

Implementation

Group 5 :

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6.B Licensing

After extensive research, the library chosen to develop the product is 'libGDX' - this is an open-source game development framework written in Java and was deemed the most appropriate to go forward with in development. The library is released under the Apache 2.0 licence, which is a permissive open-source licence that allows for free use, modification and distribution of software created using the library. The restrictions stated in the licence are: 'Trademark Use', 'Liability' and 'Warranty' - all of which are limitations which have been taken into account and will not affect the development and distribution of the product. Furthermore, 'Box2d' is a 2D physics library which has been ported to many languages and engines, including libGDX. The Box2d implementation in libGDX is a thin Java wrapper around the C++ engine - it conforms to the same permissive open-source licensing rights as libGDX. Within libGDX, there is also an asset packer provided - this should also have the same rights.

Permissive open-source licence allowing free-use, modification and distribution is an ideal licence for the project as there are little to no limitations which are relevant in the context of our development. Any liability and warranty issues would be directed to us, the developers, rather than the engine's developers.

Image assets were created within the group and have been classed as a public domain licence. This includes the sprites which are being used in the main body of the game. Collectively, we decided that rather than search for assets and ensure licensing allows us to use said assets, we created our own assets. To ensure that there would be enough time, it was implemented into the gantt chart. The assets are public domain accessible under the creative commons licence - this means that they are free to use by anyone who has it, which is not a 'limitation' that we would be affected by.

6.B Non-fully implemented features

Features which were listed on the requirements tables (found on Req1) were listed with a priority status. The team made an effort to implement all the required features but due to time constraints and problems arising in other aspects of the implementation, there were a few features that were not added.

Unmet requirements with the highest priority included the rewards system referring to UR_EARNING_REWARD - it was stated that users should earn rewards for completing tasks but not be able to spend it in this part of the assessment.

Another requirement which was ranked as 'SHOULD' was customer arrival and ordering, stated as FR_ORDERS. At the moment, the implementation consists of 5 set customers and 5 set orders when the play screen is loaded. This was implemented to test the key functionality of the game but was not developed to meet the requirement of each customer arriving one by one.

One requirement which was added for user experience were audio feedback and custom controls (UR_CUSTOM_CONTROL). Initially, we came up with this requirement to enhance the user experience and improve interaction, however, due to time constraints, this was not able to be implemented.