

Deliverable 1: Design Document

Scenario:

This project is a game inspired by *Keep Talking and Nobody Explodes* where 2 people play together asymmetrically, one having a description of a puzzle in front of them while the other must give instructions on how to solve the puzzle.

Design Paradigm:

- Asymmetrical multiplayer
- Optional single player
- Randomly chosen puzzles sorted ascendingly by difficulty

Expected Output:

A fun command-line puzzle game with some pressure on not making mistakes or being overly rash.

Hierarchy:

- Module (abstract class)
 - o WiresModule
 - o MathModule
 - o CaesarModule
 - o MorseModule
 - o ButtonModule

Interfaces:

The Randomize interface exists as some modules can randomize upon a failed attempt. It is a functional interface.

Runtime Polymorphism:

compareTo, display, and randomize all employ runtime polymorphisms as the logic is different for each class and all are called through Module.

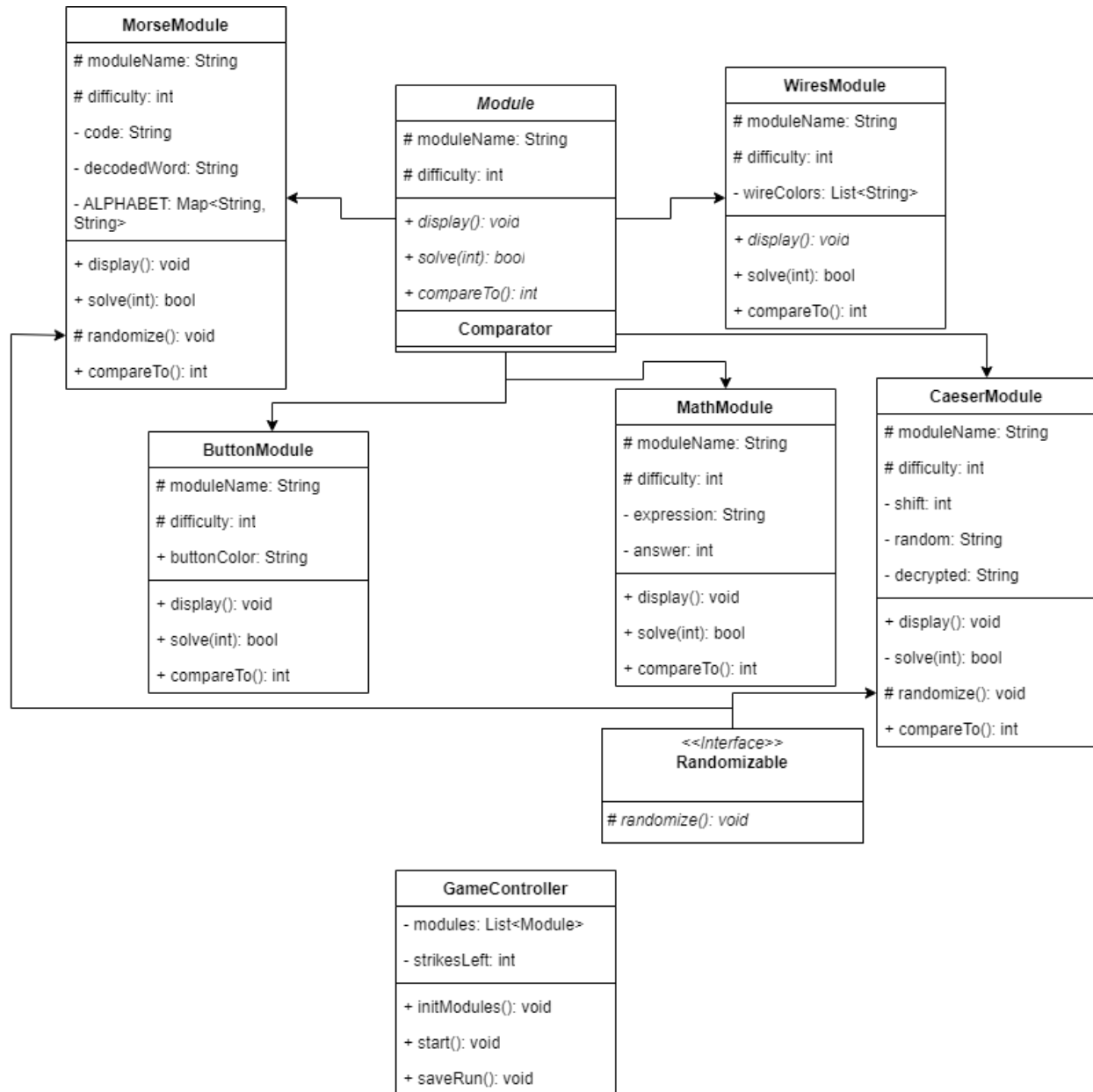
TextIO:

TextIO is used in GameController to save the current game (who completed it and how much time it took them).

Comparable and Comparator:

Comparable is used to compare the modules in terms of difficulty and comparator is used to compare them based on name.

Diagram:



Deliverable 2:

All method signatures will be implemented with no body. They will all contain documentation. Testing will be implemented for all methods.