

Readme

For the proper function of the project please import all the libraries mentioned below in python:

- Tkinter
- RSA
- Hashlib
- Cryptography
- Pickle
- Pillow

There are 6 demo accounts already on the server, with some of the demo tweets.

Username	Password
parth	1
ganesh	1234
juhi	1234
sagar	1234
samya	1234
rahul	1234
biswa	1234

Nobody on the server initially is following any person. There are some tweets that are hardcoded into the system for the demonstration of the working project. All the tweets have zero likes.

Running instructions:-

- **Windows**
→ If you are testing the working of the files on windows, Please install all the libraries and run the client and the server program. You can duplicate the client file and run it simultaneously on one server to check the chat functionality. You have to make sure that both the server and client bind to the same port and 'localhost' in the python file.
- **Ubuntu (Mini-net)**
→ If you are testing the topology, try installing all the libraries and modules. Install mininet and run the file on the command prompt of mininet using '`sudo python final_project.py`'. This will make a custom four-level fat-tree topology. Then use the command '`xterm h17`' to open a separate terminal and run the server file on the prompt. In Node 17 terminal that opens from

xterm 17 command. Here open the server program by `python Server.py` You can use xterm in a similar fashion for any of the remaining hosts and run the client program on it in Node 1-16. Also, make sure that both the server python file is binded to `'10.0.0.17'` and the client connects the same port and `'10.0.0.17'` in the python file. It is originally `'localhost'` by default.

NOTE:-

The topology is working fine and we were able to successfully implement the functionalities using mininet. However, the Tkinter does not work as smoothly on Ubuntu as it works on Windows. And while using Ubuntu, some part of the GUI Was not rendering properly which isn't the case when we are working with Windows. So, please try to test the functionalities on a window based on reflecting multiple clients. Instruction for running both are already stated above.