-part message bodies
  - Non-text attachments
- For this, we need MIME

MIME - Multipurpose Internet Email Extensions

- Standard for describing email messages
- Ensures senders/receivers always know how to interpret the transmitted data correctly
- “Virtually all human-written Internet email and a fairly large proportion of automated email is transmitted via SMTP in MIME format.” - MIME Wiki page

MIME Basic Principles

- Every MIME object has a **content-type** identifier
- MIME objects arranged in tree structure constitute the email message
  - Non-leaf nodes can have multipart format
  - leaf nodes have non multipart format



Visualization of the structure of the message from smtp_mime.py