

Change 1 commit SHA: [413d3952ef9cfa4ab2f33abb12e39d0e746b5b06](#)

Within the CollisionChecker class, there were a few methods with a lot of repeated code. These methods were CheckObjectCollision, CheckEntityCollision, and CheckPlayerCollusion. All of these methods are needed to temporarily move the entity's hitbox to test if it will collide with an object/player/farmer. To do this, we needed to use the entity's direction to know how to move the hitbox. The code was the same in all cases. Hence, we made a method (setHitboxForCollisionChecking) for that code and called it whenever needed instead of copying and pasting the same code repeatedly. This made the code much more readable and organized. We also did something remarkably similar by making the resetHitbox method return the entity's hitbox to normal after testing it. This reduced duplicate code in the same way that the previous method did.

Change 2 commit SHA: [4dd5df3bb338f411aaf0f1eb036a0bb1bad76d4a](#)

Within the Map class, there is a method called drawTiles, which had some developer methods in it, such as drawing the coordinates of the tiles on the map or drawing the enemy farmers path toward the player. These were relatively long blocks of code cluttering up the drawTiles method unnecessarily since they are often disabled and not used outside of development and testing. Moving them to their separate function makes the code more readable and means you do not have to interact with this code at all unless you need it for something.

Change 3 commit SHA: [61aa4566e2d94c6a81cabb3f26b1ab3389e1e71c](#)

Inside the Farmer class, we have .update() method as the main control method of a farmer. Variables midFX, midFY, midPX, midPY are hard to recognize what it means to those who didn't work on this code. Changed it to PlayerMiddleX, etc. to make it easy to understand.

Change 4 commit SHA: [97ff46ac113f1c624a3c121d3689cf4e0a3c2133](#)

Farmer.update() itself has too many roles in it. Checking interaction between the player by distance should be another method outside of the update() method. Created interactPlayer() method so we could set the distance standard to check the interaction also.

Change 5 commit SHA: [0a942df74e1e9cb79379d1ab8dd7f93fa2b0c80](#)

A method in Farmer called searchPath was moved to the Pathfinding class. This makes sense since it is a Pathfinding related method. It was in Farmer because we thought it would be more convenient; however, it was just as suitable in Pathfinding if we added another parameter for the entity calling the function. This fixed our convenience problem and made our code more cohesive.

Change 6 commit SHA: [ad66b6252c03c65b9576a08fedf4c640bf91f1f0](#)

StateManager has setCurrentState() method to handle state changes. It uses a switch function to determine special changes according to the current state. It also calculates the player's final score by itself, which is not a proper role to be taken by this method. Created a new calculateScore() method to calculate score using playTime and added it inside of the setCurrentState().

Change 7 commit SHA: [3029fc5a4b2a42c874f0c80b1d3240a987f73b39](#)

The last change we made was a simple one. There needed to be documentation in the checkObjectCollision method within CollisionChecker class for JavaDocs. This was easily fixed by just writing the JavaDocs comment for it.