

Implementation of the four pillars

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

Inheritance

Player - base class

New Player extends Player

Puzzle Mode - base class

Set Difficulty Mode extends Puzzle Mode

Polymorphism

Turn Based gave Process Move, but

TurnBased - checks which player is playing

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)