

Escape Rooms

Escape rooms are adventurous, interactive, theme-based games full of puzzles and clues that lead gameplayers on a mission to test their creativity and build team working skills.

Problem Statement

Design and implement an immersive "Generation 3" escape room that caters to families, friends, companies, and escape room enthusiasts.

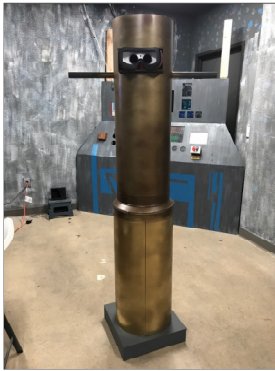
Key Objectives

- Build and install all props required for game play
- Mostly electronic props
- 5 minutes reset time
- Provide Interior Design related to the room's overall theme

Final Escape Room Design: Submerged

The Submarine room features 14 different props ranging from custom made posters to interactive touch screen displays and gyroscopic videos.

Props in the Bridge of the Submarine



Periscope



Control Center



Torpedo Launcher



Torpedoes

Key Electrical Elements for Five Different Props

Props	Key Electrical Elements
Control Center	Resistive Touch Pad, Raspberry Pi, Arduino UNO
Periscope	Gyroscopic Sensor; Raspberry Pi
Torpedo Launcher	RFID tags
Key Card Reader	Magnet Switches
Captain's Map	Angle Sensors

Props by Location

Bridge

1. Periscope
2. Control Center
3. Compass
4. Sonar
5. Torpedoes
6. Torpedo Launcher
7. "Inspirational Poster"

Captain's Quarters

8. Desk
9. Map
10. Morse Code Tapper
11. Biometric Scanner

Hidden Bunker

12. Keycard Reader
13. "Torpedo Launching Procedure"
14. Adjustment Board



Additional Information

Escape Room Classification

- *Generation 1:* Use of padlocks, keys, and paper clues
- *Generation 2:* All "Gen 1" elements AND simple mechanical systems, adaptive lighting/sound, and electronic clues
- *Generation 3:* All "Gen 2" elements AND interactive computer based systems, and automated props/doors

Results: After a couple of rounds of beta testing, 3-4 additional "Generation 1" elements were added to the room in order to lengthen the game and add puzzle variety. All props are installed and functional. The Submarine Escape Room is open for business!

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Acknowledgements, references, etc.