

Requirement Document

Overview

Objectives

The purpose of this program is to provide a p2p system for registering, searching files in server index and transferring files between each peer.

Functional Requirements

Statement of Functionality

1. Peer can register local files on server, and information will save in an index which is saved in server.
2. Peer can search files from server index through key words, and server will return a file list.
3. Peer can download files from other peer through the information, containing ip address and file path, from server.

Scope

Server:

Server need to accept information from peers, and do some operations, like add, delete, search, modify information in index.

Client:

Client need to analyze user input string, send message to server, and receive feedback from server.

Client need to listen the request from other client.

Client need to download files from other client.

Concurrency

Both the indexing server and a peer server should be able to accept multiple client requests at the same time.