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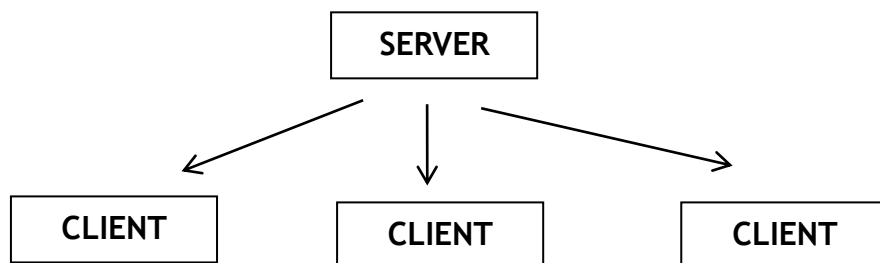
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Notes

- Peer to Peer Lockstep;

- ~ You take turns, end your turn and synchronized...
- ~ Earlier version of multiplayer
- ~ The game easily being desynchronized because for example first person shooter games where everything's happening so fast (DOOM)...

- Quake;



You update the server by sending a whole bunch/chunks of data and Updating (by packet).

- Sockets;

~ A special purpose interfaces used to inter-process communication (IPC).

~ 2 types of sockets:

(1) TCP/IP:

- > Very straight forward, reliable, orderly
- > If you send the data, they'll get them in orderly fashion
- > Stream Protocol
- > Break the data into packet for you (automatically)
- > Make sure the data doesn't being sent too fast

(2) UDP:

- > Unreliable like TCP
- > No guarantee of packet ordering (1,2,3,5? 4?)
- > No sense of connection
- > You have to code everything yourself
- > Manually break the data into packet
- > Need to make sure our self that we don't send the data too fast
- > Can't rely on UCP check some.

~ TCP is terrible for gaming, because it doesn't handle data loss very good.

~ Everything should be sent in real time.

~ But TCP is good for email and stuff because of the order it's uphold.

- Client:
 - ~ Create:
 - Open the socket using the socket command, or socket system call (socket ()).
 - ~ Connect:
 - Connect (), Need server address, port number
 - ~ Send/Receive: (using)
 - Read(), Write ()

- Server (*should be set up first):
 - ~ Create:
 - Socket()
 - ~ Bind:
 - Bind the socket, Bind ()
 - ~ Listen:
 - Listen for connection, Listen ()
 - ~ Accept:
 - Accept() the connection
 - ~ Read ()/ Write()

- When you create a socket; (identify)
 - ~ IP Socket, File Socket (What kind/ type of socket?)
 - ~ Address Domain? IPV4? IPV6? 32-bit, 16-bit?
- “The socket is represented as a file...”
- When addressing a socket, you cant pick any random port number.
- Boot up the server
- Socket assigned:
 - > Above 2000 - (port number)
 - > 2000 lower for UNIX process
- Datagram --> UDP
- The server ALWAYS start first and has to accept connection from the client.