Chess for Blind

Problem Statement

Conventional Method

- Playing on regular chess board is very tedious and time consuming for the blind/visually impaired.
- Before making every move, the player has to go through all the pieces and squares to get the sense of the position.



Photo a blind person playing chess on the conventional board for visually impaired.

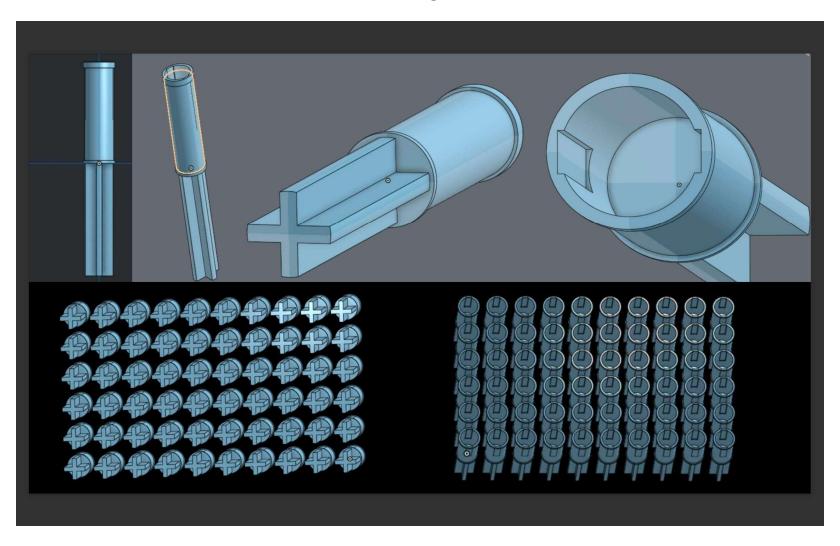
Idea

Proposed Solution

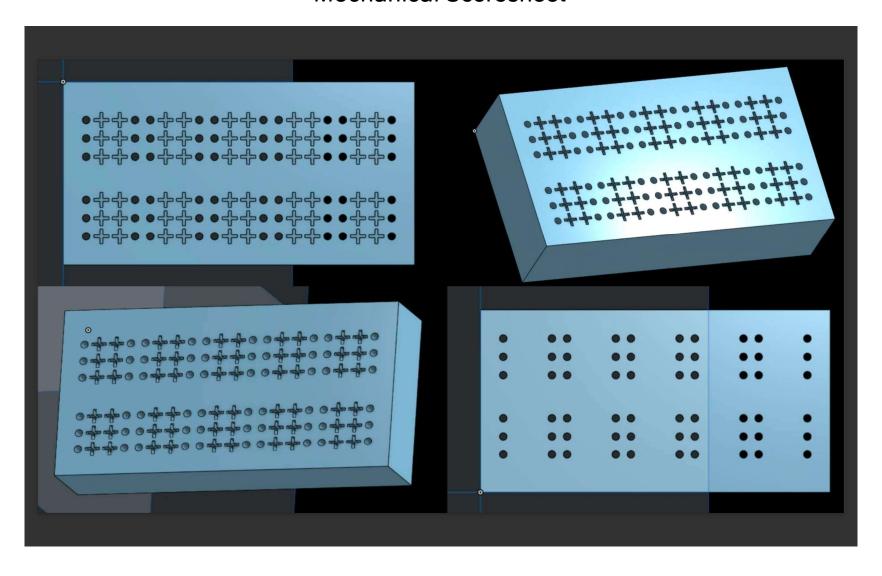
- Controller with braille buttons: The controller has buttons for each chess piece and notations (alphabets and numbers), engraved with braille code.
- Mechanical Scoresheet: When signalled by the controller, a braille pattern, exactly indicating the move played, will appear by means of a rod set-up.
- Advantages: No need to touch each and every piece or square to know the position.
 Just refer the scoresheet whenever required.

Proposed Designs

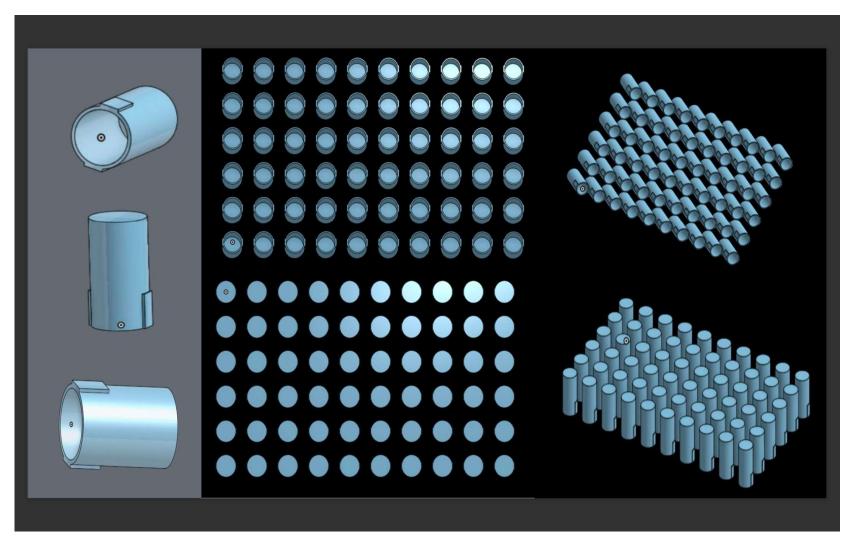
Pins



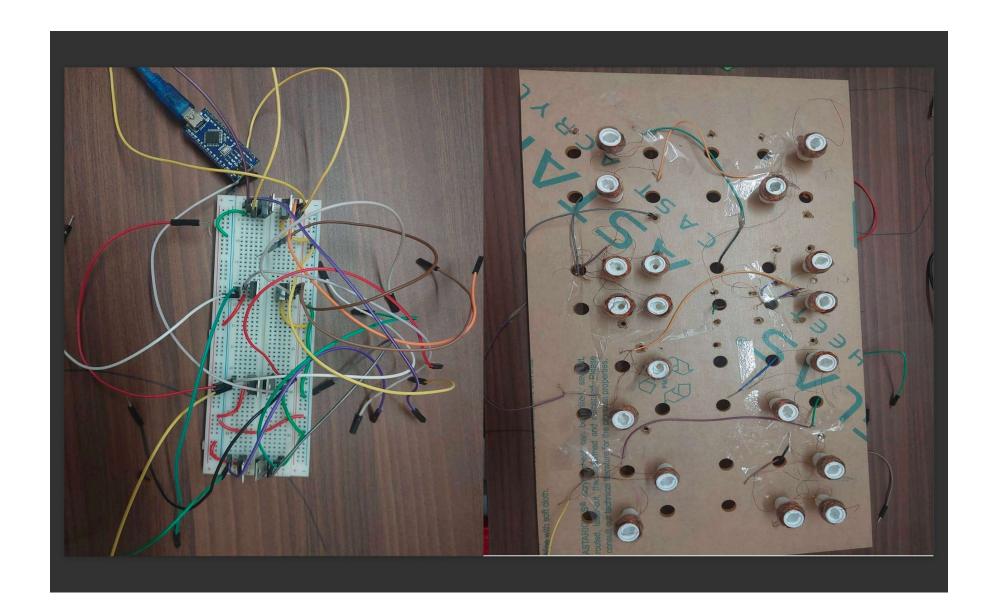
Mechanical Scoresheet

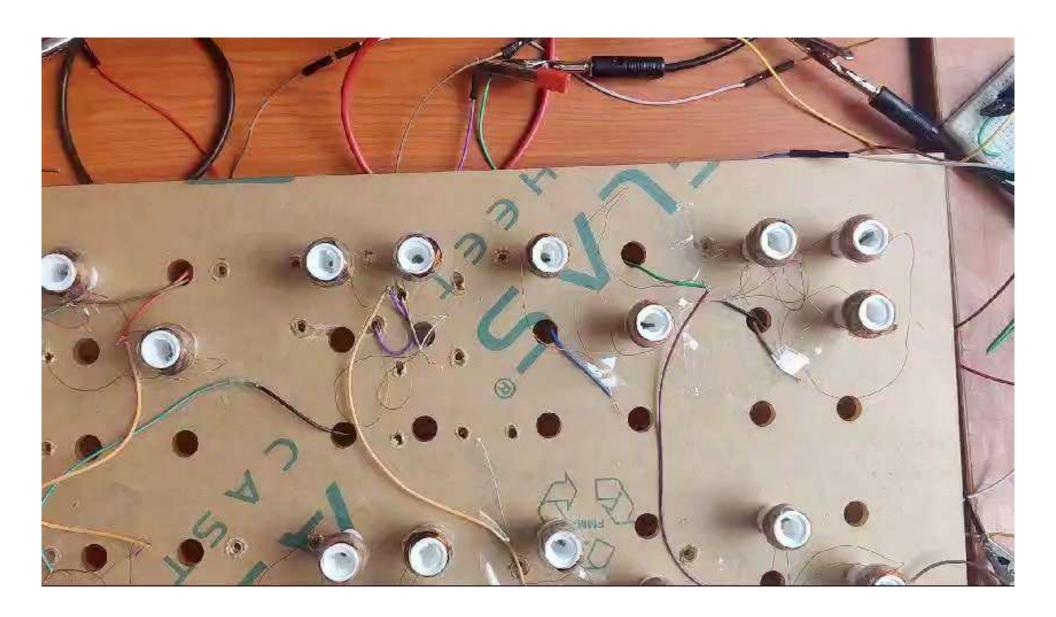


Caps



Final Product







Assume that a player plays, pawn e1-e4, all he/she has to do is press the combination on the controller which will have buttons for piece (K, Q, N, B, R, P), alphabet (a-h) and numbers(1-8). Upon this action a digital signal will be shared to the mechanical scoresheet that will move the desired rods in the preprogrammed fashion so as to make the player read the braille pattern thus formed. The game will continue in same fashion and the score sheet will keep on recording the moves, move by move for which it will have slots one below the other.