SMALL _ARTIFACTS LAB:

Design and 3D print a radar fixture

Abstract

In this assignment, you will implement a simple 'light game' using the ESP32 and peripherals.

Description

Below is the basic requirement for the 'light game'.

- 1. Generate a random number at the beginning of the game.
- 2. The number represents the targeted ambient light intensity.
- 3. Play a simple melody to indicate the beginning of the game.
- 4. The player can now change the ambient light to approximate the target.
- 5. If the number gets closer, the buzzer plays higher pitch.
- 6. If the number gets further from the target, play the lower pitch.
- 7. If the player reaches the target number within 10s, play a simple winning melody.
- 8. If the player loses the game, play a different melody.
- 9. Press a key on your keyboard to restart the game.

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 Oct 5th, 11:59 PM EST