

Project 4

Client / Server Chat

Running the program:

1. Please see 3 files separately submitted to Canvas, listed below: If these files did not successfully upload to Canvas, they will be uploaded via a zip folder instead. If a zip folder is found in the Canvas submission, unzip folder "montanek_CS372_Project_4". Within this folder, you will find five files:
 - 1.1. "montanek_Project_4.PDF"
 - 1.2. "client.py"
 - 1.3. "server.py"
2. Place the python files into a single directory. The attached PDF does not need to be included in the directory.
3. Through Pycharm, open a new terminal.
4. Through the opened terminal, navigate to the directory where the python file is located (e.g. "cd Desktop/directoryName"). Then open a separate duplicate terminal next to the original terminal.
5. Run the python files using the command lines below in the following order:
 - 5.1. "python3 server.py" (in your first terminal)
 - 5.2. "python3 client.py" (in your separate terminal)
6. You can also specify if you want a custom port number with the following commands. Please remember to keep both server and client port numbers the same.
 - 6.1. "python3 server.py [port number]" (in your first terminal)
 - 6.2. "python3 client.py [port number]" (in your separate terminal)

Screenshots:

PHOTO 1-2: screenshots of server output for default port number:

```
(base) Kristinas-iMac:Project 4 kristinamontanez$ python3 server.py
Server listening on: ('localhost', 9876)
Connected by ('127.0.0.1', 56437)
Waiting for message...
Hello!
Type /q to quit
Enter message to send...
>How are you?
Good, you?
>Good
Bye
>Bye
Connection closed by client.
(base) Kristinas-iMac:Project 4 kristinamontanez$
```

```
(base) Kristinas-iMac:Project 4 kristinamontanez$ python3 client.py
Connected to: localhost on port: 9876
Type /q to quit
>Hello!
How are you?
>Good, you?
Good
>Bye
Bye
>/q
Your connection is now closed.
(base) Kristinas-iMac:Project 4 kristinamontanez$
```

PHOTO 3-4: screenshots of server output for specified port number:

```
(base) Kristinas-iMac:Project 4 kristinamontanez$ python3 server.py 12345
Server listening on: ('localhost', 12345)
Connected by ('127.0.0.1', 56672)
Waiting for message...
Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons. The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.
Type /q to quit
Enter message to send...
>The number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to chuse three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New-York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.
The Constitutional Convenion, Article 1?
>Yes! That is correct! Good job!
Thanks! Bye!
>/q
Your connection is now closed.
(base) Kristinas-iMac:Project 4 kristinamontanez$
```

```
(base) Kristinas-iMac:Project 4 kristinamontanez$ python3 client.py 12345
Connected to: localhost on port: 12345
Type /q to quit
>Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons. The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.
The number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to chuse three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New-York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.
>The Constitutional Convenion, Article 1?
Yes! That is correct! Good job!
>Thanks! Bye!
Connection closed by server.
(base) Kristinas-iMac:Project 4 kristinamontanez$
```