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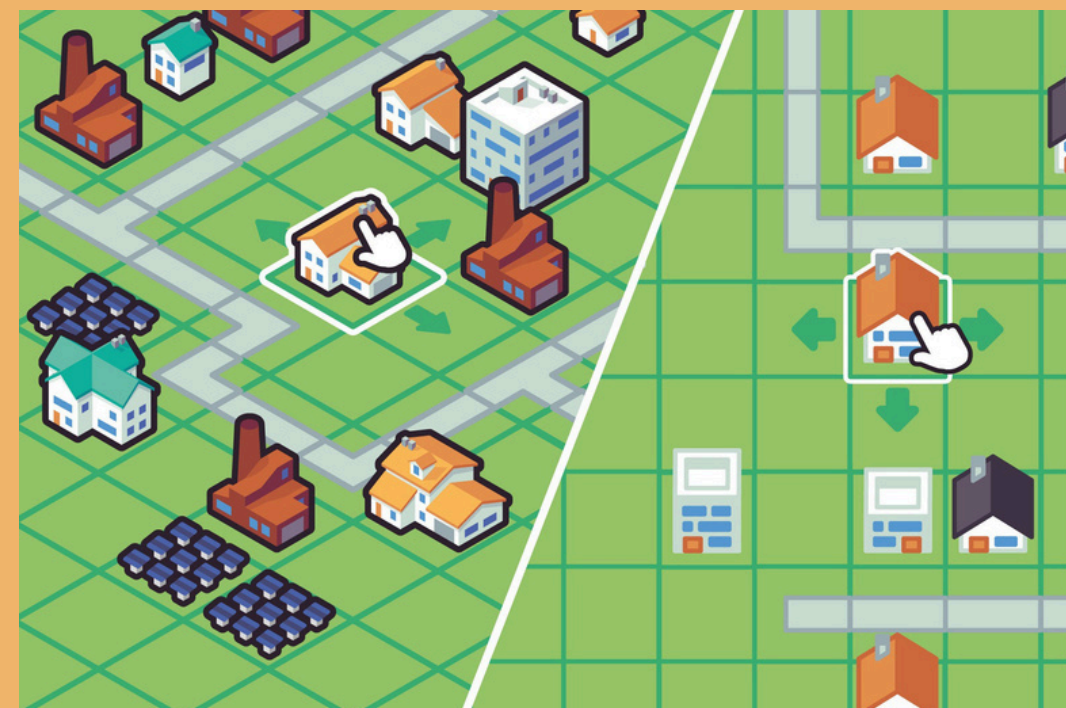
Abstract

This project aims to help players learn about the causes, problems, and impacts of the greenhouse effect. It also aims to allow players to enjoy themselves and practice time and resource management in a hypothetical world. Players manage through a game world, managing the greenhouse effect, and various resources such as wood, gold, and iron. The development of the game UnOzone is carried out by referring to situations related to the greenhouse effect in real life. Players will play as the main character, a scientist living on a planet in the future. They encounter problems caused by the weakening of the ozone layer due to the sun's rays. Compared to the current atmosphere, which the character must manage resources to create an artificial atmosphere for future living.

Problem



Greenhouse effect



2D City Builder games

Objective

1. To create a game that make players be aware of the impacts from greenhouse effect.
2. To develop a game that encourages decision-making and management skills.

Process



Research



Design and Develop



Test and Fix

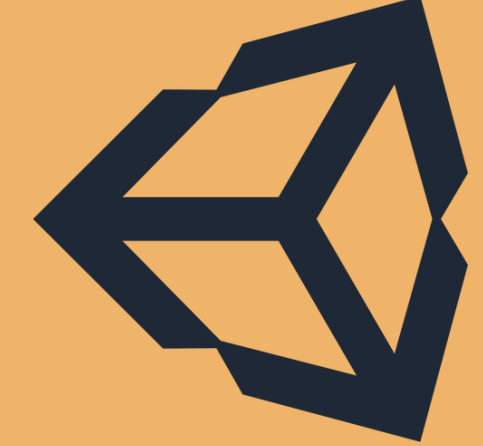
Program



Procreate

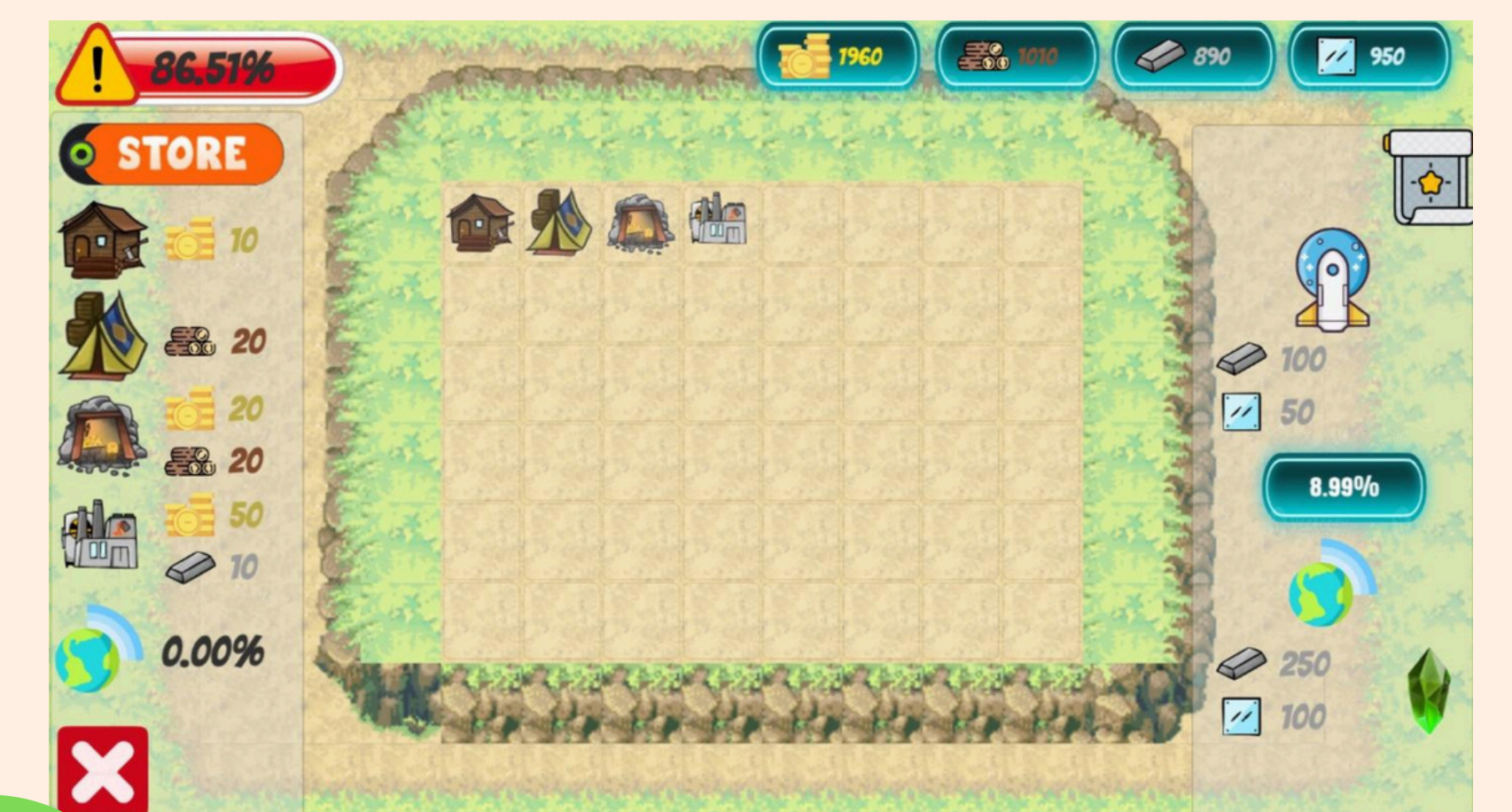


Visual Studio



Unity 2D

Result



Summary

From Testing by players who interested in trying out the game UnOzone, it was found that players had fun playing it. Referring to the satisfaction of players, the result was that the score was at the level of the highest level of liking. Therefore, it can be concluded that the game UnOzone can actually be played, helping players practice decision-making and resource management, including the game system that can be used in all parts without errors.

References

- <https://www.bbc.com/thai/international-52480755>
- <https://dsignsomething.com/2023/05/26/cities-skylines/>
- <https://educationecosystem.com/zeronevdev>