

This should possibly be run on a linux machine. Debian/Ubuntu is preferred.

How to run the Code -

1. Extract the zip file using
2. cd into the project  
`cd ComputerNetworksProject1/`
3. Python3 is a requirement, if python is installed skip this step, if python is not installed, follow these steps
  1. Start by updating the packages list and installing the prerequisites:
  2. `sudo apt update`
  3. `sudo apt install software-properties-common`
  4. Next, add the deadsnakes PPA to your sources list:
  5. `sudo add-apt-repository ppa:deadsnakes/ppa`
  6. When prompted press Enter to continue:  
`Press [ENTER] to continue or Ctrl-c to cancel adding it.`
  7. Once the repository is enabled, install Python 3.7 with:
  8. `sudo apt install python3.7`
  9. At this point, Python 3.7 is installed on your Ubuntu system and ready to be used. You can verify it by typing:
  10. `python3.7 --version`
  11. Python 3.7.3

- . 4. Run the server by  
`python3 chat_server.py`

Similarly run the client by  
`Python3 chat_client.py`

This will ask you to enter the username. You can enter anything. Now you can chat(send messages / data transfer) to any client.

Just type the message and press enter.

5. This is just gonna open a single client.To open multiple clients just open more terminals

cd into the project directory and just run the client code again as above,

6. You can open as many clients as you want.
7. .For security purposes, the other clients receive the message but it is not updated or shown. Just press ENTER it will update the chat history by other clients.

8. This chat is encrypted and secured using RSA.