**CLASS:** Piece

**IMPLEMENTATION**

*This is an implementation of Piece objects for a game of 6 man’s Morris. Each instance of Piece has a color and coordinate corresponding to a position on the board. To reflect a physical game piece, color has been made final, but coordinate can be changed.*

**INHERITS**

None

**USES**

None

**VARIABLES**

color : boolean

*The color of the piece*

coordinate : int[]

*Represents coordinate of the piece*

*x is row { 0,1,2}*

*y is column {0,1,2}*

*z is inner or outer square {0,1}*

**ACCESS** **PROGRAMS**

Piece ( ) : Piece

*Default piece contructor. Creates instance of a red piece with coordinate (0,0,0)*

Piece (color : boolean) : Piece

*Creates an instance of piece with input color and coordinate (0,0,0)*

Piece (color : boolean; coordinate : int[] ) : Piece

*Creates an instance of piece with input color and coordinate*

Piece (color : boolean; x, y, z : int) : Piece

*Creates an instance of piece with input color and coordinate (x,y,z)*

getColor ( ) : boolean

*Returns the color of the piece*

getCoordinate ( ) : int[]

*Returns 3D coordinate of the piece*

setCoordinate (x : int) : void

*Changes the coordinate of the piece to x;*

setCoordinate (x, y, z : int) : void

*Changes the coordinate of the piece to (x,y,z);*

checkCoordinate (x : int) : int[]

*Checks if x is a valid coordinate value. If it isn’t it returns a corrected coordinate value.*

**RESTRICTIONS**

*This module is used in Board to create instances of pieces on the board. It is also used in BoardError to return collections of offending pieces.*