DinoGame

Overview

This game is very similar to the 'Internet not Connected' game found in Google Chrome. The slight twist to this is that the game is controlled using voice controls.

When the webpage starts, we need to wait for a few seconds to connect to the Teachable Machine used to detect and manipulate sound. After that, we can start the game by saying 'Go' and then 'Up' to make the dinosaur jump.

Implementation

Teachable Machine from Google can be used to train your own AI to detect sound/image/pose and then manipulate results using the inputs given to it.

For this I have trained an AI using Teachable Machine which detects audio input from the user's microphone to control the dinosaur. This AI can be found on this link.

Apart from this, I have used ml5.js, p5.Js and some sister libraries (p5.collide2d.Js) to code the game. The files dinosaur.js, cactus.js contain classes for the dinosaur and the cacti respectively. The file sketch.js contains the code for the game.

All other .js files are libraries used to code the game. The .png files are the images used for the menu and the game entities.

How to Run

This game needs a live server created using the Atom text editor (atom-live-server) or it can be run if all the files are loaded into the p5js web editor. However, the live server from Atom is recommended to make the game more playable.

NOTE: Live Server from vscode doesn't support the ml5 library so it can't be used.

The webpage will also require microphone permission.

Future of the Project

In the future, some bugs (double jump when 'Up' is said) can be fixed.

Also, a new kind of obstacle (bird) can be added for which we need to modify the teachable machine to support a new kind of action (duck).

Various UI and design improvements can be done (dark mode, sound effects, aesthetic improvements to score counter) along with adding sound effects to the game can be done.

The game difficulty can be increased as the score increases.

References

- Teachable Machine with Google
- p5Js
- Flaticon
- Elgoog