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Systems & Networks II

Project 1

Protocol Document

This program uses HTTP at the application layer, IP at the network layer, and TCP at the transport layer. These protocols are used transfer HTML files between the client and the server. HTTP is a reliable protocol. This ensures that all files are received, but comes at the cost of speed.

TCP follows the client-server model. This means that a server (the computer running this program) sends information to a client (the browser in this case). The server creates a socket, binds it to the server address, and then starts listening on the server socket. The server can then accept a connection and begin communication with a client. Using threads, a server may connect to multiple clients at once. At this point, a client can send requests and the server will receive them. This can continue until connection is closed or broken.