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## Biweekly Update On Peer to Peer Game

On the server side, Dario made a lobby browser to allow for multiple games to run at once. Currently there are some features that are temporary (eg. the “Create Lobby” button that allows for unrestricted server creation), but the server is now at a point where users can choose a lobby, be served the game, and can create WebRTC connections to others in their lobby. Currently they are served the game by the server, though full multiplayer capabilities still need to be finalized. (Pictured below is the lobby browser)

### LOBBY BROWSER

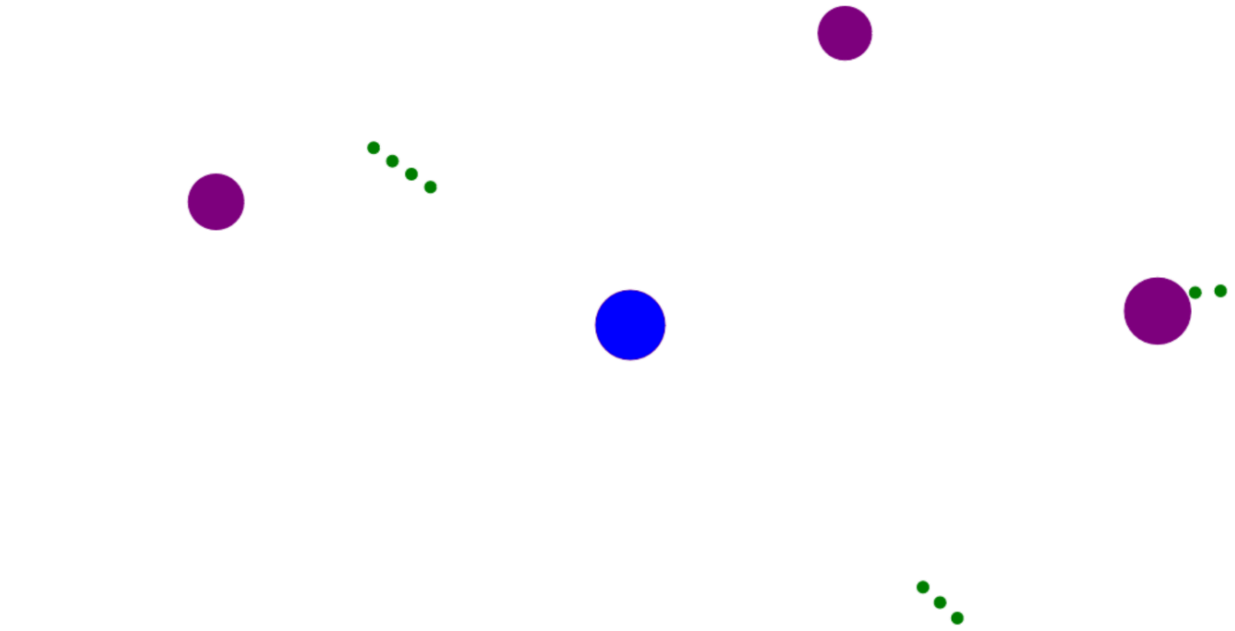
NUMBER OF LOBBIES AVAILABLE: 1	
LOBBY   5CBDC0	JOIN
CREATE LOBBY	

Sono ([sono.land](https://sono.land)) (the WebRTC package we used) handles establishing the WebRTC connections between peers with STUN/TURN server based NAT navigation. Admittedly, the lobby system is not 100% necessary for testing, but it may be useful to allow for us to test more than one lobby at a time later on.

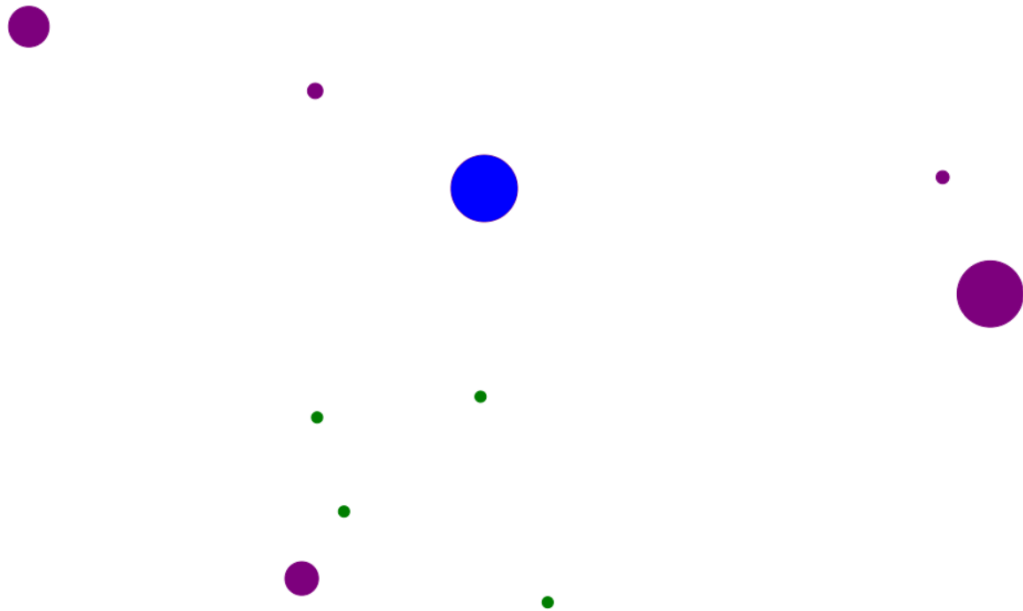
On the game side, Seth made progress on the game, allowing for shooting projectiles and entity movement along with collision detection and a score. It is ready to merge with our webRTC code to allow for multiple players to move and be rendered in the game at a time. The game file can also be loaded from the lobby browser by clicking the join button on any respective lobby.

The next steps will be merging with our server and adding consistency strategies such as delay-based and rollback. This will allow us to compare the performance of both of these approaches as well as the user experience from multiple players planning the game.

The current state of the game can be seen below.



Game screenshot 1



Game screenshot 2