

Name: Casey Hawkins

ONID: 933674542

Date: 12/05/2021

Class Section: CS_372_400_F2021

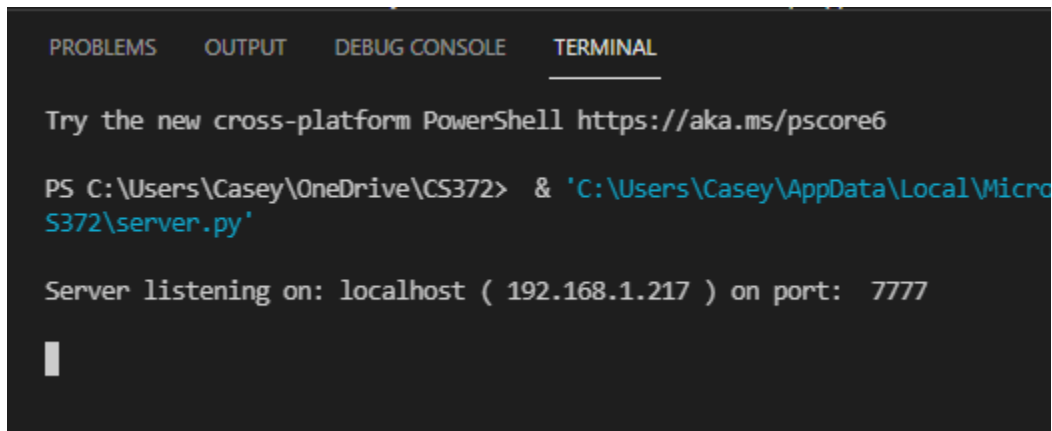
Project: Client-Server Chat

Instructions:

This project was ran using Visual Studio Code in python3.9.7 on a PC operating on Windows 10. The server.py file will open a socket on the localhost, while the client.py file will connect to that socket on localhost, both at the same port, 7777. The server.py file must, therefore, be ran first, or else the client.py file will have nothing to connect to. The chat is started by the client, after which turns are taken between the client and server to send text. If either the server or client sends “/q” in the message, the connection will be broken and both the client and server sockets will close, ending communication.

Screenshots:

Server.py startup, without connection to client.py.

A screenshot of a PowerShell terminal window. The window has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL, with TERMINAL selected. The terminal text includes a promotional message for PowerShell, the command to run server.py, and the output message 'Server listening on: localhost (192.168.1.217) on port: 7777'.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Casey\OneDrive\CS372> & 'C:\Users\Casey\AppData\Local\Microsoft\OneDrive\CS372\server.py'

Server listening on: localhost ( 192.168.1.217 ) on port: 7777
```

Client.py startup.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Casey\OneDrive\CS372> & 'C:\Users\Casey\AppData\Local\Microsoft\Windows\PowerShell\PowerShell.exe' -Command 'cd C:\Users\Casey\OneDrive\CS372; python client.py'

Connected to: localhost ( 192.168.1.217 ) on port: 7777

Type /q to quit
Enter message to send...
Client: █
```

Server connected to client and waiting for initial message from client.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Casey\OneDrive\CS372> & 'C:\Users\Casey\AppData\Local\Microsoft\Windows\PowerShell\PowerShell.exe' -Command 'cd C:\Users\Casey\OneDrive\CS372; python server.py'

Server listening on: localhost ( 192.168.1.217 ) on port: 7777

Connected by ( 192.168.1.217 , 52188 )

Waiting for message...
█
```

Client sends first message.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Casey\OneDrive\CS372> & 'C:\Users\Casey\AppData\Local\Microsoft\Windows\OneDrive\CS372\client.py'

Connected to: localhost ( 192.168.1.217 ) on port:  7777

Type /q to quit
Enter message to send...
Client: Hello!
█
```

Server responds.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Casey\OneDrive\CS372> & 'C:\Users\Casey\AppData\Local\Microsoft\Windows\OneDrive\CS372\server.py'

Server listening on: localhost ( 192.168.1.217 ) on port:  7777

Connected by ( 192.168.1.217 , 52188 )

Waiting for message...
Client : Hello!
Type /q to quit
Enter message to send...
Server: Hi█
```

Client ends connection with “/q”

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Casey\OneDrive\CS372> & 'C:\Users\Casey\AppData\Local\Microsoft\Windows\OneDrive\CS372\client.py'

Connected to: localhost ( 192.168.1.217 ) on port:  7777

Type /q to quit
Enter message to send...
Client: Hello!
Server : Hi
Client: Goodbye
Server : See ya!
Client: /q
PS C:\Users\Casey\OneDrive\CS372> █
```

Server program is ended when it receives “/q” from client

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Casey\OneDrive\CS372> & 'C:\Users\Casey\AppData\Local\Microsoft\Windows\OneDrive\CS372\server.py'

Server listening on: localhost ( 192.168.1.217 ) on port:  7777

Connected by ( 192.168.1.217 , 52188 )

Waiting for message...
Client : Hello!
Type /q to quit
Enter message to send...
Server: Hi
Client : Goodbye
Server: See ya!
PS C:\Users\Casey\OneDrive\CS372> █
```