**CLASS:** Board

Package model

*The Board object is a model of the board. It contains methods to add pieces to the board, retrieve the piece at a specified position, and to check the validity of the current board’s configuration.*

**INHERITS**

None

**USES**

java.util.ArrayList, java.util.Random, BoardError, model.Piece

**VARIABLES**

RED : boolean

*Boolean constant to represent player 1*

BLUE : boolean

*Boolean constant to represent player 2*

**ACCESS** **PROGRAMS**

Board ( ) : Board

*Constructs an instance of an empty board. Randomly decides which player goes first.*

addPiece (color : boolean; coordinate : integer[] ) : void

*Adds a new instance of Piece with color and coordinate to pieces. Updates the color of that position on the board*

addPiece (color : boolean; x, y, z : integer) : void

*Adds a new instance of Piece with color and coordinate (x,y,z) to pieces. Updates the corresponding position with color*

getPiece (coordinate : integer[] ) : Piece

*Returns the piece at the input coordinate. Returns null if no piece is there.*

getNumPieces ( ) : integer

*Returns the number of pieces currently placed on the board*

getTurn ( ) : boolean

*Returns boolean value indicative of whose turn it is*

switchTurn ( ) : void

*Switches state to the next player's turn*

resetBoard ( ) : void

*Resets the state of the Board to the initial state*

validSetup ( ) : BoardError

*Checks if the state of the board is a valid configuration.*

*Returns an instance of BoardError indicating error type and offending pieces. See BoardError API for more details.*

**RESTRICTIONS**

*This module represents the entire board of the game. As such, only one instance of this object should be constructed.*