CMSC730 - Fall 2023
University of Maryland

[Assignment 10]

Aim and Hit

Abstract

In this final assignment, you will make a Aim and Hit game using OLED, IMU, and a joystick. Below we will list the basic requirement, but feel free to make the game more exciting using any of the electronic components we introduced throughout this semester.

Description

Gameplay Mechanics

- The main control mechanism involves tilting a breadboard to control the movement of a player's pixel on the display.
- Target pixels on the display are randomly generated and are updated when they get 'hit' by the player's pixel.
- The objective is to hit 10 targets, with the game displaying the time it takes to complete this task.

Game Difficulty

- The difficulty of the game is determined by the number of target pixels displayed and is adjustable using a joystick.
- There will be at least two levels of difficulty to choose from at the beginning of the game.

Additional Notes

- Use of third-party libraries, including those for IMUs, is permitted.
- The game shall include a timer to display the time taken to hit all targets, which will be shown at the end of a game session.

Delivery

There are two deliverables.

- Upload your code. You can put them in a zip file if needed.
- a quick video demo of the working game with an (unlisted) youtube video link.

Due Date

Wed Dec 6th, 11:59 PM EST

Last Modified Date: Nov 29th, 2023