Green-L Red-L

Inés Vaquero
Alejandro Meza

Sistemas multimedia y diseño centrado en el usuario

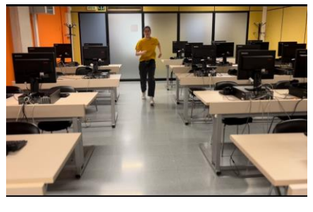
upna
Universidad Pública de Navarra
Nafarroako Unibertsitate Publikoa

Introduction

After the resounding success of the series Squid Game, many viewers were left with the game posed by the famous doll as one of the most iconic scenes of the series. Fragments of it are present in all kinds of social networks. Including portals such as LinkedIn.

Given this popularity, the idea of bringing this to reality was raised. The main purpose of Green-L Red-L is to allow the user to have an experience close to the game seen in the Korean production.

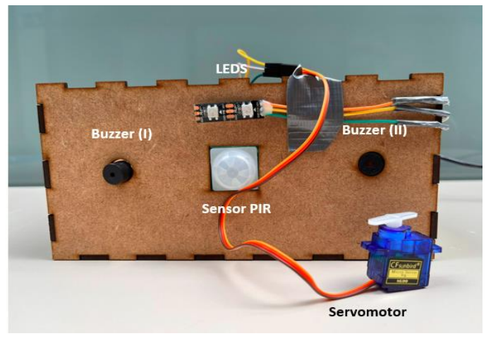
Simulations

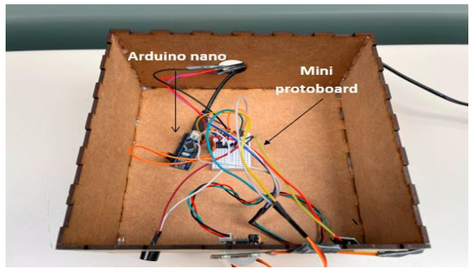


Several simulations have been carried out, where the idea has been successfully tested.

As soon as the wrist is turned, the movements are detected by the sensor. The game will continue to play as long as a timer generated by Processing has not reached zero, and the player has not been eliminated - a red light has not been emitted.

Hardware





Our prototype makes use of a PIR sensor to detect the movement of the players. In case of detection, the RGB LEDs change from green to red, and the first buzzer will beep.

The functionality of the second buzzer is to indicate the start and end of the game with a beep (communicating Arduino and Processing), as well as sounding the melody of the game.

The movement of the wrist is achieved by a servomotor, which makes 180-degree turns periodically (before the music starts and after the music ends).

The game, as mentioned before, ends with a beep, as well as the emission of blue light from the RGB LEDs.

The coordination of all the elements required the use of an Arduino nano, and a mini breadboard. Arduino - Processing communication is carried out.

Contact

meza.127609@e.unavarra.es

vaquero.126755 @e.unavarra.es