

# Content

## Idea

This project was born with the idea to use game based learning during lectures. In fact, introducing a competitive challenge for students is often a good source of stimulus in order to become better because the student wants to be first but in order to be first he/she needs to learn, but he/she doesn't actively think about that.

The idea is to hold a mini tournament before official written tests, where each team has to score 3 points (3 correct questions) in order to pass to the next competition.

The first 2 teams receive 1 bonus point to be added to the total score of the next official written test.

The teams are shuffled randomly for each tournament to ensure fairness and equality, this motivates the students to keep trying.

## How it works

The box has two sides and the leds on top.

Each player will have to tap the desk on which the box is placed, on their respective side, whenever the host tells them that they can reserve the round (this adds unpredictability).

After the player has reserved a round his/her led will light up and he/she can answer. If the answer is correct the host will have to add a point, otherwise the host will assign no points.

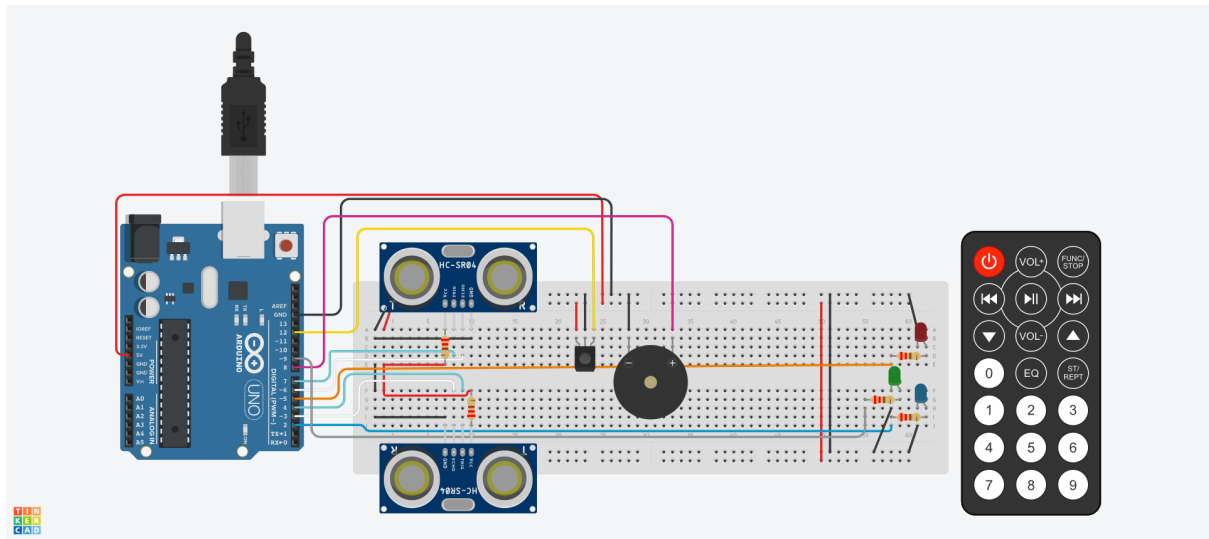
If the host decides to end the game then both players' leds will flick and then only the winning player will flick an amount of times proportional to the score.

If there's a draw both leds will light up.

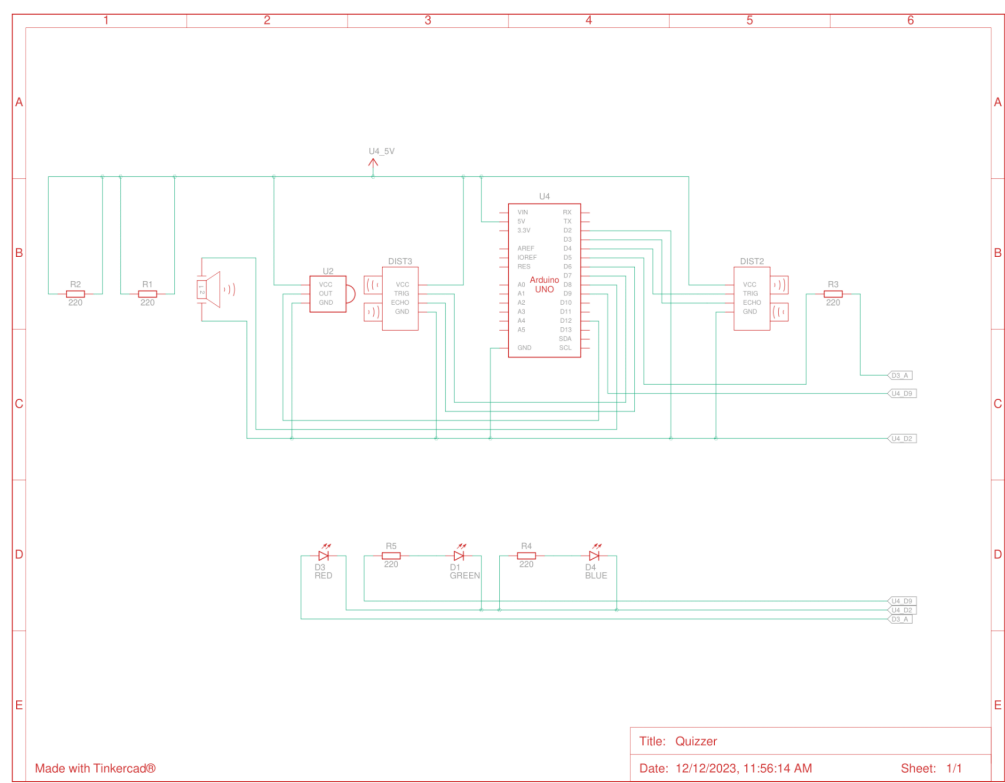
## Code

Code is inside the **Quizzer.ino** file!

## Circuit Diagram

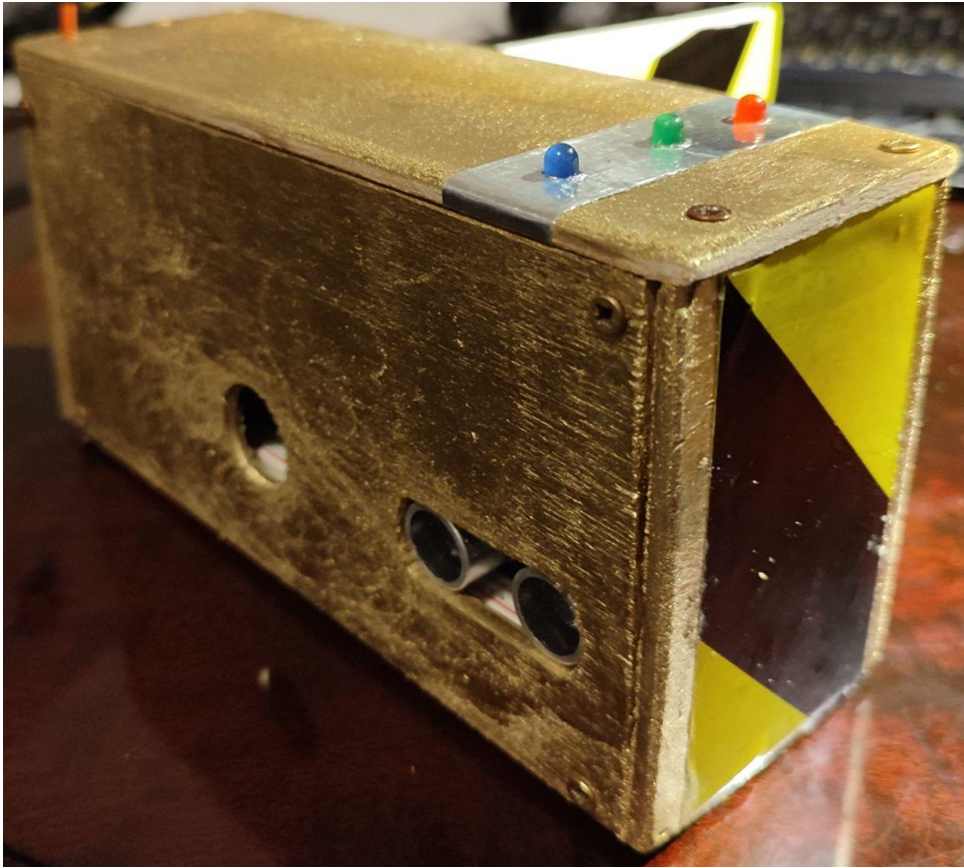


# Circuit Blocks



# Pictures









## Video

Here's the video, click [here](#)