Computational Practice Studio Final Proposal

Design Vision

By the end of the semester, I would like to develop an interactive game based on chess/checkers. The floor will be divided into a grid. Moving one at a time each player will move to any direction horizontally or vertically. As a player steps into a grid it will activate the grid to turn red. This means the space is out of play, no one can step into that space again. If a player can not move in any direction horizontally or vertically then they are out of the competition. This will continue until one person is left standing. Once the game is completed, they will use a computer to reset and start over. In addition, a screen will be displayed to track the progress of the game on the wall.

I would like to make this interactive game because I am fascinated with reality tv game shows and think this would be interesting to see how people interact.

Components

64 square grids embedded with LED lights
64 Light sensors
Projector/Screen that displays the game in progress
Computer that restarts the game

System

Data:

- Where the players are at on the grid [p5. mousepressed()]
- Once the people break the light sensor, it communicates to the screen

Render:

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Simulation:

- Screen with the progress of the game

Events:

- LED triggering from green to red

Difficulties

- Making 64 grids with the embedded lights
    - Might take so long to make sure they all are working
    - How do I have them feedback data to the screen
- Programing 2D system to 3D
    - Which program should I be using to create the game in (p5) to arduino?

Timeline

Week 3	Final Proposal
Week 4	Sketches and 2D model prototype
Week 5	2D model prototype refined + Start 1 grid
Week 6	Finish 1 grid, communicate code from 2D to 3D
Week 7	Test Past/ Failed Refinement
Week 8	Create 63 grids
Week 9	Create 63 grids
Week 10	Finish all 64 grids