Other Design Technology

mind games

Journey.

We started off ideating with concepts that seemed easy to execute – straightforward applications of modalities that were put together physically. Since it was relatively code heavy, it felt like a good idea. Soon we ran into problems while figuring out the test code – from being unhappy about the idea to frying the stepper motor, we decided to try something new. Something that is not component heavy, but rather mostly depends on the code.

A memory game - Consisting of 2 push buttons, 2 leds, a neopixel and a buzzer.

The leds and the 2 buttons were the only components actually required for the game to function, but the buzzer and neopixel helped enhance the experience.

Logic and my thought process.

What the code needed to accomplish -

1. Randomly blink 2 leds in a different order every time the code is executed.
2. Record the order of how the leds blink
3. Record the users input, trying to mimic the above order.
4. Compared the two to see whether the user is successful or not.

How the code accomplished it

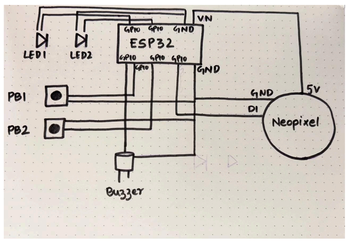
In a nutshell, the code did the following -

Create 2 blank lists and filled the first one with the order of leds blinked.

Filled the second list with the inputs from the pushbuttons pressed by the user.

Compared the two lists.

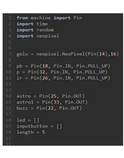
Circuit Diagram



Individual Contribution

My Individual contribution consisted of -

The following code:



Wiring of hardware in the breadboard model.

Wiring of hardware in the final model.

Compilation and editing of the vlog.

Thankyou
-Ansh Tharwani