Systems Programming Final
Project Report

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In this project, we were supposed to implement client-server based application with threadpools . Server program is supposed to simultaneously handle connections from multiple clients,

Server = server is making threads. After that, threads trying to find a connection in a loop so they are synchronized automatically.(like child process reading same pipe)

Client= according to given arguments, client trying to connect server with a directory name. When a client that was connected before connects again, it will receive missing files from the server if there is any.

WHAT IS MISSING/ WHAT IS DONE/ IN WHICH SITUTATIONS PROGRAM CAN FAIL

First what is done, multiple clients can connect the server with different directory names, and if they connect again they will get all files from the server.

WHAT IS MISSING

Program is not completed, there is no check for which file is up-to-date. Because I couldn't modify last modified date of file, so every time when I copy a file, its modified date is current time.

Again while client is connected, if file was removed and if its not uploaded to server still, it will be missed. But if its already uploaded, and when client connected again with same directory, file will come back.

"*Note that the client should return with a proper message when server is down*" this rule from pdf, I couldn't do this too. Because im working with bytes(yeah im sending data and reading data char by char). Its hard to find "*server is down*" message while dealing with characters.

In multiple clients with same directory, It wont crash but only first client will upload files, and other ones will get some files from the first client(sometimes they will get all).