Team Clean Laundry *Presents*

Space Crisis Escape

A Multiplayer Escape Room Game

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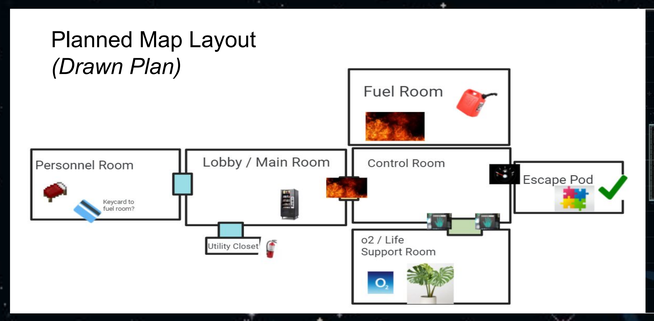
Goal

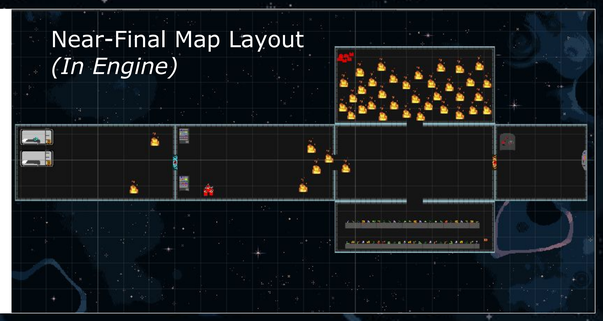
Due to the COVID-19 Pandemic, fans of Escape Room puzzles haven't been able to participate in their hobby safely - *Space Crisis Escape* remedies this problem by providing a virtual escape room game playable over the internet.

Design

The team's design choices were made with an emphasis on low cost of assets. As such, Space Crisis Escape was created in 2D using Pixel art and with a zero dollar budget, as 2D assets are cheaper and easier to make from scratch.

The project was designed in the Unity game engine because both team members have used the tool extensively in the past. The game requires two players to complete, and doesn't allow additional players. This restriction simplified map design, with which our team has minor experience.





Tools

Unity

+ Netcode for GameObjects

Unity is a Game Engine with capabilities for creating 2D or 3D games, and support for third-party code packages and libraries. Both team members have Unity development experience. C# is the coding language used for scripts in Unity, thus both team members have C# experience.

Netcode for GameObjects *(a.k.a. MLAPI)* is a Unity Package which was released by Unity in 2021, and was used for networking code / RPCs.

Challenges

Networking Logic - Sam has worked on networked game projects before, but he hadn't used MLAPI since its beta. Raja hadn't worked on networked games at all. We both took this opportunity to learn more about the Netcode for GameObjects library.

Time Constraints & Scheduling - As full time students with, extracurriculars, jobs, etc., working on the project and meeting to discuss became difficult as coursework became more time-consuming. About halfway through the project we decided to meet on Tuesday evenings instead of Sundays, which helped us meet more consistently and improved our productivity.

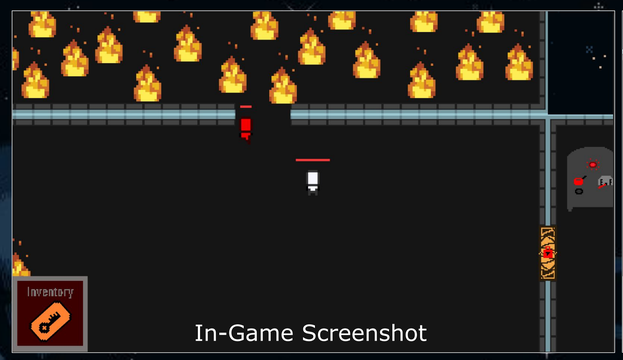
Acquiring Non-Code Assets - While a non-zero budget would've allowed the use higher-quality art and sound assets, the team decided early on to create Space Crisis Escape using only created assets or those acquired under a royalty-free license. Finding free assets which matched the project's theme / art direction was difficult, but several were used in the project's final iteration, such as the animated Fire hazard sprite used throughout the game. Many of the art assets needed to be create by hand, which was time consuming.

Final Product

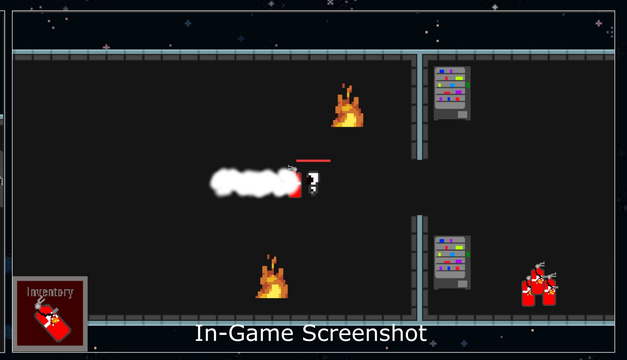
Space Crisis Escape is downloadable, and playable on Windows and Linux! Use this QR code to visit the *releases* section of our github and download a build of our game for free!

Future Work

Team Clean Laundry believes that this project could be improved with several additions, including an increased focus on story, an added narrator, and more levels.



In-Game Screenshot



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