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Class Enemy

- java.lang.Object
 - - ◆ java.awt.geom.RectangularShape
 - ◆
 - ◇ java.awt.geom.Rectangle2D
 - ◇
 - java.awt.Rectangle
 - Enemy
 - All Implemented Interfaces:
 - java.awt.Shape, java.io.Serializable, java.lang.Cloneable

```
public class Enemy
    extends java.awt.Rectangle
```

Class for AI control

See Also:

[Serialized Form](#)

◆ Nested Class Summary



Nested classes/interfaces inherited from class `java.awt.geom.Rectangle2D`

`java.awt.geom.Rectangle2D.Double`, `java.awt.geom.Rectangle2D.Float`



Field Summary

Fields

Modifier and Type	Field and Description
<code>private int</code>	<u>dir</u>
<code>private int</code>	<u>down</u>
<code>private int</code>	<u>find_path</u>
<code>private int</code>	<u>lastDir</u>
<code>private int</code>	<u>left</u>
<code>private int</code>	<u>random</u>
<code>java.util.Random</code>	<u>randomGen</u>
<code>private int</code>	<u>right</u>
<code>private static long</code>	<u>serialVersionUID</u>
<code>private int</code>	<u>smart</u>
<code>private int</code>	<u>spd</u>
<code>private int</code>	<u>state</u>
<code>private int</code>	<u>targetTime</u>
<code>private int</code>	<u>time</u>
<code>private int</code>	<u>up</u>



Fields inherited from class `java.awt.Rectangle`

`height`, `width`, `x`, `y`



Fields inherited from class `java.awt.geom.Rectangle2D`

`OUT_BOTTOM`, `OUT_LEFT`, `OUT_RIGHT`, `OUT_TOP`



Constructor Summary

Constructors

Enemy

• Constructor and Description

Enemy(int x, int y)

Constructor for the Enemy class Assigns direction/movement

◆ Method Summary

All Methods Instance Methods Concrete Methods

Modifier and Type

Method and Description

private boolean	<u>canMove</u> (int nextx, int nexty) Determines if the object is colliding with the wall tiles, not allowing the player or ghost to clip through the
void	<u>Render</u> (java.awt.Graphics g) Draws the AI with the specific texture/layout/color
void	<u>tick</u> () Movement control for the ghosts.



Methods inherited from class java.awt.Rectangle

add, add, add, contains, contains, contains, contains, createIntersection, createUnion, equals, getBounds, getBounds2D, getHeight, getLocation, getSize, getWidth, getX, getY, grow, inside, intersection, intersects, isEmpty, move, outcode, reshape, resize, setBounds, setBounds, setLocation, setLocation, setRect, setSize, setSize, toString, translate, union



Methods inherited from class java.awt.geom.Rectangle2D

add, add, add, contains, contains, getPathIterator, getPathIterator, hashCode, intersect, intersects, intersectsLine, intersectsLine, outcode, setFrame, setRect, union



Methods inherited from class java.awt.geom.RectangularShape

clone, contains, contains, getCenterX, getCenterY, setFrame, getMaxX, getMaxY, getMinX, getMinY, intersects, setFrame, setFrame, setFrameFromCenter, setFrameFromCenter, setFrameFromDiagonal, setFrameFromDiagonal



Methods inherited from class java.lang.Object

finalize, getClass, notify, notifyAll, wait, wait, wait



Methods inherited from interface java.awt.Shape

contains, contains, contains, contains, getPathIterator, getPathIterator, intersects, intersects

◆ Field Detail

◆ **serialVersionUID**

```
private static final long serialVersionUID
```

See Also:

[Constant Field Values](#)

◆ **random**

```
private int random
```

◆ **smart**

```
private int smart
```

◆ **find_path**

```
private int find_path
```

◆ **state**

```
private int state
```

◆ **right**

```
private int right
```

◆ **left**

```
private int left
```

◆ **up**

```
private int up
```

◆ **down**

```
private int down
```

◆ **dir**

```
private int dir
```

◆ **randomGen**

```
public java.util.Random randomGen
```

◆ **time**

```
private int time
```

◆ **targetTime**

```
private int targetTime
```

◆ **spd**

```
private int spd
```

◆ **lastDir**

```
private int lastDir
```

- **◆ Constructor Detail**

- ◆ **Enemy**

```
public Enemy(int x,  
             int y)
```

Constructor for the Enemy class Assigns direction/movement

Parameters:

x - Starting point for the enemy on x axis

y - Starting point for the enemy on y axis

- ◆ **Method Detail**

- ◆ **tick**

```
public void tick()
```

Movement control for the ghosts. Includes 'smart' state - follows player

- ◆ **canMove**

```
private boolean canMove(int nextx,  
                        int nexty)
```

Determines if the object is colliding with the wall tiles, not allowing the player or ghost to clip through the

Parameters:

nextx - X-Coordinate in the direction the enemy is traveling

nexty - Y-Coordinate in the direction the enemy is traveling

Returns:

True or false

- ◆ **Render**

```
public void Render(java.awt.Graphics g)
```

Draws the AI with the specific texture/layout/color

Parameters:

g - Graphics for the ghost

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Class Game

- java.lang.Object
 - ♦ java.awt.Component
 - ♦ ◇ java.awt.Canvas
 - ◇ · Game
 - All Implemented Interfaces:
 - java.awt.event.KeyListener, java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.lang.Runnable, java.util.EventListener, javax.accessibility.Accessible
-

```
public class Game
extends java.awt.Canvas
implements java.lang.Runnable, java.awt.event.KeyListener
```

Class responsible for game control

See Also:

[Serialized Form](#)

- ♦

Nested Class Summary

◇
Nested classes/interfaces inherited from class java.awt.Canvas

```
java.awt.Canvas.AccessibleAWTCanvas
```

◇
Nested classes/interfaces inherited from class java.awt.Component

```
java.awt.Component.AccessibleAWTComponent,
java.awt.Component.BaselineResizeBehavior,
java.awt.Component.BltBufferStrategy,
java.awt.Component.FlipBufferStrategy
```

- ♦

Field Summary

Fields

Modifier and Type	Field and Description
static int	<u>HEIGHT</u>
private boolean	<u>isRunning</u>
static <u>Level</u>	<u>level</u>
static <u>Player</u>	<u>player</u>

Enemy

Modifier and Type	Field and Description
private static java.lang.Integer	<u>score</u>
private static long	<u>serialVersionUID</u>
static <u>SpriteSheet</u>	<u>spritesheet</u>
private java.lang.Thread	<u>thread</u>
static java.lang.String	<u>TITLE</u>
static int	<u>WIDTH</u>



Fields inherited from class java.awt.Component

accessibleContext, BOTTOM_ALIGNMENT, CENTER_ALIGNMENT, LEFT_ALIGNMENT, RIGHT_ALIGNMENT, TOP_ALIGNMENT



Fields inherited from interface java.awt.image.ImageObserver

ABORT, ALLBITS, ERROR, FRAMEBITS, PROPERTIES, SOMEBITS



Constructor Summary

Constructors

Constructor and Description

Game ()

Constructor for the game class.



Method Summary

All Methods Static Methods Instance Methods Concrete Methods

Modifier and Type	Method and Description
static void	<u>addScore</u> () Adds score
void	<u>keyPressed</u> (java.awt.event.KeyEvent e) Checks what key was pressed and starts movement
void	<u>keyReleased</u> (java.awt.event.KeyEvent e) Checks what key was released and stops movement
void	<u>keyTyped</u> (java.awt.event.KeyEvent e) Checks what key was typed.
static void	<u>main</u> (java.lang.String[] args) Test class for testing the game
private void	<u>render</u> () Refreshes the game
static void	<u>resetScore</u> ()

Enemy

Modifier and Type	Method and Description
	Resets the score to 0
static java.lang.Integer	<u>returnScore</u> () Returns score
void	<u>run</u> () Game display control
void	<u>start</u> () Starts the game
void	<u>stop</u> () Stops the game
private void	<u>tick</u> () Game control



Methods inherited from class `java.awt.Canvas`

```
addNotify, createBufferStrategy, createBufferStrategy,
getAccessibleContext, getBufferStrategy, paint, update
```



Methods inherited from class java.awt.Component

action, add, addComponentListener, addFocusListener, addHierarchyBoundsListener, addHierarchyListener, addInputMethodListener, addKeyListener, addMouseListener, addMouseMotionListener, addMouseWheelListener, addPropertyChangeListener, addPropertyChangeListener, applyComponentOrientation, areFocusTraversalKeysSet, bounds, checkImage, checkImage, coalesceEvents, contains, contains, createImage, createImage, createVolatileImage, createVolatileImage, deliverEvent, disable, disableEvents, dispatchEvent, doLayout, enable, enable, enableEvents, enableInputMethods, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getAlignmentX, getAlignmentY, getBackground, getBaseline, getBaselineResizeBehavior, getBounds, getBounds, getColorModel, getComponentAt, getComponentAt, getComponentListeners, getComponentOrientation, getCursor, getDropTarget, getFocusCycleRootAncestor, getFocusListeners, getFocusTraversalKeys, getFocusTraversalKeysEnabled, getFont, getFontMetrics, getForeground, getGraphics, getGraphicsConfiguration, getHeight, getHierarchyBoundsListeners, getHierarchyListeners, getIgnoreRepaint, getInputContext, getInputMethodListeners, getInputMethodRequests, getKeyListeners, getListeners, getLocale, getLocation, getLocation, getLocationOnScreen, getMaximumSize, getMinimumSize, getMouseListeners, getMouseMotionListeners, getMousePosition, getMouseWheelListeners, getName, getParent, getPeer, getPreferredSize, getPropertyChangeListeners, getPropertyChangeListeners, getSize, getSize, getToolkit, getTreeLock, getWidth, getX, getY, gotFocus, handleEvent, hasFocus, hide, imageUpdate, inside, invalidate, isBackgroundSet, isCursorSet, isDisplayable, isDoubleBuffered, isEnabled, isFocusable, isFocusCycleRoot, isFocusOwner, isFocusTraversable, isFontSet, isForegroundSet, isLightweight, isMaximumSizeSet, isMinimumSizeSet, isOpaque, isPreferredSizeSet, isShowing, isValid, isVisible,

Enemy

```
keyDown, keyUp, layout, list, list, list, list, list, locate,
location, lostFocus, minimumSize, mouseDown, mouseDrag, mouseEnter,
mouseExit, mouseMove, mouseUp, move, nextFocus, paintAll,
paramString, postEvent, preferredSize, prepareImage, prepareImage,
print, printAll, processComponentEvent, processEvent,
processFocusEvent, processHierarchyBoundsEvent,
processHierarchyEvent, processInputMethodEvent, processKeyEvent,
processMouseEvent, processMouseMotionEvent, processMouseWheelEvent,
remove, removeComponentListener, removeFocusListener,
removeHierarchyBoundsListener, removeHierarchyListener,
removeInputMethodListener, removeKeyListener, removeMouseListener,
removeMouseMotionListener, removeMouseWheelListener, removeNotify,
removePropertyChangeListener, removePropertyChangeListener, repaint,
repaint, repaint, repaint, requestFocus, requestFocus,
requestFocusInWindow, requestFocusInWindow, reshape, resize, resize,
revalidate, setBackground, setBounds, setBounds,
setComponentOrientation, setCursor, setDropTarget, setEnabled,
setFocusable, setFocusTraversalKeys, setFocusTraversalKeysEnabled,
setFont, setForeground, setIgnoreRepaint, setLocale, setLocation,
setLocation, setMaximumSize, setMinimumSize, setName,
setPreferredSize, setSize, setSize, setVisible, show, show, size,
toString, transferFocus, transferFocusBackward,
transferFocusUpCycle, validate
```

◇

Methods inherited from class java.lang.Object

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

• ◆

Field Detail

◇ serialVersionUID

```
private static final long serialVersionUID
```

See Also:

[Constant Field Values](#)

◇ isRunning

```
private boolean isRunning
```

◇ WIDTH

```
public static int WIDTH
```

◇ HEIGHT

```
public static int HEIGHT
```

◇ TITLE

```
public static final java.lang.String TITLE
```

See Also:

[Constant Field Values](#)

Enemy

◇ thread

```
private java.lang.Thread thread
```

◇ player

```
public static Player player
```

◇ level

```
public static Level level
```

◇ spritesheet

```
public static SpriteSheet spritesheet
```

◇ score

```
private static java.lang.Integer score
```



Constructor Detail

◇ Game

```
public Game()
```

Constructor for the game class. Draws the game and assigns controls to Player/AI



Method Detail

◇ addScore

```
public static void addScore()
```

Adds score

◇ resetScore

```
public static void resetScore()
```

Resets the score to 0

◇ returnScore

```
public static java.lang.Integer returnScore()
```

Returns score

◇ start

```
public void start()
```

Starts the game

Enemy

◇ stop

```
public void stop()
```

Stops the game

◇ tick

```
private void tick()
```

Game control

◇ render

```
private void render()
```

Refreshes the game

◇ run

```
public void run()
```

Game display control

Specified by:

run in interface `java.lang.Runnable`

◇ main

```
public static void main(java.lang.String[] args)
```

Test class for testing the game

Parameters:

args -

◇ keyPressed

```
public void keyPressed(java.awt.event.KeyEvent e)
```

Checks what key was pressed and starts movement

Specified by:

keyPressed in interface `java.awt.event.KeyListener`

◇ keyReleased

```
public void keyReleased(java.awt.event.KeyEvent e)
```

Checks what key was released and stops movement

Specified by:

keyReleased in interface `java.awt.event.KeyListener`

◇ keyTyped

```
public void keyTyped(java.awt.event.KeyEvent e)
```

Checks what key was typed. Ignored in this instance

Specified by:

keyTyped in interface `java.awt.event.KeyListener`

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Class Highscores

- java.lang.Object
 - ◆ Highscores
 - All Implemented Interfaces:
 - java.lang.Comparable<[Highscores](#)>
-

```
public class Highscores
extends java.lang.Object
implements java.lang.Comparable<Highscores>
```

The class is responsible for database access and highscore storage

- ◆ **Field Summary**

Fields

Modifier and Type	Field and Description
private java.lang.String	name
private java.lang.Integer	score
private static java.lang.String	url

- ◆ **Constructor Summary**

Constructors

Constructor and Description

[Highscores](#)(java.lang.String name, java.lang.Integer score)
 Constructor for the Highscores class.

- ◆ **Method Summary**

All Methods [Static Methods](#) [Instance Methods](#) [Concrete Methods](#)

Modifier and Type	Method and Description
-------------------	------------------------

Enemy

Modifier and Type	Method and Description
static void	<u>addScore</u> (java.lang.String name, int score) Adds a score into database.
int	<u>compareTo</u> (<u>Highscores</u> o) Compares two scores
private static java.sql.Connection	<u>connect</u> () Connects to the database.
private static void	<u>createNewTable</u> () Creates a new table if it doesn't exist
java.lang.String	<u>getName</u> () Returns name
java.lang.Integer	<u>getScore</u> () Returns score
static java.lang.String	<u>getURL</u> () Returns URL for database location
private void	<u>insert</u> (<u>Highscores</u> score) Inserts items into the database
private static java.util.ArrayList< <u>Highscores</u> >	<u>retrieveAll</u> () Retrieves items from the database
static java.util.ArrayList< <u>Highscores</u> >	<u>retrieveScores</u> () Retrieves scores from the file in an array
java.lang.String	<u>toString</u> () Converts into String the Highscores class

◇

Methods inherited from class java.lang.Object

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

• ◆ Field Detail

◇ score

private java.lang.Integer score

◇ name

private java.lang.String name

◇ url

private static java.lang.String url

◆ Constructor Detail

Enemy

◇ Highscores

```
public Highscores(java.lang.String name,  
                  java.lang.Integer score)
```

Constructor for the Highscores class.

Parameters:

Player - name

Player - score



Method Detail

◇ getName

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

Returns name

Returns:

Player name

◇ getScore

```
public java.lang.Integer getScore()
```

Returns score

Returns:

Player score

◇ getURL

```
public static java.lang.String getURL()
```

Returns URL for database location

Returns:

url for database location

◇ retrieveScores

```
public static java.util.ArrayList<Highscores> retrieveScores()
```

Retrieves scores from the file in an array

Returns:

array containing the scores

◇ addScore

```
public static void addScore(java.lang.String name,  
                             int score)
```

Adds a score into database.

Parameters:

Name - of player

Score - of player

Enemy

◇ compareTo

```
public int compareTo(Highscores o)
```

Compares two scores

Specified by:

```
compareTo in interface java.lang.Comparable<Highscores>
```

Parameters:

```
class - to compare to
```

Returns:

"-" if Less than compared class, 0 if same, "+" if greater than

◇ toString

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

Converts into String the Highscores class

Overrides:

```
toString in class java.lang.Object
```

Returns:

String of name + score

◇ connect

```
private static java.sql.Connection connect()
```

Connects to the database. Creates a new file if fails

Returns:

Connection to the database

◇ insert

```
private void insert(Highscores score)
```

Inserts items into the database

Parameters:

```
Score - to insert
```

◇ createNewTable

```
private static void createNewTable()
```

Creates a new table if it doesn't exist

◇ retrieveAll

```
private static java.util.ArrayList<Highscores> retrieveAll()
```

Retrieves items from the database

Returns:

Array containing the scores

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Class Level

- java.lang.Object
-  Level

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

Class responsible for creation of the game level

- 

Field Summary

Fields

Modifier and Type	Field and Description
java.util.List< Enemy >	enemies
int	height
java.util.List< Pellet >	pellets
Tile [][]	tiles
int	width

- 

Constructor Summary

Constructors

Constructor and Description

[Level](#)(java.lang.String path)
Constructor for the level class

- 

Method Summary

All Methods [Instance Methods](#) [Concrete Methods](#)

Modifier and Type	Method and Description
void	render (java.awt.Graphics g) Class responsible for rendering game tiles
void	tick () Class responsible for updating enemies

Enemy

◊ Methods inherited from class java.lang.Object

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

- ◆ **Field Detail**

◊ width

`public int width`

◊ height

`public int height`

◊ tiles

`public Tile[][] tiles`

◊ pellets

`public java.util.List<Pellet> pellets`

◊ enemies

`public java.util.List<Enemy> enemies`

- ◆ **Constructor Detail**

◊ Level

`public Level(java.lang.String path)`

Constructor for the level class

Parameters:

path - to the level map

- ◆ **Method Detail**

◊ tick

`public void tick()`

Class responsible for updating enemies

◊ render

`public void render(java.awt.Graphics g)`

Class responsible for rendering game tiles

Parameters:

g - Render settings

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Class MainMenuScene

- java.lang.Object
- - ◆ javafx.application.Application
 - ◆
 - ◆ MainMenuScene

```
public class MainMenuScene
    extends javafx.application.Application
```

Draws the main menu for the game

- - ◆ **Nested Class Summary**

◆

Nested classes/interfaces inherited from class javafx.application.Application

javafx.application.Application.Parameters

- ◆ **Field Summary**

Fields

Modifier and Type	Field and Description
private javafx.scene.image.Image	backImage
private javafx.scene.control.Button	btnBack
private javafx.scene.control.Button	btnExit
private javafx.scene.control.Button	btnHighScores
private javafx.scene.control.Button	btnStart
private static javax.swing.JFrame	frame
private static Game	game
private javafx.scene.control.ListView<java.lang.String>	lstScores
private javafx.scene.Scene	mainMenuScene

Enemy

Modifier and Type	Field and Description
private static java.lang.String	<u>playerName</u>
private javafx.scene.Scene	<u>scene</u>
private javafx.scene.control.Label	<u>scoreLabel</u>



Fields inherited from class javafx.application.Application

STYLESHEET_CASPIAN, STYLESHEET_MODENA



Constructor Summary

Constructors

Constructor and Description

MainMenuScene()



Method Summary

All Methods Static Methods Instance Methods Concrete Methods

Modifier and Type	Method and Description
static void	<u>disposeFrame()</u> Disposes the game frame and stops the game
private void	<u>showScores</u> (javafx.stage.Stage currStage, javafx.scene.Scene oldScene) Changes the scene of the main menu to display the scores
void	<u>start</u> (javafx.stage.Stage primaryStage) Draws the GUI for the main menu and assigns all buttons
private void	<u>startGame</u> (javafx.stage.Stage currStage, javafx.scene.Scene oldScene) Starts the game in a new window.



Methods inherited from class javafx.application.Application

getHostServices, getParameters, getUserAgentStylesheet, init, launch, launch, notifyPreloader, setUserAgentStylesheet, stop



Methods inherited from class java.lang.Object

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

◆ **Field Detail**◇ **mainMenuScene**

```
private javafx.scene.Scene mainMenuScene
```

◇ **scene**

```
private javafx.scene.Scene scene
```

◇ **btnStart**

```
private javafx.scene.control.Button btnStart
```

◇ **btnExit**

```
private javafx.scene.control.Button btnExit
```

◇ **btnHighScores**

```
private javafx.scene.control.Button btnHighScores
```

◇ **btnBack**

```
private javafx.scene.control.Button btnBack
```

◇ **scoreLabel**

```
private javafx.scene.control.Label scoreLabel
```

◇ **backImage**

```
private javafx.scene.image.Image backImage
```

◇ **lstScores**

```
private javafx.scene.control.ListView<java.lang.String> lstScores
```

◇ **frame**

```
private static javax.swing.JFrame frame
```

◇ **playerName**

```
private static java.lang.String playerName
```

◇ **game**

```
private static Game game
```

**Constructor Detail**◇ **MainMenuScene**

```
public MainMenuScene()
```

**Method Detail**

Enemy

- **◇ start**

```
public void start(javafx.stage.Stage primaryStage)
    throws java.lang.Exception
```

Draws the GUI for the main menu and assigns all buttons

Specified by:

```
start in class javafx.application.Application
```

Parameters:

```
primaryStage -
```

Throws:

```
java.lang.Exception
```

- **◇ startGame**

```
private void startGame(javafx.stage.Stage currStage,
    javafx.scene.Scene oldScene)
```

Starts the game in a new window. Asks user for name input

Parameters:

```
currStage -
```

```
oldScene -
```

- **◇ disposeFrame**

```
public static void disposeFrame()
```

Disposes the game frame and stops the game

- **◇ showScores**

```
private void showScores(javafx.stage.Stage currStage,
    javafx.scene.Scene oldScene)
```

Changes the scene of the main menu to display the scores

Parameters:

```
currStage -
```

```
oldScene -
```

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Class Pellet

- java.lang.Object
 - ♦ java.awt.geom.RectangularShape
 - ♦ java.awt.geom.Rectangle2D
 - ♦ java.awt.Rectangle
 - Pellet

- All Implemented Interfaces:
java.awt.Shape, java.io.Serializable, java.lang.Cloneable
-

```
public class Pellet
extends java.awt.Rectangle
```

Class responsible for the points to be drawn on board

See Also:

[Serialized Form](#)

- **Nested Class Summary**

◊
**Nested classes/interfaces inherited from
class java.awt.geom.Rectangle2D**

java.awt.geom.Rectangle2D.Double, java.awt.geom.Rectangle2D.Float

- **Field Summary**

Fields

Modifier and Type	Field and Description
-------------------	-----------------------

private static long	serialVersionUID
---------------------	----------------------------------

◊
Fields inherited from class java.awt.Rectangle

height, width, x, y

◊
Fields inherited from class java.awt.geom.Rectangle2D

OUT_BOTTOM, OUT_LEFT, OUT_RIGHT, OUT_TOP

- **Constructor Summary**

Constructors

Constructor and Description

Pellet (int x, int y) Constructor for the pellet class

- **Method Summary**

All Methods [Instance Methods](#) [Concrete Methods](#)

Modifier and Type	Method and Description
void	<u>render</u> (java.awt.Graphics g) Draws the Graphic with the specified color



Methods inherited from class java.awt.Rectangle

add, add, add, contains, contains, contains, contains, createIntersection, createUnion, equals, getBounds, getBounds2D, getHeight, getLocation, getSize, getWidth, getX, getY, grow, inside, intersection, intersects, isEmpty, move, outcode, reshape, resize, setBounds, setBounds, setLocation, setLocation, setRect, setSize, setSize, toString, translate, union



Methods inherited from class java.awt.geom.Rectangle2D

add, add, add, contains, contains, getPathIterator, getPathIterator, hashCode, intersect, intersects, intersectsLine, intersectsLine, outcode, setFrame, setRect, union



Methods inherited from class java.awt.geom.RectangularShape

clone, contains, contains, getCenterX, getCenterY, setFrame, getMaxX, getMaxY, getMinX, getMinY, intersects, setFrame, setFrame, setFrameFromCenter, setFrameFromCenter, setFrameFromDiagonal, setFrameFromDiagonal



Methods inherited from class java.lang.Object

finalize, getClass, notify, notifyAll, wait, wait, wait



Methods inherited from interface java.awt.Shape

contains, contains, contains, contains, getPathIterator, getPathIterator, intersects, intersects



Field Detail

◇ serialVersionUID

private static final long serialVersionUID

See Also:

[Constant Field Values](#)



Constructor Detail

◇ **Pellet**

```
public Pellet(int x,  
              int y)
```

Constructor for the pellet class

Parameters:

x -

y -



Method Detail

◇ **render**

```
public void render(java.awt.Graphics g)
```

Draws the Graphic with the specified color

Parameters:

graphic - to be filled in

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Class Player

- java.lang.Object
 - - ◆ java.awt.geom.RectangularShape
 - ◆
 - ◇ java.awt.geom.Rectangle2D
 - ◇
 - java.awt.Rectangle
 - - Player
 - All Implemented Interfaces:
 - java.awt.Shape, java.io.Serializable, java.lang.Cloneable

```
public class Player
    extends java.awt.Rectangle
```

Creates a player on board and allows player control

See Also:

[Serialized Form](#)

◆ Nested Class Summary



Nested classes/interfaces inherited from class java.awt.geom.Rectangle2D

java.awt.geom.Rectangle2D.Double, java.awt.geom.Rectangle2D.Float



Field Summary

Fields

Modifier and Type	Field and Description
boolean	<u>down</u>
boolean	<u>left</u>
boolean	<u>right</u>
private static long	<u>serialVersionUID</u>
private int	<u>speed</u>
boolean	<u>up</u>



Fields inherited from class java.awt.Rectangle

height, width, x, y



Fields inherited from class java.awt.geom.Rectangle2D

OUT_BOTTOM, OUT_LEFT, OUT_RIGHT, OUT_TOP



Constructor Summary

Constructors

Constructor and Description

[Player](#)(int x, int y)
Constructor for the Player class



Method Summary

All Methods [Instance Methods](#) [Concrete Methods](#)

Modifier and Type	Method and Description
private boolean	<u>canMove</u> (int nextx, int nexty) Private class for seeing if the player can move in a certain direction
void	<u>render</u> (java.awt.Graphics g) Draws the graphic to a specified color

- | Modifier and Type | Method and Description |
|-------------------|------------------------|
|-------------------|------------------------|

void	<u>tick()</u> Player control method
------	--



Methods inherited from class java.awt.Rectangle

add, add, add, contains, contains, contains, contains, createIntersection, createUnion, equals, getBounds, getBounds2D, getHeight, getLocation, getSize, getWidth, getX, getY, grow, inside, intersection, intersects, isEmpty, move, outcode, reshape, resize, setBounds, setBounds, setLocation, setLocation, setRect, setSize, setSize, toString, translate, union



Methods inherited from class java.awt.geom.Rectangle2D

add, add, add, contains, contains, getPathIterator, getPathIterator, hashCode, intersect, intersects, intersectsLine, intersectsLine, outcode, setFrame, setRect, union



Methods inherited from class java.awt.geom.RectangularShape

clone, contains, contains, getCenterX, getCenterY, setFrame, getMaxX, getMaxY, getMinX, getMinY, intersects, setFrame, setFrame, setFrameFromCenter, setFrameFromCenter, setFrameFromDiagonal, setFrameFromDiagonal



Methods inherited from class java.lang.Object

finalize, getClass, notify, notifyAll, wait, wait, wait



Methods inherited from interface java.awt.Shape

contains, contains, contains, contains, getPathIterator, getPathIterator, intersects, intersects

- ## Field Detail

serialVersionUID

```
private static final long serialVersionUID
```

See Also:

[Constant Field Values](#)

right

```
public boolean right
```


Enemy

◊ left

```
public boolean left
```

◊ up

```
public boolean up
```

◊ down

```
public boolean down
```

◊ speed

```
private int speed
```



Constructor Detail

◊ Player

```
public Player(int x,  
              int y)
```

Constructor for the Player class

Parameters:

x - coordinate for player image spawn

y - coordinate for player image spawn



Method Detail

◊ tick

```
public void tick()
```

Player control method

Parameters:

none -

◊ canMove

```
private boolean canMove(int nextx,  
                        int nexty)
```

Private class for seeing if the player can move in a certain direction

Parameters:

nextx -

nexty -

Returns:

True or false depending on outcome.

◊ render

```
public void render(java.awt.Graphics g)
```

Draws the graphic to a specified color

Parameters:

g -

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Class SpriteSheet

- java.lang.Object
- ◆ SpriteSheet

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

Retrieves a sprite image for the characters

- ◆ **Field Summary**

Fields

Modifier and Type	Field and Description
private java.awt.image.BufferedImage	<u>sheet</u>

- ◆ **Constructor Summary**

Constructors

Constructor and Description
<u>SpriteSheet</u> (java.lang.String path) Constructor for the SpriteSheet class Retrieves the image from the path

- ◆ **Method Summary**

All Methods Instance Methods Concrete Methods

Modifier and Type	Method and Description
java.awt.image.BufferedImage	<u>getSprite</u> (int xx, int yy) Gets a 16x16 sprite at the coordinates

◇ Methods inherited from class java.lang.Object

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

• ◇

Field Detail

◇ sheet

```
private java.awt.image.BufferedImage sheet
```

◇

Constructor Detail

◇ SpriteSheet

```
public SpriteSheet(java.lang.String path)
```

Constructor for the SpriteSheet class Retrieves the image from the path

Parameters:

Image - path

◇

Method Detail

◇ getSprite

```
public java.awt.image.BufferedImage getSprite(int xx,  
                                              int yy)
```

Gets a 16x16 sprite at the coordinates

Parameters:

xx - x coordinate

yy - y coordinate

Returns:

Sprite

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Class Texture

- java.lang.Object
- ◆ Texture

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

Retrieves the spritesheets for the player and ghosts

- ◆

Field Summary

Fields

Modifier and Type	Field and Description
static java.awt.image.BufferedImage	<u>ghost</u>
static java.awt.image.BufferedImage	<u>player</u>

- ◆

Constructor Summary

Constructors

Constructor and Description

Texture()
Constructor for the Texture Class Retrieves sprite images

- ◆

Method Summary

◇

Methods inherited from class java.lang.Object

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

- ◆

Field Detail

◇ **player**

```
public static java.awt.image.BufferedImage player
```

◇ **ghost**

```
public static java.awt.image.BufferedImage ghost
```



Constructor Detail

◇ **Texture**

```
public Texture()
```

Constructor for the Texture Class Retrieves sprite images

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Class Tile

- java.lang.Object
 - - ◆ java.awt.geom.RectangularShape
 - ◆
 - ◇ java.awt.geom.Rectangle2D
 - ◇
 - java.awt.Rectangle
 - - Tile
 - All Implemented Interfaces:
 - java.awt.Shape, java.io.Serializable, java.lang.Cloneable

```
public class Tile
    extends java.awt.Rectangle
```

Class responsible for drawing a tiles on the board
 See Also:

[Serialized Form](#)

- - ◆ **Nested Class Summary**

◇
**Nested classes/interfaces inherited from
 class java.awt.geom.Rectangle2D**

java.awt.geom.Rectangle2D.Double, java.awt.geom.Rectangle2D.Float

◆ Field Summary



Fields inherited from class java.awt.Rectangle

height, width, x, y



Fields inherited from class java.awt.geom.Rectangle2D

OUT_BOTTOM, OUT_LEFT, OUT_RIGHT, OUT_TOP



Constructor Summary

Constructors

Constructor and Description

[Tile](#)(int x, int y)

Constructor for the tile class



Method Summary

All Methods [Instance Methods](#) [Concrete Methods](#)

Modifier and Type

Method and Description

void

[render](#)(java.awt.Graphics g)

Fills the graphic with the specific color



Methods inherited from class java.awt.Rectangle

add, add, add, contains, contains, contains, contains, createIntersection, createUnion, equals, getBounds, getBounds2D, getHeight, getLocation, getSize, getWidth, getX, getY, grow, inside, intersection, intersects, isEmpty, move, outcode, reshape, resize, setBounds, setBounds, setLocation, setLocation, setRect, setSize, setSize, toString, translate, union



Methods inherited from class java.awt.geom.Rectangle2D

add, add, add, contains, contains, getPathIterator, getPathIterator, hashCode, intersect, intersects, intersectsLine, intersectsLine, outcode, setFrame, setRect, union



Methods inherited from class java.awt.geom.RectangularShape

clone, contains, contains, getCenterX, getCenterY, setFrame, getMaxX, getMaxY, getMinX, getMinY, intersects, setFrame, setFrame, setFrameFromCenter, setFrameFromCenter, setFrameFromDiagonal, setFrameFromDiagonal

◇ **Methods inherited from class java.lang.Object**

`finalize, getClass, notify, notifyAll, wait, wait, wait`

◇ **Methods inherited from interface java.awt.Shape**

`contains, contains, contains, contains, getPathIterator, getPathIterator, intersects, intersects`

• ◇ **Constructor Detail**

◇ **Tile**

```
public Tile(int x,  
            int y)
```

Constructor for the tile class

Parameters:

x - starting x point
y - starting y point

◇ **Method Detail**

◇ **render**

```
public void render(java.awt.Graphics g)
```

Fills the graphic with the specific color

Parameters:

g -

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