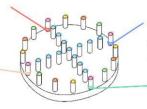
Week 1 - Assignment 1 Line Game

Ben Chambers, Marysia Tańska, Melis Meriç, Sali Mallat, Seamus White



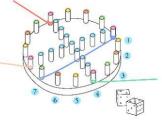
Rules



Each player chooses a different colour thread and starts the game by tying one end around a pin on the edge.



Each pole has 4 thread slots. Once these are filled, it cannot be used any further.

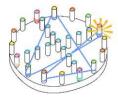


In turns players roll 2 dice which decides how many points around the edge they move to.

The colour-coded poles make counting easier.



The path of the thread to the point must not touch any threads of another colour, or any of other outside points.



The game is finished when one player ges back to their starting point or when all but one players touch a thread of another colour.

Actions

The player needs to move around the board along with their thread.

Like the threads, players must not touch each other.

The players may use the inner sticks countless times to maneuver strategically around the board.

Players may take over other players' starting points by filling the available vertical space on the stick to prevent them from completing the game.

Goals / How to Win

The player has to reach the same exact point they started at before the other players in order to win to the game.

If only one player is left on the board, that players wins by default even if they did not reach their starting point.

Objects

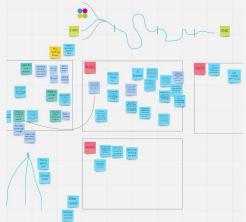
Dice / Threads / Main & Inner Sticks

Brainstorm & initial ideas

Miro board

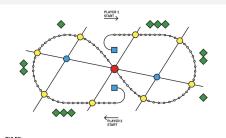
Main ideas:

- teams/teamwork
- It would be nice to have a physical aspect to the game
- Limited movement possibilities
- Enclosed line/circle/going around





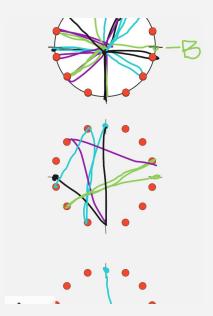




1. USE DICE TO DETERMINE THE NUMBER OF LINES TO DRAW FOR EACH PLAY

 EACH PLAYER SECTION IS DIVIDED INTO 5 SECTIONS USING THE DIAGONAL LINES
 PLAYER MAY ONLY PROCEED TO THE NEXT SECTION WHEN ALL DOTS HAVE BEEN SUCCESSFULLY FILLED USING THREADS.

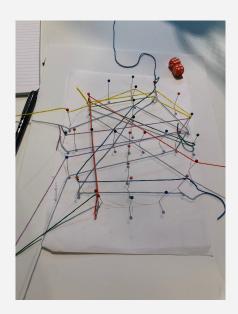
Process



Initial test live on miro



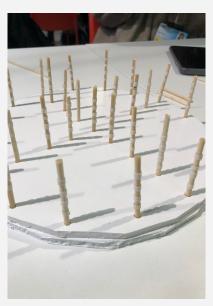




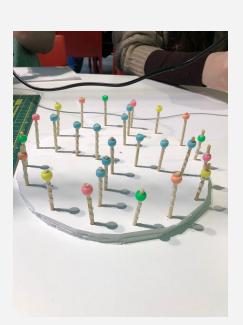
First physical version with sewing pins and foam board

Process









Stages of v2 physical prototype

Video



https://www.youtube.com/watch?v=rE-nem9G76Q

Robust Tabletop Prototype

We made a larger and more sturdy prototype out of wood to enable continued indoor playtesting and experimentation.

The original prototype was too delicate to withstand more than a few games and also too lightweight (it would move around a lot in play).

The increased size should make threading the strings a lot less fiddly, so that turns are quicker and players will remain more engaged.

This is currently ~85% ready. We will probably drill holes in the posts in order to keep the strings in place during play.



Future Improvements

- Expanding the playing field by increasing the size of the game to human size (For example, players would have the wires tied around them and would go under / above / between other wires to reach different points).
- Using conductive threads and a sensor (MPR121 / Capacitive Touch) so if they touch it can produce an output like a sound or light.
- Adding needles to the end of the threads for easier weaving through tight spaces.

