

1. Team Mode

Multiple paddles on each side have to block the shots from the other team. In order to keep it challenging, the paddles should be proportionally smaller so that they cover less area. This can be implemented by having two paddles allocated per side in the code rather than only one and increasing the maxPlayers in order to fit a larger number of players.

2. Obstacles

Have randomly generated obstacles in the middle of the screen and have players bounce the ball off of them to get to the other side. This can be implemented by having a random object generator and having the collision detection that is already implemented on the edges of the screen be implemented on the obstacles as well.

3. Paddles

In order to make it easier to tell which player is which, similar to Galaxy Snake the paddles should have different colors, with the color of the paddle being displayed on the controller. This can be implemented similar to Galaxy Snake by randomly recoloring the paddle and sending that information to the socket.

4. Powerups/Powerdown

Many games have powerups/powerdowns that allow players a temporary advantage that make the game more fun and challenging to play. This could be achieved by having the player bounce the ball through the powerup in order to gain its effects. For example, one powerup could increase the paddle size, while the corresponding powerdown could decrease its size. Another powerup could decrease the ball speed, while its corresponding powerdown could increase the ball speed. This could be implemented by having a random object generator generate and place objects on the screen and having collision detection recognize when the ball goes through the powerup and the identity of whichever player bounced the ball and change the required variables in the game.

5. Design

Having a changing background of random pictures would make the game more visually interesting. This could be implemented by having a random element in the rendering of the background in the Game.js file.