Implementation

Assets and generative AI

Most of the game's assets were sourced from sites like opengameart.org, where I selected content with a public domain licence. When I couldn't find suitable image assets for some of the buildings, I used generative AI, specifically the DALL.E model, to create images for them. Below are the prompts I used:

Place to eat: video game graphic of a restaurant, against a transparent background, square aspect ratio

Place to learn: video game graphic of a study building, against a transparent background, square aspect ratio

Recreational: video game graphic of a recreational place to play games, against a transparent background, square aspect ratio

To verify the originality of the generated assets, I checked them with Google and TinEye reverse image searches, which returned no exact matches. This gave me confidence that the assets are sufficiently unique for use in our project. It's worth noting that all images sourced from non-generative AI have their original source linked in the attribution.txt file under assets in the game's source code.

3rd Party Libraries

All classes are all part of the libGDX framework, which provides tools for 2D and 3D game development and comes with utilities for graphics rendering, maths, input, and more. The Apache License 2.0 allows us to use, modify, and distribute the library, provided we include the original licence and a notice about modifications if applicable.

Completeness

All building locations were implemented, a tracker keeps track of the time, and there are counters for the number of buildings placed. Additionally, the game starts paused, and can be paused at any time.