Project 1

Submit Assignment

Due Nov 3 by 11:59pm   **Points** 50   **Submitting** a file upload   **File Types** zip
Available after Oct 20 at 12am

See the attached documents for the first Sockets API programming assignment. Please get an early start on this assignment, and remember to use the correct programming languaes, as I will not accept programs in other languages.

The grading criteria for this project is available.

Attachments

- **Project1.pdf**

Project 1 Rubric

Criteria	Ratings		Pts
Documentation - Header Blocks Header block for programs include Programmer Name, Program Name, Program Description, Course Name, Last Modified	**2.0 pts** **Full Marks**	**0.0 pts** **No Marks**	2.0 pts
Documentation - Comments Function Descriptions are complete with pre- and post-conditions. Comments outline program flow and call out important techniques.	**4.0 pts** **Full Marks**	**0.0 pts** **No Marks**	4.0 pts
Verification - chatserve command-line Starts by command line "./chatserve " and listens on for client request	**4.0 pts** **Full Marks**	**0.0 pts** **No Marks**	4.0 pts
Verification - chatclient command-line Starts by command line "./chatclient "	**3.0 pts** **Full Marks**	**0.0 pts** **No Marks**	3.0 pts
Verification - Connection chatserve and chatclient establish a connection from different flip servers (e.g. chatserve on flip1, chatclient on flip2)	**2.0 pts** **Full Marks**	**0.0 pts** **No Marks**	2.0 pts
Verification - chatclient Handle Gets user "handle", displays "handle" at chatclient prompt, sends "handle" to chatserve with each message	**4.0 pts** **Full Marks**	**0.0 pts** **No Marks**	4.0 pts
Verification - Initial Message chatclient sends initial message to chatserve	**3.0 pts** **Full Marks**	**0.0 pts** **No Marks**	3.0 pts
Verification - Initial Response chatserver accepts and displays chatclient's message	**3.0 pts** **Full Marks**	**0.0 pts** **No Marks**	3.0 pts
Verification - Communication chatserver and chatclient alternate sending/receiving message successfully	**6.0 pts** **Full Marks**	**0.0 pts** **No Marks**	6.0 pts

Criteria	Ratings		Pts
Verification - Close Connection Either host may close connection | chatserve keeps running | chatclient terminates	**3.0 pts** **Full Marks**	**0.0 pts** **No Marks**	3.0 pts
Verification - chatserve continuity chatserve can successfully accept and maintain a second connection after the first client disconnects	**2.0 pts** **Full Marks**	**0.0 pts** **No Marks**	2.0 pts
Requirements - Files submitted correctly Files and README submitted according to project submission guidelines. || Programs compile/run according to README specifications	**4.0 pts** **Full Marks**	**0.0 pts** **No Marks**	4.0 pts
Requirements - Well Modularized Server has at least functions which perform: Start-up, Send Message, Receive Message || Client has at least functions which perform: Initiate Contact, Send Message, Receive Message	**6.0 pts** **Full Marks**	**0.0 pts** **No Marks**	6.0 pts
Requirements - Uses SOCKETS API Deduct up to 20 points for not using SOCKETS API	**0.0 pts** **Full Marks**	**0.0 pts** **No Marks**	0.0 pts
Requirements - runs on FLIP servers Deduct up to 10 points for lack of FLIP functionality	**0.0 pts** **Full Marks**	**0.0 pts** **No Marks**	0.0 pts
Requirements - Required Languages chatclient coded in C/C++ ||| chatserver coded in Java or Python ||| Deduct 25 points for each language	**0.0 pts** **Full Marks**	**0.0 pts** **No Marks**	0.0 pts
Requirements - Citations Cites sources for borrowed code || Deduct up to 50 points for sources not cited	**0.0 pts** **Full Marks**	**0.0 pts** **No Marks**	0.0 pts
Style - Code Coded using readable indentation, white-space, etc.	**2.0 pts** **Full Marks**	**0.0 pts** **No Marks**	2.0 pts

Criteria	Ratings		Pts
Style - Output Useful, readable, clear output.	**2.0 pts** **Full** **Marks**	**0.0 pts** **No** **Marks**	2.0 pts
Extra Credit Server multi-threaded (2) | Other (?)	**0.0 pts** **Full** **Marks**	**0.0 pts** **No** **Marks**	0.0 pts
Late Penalty Deduct 10% of earned points for each day late.	**0.0 pts** **Full** **Marks**	**0.0 pts** **No** **Marks**	0.0 pts
Total Points: 50.0			