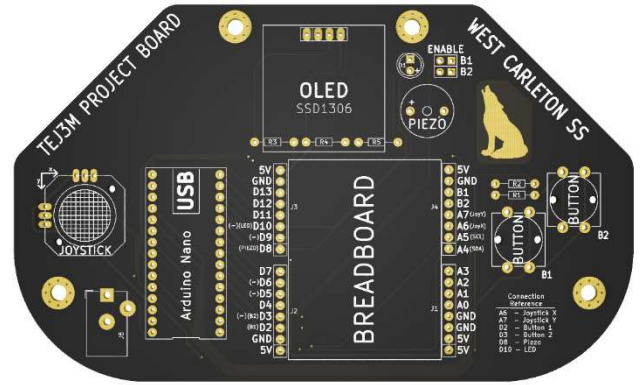


Gameboard I/O Task

Mr. Emmell – TEJ3M – B – March 26/'21



Level 1

- Setup your gameboard such that while neither button is pressed, the LED stays on.
- The moment either button is held down, the LED turns off.

Level 2

- Display your name on the top portion of the gameboard
- Both buttons should serve as toggles that turn the LED on and off
 - o Meaning a single press (and release) of B1 or B2 should toggle the LED's state on/off

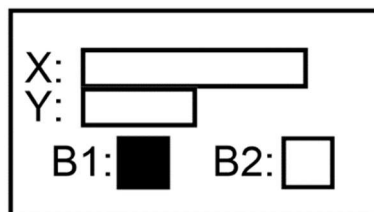
Level 3

- Display your name on the top portion of the gameboard
- Instead of toggling an LED as in level 2, both buttons serve as a toggle for a filled circle on the screen.
 - o Meaning, there is a single filled circle on the screen (somewhere below your name)
 - o When either B1 or B2 is pressed (and released) the filled circle should either switch being displayed to not being displayed, or vice-versa.
- Button B2 (and only B2) will also play a sound when pressed.

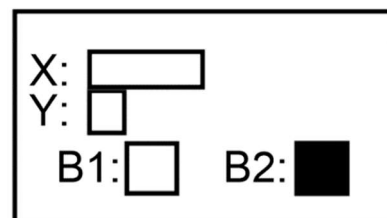
Level 4

- Setup your gameboard such that it displays the two joystick values as bar graphs, and the two button values as either filled in squares or empty squares.

Examples:



X is to the right
Y is untouched
B1 is pressed



X is untouched
Y is held up
B2 is pressed

Extension

- When B1 is toggled ON (meaning, the square is filled), the X joystick value should be used to play a tone ranging from 2000-4000 depending on the value. A value of 0 would correspond to a tone of 2000, and a value of 1023 would correspond to a value of 4000.