

Model

Class Square

java.lang.Object
Model.Square

```
public class Square
extends java.lang.Object
```

Square Class stores information of the Pieces and Coordinates

Version:

1.0

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Field Summary

Fields	
Modifier and Type	Field and Description
private Piece	gamePiece The Piece that is occupying the square object
private Coordinate	position The Coordinates of the square object

Constructor Summary

Constructors	
Constructor and Description	
Square(Coordinate newCoordinates)	Square Constructor with specific coordinate
Square(Coordinate newCoordinates, Piece newPiece)	Square Constructor with specific coordinate and game piece

Method Summary

All Methods Instance Methods Concrete Methods

Modifier and Type	Method and Description
void	addPiece(Piece newPiece) Adds a new piece to the specific square object when necessary, and if the square is not empty/occupied it will replace the existing game piece.
void	deletePiece() Removes a piece from the square position.
boolean	equals(java.lang.Object input) The Equality of two objects is checked by comparing the object by the field values
int	getColumnNumber() Getter method for the column number of the coordinate position
Coordinate	getCoordinate() Getter method for the coordinate position
Piece	getPiece() Getter method for the game piece on the square
int	getRowNumber() Getter method for the row number of the coordinate position
boolean	isOccupied() Method checks if the square is empty or being occupied by an existing game piece
void	setPiece(Piece piece) Setter method for the game piece
void	setPosition(Coordinate newCoordinate) Setter method for the position of the square with user specified coordinate value
java.lang.String	toString() Method used to print the information of the square object in STRING format

Methods inherited from class java.lang.Object

clone, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Field Detail

position

private Coordinate position

The Coordinates of the square object

gamePiece

```
private Piece gamePiece
```

The Piece that is occupying the square object

Constructor Detail

Square

```
public Square(Coordinate newCoordinates)
```

Square Constructor with specific coordinate

Parameters:

newCoordinates, - user specified position

Square

```
public Square(Coordinate newCoordinates,  
              Piece newPiece)
```

Square Constructor with specific coordinate and game piece

Parameters:

newCoordinates, - user specified position

newPiece, - user specified game object

Method Detail

getColumnNumber

```
public int getColumnNumber()
```

Getter method for the column number of the coordinate position

Returns:

Column Number of the position

getRowNumber

```
public int getRowNumber()
```

Getter method for the row number of the coordinate position

Returns:

Row Number of the coordinate position

setPosition

```
public void setPosition(Coordinate newCoordinate)
```

Setter method for the position of the square with user specified coordinate value

Parameters:

newCoordinate, - The user specified coordinate of the square

getCoordinate

```
public Coordinate getCoordinate()
```

Getter method for the coordinate position

Returns:

Position, The position coordinate of the square

getPiece

```
public Piece getPiece()
```

Getter method for the game piece on the square

Returns:

Piece, the piece located on the square position

setPiece

```
public void setPiece(Piece piece)
```

Setter method for the game piece

Parameters:

piece, - user specified game piece object

addPiece

```
public void addPiece(Piece newPiece)
```

Adds a new piece to the specific square object when necessary, and if the square is not empty/occupied it will replace the existing game piece.

Parameters:

newPiece, - user specified game piece object that is to be added

deletePiece

```
public void deletePiece()
```

Removes a piece from the square position.

isOccupied

```
public boolean isOccupied()
```

Method checks if the square is empty or being occupied by an existing game piece

Returns:

True, only if the square is occupied. False, if there is no game piece located

toString

```
public java.lang.String toString()
```

Method used to print the information of the square object in STRING format

Overrides:

toString in class java.lang.Object

Returns:

String, a String which contains the coordinates of the specific square along with the piece that occupies that current square location

equals

```
public boolean equals(java.lang.Object input)
```

The Equality of two objects is checked by comparing the object by the field values

Overrides:

equals in class java.lang.Object

Returns:

True, If the two objects are same

