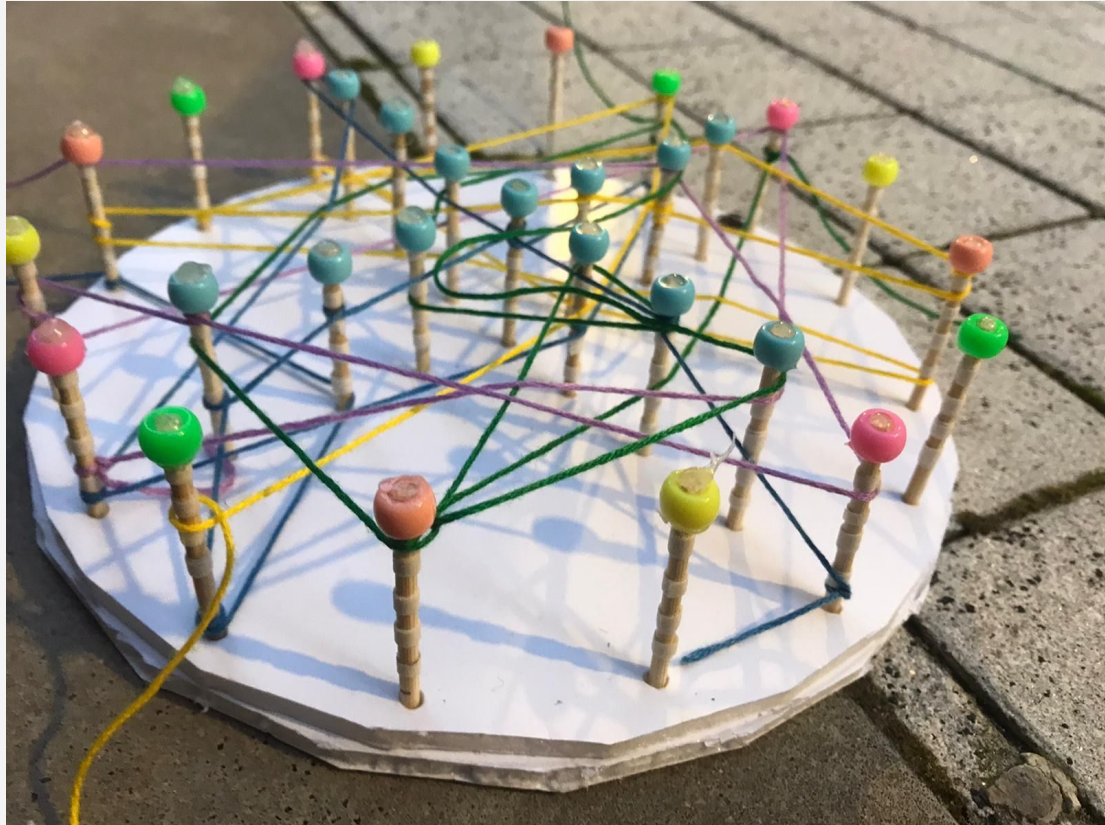


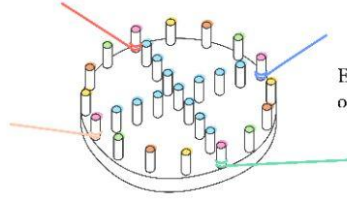
Week 1 - Assignment 1

Line Game

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



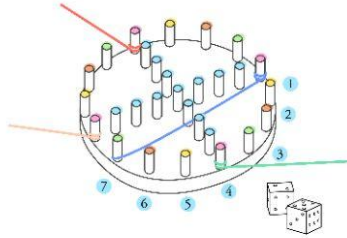
Rules



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

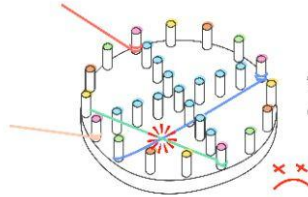


Each pole has 4 thread slots. Once these are filled, it cannot be used any further.

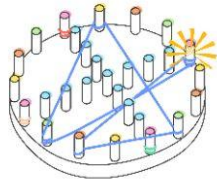


In turns players roll 2 dice which decides how many points around the edge they move to.

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 gets 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 player wins by default even if they did not reach their starting point.

Objects

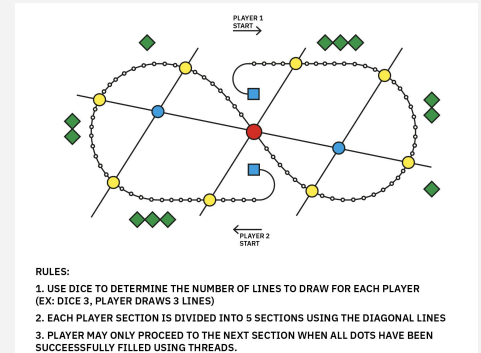
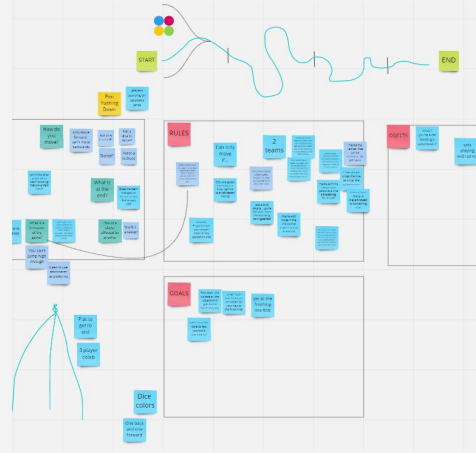
Dice / Threads / Main & Inner Sticks

Brainstorm & initial ideas

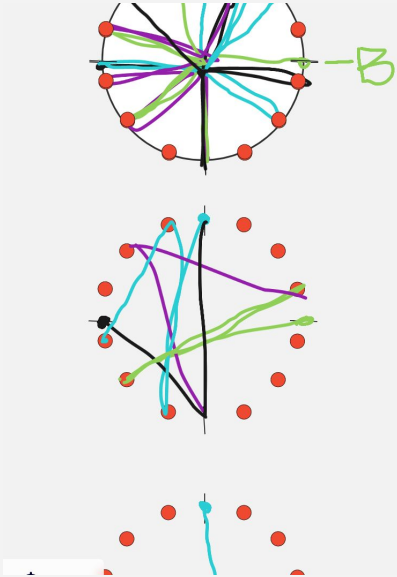
Miro board

Main ideas:

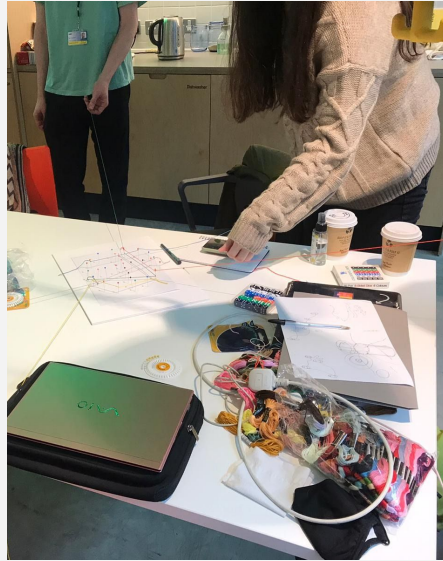
- teams/teamwork
- It would be nice to have a physical aspect to the game
- Limited movement possibilities
- Enclosed line/circle/going around



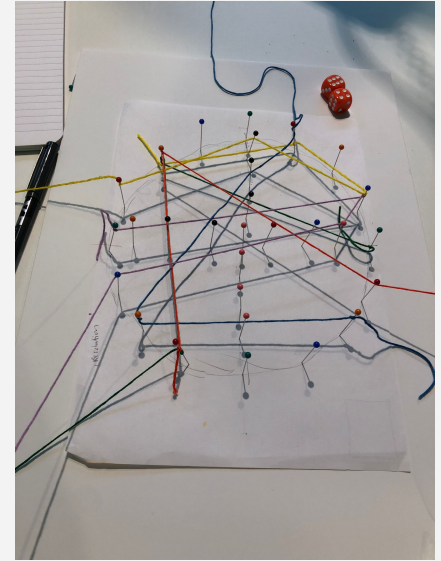
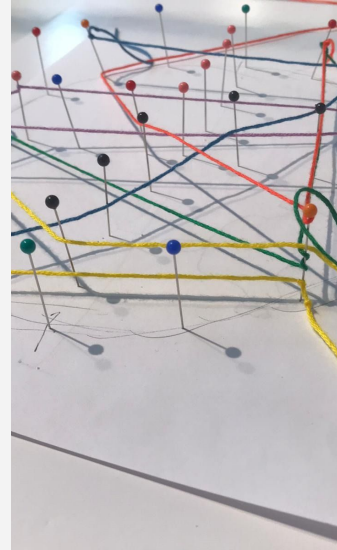
Process



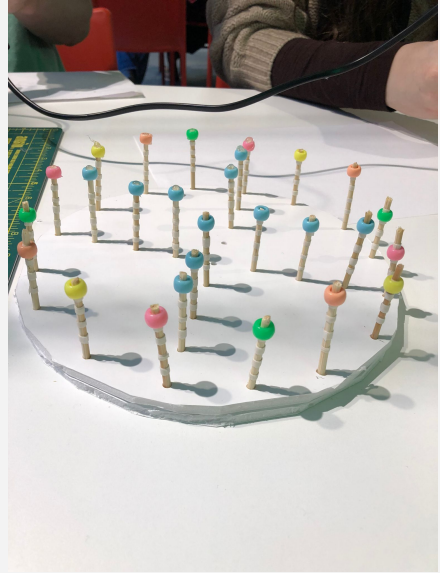
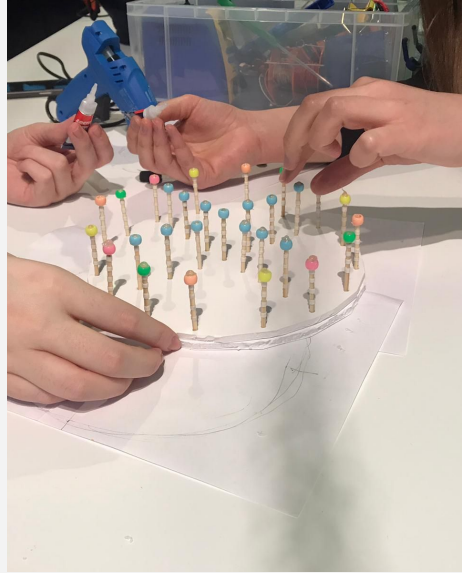
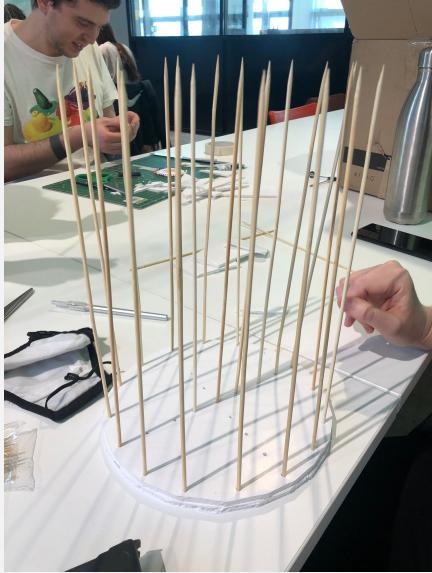
Initial test live on
miro



First physical version with sewing pins
and foam board



Process



Stages of v2 physical prototype

Video



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

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.

