OOP IMPLEMENTATION GUIDE

1. Encapsulation

Private:

Puzzle Pattern: *Private Array*

Player Class: *Score*

Controlled Access: *Cell generation - prevents invalid changes to occupied cells*

Ensures that it cannot be modified or interfered with directly by outside classes

2. Inheritance

Player: *Base Class*

New Player extends Player

Puzzle Mode: *Base Class*

Set Difficulty Mode extends *Puzzle Mode*

3. Polymorphism

TurnBased gave *Process Move*, but TurnBased *checks* which player is playing.

4. Abstraction

PuzzlePatternSet - *hides how moves are counted*

SolveSet - *hides how puzzles are validated for pointing*

GeneratorSet - *hides how puzzles are generated* (patterns are set to avoid duplicates)