# Implementation

Team 2 - Billy's Amazing Team

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## Third-party dependencies and licences

#### Apache 2.0

- <u>LibGDX</u>: Java-based game development framework
- GSON: JSON parsing in Java, dependency of DataFixerUpper
- Guava: Dependency of DataFixerUpper
- <u>fastutil</u>: Zoomy reimplementation of standard library collections, dependency of DataFixerUpper

The Apache 2.0 licence allows private and commercial use, as well as distribution, and only requires preserving the licence and copyright notices and stating the changes, which is suitable for our project.

#### **BSD 3-Clause**

- <u>LWJGL</u>: Java bindings to OS rendering and audio APIs

A BSD 3-Clause licence allows private and commercial use, as well as distribution, and only requires preserving the licence and copyright notice, which is suitable for our project.

#### CC0

- MiniWorldSprites: Sprite pack
- InterfaceSounds: Ui Sound effect library

The CC0 licence puts the contents in the public domain, so there are no legal restrictions, which is suitable for our project.

#### **GPL-2.0**

- OpenMSX: city builder-themed music pack

The GPL-3.0 licence allows private and commercial use, as well as distribution, with the only requirements being to provide source code and to use the same licence for any works that make use of it, which is suitable for our project as we can license it under GPL and provide source code.

#### LGPL-3.0

- JOrbis: Java OGG decoding library, dependency of LibGDX

The LGPL-3.0 licence allows private and commercial use, as well as distribution, with the only requirements being to provide source code if it is used as a library, and use the same licence for modifications, which is suitable for our project.

### LGPL-2.1

- <u>ilayer-qdx</u>: Dependency of LibGDX

The LGPL-2.1 has similar terms to the LGPL-3.0 and allows private and commercial use, as well as distribution. It only requires providing source code if it is used as a library and using the same licence for modifications, which is suitable for our project.

#### MIT Licence

- <u>DataFixerUpper</u>: Used for loading data-driven assets from JSON files using the (de)serialisation component
- <u>slf4j-api</u>: Logging facade depended on by DataFixerUpper

The MIT Licence allows private and commercial use, as well as distribution, and only requires preserving the licence and copyright notices, which is suitable for our project.

#### **Unimplemented features**

From our initial requirements, we did not fully implement UR\_GHOST\_BUILDING, UR\_PAUSE\_GAME, UR\_EVENTS, UR\_DIFFICULTY and UR\_TUTORIAL. These were not expectations for this part of the project, and there was not enough time to implement them.