

TDD

CRC CARDS

Game

Responsibilities	Collaborators
Update all player positions Render to screen Start server/connect to server Check collisions Change game state	Player Server Client

Player

Responsibilities	Collaborators
Get keyboard input Alter player position Check for window boundary Set name/colour	

Server

Responsibilities	Collaborators
Store all connections Handle all packets sent/received Listen for new connections Send data/gamestates to clients Process packets received	Game Packet Structure Packet Manager

Client

Responsibilities	Collaborators
Connect/disconnect from server Process packets received Send data/gamestates to server Send keyboard input to server	Game Packet Structure Packet Manager

Packet

Responsibilities	Collaborators
Store data Be sent to server/client	

Packet Structure

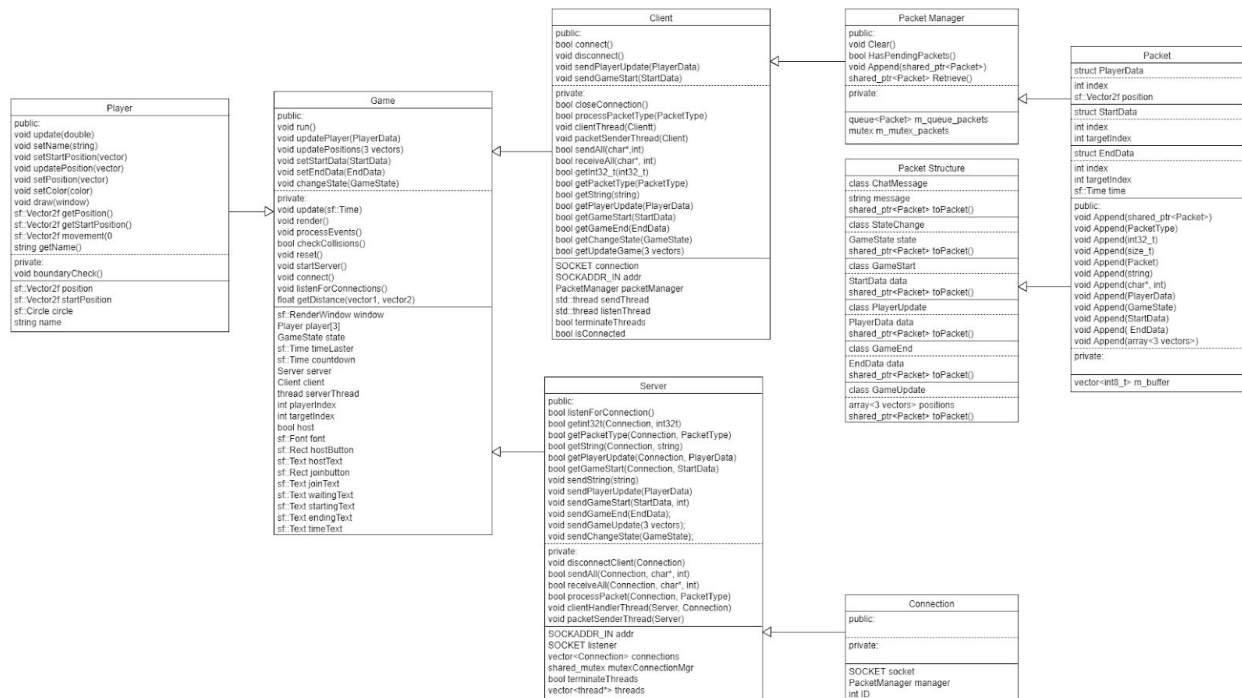
Responsibilities	Collaborators
Store packet structs Convert data to packets	Packet

Packet Manager

Responsibilities	Collaborators
<p>Add packets to queue for sending</p> <p>Check if client has pending packets to send</p> <p>Clear all packets from client</p>	

DOMAIN MODEL

[\[link to larger image\]](#)



TECHNOLOGIES

For this project, I will use Visual Studio 2019 and C++ as this language was specified in the project specifications. This is also due to the Winsock library being easily available for C++. Winsock is used to create sockets and connections to allow 2 instances of the project to communicate between each other by sending data like game states or player positions. For the graphics I will be using SFML as I have used it in the past and it's an easy to use library that allows to render sprites to the screen easily.