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Concurrent Network Applications report

ANTHONY STURDY

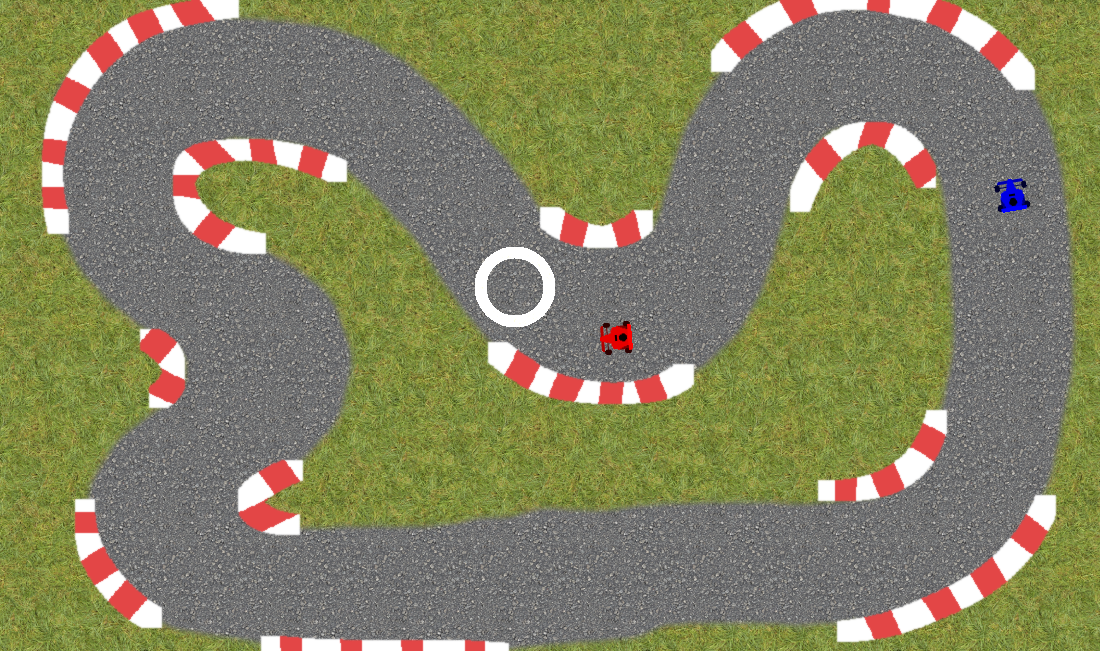


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# User Guide

**Change Profile Picture**

Before connecting to a server, click the Profile Picture icon to the left of the Username input box. Select an image, then click Open. When you connect to the server, the profile picture will be applied.

**Connect to a server**

Enter server details in IP Address and Port input fields, ensure you have entered a username (custom profile picture not required), then press the Connect button.

**Send message**

Type your message into the large input field at the bottom of the application, then press the Send button.

**Send image**

Press the button with a file icon on it, next to the message input field. Select an image you want to send, then select Open.

**Send direct message**

Double click a use you would like to direct message from the User list on the left of the application, the username will appear in the message input field (e.g. @Anthony), type your message after this.

**Help command**

Type ‘/help’ into the message input field to get help from within the application.

**Challenge user to a racing game**

In the message input field, type ‘/game’ followed by the username of the use you would like to challenge (e.g. ‘/game Anthony’)

**How to play racing game**

Use the arrow keys to control your car, drive through the circle checkpoints, the first person to complete three laps of the circuit will win which is then output to the chat.

# Design

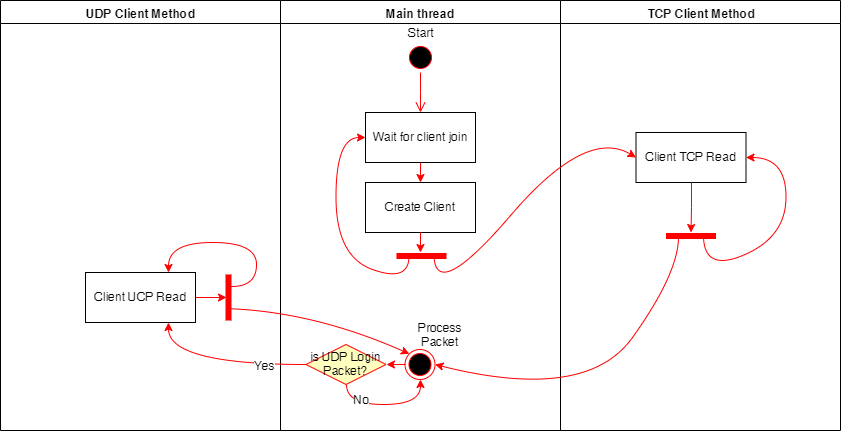
### Functionality/Concepts Implemented

* TCP Sending (Server and Client)
* UDP Sending (Server and Client)
* Nickname System (Stored on server)
* Customisable Server Details
* Profile Picture
* Clients List
* TCP Message Sending
* TCP Direct Messaging
* TCP Image Sending
* Command System (/help and /game)
* Two player 2D racing game using MonoGame

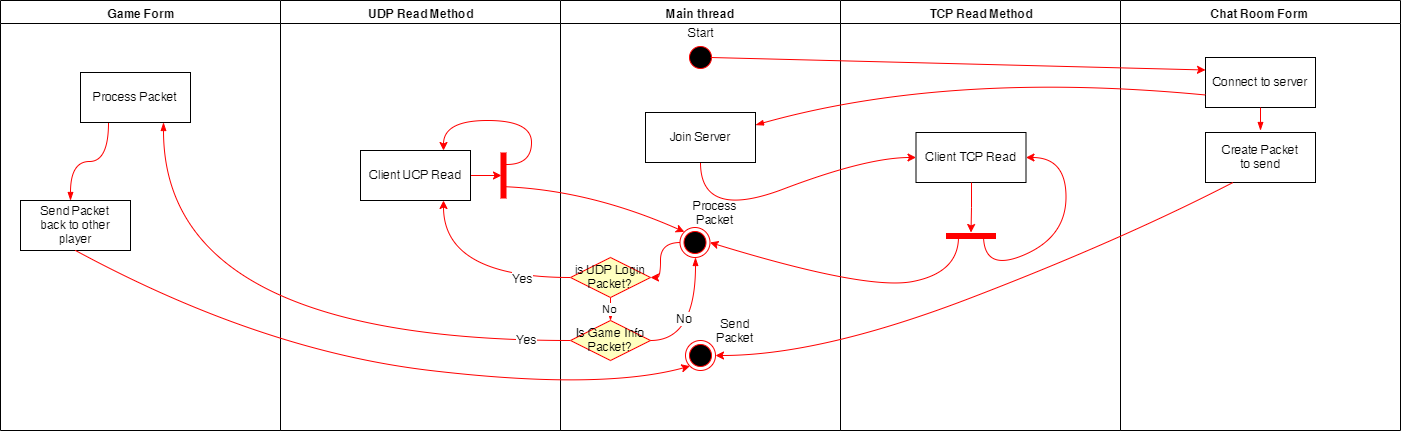
### Class

### Activity

**Server**



**Client**



# Explanation of Strategy

# Critical Evaluation

### What I have Learned

### What Went Well / What Went Wrong

### Challenges I Have Overcome

### What I Would Do Differently

# References