

CURIOSCAPE: A CURIOSITY-DRIVEN ESCAPE ROOM BOARD GAME

Department:

Systems Design Engineering

Program:

MA

Project type:

Collaborative project

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Project co-researchers:

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SSHRC  CRSH



 mitacs



Interesting fact:

Since sensors are placed on chairs,
Curioscape automatically begins the
moment four players sit down!

games.uwaterloo.ca

EKATERINA DURMANOVA AND JOSEPH TU

Have you ever felt frustrated when a board game has too many rules? Are the rules so elaborate and convoluted that they are difficult to understand? Do you want to jump straight into the game and just play?

Curioscape is a game that combines the fun of a boardgame with the thrill of an escape room where a team of four players cooperatively discover clues, solve puzzles, and accomplish tasks within a limited time frame. Durmanova and Tu wanted to experiment and answer the following research questions:

1. What happens when players start a game without learning the rules?
2. Can curiosity function as intrinsic motivation, driving players to seek out information and continuing playing a game where minimal instructions are given?
3. Can the escape room format be shrunk and played in small spaces?

Curioscape relies on the combination of multiple Arduino sensors for puzzle and narrative design within the game space. The following items were used to remove the physical necessity of a rulebook and the role of a “game master”:

- > Touch sensor for detecting and recording physical touch.
- > Ultrasonic sensor to measure the distance of a target object or person.
- > A digital numeric pad for players to enter lock/pin combinations.
- > Drivers providing haptic feedback on some tangible objects within the game.
- > LED lights to indicate clues, hints, and successful puzzle clears.
- > Audio speakers to play the narrative and background music.
- > Chairs combined with ultrasonic sensors and haptic drivers to detect if player is sitting, standing, or standing at a specific location in the game space.

Curioscape was prototyped as part of the student game design competition at CHI Play.



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