## Final Project Update

My final project will be a multiplayer 2d bumper car game. Each player will control a car of different color, and they can push other players outside of the arena. there will not be scores and nobody can win.

In specific. The arena will be a circle. Any player got outside will be reset automatically to random position on the circle. There will be collision detection and collision response on the players cars. The cars can collide with each other. The player's cars will also be circles for now.

One of the player will run a server and other players will join this server. I will use my network connection system to achieve communications between multiple clients and the server.

I will use this collision detection system

http://www.plutoshe.com/blog/project1\_writeup, Created and supported by PlutoShe.

## What I have done

I have set up the inputs and rendering on the client side, inputs will be arrow keys, and cars will be circle of the same color.

The Server side can gather the inputs and return an updated results. The inputs will be user control inputs and the returns are speed, position and delta time for the last frame.

Updates on the server. I add another channel for emergency information transformation between client and server, such as the exiting of the client and distribution of the ids. The Receiving part and the and the sending part of the server have been separated into two threads.

As a result, the client server communication won't be blocked when clients connected with the serve have not reach the maximum client counts, or when some clients left the game.

Things to do,

Add the collision detection and collision response on the server.

Use Different colors to indicate different players.