

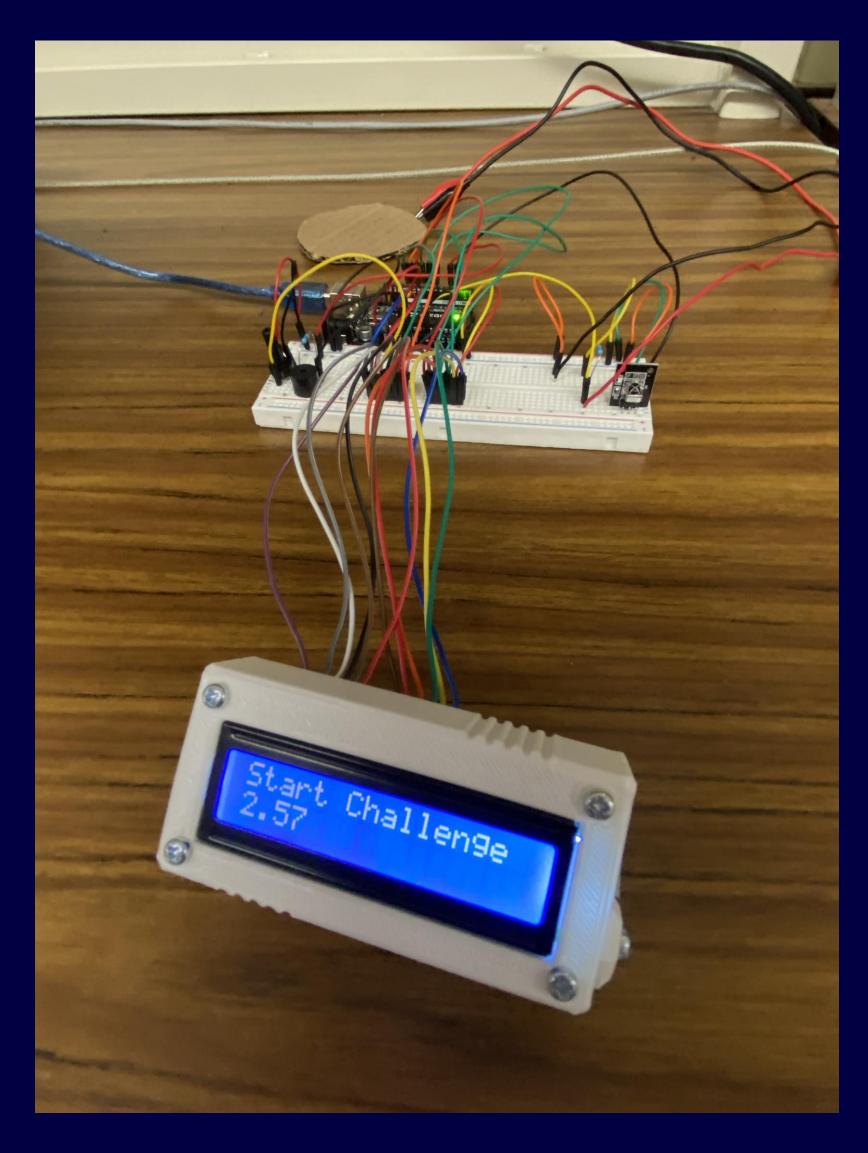


HOW FAST CAN YOU CHUG?

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Abstract:

Our goal was to create a game that would test the speed that someone could drink something, and then compare that to previous high scores.



Materials:

Breadboard
Arduino UNO R3 Controller Board
LCD1602 Module
Remote Control
IR Receiver Module
Force Sensor
10k Potentiometer



How It Works:

Our project works by using a force sensor to be able to register a cup being taken off a coaster. Then, using the millis() command a timer starts, and will run until the cup is placed back on the coaster. After the user has completed their chugging, their score is then compared to previous scores saved on a list in the Arduino. If it beats those scores, it will be put on the leaderboard until someone else beats that score. We also have a remote that will allow us to scroll through the leaderboard and reset the game.

Future Improvements:

In the future we hope to be able to implement some other mechanisms including:

- Flashing LEDs that cycle as you drink
- A theme song that plays while chugging
- A feature that lets you set the volume you will be drinking
- The ability to go head-to-head against another person
- A bigger display for the leaderboard and timer
- A speaker that plays a song for beating certain scores

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