

**Code Review**  
**Group 20**  
**Panos and Eric**

**Unused imports**

- Many classes imported libraries/tools that were never used
- Removed all these unnecessary imports
- Changes made in “Removed unused imports” commit

**Lack of Documentation**

- Several class methods and code blocks lacked documentation for their behavior/purpose
- Added/expanded several class documentations
- Changes made in “Added refactoring documentation” commit

**Methods that are too long**

- Board ,DefaultGameFactory and GameInstance class constructor had several large blocks that made the method very large
- Refactored method by creating smaller private methods within class to make constructor smaller
- Changes made in “breakdown big methods to small methods” and “break down constructor method gameinstance class” commits

**Long list of Method parameters**

- eventManager class constructor had a parameter that was not necessary
- Unnecessary parameter was removed and needed object was obtained by the getter of other parameter
- Changes made in “Clean eventmanager parameter map” commit

**Unjustified/unnecessary use of primitives and unnecessary methods**

- Collectible subclasses all used primitives in their constructors and made unnecessary calls to setValue method
- Adjusted Collectible class to be abstract with abstract getValue method and attributes assigning value to all collectible types
- Removed setValue method from Collectible class
- All Collectible subclasses now have simplified constructors and implement abstract class getValue from superclass without using primitives
- Changes made in “Modified Collectible and subclasses” commit

**Duplicate code**

- Both the shark and diver used nearly identical, repeated code for their movement in the Map class
- Code for movement of both entities was condensed into one method for each to use repeatedly, reducing overall bulk of code
- Changes made in “map duplicate code to one method” commit

**Code clean up**

- Some old comments left from implementation phase for testing purposes that had been commented out
- Cleaned up these old comments to make code neater and easier to follow
- Changes made in “Cleaned up code” commit