T18

Practicum Proposal

The game of Tablero

Tablero is a two player game played on a checkered board, much like chess with the exception that the board is a 7 by 7 grid as opposed to 8 by 8. There are seven identical game pieces. The object is to line the pieces up, either diagonally, horizontally, or vertically. A turn consists of rolling a pair of dice. The player moves one piece the number spaces on one die, and a different piece the number on the other die, and in a perpendicular direction. One player continues to roll and move pieces until one of a number of conditions are met (seven is rolled, doubles are rolled, etc), at which point the opponent takes his turn. The player who successfully aligns all seven pieces wins the round.

Contruction

Our group intends to design and build an electronic version of Tablero. This would take the form of a translucent play top set into a box with colored LED backlighting. The play top will have sensors to determine which squares have pieces on them. The board will have a small set of buttons, including 'reset' and 'Roll Dice', as well as a display which will at least take the form of two 7-seg digits, and optionally be a small LCD screen instead.

Gameplay

During gameplay, when the reset button is pressed, the game will indicate where the starting squares are for the pieces. When the pieces have been placed, the first player may press the 'Roll Dice button'. The game will randomly generate two die rolls and display them. When the player has lifted the first piece from the board, the possible squares to move that piece to will be highlighted. After he places the first piece and picks up a second, the possible moves for that piece will be highlighted according to where he moved the first one. When all pieces have been aligned, the game will provide feedback (sound, flashes, etc.) and a new round will begin.