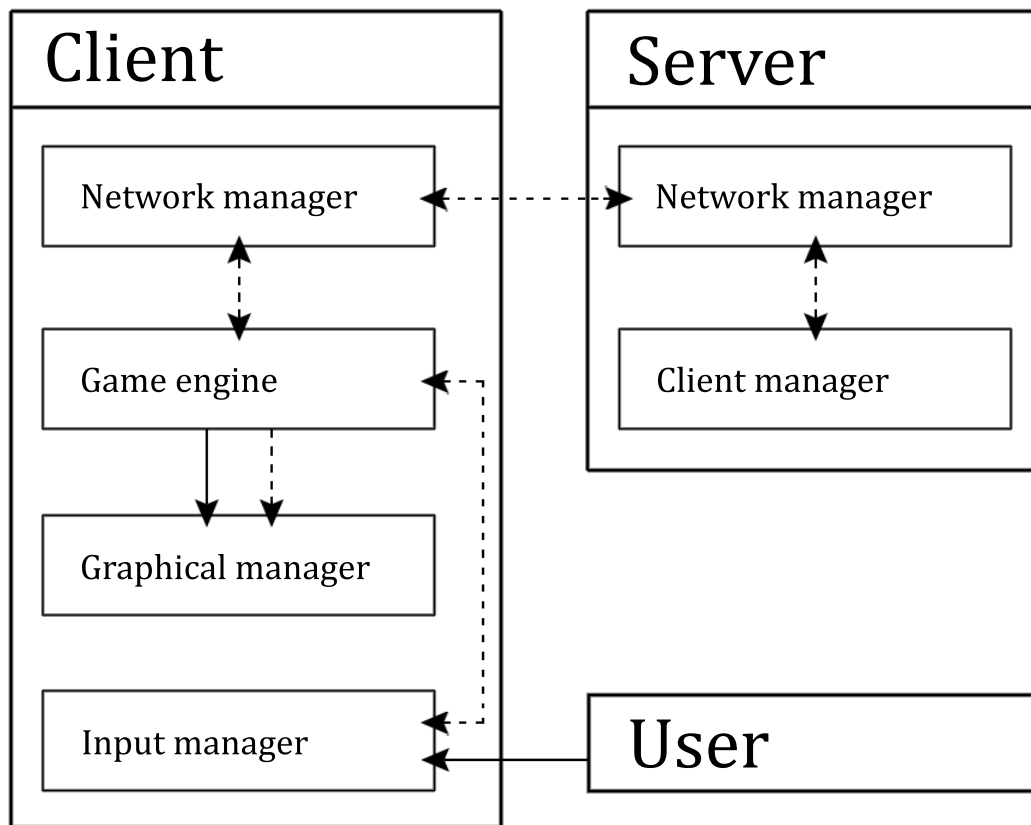# AETD - Arch-Enemy Tower Defense
Group 6

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2.2 Overall Architecture Description

Client

The clients job is to handle the game data for the particular user associated with it and to provide a graphical interface for said user. The Input manager takes input from the user and sends data to the Game engine. The Game engine then process the data and sends it to both the Graphical manager and the Network manager. The Graphical manager updates the graphical interface from the given data. The Network manager sends the data to the Network manager in the server.
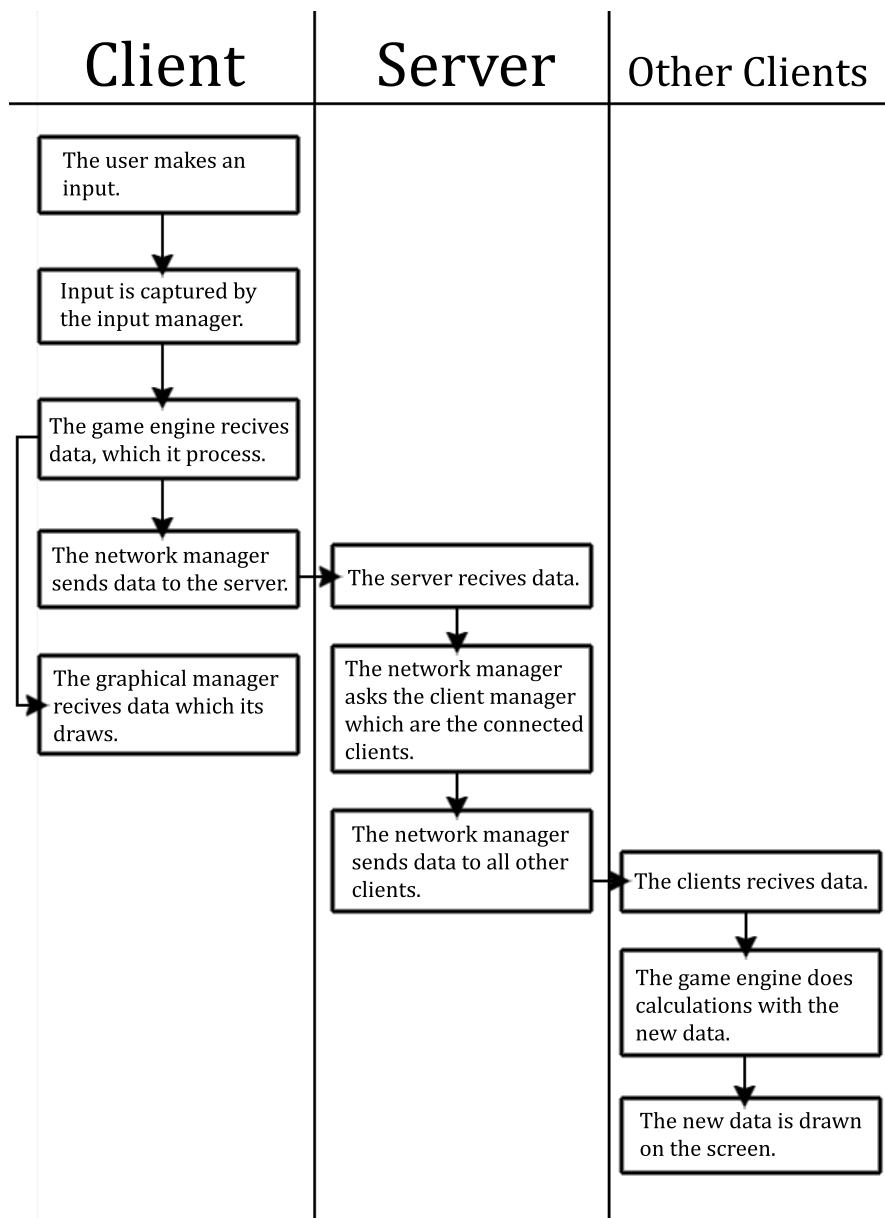
Server

The servers job is to manage the clients that are connected to it and to distribute information received from the individual clients to all others. The
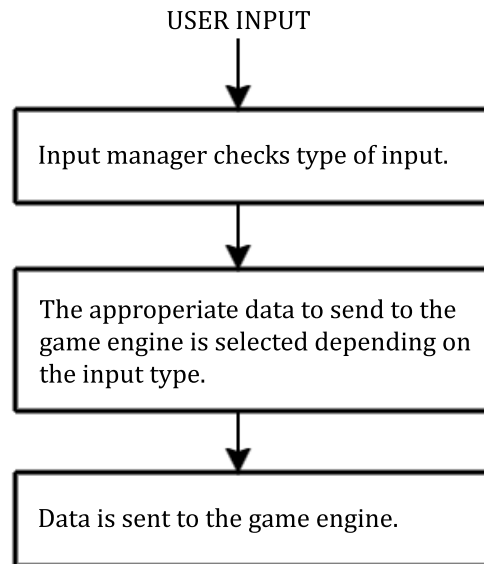
communication between the Network manager in the clients and the one in the server is made with the UDP protocol.

2.3 Detailed Architecture

Dataflow for user input

Client	Server	Other Clients

The user makes an input.

↓

Input is captured by the input manager.

↓

The game engine recives data, which it process.

↓

The network manager sends data to the server. → The server recives data.

↓

The graphical manager recives data which its draws.

The network manager asks the client manager which are the connected clients.

↓

The network manager sends data to all other clients. → The clients recives data.

↓

The game engine does calculations with the new data.

↓

The new data is drawn on the screen.

Input manager control flow

USER INPUT

Input manager checks type of input.

The approperiate data to send to the game engine is selected depending on the input type.

Data is sent to the game engine.

Game engine control flow

INPUT

Network manager processes the input.

If the updates need to be relayed to other clients, the updates made is sent to the network manager.

The graphical manager is called to update the interface with the new information.
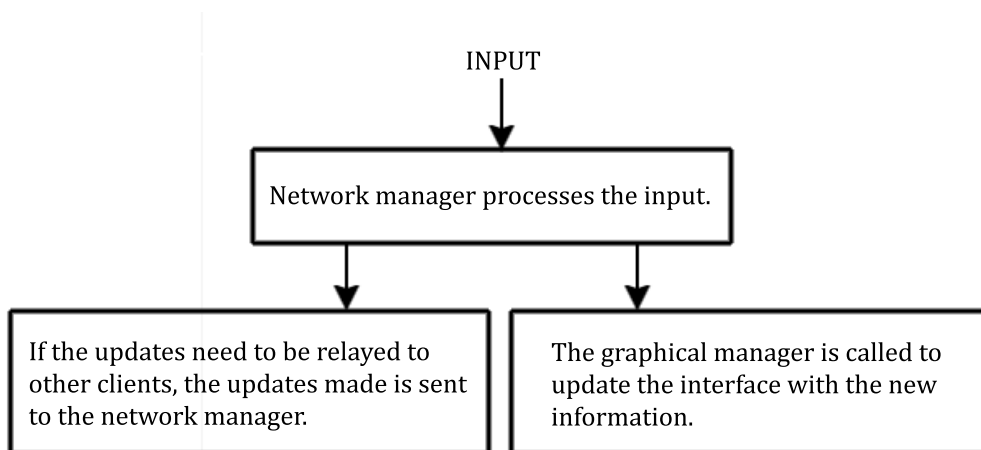
Network manager control flow

INPUT

Network manager processes the input.

Input is a package sent from the server.

Input will be shared with other clients.

Game engine recieves the package.

Input is sent to the server as a package.