Code Smell 1 – Evan Leleux

Bloaters – Long Method: As seen below this method in the Tower class is long and convoluted doing quite a few things. Mostly because it just has slowly been build up over the milestones to not only damage the enemy but then only shoot at one enemy, and then do animate shooting at the enemy.

Before:

Text

Description automatically generated

After:

Text

Description automatically generatedText

Description automatically generated

As you can see it is much more readable when you break it up into 4 methods. No need to comment anymore as the methods are pretty self-explanatory.

Code Smell 2 – Andrew Fitton

Lazy Class – A class that is too small to validate its existence

Before:

This class that we created for money simply didn’t have enough methods or attributes to validate its existence. It mostly just returned the player’s money and nothing else, therefore it was a lazy class.

A screenshot of a computer

Description automatically generated with medium confidence

After:

To fix this code smell, we deleted the lazy class and incorporated it into the BDDGame class with other player values. This made it much easier to access money and also uses less space than having the lazy class.

Text

Description automatically generated with low confidence

Graphical user interface, text, application

Description automatically generated

Code Smell 3– Sonya Yuen

* Shotgun surgery

Before:

We had separate classes for each of our towers “Buzz Tower”, “Electric Tower”, and “Wreck Tower” which caused us have to tweak each individual class many times.

Text

Description automatically generated

After:

To combat this code smell, we created a Tower class to be a parent class to “Buzz Tower”, “Electric Tower”, and “Wreck Tower”. This in turn, increased cohesion within our code.

Text

Description automatically generated

Code Smell 4– Erich Drawdy

* Data Class

Before:

We had a class that just had getters and setters in it, thus the only function it had was to return data or change data.

Text

Description automatically generated

After:

We combined this class with another and abstracted it that way it could be used and overridden by many other classes, and doesn’t only serve the purpose of data manipulation.

Text

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