# Package requirements:

PyQt5, python3

# How to run:

1. Open ‘server’ folder, then open ‘server.py’ with pycharm. Run it.
2. Open ‘clients’ folder, then open ‘client.py’ with pycharm. Run it.
3. Feel free to open ‘client2.py’ and ‘client3.py’ by the same way.
4. Now you should see 1 server GUI and 3 clients GUI on the screen. The server should have start listening automatically. Now input username on the client GUI, click the ‘submit’ button. Then click the ‘upload’ button to upload a file to server. Then the spell checked file will be returned to the ‘files’ folder inside the ‘clients’ folder.
5. Now click ‘kill’ button on the client GUI to end the process. Then click ‘exit’ button to close the window.
6. Click the ‘kill button on the server GUI to stop listening. Then click ‘exit’ button to close the window.

# Screenshot examples:

A screenshot of a computer

Description automatically generated with medium confidenceA screenshot of a computer

Description automatically generated with medium confidence

# Things that may cause confusion:

1, I set a timeout of 20 seconds on the client when uploading. So if you haven’t upload any file, the connection will be terminated.

Also, if you exit the client without killing it first, which can be considered as an unexpected disconnection, the server won’t notify you that there is a user has disconnected until 20 seconds later.

2, due to the limitation of the python, the original port number won’t be released until the whole python process terminated. If you want to restart listening after clicked the ‘kill(stop)’ button on the server GUI, you will need to change the port number prior to clicking the ‘start listening’ button.

# Other Files description:

**Clients\_ui.ui** and **server\_ui.ui** are the ui files generated by QtDesigner.

**Clients\_ui.py** and **server\_ui.py** are the py files generated from their corresponding ui files. I didn’t write any code of them.

# Referral links:

<https://www.jianshu.com/p/da8c812a6354>

<https://blog.csdn.net/u010139869/article/details/79505892>

<https://blog.csdn.net/qq_30068487/article/details/90297814>

<https://www.jianshu.com/p/e26594304e11>