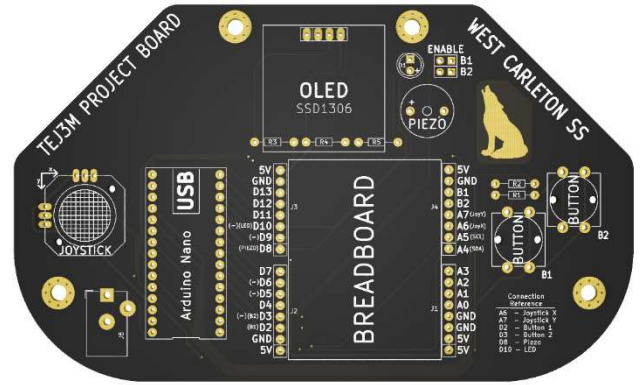


Gameboard I/O Task

Mr. Emmell – TEJ3M – A – Apr. 6/2021



Level 1

- Display your name at the top of the screen
- Holding down either B1 or B2 causes the LED to stay lit
- Releasing all buttons causes the LED to be unlit

Level 2

- Display your name at the top of the screen
- Toggling B2 causes the LED to toggle onto a flashing mode
 - o *The button press activates/deactivates the effect*
 - o *Holding the button down does nothing*
- The LED should flash at an interval of 500ms

Level 3

- All requirements from Level 2
- Toggling B1 causes the piezo speaker to play a tone of 2500Hz
 - o *The button press activates/deactivates the effect*
 - o *Holding the button down does nothing*

Level 4 (fully working earns 4+)

- All requirements from Level 3
- Display two numbers on the screen:
 - o The flashing light interval (example: 250ms)
 - o The frequency of sound to be played
- The joystick controls these two values on the screen (and their corresponding effect)
 - o Pushing to the right increases frequency, to the left decreases
 - Ranging from 2000Hz to 4500Hz (in 50Hz increments)
 - o Pushing up decreases the interval, down increases the interval
 - Ranging from 25ms to 2000ms (in 25ms increments)
- MODIFICATION: Toggling B1 causes the sound to be played at the displayed frequency
- MODIFICATION: Toggling B2 causes the light to flash according to the displayed interval.

