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Peer to Peer File Sharing System

REMOTE METHOD INVOCATION(RMI)

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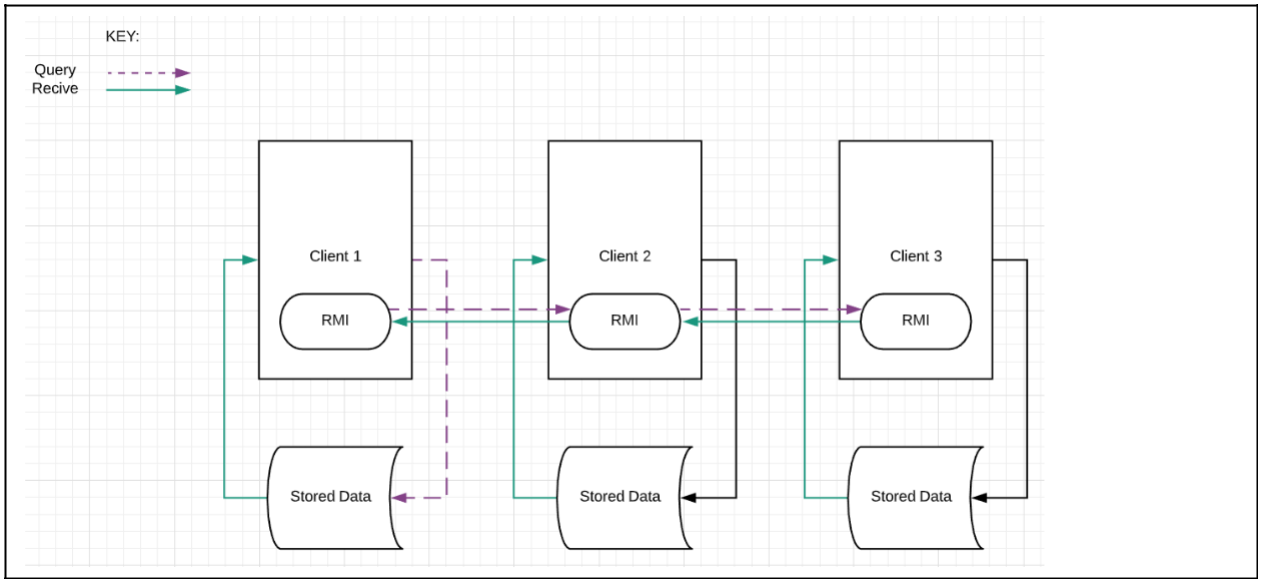
Description

This is a peer to peer file sharing system written in java using remote method invocation (RMI). Each client connected to the network will act as a server as well as a client. Using RMI's interface clients can send queries and receive data. The program has a basic "control panel" for adding new clients to the system to simulate a network on a single computer. Clients will have the capability of searching for a specific file through the network. If the search is successful, the client can decide which host-client to download the file from. The system incorporates vector timestamps which gets added to each time a client causes an event. The system also elects a leader when a new client joins the system and when a client leaves the system. Once elected leader, the leader's job is to print out a snapshot of the system for debugging purposes. This snapshot shows which client each is connected to in the RMI system and shows the vector that each client has for each other process.



UML Diagram