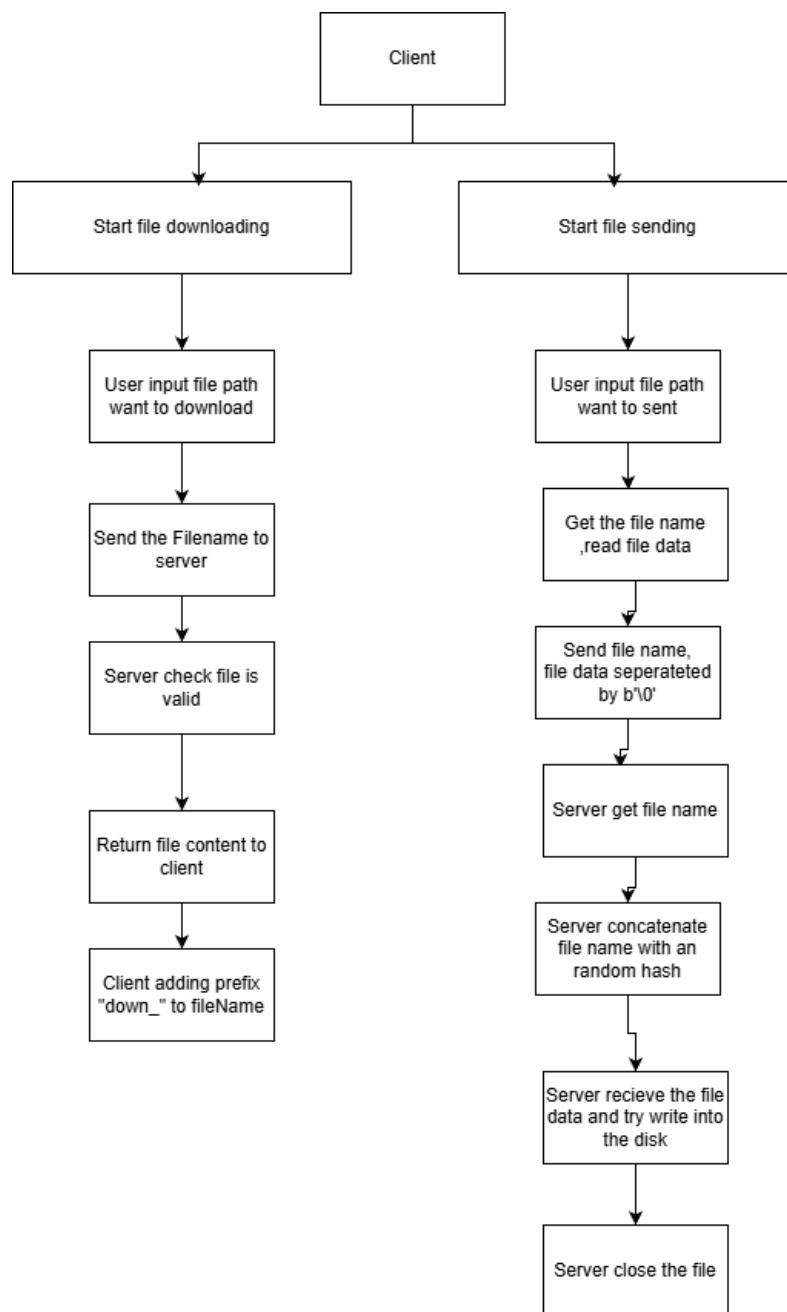


# Practical Work 1

## Introduction

This is an implementation of the first labwork for the distributed system subject. It's about writing a 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

## More information

[https://www.tiktok.com/@dong\\_code/video/7575766619188792583](https://www.tiktok.com/@dong_code/video/7575766619188792583)

<https://www.youtube.com/watch?v=2alxokA1zR0>

(Only upload part)