Clefairy Says

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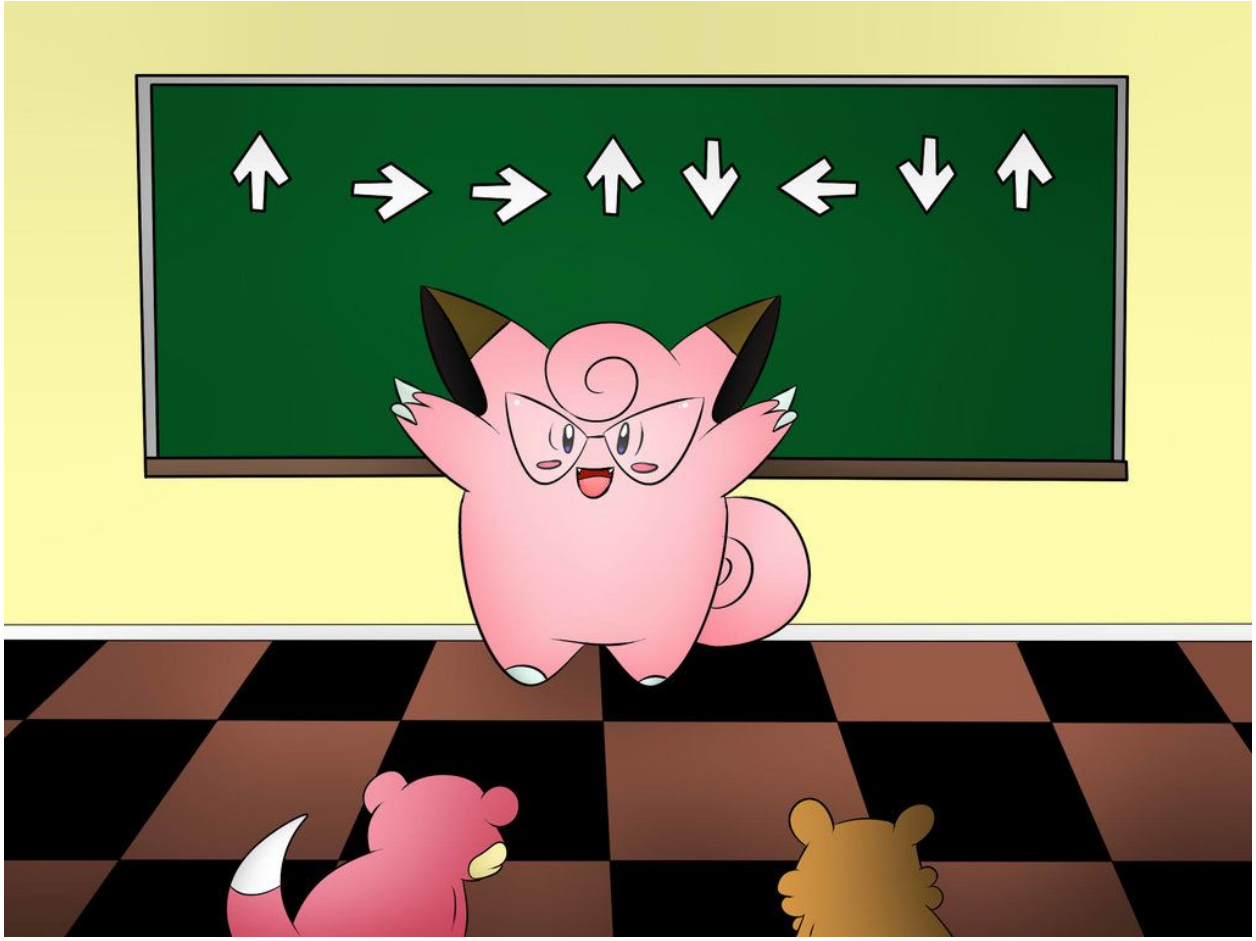

Overview

Our project will be a one player game, focused around memorization. A sequence of outputs, which will be displayed on a LED matrix grid. This sequence will be repeated by the player, inputted through the joystick. The player will have a life bar that depletes upon a mistake in their sequence. A speaker will output certain sounds depending on an action or game over.

Peripherals

- 16x32 LED Matrix
- 5 input Joystick (on board)
- Speaker (on board)

Software Design

There will be a loop that determines the state at which the game is currently, such as displaying the sequence, reading the input, etc. Within each state will determine what is output to the LED matrix or if a sound will be outputted. The LED will display directional arrows, which the player will input using the directional inputs from the joystick. After the player has input their sequence, it will be repeated to them on the LED matrix and an error sound will play for an incorrect input.

Group Responsibilities

Eduardo will be in charge or writing the logic implemented within the loop. Juan will take responsibility for correctly interfacing with the peripherals.