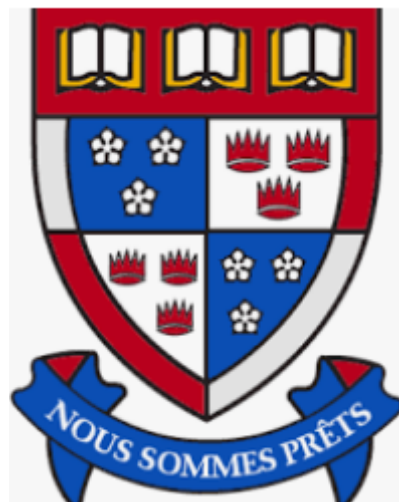


CMPT 276: Introduction to Software Engineering

Code Review - GROUP 09

Chun Hei Yiu	301329448
Steven Xia	301444281



Commit: 9d82b2cfe69c792dd19fbf47b2bd4e87834beb45

Reason: Static constant variable is defined and used inside a function.

Since the design for this project was mostly done in one go, it was not fully fleshed out and some points were missed. As such, many things needed to be changed throughout the development of the codebase, and one such thing was the implementation of the collision function. The collision function was initially designed to be very simple, however, this simplicity caused an unforeseen circumstance that caused some of the game's collision detection to be very annoying to play with. Specifically, fitting between two walls required the user to position the player character pixel perfectly. To deal with this, a quick and very hacky fix was implemented. This fix featured some hard coding, which is very bad for the configurability of the program.

To resolve this issue, the hard-coded values of the function were moved to be with the other class constants. This made the code easier to be configured if any future changes were to be implemented.

Commit: b69bd4f9d4e99a5aaa216b8d13d7912e1e734f6f

Reason: Many important class attributes have no description.

The most common coding style used in the development of the project was just to put as much code down as possible and make it functional. As such, lots of the methods and attributes of the classes were missing descriptions. Although Javadoc documentation was added to most methods in phase 3, the same could not be said for variables. What was left was a clump of many lines of just variable definitions with little to no description about them whatsoever.

To resolve this issue, documentation was added to these attributes, which, although more than doubled the size of that code, greatly increased the ease of maintenance for future maintainers. Even some of our group members did not know what every one of these attributes was used for, imagine how difficult it would be for someone who has not seen the code before.

Commit: 243f43d0dd7a923481abda5cb5384c84649c6dfb

Reason: Code is not in the project.

Since our project went through a couple of iterations of design, there were some variables from past designs that were not completely removed when new systems

were implemented. This is because our implementation was quite rushed due to the tight time constraints.

To resolve this issue, the unused code was removed. To ensure this did not break the game, the automated unit tests were run again along with manual system tests. This made our code simpler for future programmers to understand because they will not be confused about the use of the dead code.

Commit: 67745982611a7ff3fc6a30cf4f91831dad919c37

Commit: d684551ae47197eac3b791f81ba65021aacb6d44

Reason: Some classes are missing (or have incomplete) documentation.

As part of phase 3 of the project, Javadoc documentation was added to every method with substantial logic. However, since our knowledge of Javadoc was very limited, some things were overlooked when adding the documentation. For example, no classes were documented, which would cause it to be difficult for someone to get an overview of the project by just looking at the code.

To resolve this issue, documentation was added to the Character class and the GameObject class. Furthermore, the Javadoc directive “@see” was used to reference the proper external documentation for the Image class that was imported from the Java built-in library.

Commit: 57937cfe12f8e3f0b875fef59e98ee06ba836237

Reason: Many imports are not utilized.

Portions of similar class implementations (eg. Character, Hunter) were built from the same code framework, and as such contained copy/pasted code (bad style, but it is what it is). However, as all other parts of the code were adapted to fit its specific use, the imports remained mainly untouched, mostly because we did not have enough experience using them to know the exact uses of each one. This resulted in a plethora of unused imports which greatly cluttered up the file headers and made them confusing.

To resolve this issue, these unused imports were all deleted with the help of a program used to detect unused imports.