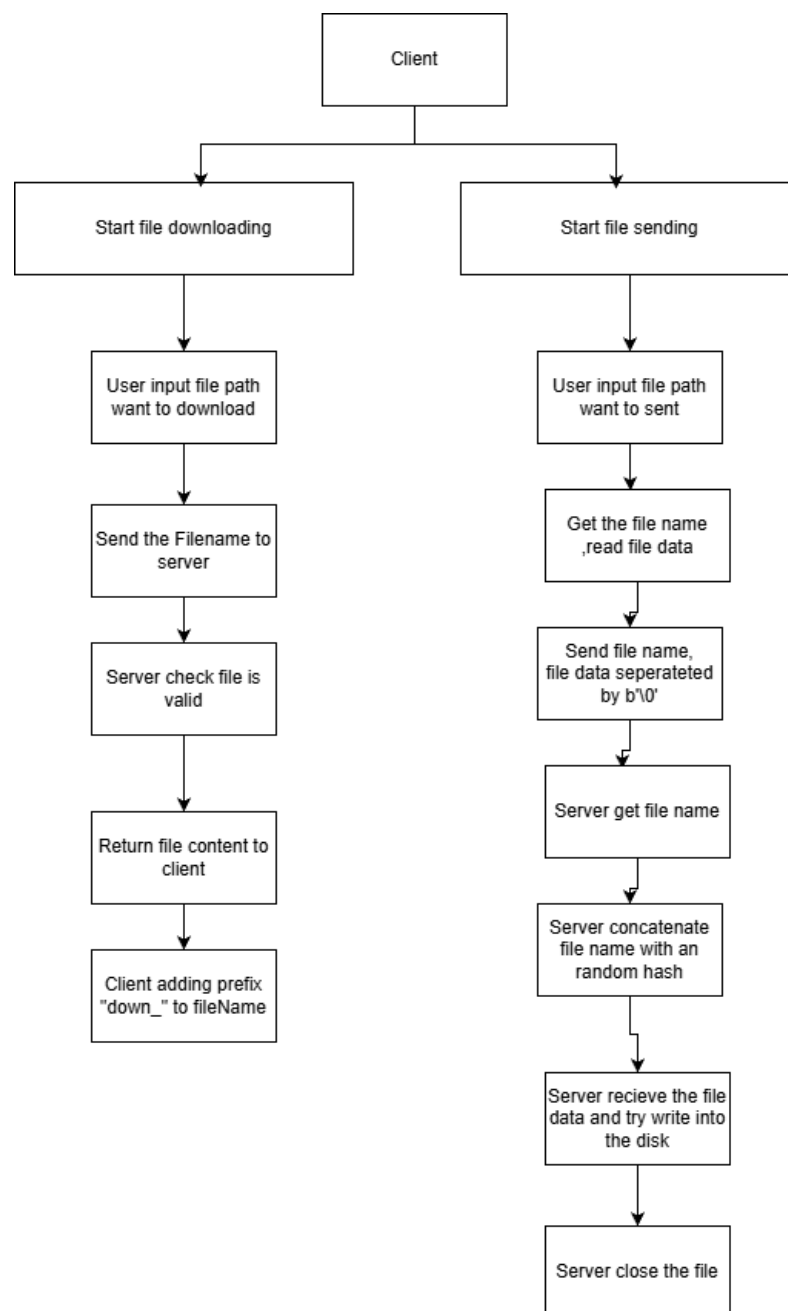# Practical Work 1

Introduction

This is an implementation of the first labwork for the distributed system subject. It 's about writing an client and server application for exchanging files.

Architecture

Method

Server open a TCP socket at 9999 and listen every IP possible

1.Upload

First bit of the packet inform the server to upload file
Next is bit of the packet represent file name which is sent
Next is the EOF bit indicate the end of the file name
Next bit sequence indicate the server to receive file body
Server try to concatenate the file name with a random hash to prevent same file being sent
Server try to save the file

2.Download

First bit of the packet inform the server to download File
Next bit sequence is inform the server to receive the file name want to download
At the end is the EOF bit
Server receives the file name and check it is valid or not
if it is valid, send back the file data
and client will add the suffix '_down' to the filename to the file and save it

Link github

ds2026/Prac1.rar at main · TommyDatLC/ds2026

More information

Đơn giản hóa Socket
https://www.youtube.com/watch?v=2alxokA1zR0
(Only upload part)