Drum Hero

The game begins with a splash screen, then after a little bit continues to the difficulty selection screen. If the user chooses hard mode, there will be 30 notes and a 10 point bonus to their score if they win. If the user chooses easy mode, there will be 20 notes and no bonus. After choosing difficulty, the game begins, using a pseudo-random number generator to decide whether each value will be a left motion (symbolized by L), a right motion (symbolized by R), or a double tap (symbolized by T).

The values for the array are then set 100 pixels apart from each other and move down until they are in range of the oled screen. It displays them while they are on the oled screen and will accept inputs within a certain range. If an input is hit while the values are within the input-accepting range, then hits, the score will go up. Conversely, if the user fails to hit an input within the range, hits will decrease. Hits begins at 15, if hits is lowered to 0, the player will be eliminated and receive a score of 0.

The LED lights light up within certain ranges, if hits is greater than 20, all the lights will light up, if hits is between 12 and 20, 3 lights will light up, if hits is between 6 and 12, 2 lights light up, if hits is between 1 and 6, 1 light lights up, and if hits is 0, all the lights are turned out and score will be 0.

Once the score is returned, the game gives the option to return to the difficulty select screen to play again.

Here is the video of the game in action, losing one time and winning twice in normal and hard mode respectively

<https://youtu.be/Y3U6g-MmAiU>