

Assignment 3: Code Review

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Method Refactor

Smell: Too many parameters for constructor, most left null on instantiation.

The constructor for the Board class was refactored to have a shorter parameter list and better structure. The board constructor previously had four BoardHolder objects, and an AppWindow in its parameter list. It now has AppWindow as its only parameter. This change was made in the Board.java file in commit ID fa9feb83.

Change in Class Hierarchy

Smell: Confusing class hierarchy

The rewards class hierarchy was changed so that not all the rewards classes inherit Regular Rewards. A new class called Collectible was created to serve as the base for the rewards classes. The new Collectible is a subclass of BaseElement, and has a constructor and getIdentifier method. This change was made in the collectible.java, bonus.java, board.java, MovingEnemy.java, NonAnimatedEnemy.java, and RegularRewards.java files in commit ID fa9feb83.

Method Moved to Another Class

Smell: Method belonging to class that didn't really make sense

The change method which was formerly in the Board class is now in the AppWindow class. The previous change method had a BoardHolder as one of its parameters. Since the BoardHolder class was removed the change method was renamed to changeBoard and was refactored to now take type Board as a parameter but keep its functionality. Any BoardHolder objects in other classes have either been deleted or are now of type Board. This change was made in the App.java and Board.java files in commit ID fa9feb83.

Unused Class

Smell: Redundant class that caused bloat and confusion

The BoardHolder class was removed as we realize that it was never used in our implementation and neither were the BoardHolder class' attributes, and methods. Any

methods in other classes that had the BoardHolder type as a parameter were refactored to keep its functionality without use of the BoardHolder class by taking Board as the parameter instead. This change was made in Board.java and the now deleted BoardHolder.java files in commit ID fa9feb83.

Change of Variable Names

Smell: Confusing variable names

Prior to refactoring, the names of the variables storing the x and y coordinates of the bonus, enemy collision box, and player collision box in the Board class were unclear. Integer variables bX, bY, eX, eY, pX, and pY were changed to bonusX, bonusY, enemyX, enemyY, playerX, and playerY respectively. The variable names were changed in the Board.java file commit ID 22777ac5.

Unused Method

Smell: Method never called

In the character class, the method stopTimer was removed. The stopTimer method is never called in its own class or in any of the other classes. This change was made in the character.java file commit ID 22777ac5.