

We will write a Stratego program that does the following:

- Has two players
- Allows the players to set up their pieces on their own or chose from preset boards (and make changes if they want)
- It will not show the board until the player whose turn it is is ready to see their pieces. The other player's pieces will all be represented by the same symbol.
- Plays Stratego normally, following rules such as
 - Scout (2) can move multiple spaces
 - Flags and bombs cannot move (and cannot attack)
 - Miners (3) are the only pieces that can disarm bombs
 - Spies (1) are the only pieces that can kill the Marshal (10)
 - If the attacking piece and defending piece are the same, then they both die
- The board will most likely be displayed on the console but we may end up using a GUI
- We may make an option for one player against an AI

Our program should include everything that a normal game of Stratego would have.

We will use the following classes:

- Stratego – has main and creates a Game object and runs gameLoop()
- Game – has a game loop and a Board and methods to check rules
- Board – has an 2D array list of Pieces and methods to check certain things about the board (such as if a position is already taken)
- Piece – a class that holds variables for individual pieces

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Stratego
+ main(): void
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Game
- gameBoard: Board
- currentPlayer: String
- player1: String
- player2: String
+ Game()
+ gameLoop(): void
- switchPlayer(): void
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Board

- board: ArrayList<ArrayList<Piece>>
- startingPieces1: LinkedList<Pieces>
- startingPieces2: LinkedList<Pieces>

+ Board()

- + isFilled(row:int, col:int): boolean
- + toString(): String
- + movablePiecesLeft() boolean
- + move(currentPlayer: String, row1: int, col1: int, row2: int, col2: int): void
throws exceptions
- + getPiece(row: int, col: int): Piece
- + setPiece(p: Piece, row: int, col: int): void
throws exceptions

Piece

- teamName: String
- value: int
- moveable: boolean

- + Piece(teamName: String, value: int)
- + setTeamName(teamName: String): void
- + setValue(value: int): void
- + getTeamName(): String
- + getValue(): int
- + isMoveable(): boolean

