MP1 Design Document

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The design methodology to create the Chat Room Service is a multi-threaded approach using threads. When the server starts, it spawns a master thread that listens for incoming connections to the server. When a client connects to the server, it can issue 4 types of commands: CREATE, DELETE, JOIN, and LIST. When CREATE is issued by a client, the master server thread creates a master room thread using a new port, which listens to incoming connections to the created room. When JOIN is issued by a client, a thread is created to relay messages sent to the other clients connected to the same room. DELETE, and LIST require no additional threads to complete.