

Implementation

This document describes the libraries we used in our project and a justification of their use.

LibGDX

LibGDX is an open source game engine for Java licensed under Apache License 2.0. Apache License 2.0 is permissive, which means we are fully able to use, modify, and distribute both it, and any product made using it, which allows us to build our project without worry about costs or licensing issues.

In addition to LibGDX, we employed a suite of 3 libraries for CI and testing. These include Mockito, a powerful library that allows us to create mock classes for testing purposes; JUnit, an industry standard unit testing framework for java; and Jacoco, a coverage report tool so that we could plan and discuss what needs testing next.

The group we inherited this project from (group 6) writes ' we sourced various game assets such as tiles, textures, and sound effects from Kenney.nl and Itch.io.'(Impl1.pdf). These assets were licensed under the Creative Commons CC0 license, which makes them part of the public domain, in turn allowing us to use and customise them however we see fit.

Functionalities Not Implemented

We have hit every core functionality that is required on the product brief, and implemented several of our own additional requirements. However, we have not fully implemented:

- SR_SETTINGS
- SR_DIFFICULTY
- NFR_BACKGROUND
- UR_TIPS
- UR_SETTINGS
- SR_PLACE_BUILDINGS

For UR_PLACE_BUILDINGS, whilst the user can place the buildings as required by the core brief, they are immutable, and cannot be upgraded or destroyed as the Req1 states.

All other requirements not implemented are of Medium or Low priority, and are non-essential for a successful and enjoyable game