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Project Under Professor – CHANCE EARY

Course - CSE 5306: DISTRIBUTED SYSTEMS

This project is a GUI Based Server - Client Chat Application built using python and consists of three phases:
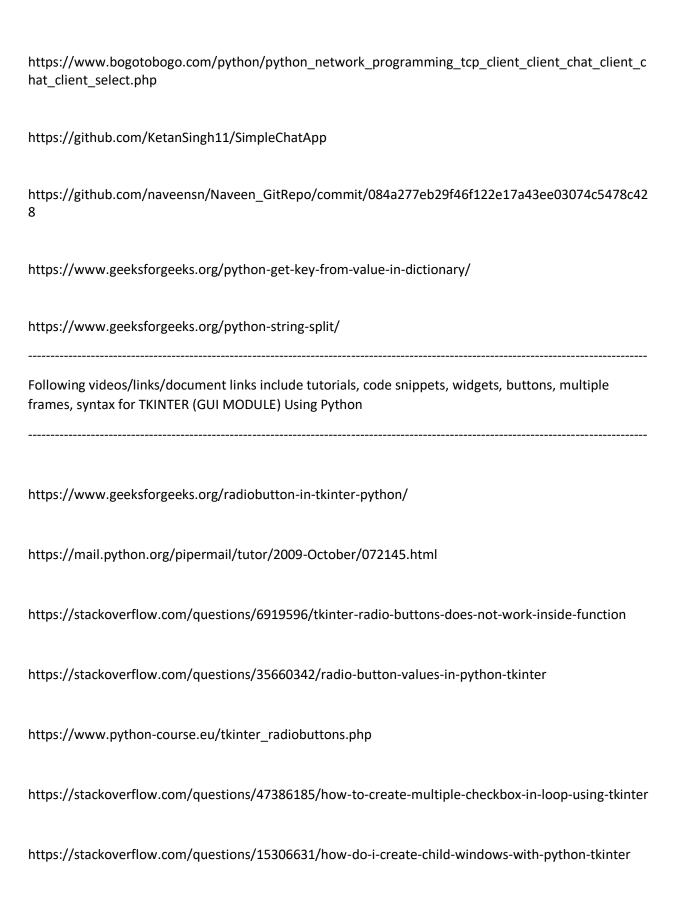
1. **Synchronous Message server Chat Application**
2. **Asynchronous Persistent Message Server Chat Application**
3. **Passing Vector Clock Values Between Different Clients**

   Please have a look at the individual read me files for more information regarding this project.

##

Utilization List:

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IDE - Pycharm version 2019.3.3

Programming Language - Python version 3.8

OS - Windows 10

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Requirements to Run & check the functionalities

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1. Download and Install Pycharm 2019.3.3 - from
https://www.jetbrains.com/pycharm/download/#section=windows

2. Download and Install Python 3.8 - from https://www.python.org/downloads/

3. Create a new Project in Pycharm

4. Setup Pycharm with Python Interpreter:

      a) Go to settings > Projects > Project Interpreter - Select Python 3.8

5. Include header/packages

      a) Go to settings > Projects > '+' - add desired packages

            If not installed already install json, socket, threading, Tkinter packages for this project

REFERENCES:

Following videos/links/document links include Sockets, Client-Server Model, Multi-threading, Chat room, Broadcast messages, Multiclient chat system

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https://www.geeksforgeeks.org/simple-chat-room-using-python/

https://medium.com/swlh/lets-write-a-chat-app-in-python-f6783a9ac170

https://pythontips.com/2013/08/06/python-socket-network-programming/

https://github.com/attreyabhatt/Reverse-Shell/tree/master/Multi_Client%20(%20ReverseShell%20v2)

https://pythonprogramming.net/sockets-tutorial-python-3/

https://pythonprogramming.net/client-chatroom-sockets-tutorial-python-3/

https://pythonprogramming.net/client-chatroom-sockets-tutorial-python-3/

https://www.bogotobogo.com/python/python_network_programming_tcp_client_client_chat_client_chat_client_select.php

https://github.com/KetanSingh11/SimpleChatApp

https://github.com/naveensn/Naveen_GitRepo/commit/084a277eb29f46f122e17a43ee03074c5478c428

https://www.geeksforgeeks.org/python-get-key-from-value-in-dictionary/

https://www.geeksforgeeks.org/python-string-split/

Following videos/links/document links include tutorials, code snippets, widgets, buttons, multiple frames, syntax for TKINTER (GUI MODULE) Using Python

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https://www.geeksforgeeks.org/radiobutton-in-tkinter-python/

https://mail.python.org/pipermail/tutor/2009-October/072145.html

https://stackoverflow.com/questions/6919596/tkinter-radio-buttons-does-not-work-inside-function

https://stackoverflow.com/questions/35660342/radio-button-values-in-python-tkinter

https://www.python-course.eu/tkinter_radiobuttons.php

https://stackoverflow.com/questions/47386185/how-to-create-multiple-checkbox-in-loop-using-tkinter

https://stackoverflow.com/questions/15306631/how-do-i-create-child-windows-with-python-tkinter

https://www.youtube.com/watch?v=IB6VkXJVf0Y

https://www.youtube.com/watch?v=qWnE-yp6wzU&t=163s

https://www.youtube.com/watch?v=_lSNIrR1nZU