FYP Plan/Strategy

Background:

The objective of this project is to and construct creative interactive displays using Arduino/Raspberry Pi controller, sensors, actuators, LEDs and speaker, with light, sound, animation and wireless communications. In light of COVID-19 there should also be a virtual display done at the end to allow for a non-physical experience of the project.

The background would be to create an interactive display that is able to be showcased for IEM’s open house displays.

Ideation:

The idea is to create a pinball like game where the user plays against a computer-controlled board to attempt to score. One side will be controlled by the user and the other will be by the computer. Being pinball like, the goal is defended by the use of 2 flippers and those flippers are used to attack as well. There will be static and dynamic obstacles on the board and in the way of the goals. To ensure users are able to score, the opponent will be programmed in such a way that allows it to sometime miss the ball coming towards it.