

REPORT

Assignment-1

CS3205 : Introduction to computer networking.

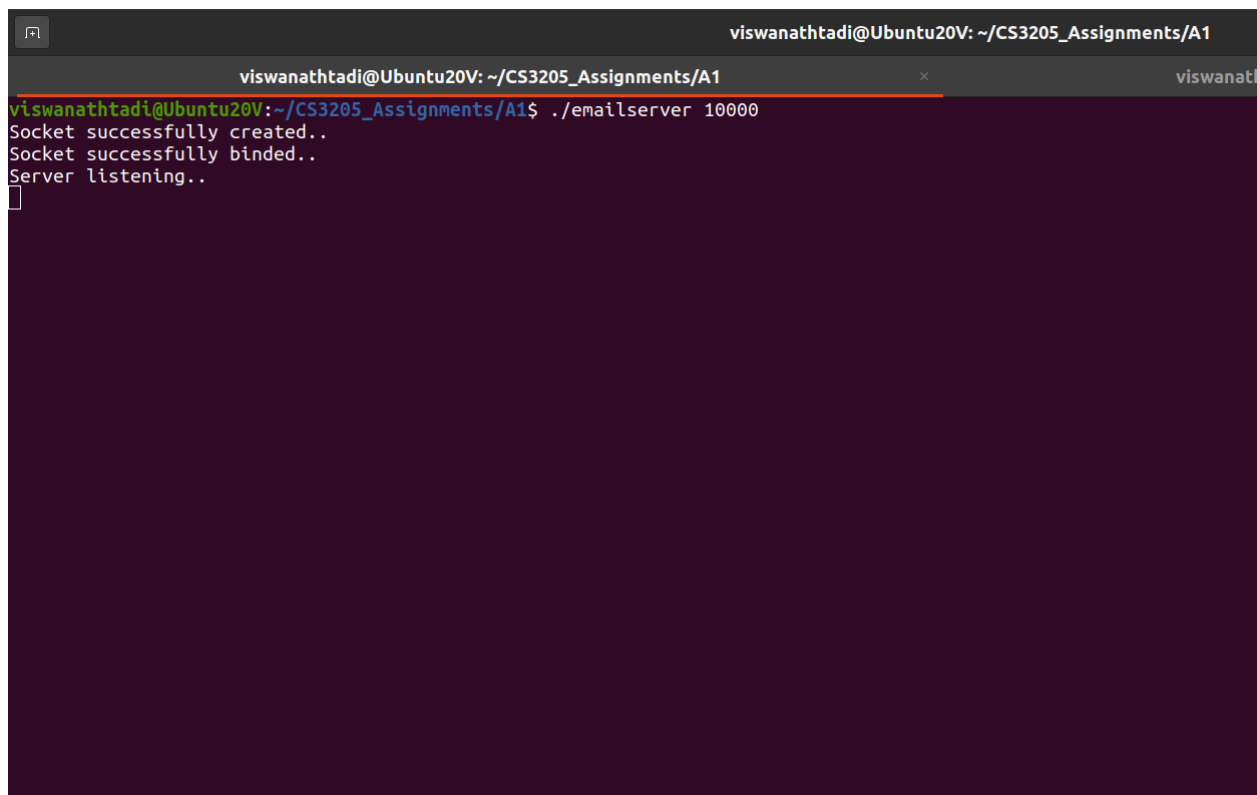
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Learning outcomes

This assignment helped me understand the application layer in-depth. I got to know how processes communicate on different end-systems. This assignment clearly exposes the abstraction done by the transport layer which makes it easier for application developers to easily write programs without worrying about the deeper layers and concepts.

Trail runs on local host:

The following is the screen-shot of the email server running on tcp port number 10000.



```
viswanathtadi@Ubuntu20V: ~/CS3205_Assignments/A1
viswanathtadi@Ubuntu20V: ~/CS3205_Assignments/A1$ ./emailserver 10000
Socket successfully created..
Socket successfully binded..
Server listening..
█
```

The following is the screen-shot of the email client running on the same machine as the server. This trail run covers all the commands the user can give to the client.

```
viswanathtadi@Ubuntu20V: ~/CS3205_Assignments/A1
viswanathtadi@Ubuntu20V: ~/CS3205_Assignments/A1$ ./emailclient 127.0.0.1 10000
socket created successfully
connected to server
general>ListUsers

general>AddUser alice
New user created
general>AddUser bob
New user created
general>SetUser alice
Selected user alice
User has 00 messages in his/her inbox
current>Read
Empty inbox
current>Delete
Empty inbox
current>Send bob
Type Message>hello bob
Type Message>xxx
Message sent
current>Done
User session ended
general>SetUser bob
Selected user bob
User has 01 messages in his/her inbox
current>Read
From: alice
To: bob
Sat Feb 27 23:18:51 IST 2021
Subject: hello bob
xx
current>Delete
Message deleted
current>Read
Empty inbox
current>Done
User session ended
general>Quit
Disconnectedviswanathtadi@Ubuntu20V:~/CS3205_Assignments/A1$
```