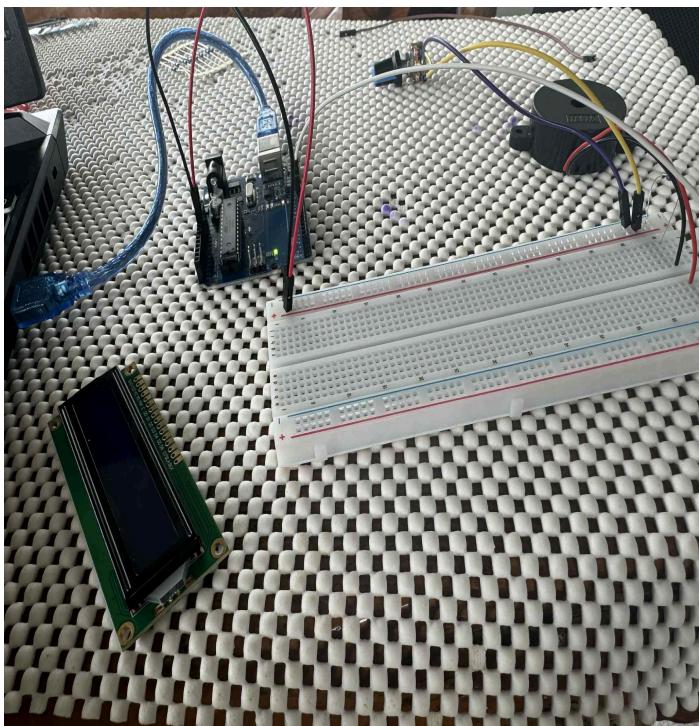
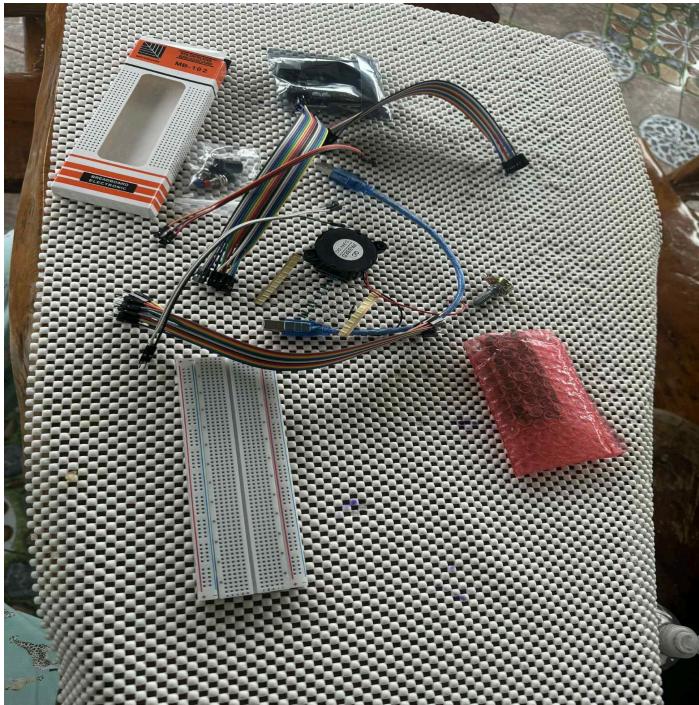


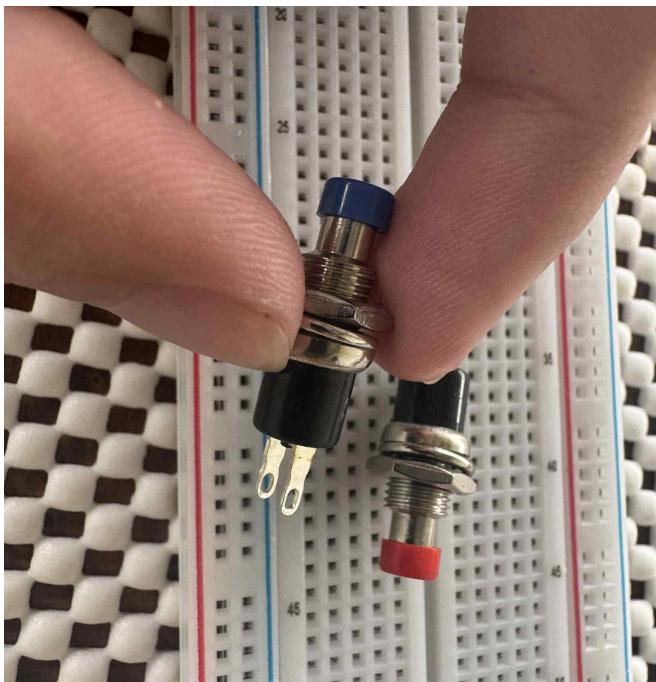
Picture Documentation



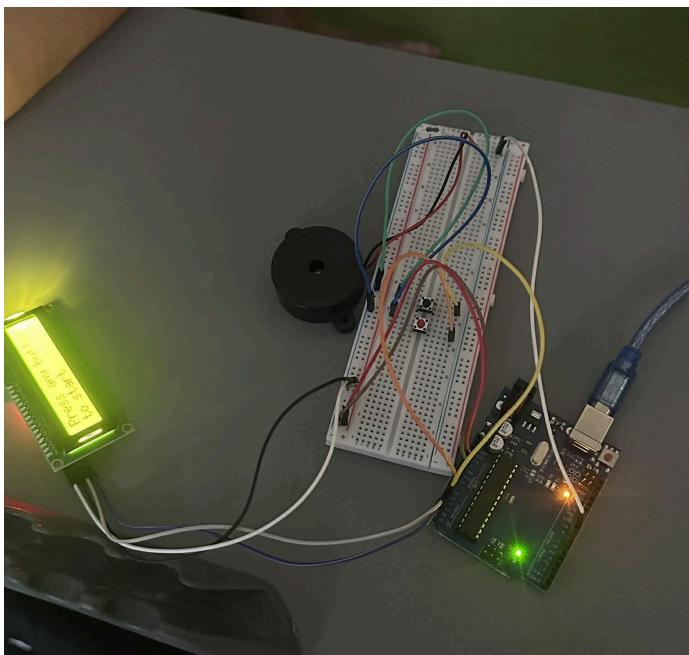
Explanation

- This image presents the complete set of materials prepared before building the circuit. It includes jumper wires, the breadboard, the piezo buzzer, the LCD, resistors, and other essential parts. The image highlights the gathering and inspection of all components to ensure everything needed for the project is available.

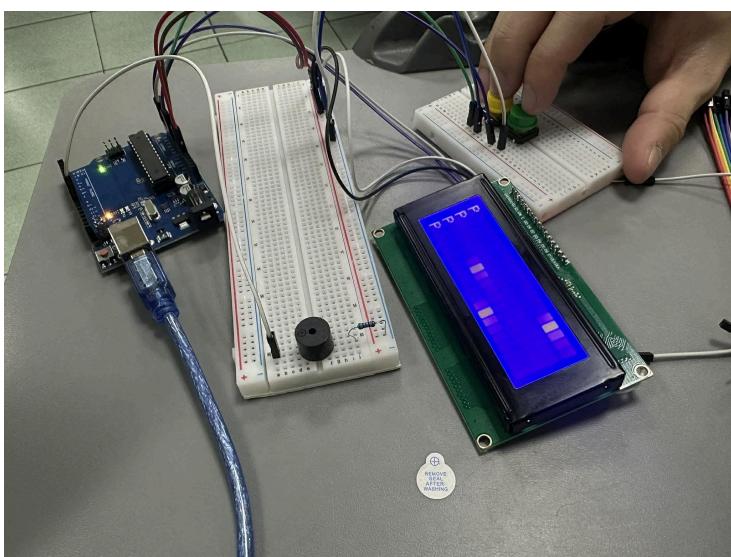
- This image shows the early arrangement of the project's main components. The Arduino Uno, breadboard, jumper wires, buzzer, and LCD module are positioned on the workspace while the basic wiring is being tested. At this stage, the setup is being organized to confirm that the components power correctly and are ready for full assembly.



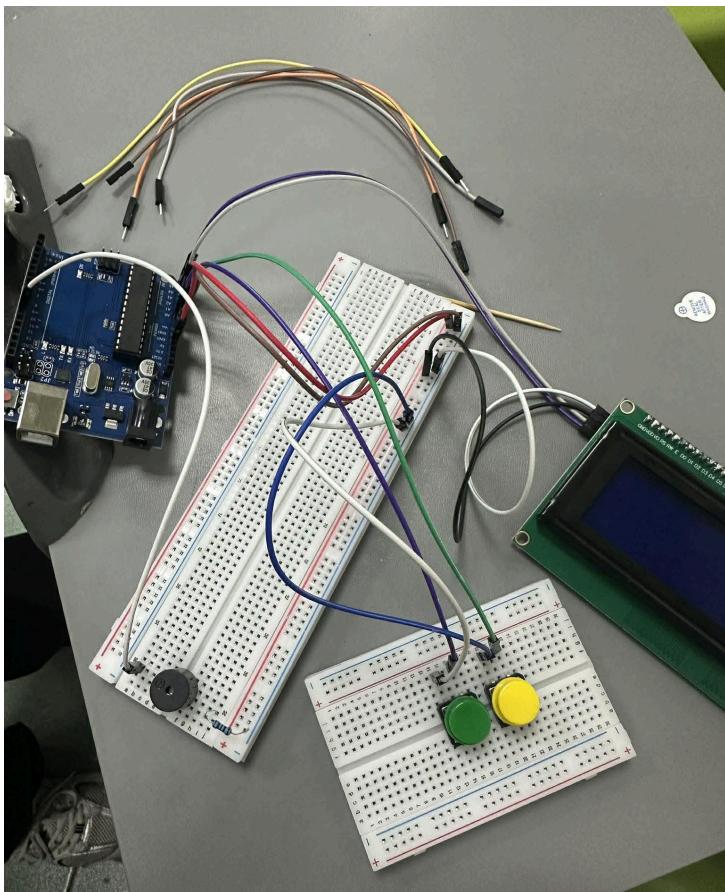
- This image shows an earlier set of push buttons that were initially considered for the project. These metal push buttons were later replaced with tactile push buttons for better compatibility and easier mounting on the breadboard. Additionally, the picture also documents a part of the selection process while deciding which component best fit for the final project.



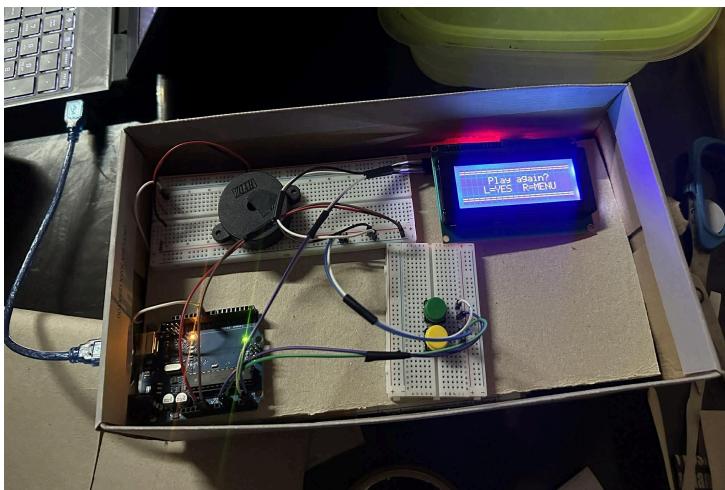
- This image shows the Arduino connected to the breadboard with jumper wires, powering the LCD screen and the piezo buzzer. The LCD is lit up and displaying text, indicating that the screen and wiring are functioning. The components are arranged on the table to allow clear access to the connections while checking that the display and buzzer respond properly to the program.



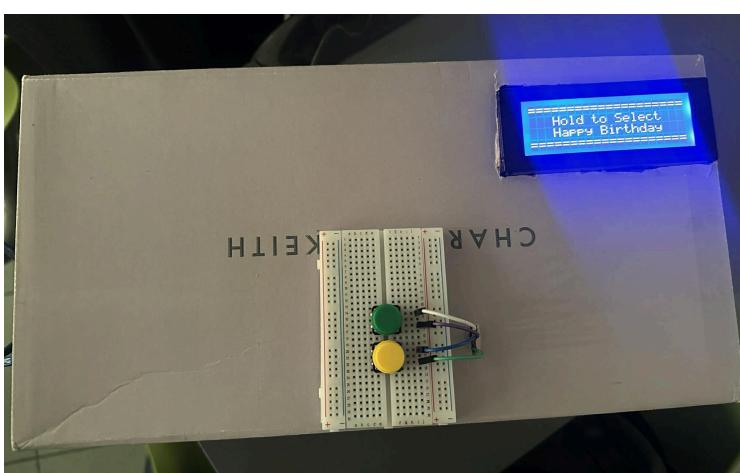
- This image shows the Arduino connected to the LCD, buzzer, and the tactile push buttons that replaced the earlier button type from Image 3. The original buttons were switched out because the tactile type fit better on the breadboard and provided a more responsive and comfortable press. A colored button is being pressed while the LCD displays output, showing how the controls interact with the system. During this phase, we also tried a small piezo buzzer to compare its loudness and clarity with the main buzzer.



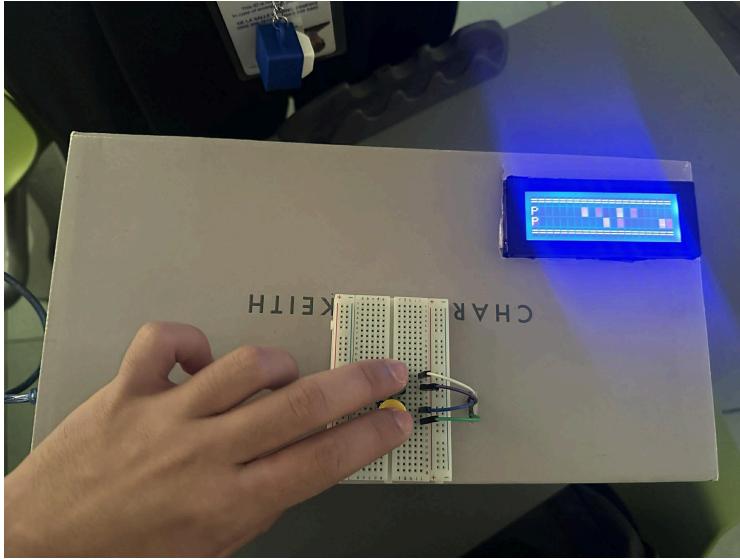
- This Image shows the wiring layout connecting the Arduino, LCD, buzzer, and the tactile push buttons that we decided to use after completing our earlier tests. We replaced the previous button type after confirming that the tactile buttons were more reliable and comfortable for gameplay. The setup also includes the buzzer we selected after trying a small piezo buzzer and comparing their sound quality. The image highlights how we arranged the components once we finalized our choices for both the buttons and the buzzer.



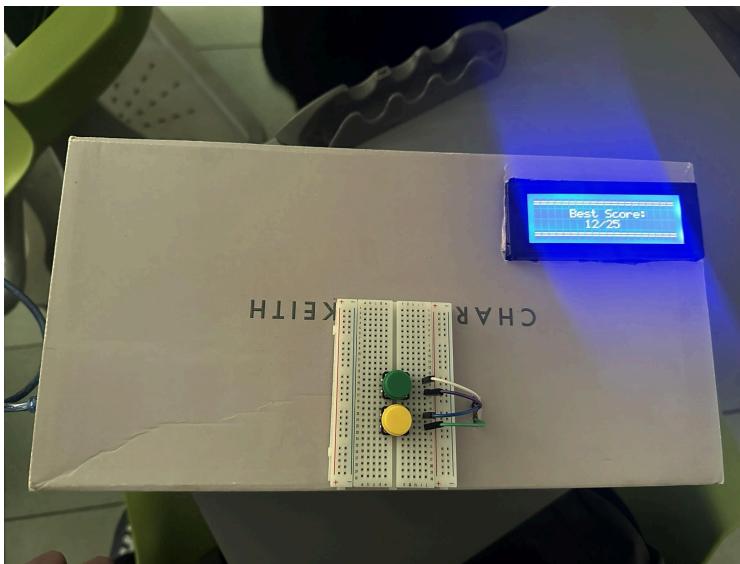
- We have finalized the design for our rhythm game, utilizing a shoe box as the primary enclosure. To ensure the electronic components are positioned at the correct height, we layered paper inside the box to create an elevated platform. Additionally, we reverted to using our original, larger piezo buzzer, as its size produces superior sound quality.



- This image presents the final assembly of our project. We wanted to keep it clean, we made a cutout in the box cover so that the user interacts only with the LCD screen and the pushbuttons, keeping the internal components hidden. A cutout was made in the box lid to display the LCD, while the pushbuttons were mounted externally on top. The specific placement of the buttons was chosen to ensure optimal ergonomics and ease of use during gameplay.



- This image shows the final output of our game during an actual play session. The LCD displays the moving notes clearly, and we can see the interface working in real time as we interact with the system. We placed the setup on the box to keep the screen stable and easy to view while playing.



- This image shows the LCD displaying the final score after we finished a round. The game calculates our performance and presents the score and total notes, confirming that the scoring system and end-of-game screen function correctly. This step helped us verify that the game smoothly transitions from gameplay to the results display.