

CS 372

## Programming Assignment #2 (2 programs)

Due before midnight, Sunday, end of Week 9

Student Name:	
Grader Name:	

		Possible	Points	Comments
Documentation (6 pts)				
	Header block with name, etc.	2		
	Function descriptions, comment outline	4		
Verification (32 pts)				
	<i>fserve</i> starts on host A, validates the parameter, and waits on <SERVER_PORT> for client request	2		
	<i>fclicient</i> starts on host B, and validates parameters	2		
	<i>fserve</i> and <i>fclicient</i> establish a control connection	2		
	<i>fclicient</i> sends a command	2		
	<i>fserve</i> accepts and interprets command	3		
	<i>fserve</i> and <i>fclicient</i> send/receive control messages on the control connection	2		
	<i>fserve</i> and <i>fclicient</i> establish a data connection	2		
	When appropriate, <i>fserve</i> sends its directory to <i>fclicient</i> on the data connection, and <i>fclicient</i> displays the directory on-screen	3		
	When appropriate, <i>fserve</i> validates <i>filename</i> , and either sends the contents of <i>filename</i> on the data connection or sends an appropriate error message to <i>fclicient</i> on the control connection (error 2 pts, short file 2 pts, long file 2 pts)	6		
	<i>fclicient</i> saves the file, and handles "duplicate file name" error if necessary	3		
	<i>fclicient</i> displays "transfer complete" message on-screen	1		
	<i>fserve</i> closes the data connection after directory or file transfer	1		
	Control connection closed by <i>fclicient</i>	2		
	<i>fserve</i> repeats until terminated by a supervisor	1		
Requirements (8 pts)				
	Files submitted correctly	1		
	Well-modularized: server has at least <i>startup</i> , <i>handleRequest</i> functions client has at least <i>initiateContact</i> , <i>makeRequest</i> , <i>receiveFile</i> functions	4		
	Does not use <i>sendfile</i> , etc. Note: additional points may be lost under "Verification"	2		
	Runs on <i>flip</i>	1		
	<i>fserver</i> in C, <i>fclicient</i> in Python or Java (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	0		
	Client can change server directory	0		
	Other?	0		
Total		50	0	