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CPE 138 – 03

Professor Jun Dai

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SOCKET PROGRAMMING ASSIGNMENT 2 – MAIL CLIENT

In this programming assignment, the task is to create a simple mail client that sends email to any recipient. I will need to establish a TCP connection with a mail server using CSUS mail server: smtp.csus.edu with port number 25. The assignment provided a skeleton code to work with and test the client by sending email to different user accounts. Below is the full code in python and the SMTPClient test.

```
from socket import *
msg = "\r\n I love computer networks!"
endmsg = "\r\n.\r\n"

# Choose a mail server (e.g. Google mail server) and call it mailserver
mailserver = 'smtp.csus.edu'
mailport = 25

# Create socket called clientSocket and establish a TCP connection with mailserver
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((mailserver,mailport))

recv = clientSocket.recv(1024).decode()
print(recv)
if recv[:3] != '220':
    print('220 reply not received from server.')

# Send HELO command and print server response.
heloCommand = 'HELO Alice\r\n'
clientSocket.send(heloCommand.encode())
recv1 = clientSocket.recv(1024).decode()
print(recv1)
if recv1[:3] != '250':
    print('250 reply not received from server.')

# Send MAIL FROM command and print server response.
MailFrom = 'MAIL FROM: <vktalgaador@csus.edu>\r\n'
clientSocket.send(MailFrom.encode())
recv2 = clientSocket.recv(1024).decode()
print(recv2)
```

```

# Send RCPT TO command and print server response.
RcptTo = 'RCPT TO: <vigomarkimalgador@csus.edu>\r\n'
clientSocket.send(RcptTo.encode())
recv3 = clientSocket.recv(1024).decode()
print(recv3)

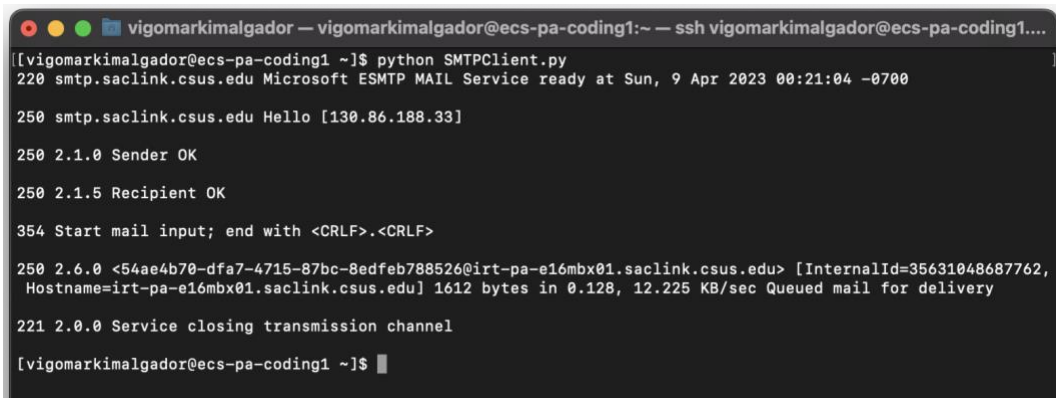
# Send DATA command and print server response.
data = 'DATA\r\n'
clientSocket.send(data.encode())
recv4 = clientSocket.recv(1024).decode()
print(recv4)

# Send message data.
clientSocket.send(msg.encode())

# Message ends with a single period.
clientSocket.send(endmsg.encode())
recv6 = clientSocket.recv(1024).decode()
print(recv6)

# Send QUIT command and get server response.
quit = "QUIT\r\n"
clientSocket.send(quit.encode())
recv7 = clientSocket.recv(1024).decode()
print(recv7)
clientSocket.close()

```



```

vigomarkimalgador — vigomarkimalgador@ecs-pa-coding1:~ — ssh vigomarkimalgador@ecs-pa-coding1...
[vigomarkimalgador@ecs-pa-coding1 ~]$ python SMTPClient.py
220 smtp.saclink.csus.edu Microsoft ESMTP MAIL Service ready at Sun, 9 Apr 2023 00:21:04 -0700

250 smtp.saclink.csus.edu Hello [130.86.188.33]

250 2.1.0 Sender OK

250 2.1.5 Recipient OK

354 Start mail input; end with <CRLF>.<CRLF>

250 2.6.0 <54ae4b70-dfa7-4715-87bc-8edfeb788526@irt-pa-e16mbx01.saclink.csus.edu> [InternalId=35631048687762,
  Hostname=irt-pa-e16mbx01.saclink.csus.edu] 1612 bytes in 0.128, 12.225 KB/sec Queued mail for delivery

221 2.0.0 Service closing transmission channel

[vigomarkimalgador@ecs-pa-coding1 ~]$

```

Screenshot of SMTPClient