

Project Overview:

In this final project I have attempted to recreate the pong game where 2 players control paddles on each side of the screen to prevent a ball from falling. The project is made using the processing.js library and uses OOP at its core.

Development process:

The development of the game was broken down into key components-

1. **Background**- Set the background, size, and the boundary coordinates
2. **Paddles and movement**- Creating the 2 rectangles on each side of the screen. Creating their movement mechanics.
3. **Ball and movement** - creating the ball itself and defining it's features like movement with a certain speed in x, y axis and bouncing of the paddles and crossing the screen boundary to reset
4. **Scorecard**- Incrementing left and right scores based on the position of the ball i.e., if it has crossed screen limits
5. Setting up winning score, game end screen and restart features.

Techniques used:

The project used Object Oriented Programing, it is interactive (2 player game) and uses animated geometry (ball movement) along with if else logic (ball collision mechanics).

Success:

Although there were several documentations about the game available online, the features I worked hardest to implement, and I believe were the most successful are-

- Score board
- Game Over page
- Restart feature
- Win Score (First to reach it wins)
- Ball speed variation
- Smooth movement of the Paddle

Weakness:

Some of the weaknesses of the project are-

- Failure to implement the feature where the game becomes progressive harder as the score increases by controlling the speed of the ball and size of the paddles.
- There are some glitches that ends up causing the ball stick to the bottom of the screen
- I believe I could have made the game a bit more artistically pleasing.