

Comp230 Networking component

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 - Player Movement.
 - Player Health.
 - Spawning Items (I.e. bullets)

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 - Online matchmaking
- Having a multiplayer aspect to the game can help with advertising.

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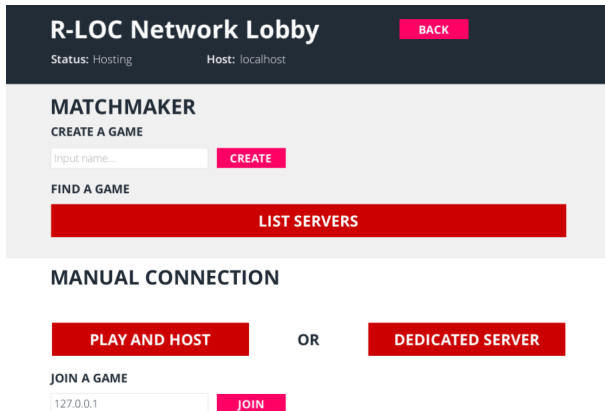
- Unity has quite a high level networking architecture already built in it.
- This meant that I didn't have to program very low level networking stuff and worry about security etc.
- This made the scope of this component manageable for this time-frame.
- However there is still a lot to be improved upon.

Images of the Lobby GUI

- Lobby Menu.

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The screenshot shows the R-LOC Network Lobby interface. At the top, a dark blue header contains the title "R-LOC Network Lobby" and a pink "BACK" button. Below the header, the status "Status: Hosting" and host "Host: localhost" are displayed. The main content area is divided into three sections: "MATCHMAKER", "MANUAL CONNECTION", and "JOIN A GAME". The "MATCHMAKER" section includes a "CREATE A GAME" sub-section with an input field for a name and a pink "CREATE" button, and a "FIND A GAME" sub-section with a large red "LIST SERVERS" button. The "MANUAL CONNECTION" section features two red buttons: "PLAY AND HOST" and "DEDICATED SERVER", separated by the word "OR". The "JOIN A GAME" section has an input field for an IP address (showing "127.0.0.1") and a pink "JOIN" button.

R-LOC Network Lobby **BACK**

Status: Hosting Host: localhost

MATCHMAKER

CREATE A GAME

Input name... **CREATE**

FIND A GAME

LIST SERVERS

MANUAL CONNECTION

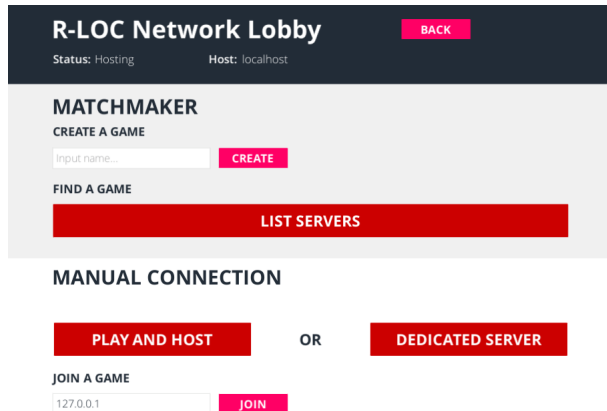
PLAY AND HOST OR **DEDICATED SERVER**

JOIN A GAME

127.0.0.1 **JOIN**

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The screenshot shows the 'R-LOC Network Lobby' interface. At the top, it displays 'Status: Hosting' and 'Host: localhost' next to a pink 'BACK' button. Below this is the 'MATCHMAKER' section, which includes a 'CREATE A GAME' subsection with an 'Input name...' text field and a pink 'CREATE' button. The 'FIND A GAME' subsection features a large red button labeled 'LIST SERVERS'. At the bottom is the 'MANUAL CONNECTION' section, which has two red buttons: 'PLAY AND HOST' and 'DEDICATED SERVER', separated by the word 'OR'. Below these is a 'JOIN A GAME' subsection with an IP address input field containing '127.0.0.1' and a pink 'JOIN' button.

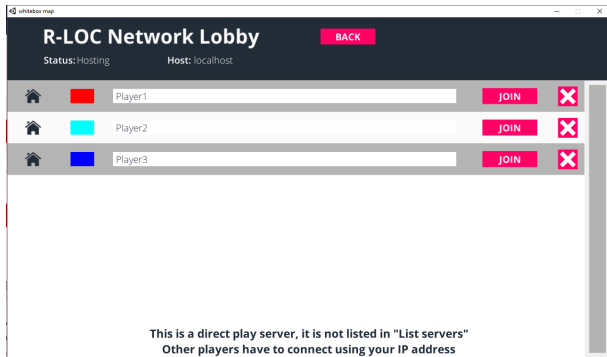
- Currently the Online Matchmaking isn't working.

Images of the Lobby GUI

- Lobby Setup

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Networking Video Demo

Demo of working lobby and networked player movement.

https:

[//www.youtube.com/watch?v=fUtDHb1e6x8&feature=youtu.be](https://www.youtube.com/watch?v=fUtDHb1e6x8&feature=youtu.be)

Moving Forward into Production

- Lobby Menu GUI improvements.

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- Aim to get online matchmaking working.
- Player is able to choose different types of units and select a map.

Questions?

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