CMPT276 Assignment 3 - Code Review

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When refactoring our game, we made several small changes to improve our code. First, we improved documentation within the screen and player classes after noticing that we could be more clear with our comments. Specifically, we specified what specific lines were doing and extended short, unclear comments in order to complement our javadoc comments. We also removed some commented out areas with code that is no longer used (commits 917e41a8 and 658188dc).

In our KeyHandler.java file, we identified an instance of variable naming that could be improved, so we renamed variable ‘e’ to ‘input’ to make it easier to follow. Added a couple of comments as well to improve documentation and make the code easier to follow (commit 20eb2a80).

In the same file, we found a useless function that could be removed (keyTyped()), so we removed it (commit e2fe232a).

A couple of our files (namely Player.java and Screen.java) still imported unused elements that made our project structure slightly more confusing than it needed to be. Player no longer used item.Health, and Screen no longer needed Entity or any java.util methods. We removed these imports to solve this issue (commits 78353e57 and 525a188c).

The entity class, parent class to player and enemy, had a couple of variables that were public, but were never used outside of their subclasses. BufferedImages (one BufferedImage for each player sprite), spriteCounter, and spriteNum were initialized in the entity file, but were only used in either the player or enemy classes. We made these variables protected to make the code slightly safer (commit f8800ddb).

We noticed some unnecessary code duplication in ItemSetter.java, with basically the same code being repeated when spawning multiples of the same kind of item (eg. keys). The only differences between the lines were the placement in the items array (one new instance for each spawn), and the coordinates to spawn the items at. Using integer arrays to store the coordinates, a for loop allowed us to create the new items and also place them in their unique locations - removing code duplication while still producing the same output (commit 540b1e7e).