

### **Design Project Description – Client and Server FTP Programs**

Your team is tasked with developing **a client and a server FTP programs**. Your client will send an FTP message to the server and receive a corresponding message back from the server. The client should be able to see a list of the available files and directories, select a file, and request a transfer. The server must be able to transfer the file to the client. The client must be able to move within the allowed directory tree. Your team must read RFC 959, and any relevant updates, to ensure that the protocol is properly implemented.

The client should initiate a TCP connection with the server, and the server must be able to accept and manage it. Your FTP server must include at least 3 directories with 5 files each. The client must be able to view any of the directories and download any of the available files via TCP. The client must also be able to upload files and create new directories.

Follow the Engineering Design Process to provide an accurate and implementable solution. **DO NOT COPY other code without the proper acknowledgement.** Your team is required to develop the code for the applications; hence your submission must be an original program.

Develop a presentation in which the team confirms that the solution works. The presentation must show how all requirements are satisfied. During the presentation, a live demonstration of the applications is expected.

Your team must also develop a complete written report which showcases how the Engineering Design Process was used to develop and implement the solution and the well commented source code which was employed. Your report must include screenshots which prove that the design's implementation solves the problem. The report is to be submitted via Blackboard before the due time & date.

**Late submissions will NOT be accepted.**