

CS 372

**Programming Assignment #1** (2 programs)

Due before midnight, Sunday, end of Week 5

Student Name:	
Grader Name:	

		Possible	Points	Comments
Documentation (6 pts)				
	Header blocks with name, program descriptions, etc	2		
	Function descriptions, comment outline	4		
Verification (30 pts)				
	<i>chatserve</i> starts with the command line ./chatserve <port#> and waits on <port#> for a client request	4		
	<i>chatclient</i> starts with the command line ./chatclient <server-hostname> <port#>	3		
	<i>chatserve</i> and <i>chatclient</i> establish a connection	2		
	<i>chatclient</i> gets user "handle", displays as <i>chatclient</i> prompt, sends to <i>chatserve</i> with each message	4		
	<i>chatclient</i> sends initial message to <i>chatserve</i>	3		
	<i>chatserve</i> accepts and displays <i>chatclient</i> 's message	3		
	<i>chatserve</i> and <i>chatclient</i> alternate sending/receiving messages	6		
	Either host may close the connection, <i>chatserve</i> keeps running, <i>chatclient</i> terminates	3		
	<i>chatserve</i> repeats until terminated by a supervisor	2		
Requirements (10 pts)				
	Files submitted correctly	2		
	Well-modularized: server has at least functions which perform the following: <i>Start-up</i> , <i>Send Message</i> , <i>Receive Message</i> client has at least functions which perform the following: <i>Initiate Contact</i> , <i>Send Message</i> , <i>Receive Message</i>	6		
	Uses socket API	1		
	Runs on <i>flip</i>	1		
	<i>chatserver</i> in Java or Python, <i>chatclient</i> in C/C++ (deduct up to 40 points for improper languages)	0		
	Cites sources for borrowed code (deduct up to 40 points for sources not cited)	0		
Coding Style (4 pts)				
	Coded using readable indentation, white-space, etc.	2		
	Useful, readable output	2		
Extras				
	Server is multi-threaded			
	Other?			
Score		50	0	