

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

Package [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	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	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

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Square	copy()	Used for a deep-copy in order to allow for proper undo/redo
void	deletePiece()	Removes a piece from the square position.
boolean	equals (<code>java.lang.Object</code> 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
boolean	isPlant()	The Method is used to check the current piece type of Game piece: PLANT
boolean	isShooter()	The Method is used to check the current piece type of Game piece: PLANT SHOOTER
boolean	isSunflower()	The Method is used to check the current piece type of Game piece: PLANT SUNFLOWER
boolean	isZombie()	The Method is used to check the current piece type Game piece: ZOMBIE
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
<code>java.lang.String</code>	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

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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()
```

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)
```

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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

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Returns:

True, If the two objects are same

isZombie

```
public boolean isZombie()
```

The Method is used to check the current piece type Game piece: ZOMBIE

Returns:

True, if the current piece located is a Zombie else false

isPlant

```
public boolean isPlant()
```

The Method is used to check the current piece type of Game piece: PLANT

Returns:

True, if the current piece located is a PLANT else false

isShooter

```
public boolean isShooter()
```

The Method is used to check the current piece type of Game piece: PLANT SHOOTER

Returns:

True, if the current piece located is a PLANT SHOOTER else false

isSunflower

```
public boolean isSunflower()
```

The Method is used to check the current piece type of Game piece: PLANT SUNFLOWER

Returns:

True, if the current piece located is a PLANT SUNFLOWER else false

Search

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Returns:

Deep copy of the square

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