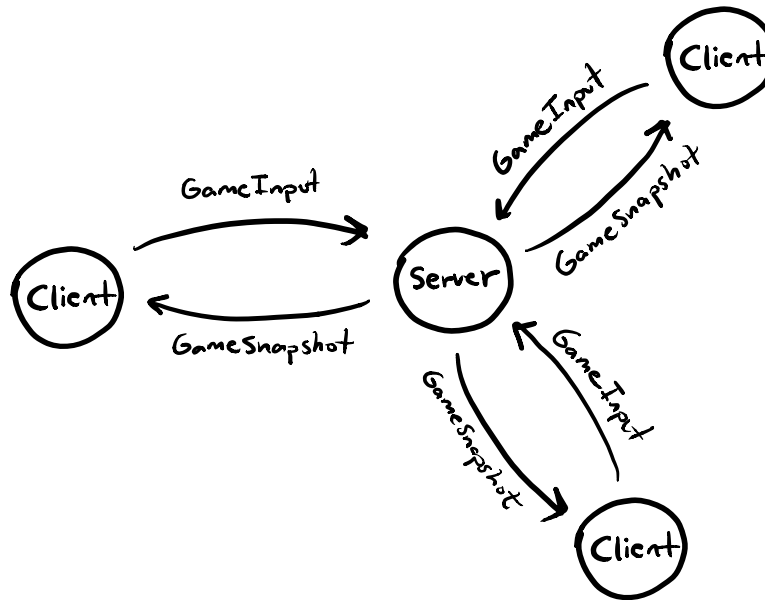# Networking

Server

loop :
- Process client inputs
- Update game world
- Send a snapshot of game world to clients

Client

loop :
- Send inputs to server
- Render game world snapshot from server

Packets

Objects that can be sent over the network.
Currently we only have two packets:

GameInput
- Movement
- Attack (ToDo)

GameSnapshot
- Contains the state of the game world at an instant in time
- Contains positions, shapes, and other necessary info for entities

ECS
- Serves as the game world simulator
- The server and each client will have their own instance of an ECS running.
- The server records the state of its game world by calling Ecs.Registry.Snap(), which creates a GameSnapshot packet.

- The client receives the GameSnapshot packet and updates its own ECS registry to match the packet