

Code Review
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CMPT 276 D100

Code Review of movingEnemies

Bad smells listed by number 1, 2, 3.....

In this assignment 2, we found a total of 13 bad smells within the code we wrote in Phase 2. These bad smells are separated into several different categories: Confusing names, Lack of documentation, code duplication, and dead code.

Commit reference numbers:

Ed2cbc8c - dead code, lack of documentation,

87a4ed74 - dead code, confusing names, code duplication

Confusing Names

1. dirList → possibleClosestMove (in method: findClosestMove)
2. dirList → allPossibleMoves (in method: randomEnemyMove)

dirList is too general as we can only infer that it is a list of directions.

For findClosestMove, it is changed to possibleClosestMove as it is a list containing valid moves which cause the enemy to move closer to the main character.

For randomEnemyMove, it is changed to allPossibleMoves as it is a list containing all valid moves.

Lack of Documentation

Added sufficient documentation to the following methods:

3. removeBonusRewards
4. removeRewards
5. movingEnemies
6. movesWhenStuck
7. findClosestMove
8. addingToList

All methods above do not have a clear explanation, so we added documentation to them.

Code Duplication

Removed:

9. checkCollisionWithEnemy on line 265 (under randomEnemyMove), and
10. checkCollisionWithEnemy on line 366 (under findClosestMove)

Both instances of checkCollisionWithEnemy are called right after calling the method “mazeObjectDirectionMove”, which already uses checkCollisionWithEnemy within it (mazeObjectDirectionMove calls the method checkCollisionWithEnemy, so the code is repeated).

Dead Code

Removed:

11. removeBonusReward
12. removeEnemy
13. Reducelifespan

All methods above are not used in any situation, either because a new function replaced it, or the usage of it is not needed. Therefore, they are deleted.