# VIETNAM ACADEMY OF SCIENCE AND TECHNOLOGY UNIVERSITY OF SCIENCE AND TECHNOLOGY OF HANOI



Subject: Distributed System
Labwork 1

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#### Chapter 1

#### Designing the protocol

We used a predefined message system to create handshaking. It helps to ensure that the connection and transmission between the server and client are consistent. When the connection is established, the server will send a message; if the client confirms the message, it will begin performing the task and sending data to the server. After that, the process repeats until the file is transferred.

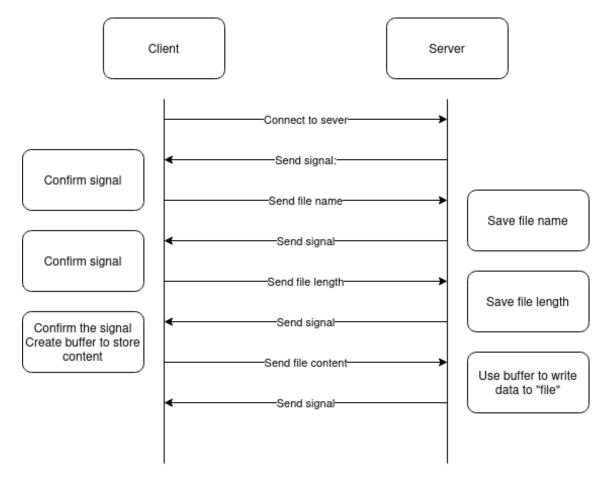


Figure 1.1: Protocol

#### Chapter 2

### Organizing

The system involves a client and a server communicating via sockets. The server binds to a port and monitors the client. When ready to transfer a file, the server signals readiness, prompting the client to input the file name, which it sends to the server. Upon receiving the file name, the server acknowledges and provides the file's length. The client then sends the file data, awaiting completion. Upon receipt, the server prompts the user to restart the process.

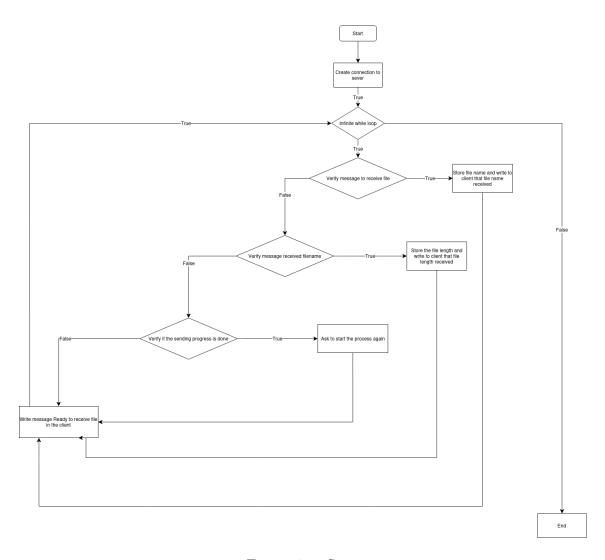


Figure 2.1: Server

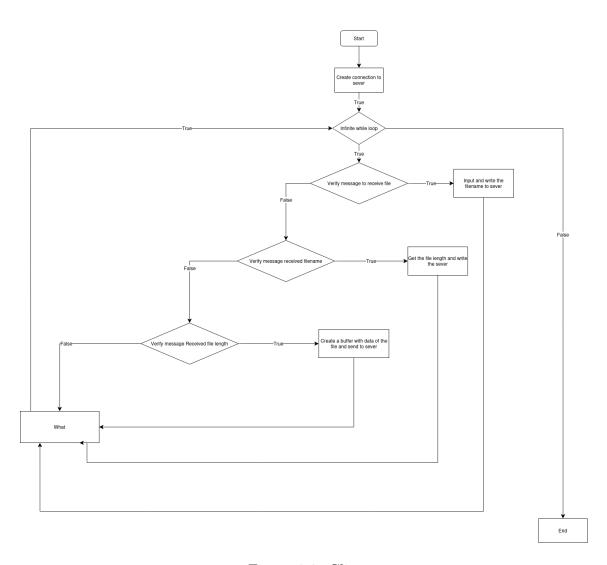


Figure 2.2: Client