Data Structures

Retro Ball

User Guide

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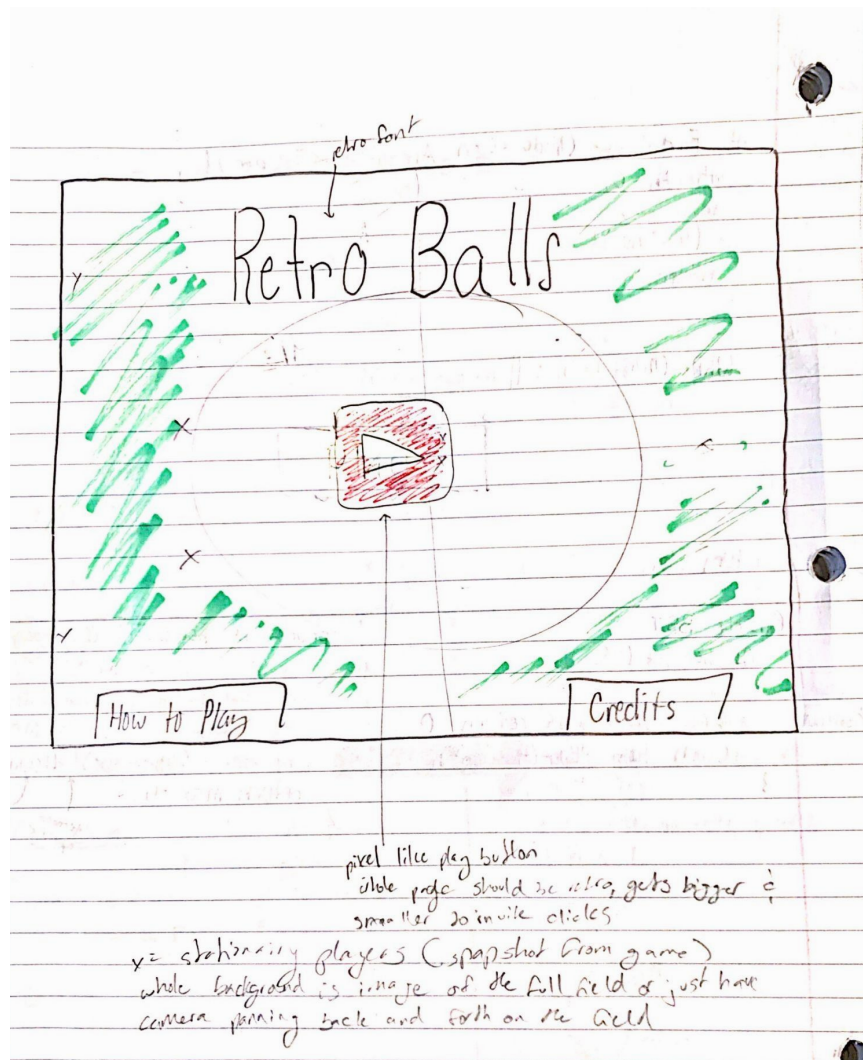
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Introduction

Hello! Retro Ball was designed and created by Lucas and Noah Ross and Will Baxter. For our design project this semester, we created an online soccer game that is meant to simulate a real game, and give players feedback and tips on their style of play.

All three of us are avid soccer players who have played for more than 10 years. We also enjoy playing video games, so we created this project in hopes of teaching younger players how to play the game and creating an entertaining game for soccer fans! We hope you enjoy!

Prerequisites

To use our program, you will need the following:

- ➔ A machine with an operating system installed (we recommended Windows or OSX) that can connect to a Wifi network, either wirelessly or via ethernet cable
- ➔ An Internet Browser (We recommend Google Chrome)
    - ◆ A WiFi connection (this is not necessary, but is highly recommended for the UI to fully render)
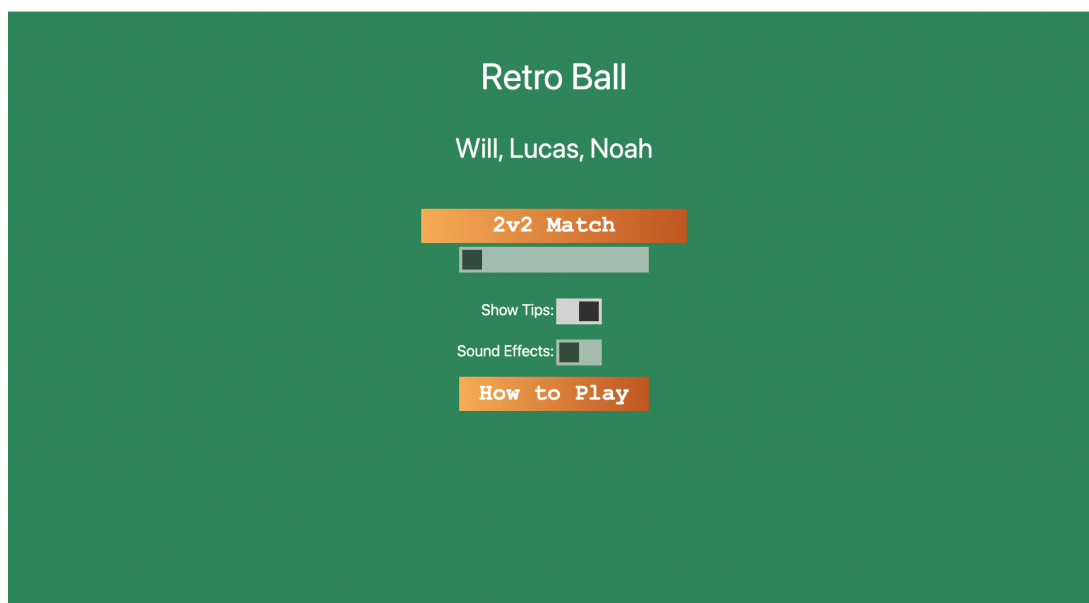
How to use our program

Accessing our program

To access and use our program, first open this project's folder on your computer, titled `Retro_Ball`. It should look something like this:
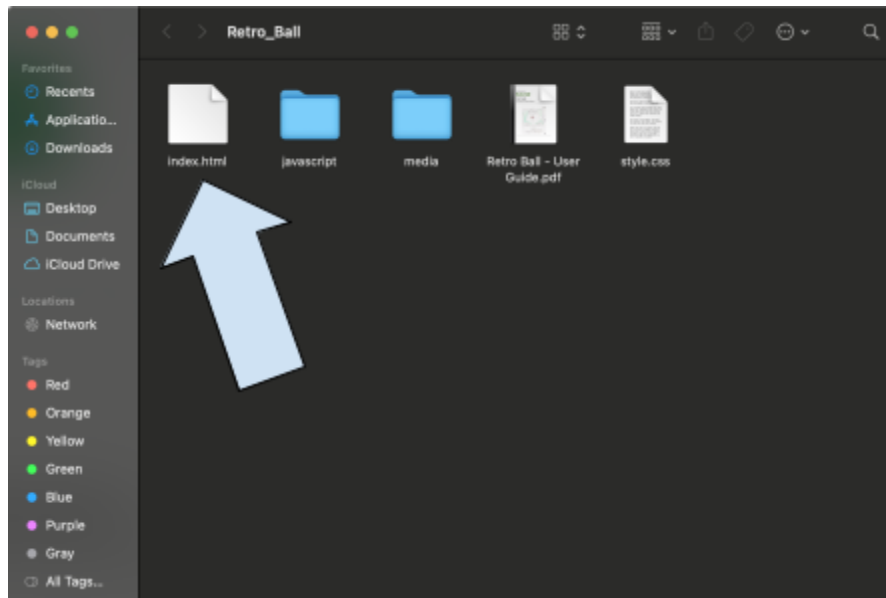
Running the program

To run this program, simply double-click the `index.html` file. A new browser window should open that looks like this:

About our Program

Main Menu:

In the main menu, there are five interactable icons to set the preferences for the game:

- ➔ Quick Play Button
  - ◆ This button starts the game; the text displays the number of players per team when the match begins, which can change dynamically with the slider below.
- ➔ Number of Players Slider
  - ◆ This slider changes the number of players that will spawn in the game. The number of players is displayed on the Quick Match Button
- ➔ Show Tips Switch [Default: On]
  - ◆ This toggle switch allows the user to choose whether they would like to receive tips throughout the match. By default, tips are set to on.
- ➔ Play Sound Effects Switch [Default: Off]
  - ◆ This toggle switch allows the user to choose whether they would like to hear the sound effects of the countdowns throughout the game. By default, sound effects are set to off.
- ➔ How To Play Button
  - ◆ When you click this button, it will show the tutorial for beginner players who have never played the game before.

Game Window:

In the game, there are four different icons:

The Ball
➔ This is the ball icon. Pass the ball with your teammates to find an opening to shoot, but be careful! If you don't defend, they will also have the opportunity to score!

The Player
➔ To control the player, use keyboard keys (controls are on the webpage)

Friendly Player
➔ Friendly players are your teammates! Work together to defend and attack the opposing goal!

Enemy Player
➔ These are the enemy players! Defend your goal, and pass around them to find an opening to shoot!

Objective:

Move off the ball and find angles to pass and receive the ball to find an opportunity to shoot! When you lose the ball, transition to defense, and try to swiftly transition!

Tools Used

This program was written in HTML, CSS, and JS using VSCode and its editing tools. W3Schools and Stack Overflow articles were used for research purposes and web designing. As well as this, EzGif was used to edit and create gifs for visual elements for the "soccer tips". All tools are linked below:

- ➔ https://code.visualstudio.com/
- ➔ https://www.w3schools.com/
- ➔ https://stackoverflow.com/questions/
- ➔ https://ezgif.com/video-to-gif

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