

JavaScript is disabled on your browser.

[Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- [Summary:](#)
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)
  
- [Detail:](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)

## Class Bitmap

- [java.lang.Object](#)
- [◆ Bitmap](#)

---

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

- [◆](#)

### Constructor Summary

Constructors

#### Constructor and Description

[Bitmap](#)(java.lang.String path)

## ◆ Method Summary



### Methods inherited from class java.lang.Object

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

•



## Constructor Detail

### ◇ Bitmap

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

#### Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- [Summary:](#)
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)
  
- [Detail:](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)

JavaScript is disabled on your browser.

#### Skip navigation links

- [Package](#)
- [Class](#)

- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)

- [Prev Class](#)
- [Next Class](#)

- [Frames](#)
- [No Frames](#)

- [All Classes](#)

- Summary:
- [Nested](#) |
- [Field](#) |
- [Constr](#) |
- [Method](#)

- Detail:
- [Field](#) |
- [Constr](#) |
- [Method](#)

## 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
private int	<a href="#"><u>dir</u></a>
private int	<a href="#"><u>down</u></a>
private int	<a href="#"><u>find path</u></a>
private int	<a href="#"><u>lastDir</u></a>
private int	<a href="#"><u>left</u></a>
private int	<a href="#"><u>random</u></a>
java.util.Random	<a href="#"><u>randomGen</u></a>
private int	<a href="#"><u>right</u></a>
private static long	<a href="#"><u>serialVersionUID</u></a>
private int	<a href="#"><u>smart</u></a>
private int	<a href="#"><u>spd</u></a>
private int	<a href="#"><u>state</u></a>
private int	<a href="#"><u>targetTime</u></a>
private int	<a href="#"><u>time</u></a>
private int	<a href="#"><u>up</u></a>

### ◊ 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

[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	<a href="#">canMove</a> (int nextx, int nexty) Checks if the AI can move in a certain direction
void	<a href="#">Render</a> (java.awt.Graphics g) Draws the AI with the specific color
void	<a href="#">tick</a> () Movement control

◇

### 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

## Bitmap

### ◇ 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 -

y -



**Method Detail**

◇ **tick**

```
public void tick()
```

Movement control

◇ **canMove**

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

Checks if the AI can move in a certain direction

Parameters:

nextx -

nexty -

Returns:

True or False

◇ **Render**

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

Draws the AI with the specific color

Parameters:

g -

Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)

- [No Frames](#)
- [All Classes](#)
- Summary:
  - [Nested](#) |
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)
- Detail:
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)

JavaScript is disabled on your browser.

[Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
- [Prev Class](#)
- [Next Class](#)
- [Frames](#)
- [No Frames](#)
- [All Classes](#)
- Summary:
  - [Nested](#) |
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)
- Detail:
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)

## 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	<a href="#"><u>HEIGHT</u></a>
private boolean	<a href="#"><u>isRunning</u></a>
static <a href="#"><u>Level</u></a>	<a href="#"><u>level</u></a>
static <a href="#"><u>Player</u></a>	<a href="#"><u>player</u></a>
private static long	<a href="#"><u>serialVersionUID</u></a>
static <a href="#"><u>SpriteSheet</u></a>	<a href="#"><u>spritesheet</u></a>
private java.lang.Thread	<a href="#"><u>thread</u></a>

## Bitmap

### Modifier and Type

### Field and Description

static java.lang.String TITLE

static int WIDTH



### 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

void keyPressed(java.awt.event.KeyEvent e)  
Checks what key was pressed and starts movement

void keyReleased(java.awt.event.KeyEvent e)  
Checks what was released and stops movement

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

static void main(java.lang.String[] args)  
Test class for testing the game

private void render()  
Refreshes the game

void run()  
Game running control

void start()  
Starts the game

void stop()  
Stops the game

private void tick()  
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, 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, getListeners, 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,  
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,

## Bitmap

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](#)

### ◇ thread

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

### ◇ player

```
public static Player player
```

### ◇ level

```
public static Level level
```

### ◇ spritesheet

```
public static SpriteSheet spritesheet
```



## Constructor Detail

## ◇ Game

```
public Game()
```

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



## Method Detail

### ◇ start

```
public void start()
```

Starts the game

### ◇ 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 running 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 was released and stops movement

Specified by:

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

◇ **keyTyped**

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

Specified by:

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

Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested](#) |
- [Field](#) |
- [Constr](#) |
- [Method](#)
  
- Detail:
- [Field](#) |
- [Constr](#) |
- [Method](#)

JavaScript is disabled on your browser.

Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)

- [Deprecated](#)
- [Index](#)
- [Help](#)
- [Prev Class](#)
- [Next Class](#)
- [Frames](#)
- [No Frames](#)
- [All Classes](#)
- Summary:
  - Nested |
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)
- Detail:
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)

## 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	<a href="#"><u>name</u></a>
private java.lang.Integer	<a href="#"><u>score</u></a>
private static java.lang.String	<a href="#"><u>url</u></a>

## ◆ 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
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



## Bitmap

### ◊ score

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

### ◊ name

```
private java.lang.String name
```

### ◊ url

```
private static java.lang.String url
```



## Constructor Detail

### ◊ 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

## Bitmap

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

### ◇ **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

Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)
  
- Detail:
- [Field |](#)
- [Constr |](#)
- [Method](#)

JavaScript is disabled on your browser.

Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)

- [Frames](#)
- [No Frames](#)
- [All Classes](#)
- Summary:
  - [Nested |](#)
  - [Field |](#)
  - [Constr |](#)
  - [Method](#)
- Detail:
  - [Field |](#)
  - [Constr |](#)
  - [Method](#)

## Class Level

- java.lang.Object
- ◆ Level

---

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

Class responsible for drawing the level

- ◆ **Field Summary**

Fields

Modifier and Type	Field and Description
java.util.List< <a href="#">Enemy</a> >	<a href="#">enemies</a>
int	<a href="#">height</a>
java.util.List< <a href="#">Pellet</a> >	<a href="#">pellets</a>
<a href="#">Tile</a> [][]	<a href="#">tiles</a>
int	<a href="#">width</a>

- ◆ **Constructor Summary**

Constructors

Constructor and Description
<a href="#">Level</a> (java.lang.String path)

## Bitmap

### Constructor and Description

Constructor for the level class Draws the level with the image from a path



### Method Summary

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

Modifier and Type	Method and Description
void	<a href="#">render</a> (java.awt.Graphics g) Fills the tiles with a specified color
void	<a href="#">tick</a> () Movement control



### 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 Draws the level with the image from a path

Parameters:

path - to the background image

## ◆ Method Detail

### ◆ tick

```
public void tick()
```

Movement control

### ◆ render

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

Fills the tiles with a specified color

Parameters:

g -

#### Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
- [Prev Class](#)
- [Next Class](#)
- [Frames](#)
- [No Frames](#)
- [All Classes](#)
- Summary:
  - [Nested |](#)
  - [Field |](#)
  - [Constr |](#)
  - [Method](#)
- Detail:
  - [Field |](#)
  - [Constr |](#)
  - [Method](#)

JavaScript is disabled on your browser.

#### Skip navigation links

- [Package](#)
- [Class](#)

- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
  - [Nested](#) |
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)
  
- Detail:
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)

## 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	<a href="#"><u>backImage</u></a>
private javafx.scene.control.Button	<a href="#"><u>btnBack</u></a>
private javafx.scene.control.Button	<a href="#"><u>btnExit</u></a>
private javafx.scene.control.Button	<a href="#"><u>btnHighScores</u></a>
private javafx.scene.control.Button	<a href="#"><u>btnStart</u></a>
private javafx.scene.control.ListView<java.lang.String>	<a href="#"><u>lstScores</u></a>
private javafx.stage.Stage	<a href="#"><u>oldStage</u></a>
private javafx.scene.Scene	<a href="#"><u>scene</u></a>



### Fields inherited from class javafx.application.Application

STYLESHEET\_CASPIAN, STYLESHEET\_MODENA



## Constructor Summary

Constructors

### Constructor and Description

[MainMenuScene\(\)](#)



## Method Summary

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

Modifier and Type	Method and Description
private void	<a href="#"><u>showScores</u></a> (javafx.stage.Stage currStage, javafx.scene.Scene oldScene) Changes the scene of the main menu to display the scores
void	<a href="#"><u>start</u></a> (javafx.stage.Stage primaryStage) Draws the GUI for the main menu and assigns all buttons
private void	<a href="#"><u>startGame</u></a> (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

### ◇ oldStage

```
private javafx.stage.Stage oldStage
```

### ◇ 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
```

### ◇ backImage

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

### ◇ lstScores

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

◆

## Constructor Detail

### ◇ MainMenuScene

```
public MainMenuScene()
```

◆

## Method Detail

### ◇ 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`

## Bitmap

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 -

### ◇ **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 -

### Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)

- [Prev Class](#)
- [Next Class](#)

- [Frames](#)
- [No Frames](#)

- [All Classes](#)

- Summary:
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)

- Detail:
- [Field |](#)
- [Constr |](#)
- [Method](#)

JavaScript is disabled on your browser.

[Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested](#) |
- [Field](#) |
- [Constr](#) |
- [Method](#)
  
- Detail:
- [Field](#) |
- [Constr](#) |
- [Method](#)

## 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                      render(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

#### Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)
  
- Detail:
- [Field |](#)
- [Constr |](#)
- [Method](#)

JavaScript is disabled on your browser.

#### Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)

- [Frames](#)
- [No Frames](#)
- [All Classes](#)
- Summary:
  - [Nested](#) |
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)
- Detail:
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)

## 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

## Bitmap

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

◇

### 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	<a href="#"><u>canMove</u></a> (int nextx, int nexty) Private class for seeing if the player can move in a certain direction
void	<a href="#"><u>render</u></a> (java.awt.Graphics g) Draws the graphic to a specified color
void	<a href="#"><u>tick</u></a> () 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

### ◇ 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 -

## Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)

- [Help](#)
- [Prev Class](#)
- [Next Class](#)
- [Frames](#)
- [No Frames](#)
- [All Classes](#)
- Summary:
  - [Nested](#) |
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)
- Detail:
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)

JavaScript is disabled on your browser.  
[Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
- [Prev Class](#)
- [Next Class](#)
- [Frames](#)
- [No Frames](#)
- [All Classes](#)
- Summary:
  - [Nested](#) |
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)
- Detail:
  - [Field](#) |
  - [Constr](#) |
  - [Method](#)

# 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

SpriteSheet(java.lang.String path)  
Constructor for the SpriteSheet class

- ◆

## 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

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 -

yy -

Returns:

### Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- [Summary:](#)
- [Nested I](#)
- [Field I](#)

- [Constr |](#)
- [Method](#)

- Detail:
- [Field |](#)
- [Constr |](#)
- [Method](#)

JavaScript is disabled on your browser.

[Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)

- [Prev Class](#)
- [Next Class](#)

- [Frames](#)
- [No Frames](#)

- [All Classes](#)

- Summary:
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)

- Detail:
- [Field |](#)
- [Constr |](#)
- [Method](#)

## 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	<a href="#"><u>ghost</u></a>
static java.awt.image.BufferedImage	<a href="#"><u>player</u></a>

- ◆ **Constructor Summary**

Constructors

Constructor and Description
<a href="#"><u>Texture()</u></a> 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

[Skip navigation links](#)

- [Package](#)

- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)
  
- Detail:
- [Field |](#)
- [Constr |](#)
- [Method](#)

JavaScript is disabled on your browser.

[Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)



- Detail:
- Field |
- Constr |
- Method

## 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 -

y -



## Method Detail

### ◇ render

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

Fills the graphic with the specific color

Parameters:

g -

### Skip navigation links

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested |](#)
- [Field |](#)
- [Constr |](#)
- [Method](#)
  
- Detail:
- [Field |](#)
- [Constr |](#)
- [Method](#)

JavaScript is disabled on your browser.

[Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
  
- [Prev Class](#)
- [Next Class](#)
  
- [Frames](#)
- [No Frames](#)
  
- [All Classes](#)
  
- Summary:
- [Nested I](#)
- [Field I](#)
- [Constr I](#)
- [Method](#)
  
- Detail:
- [Field I](#)
- [Constr I](#)
- [Method](#)

## Class pacmanMainClass

- java.lang.Object
- ◆ pacmanMainClass

---

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

Main class for the application control

- ◆ **Constructor Summary**

Constructors

**Constructor and Description**

## Constructor and Description

[pacmanMainClass\(\)](#)



## Method Summary

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

### Modifier and Type

### Method and Description

static void [main](#)(java.lang.String[] args)  
Draws the GUI for the main menu



## Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#),  
[toString](#), [wait](#), [wait](#), [wait](#)



## Constructor Detail

### ◇ [pacmanMainClass](#)

[public](#) [pacmanMainClass](#)()



## Method Detail

### ◇ [main](#)

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

Draws the GUI for the main menu

## [Skip navigation links](#)

- [Package](#)
- [Class](#)
- [Use](#)
- [Tree](#)
- [Deprecated](#)
- [Index](#)
- [Help](#)
- [Prev Class](#)
- [Next Class](#)
- [Frames](#)
- [No Frames](#)

- All Classes
- Summary:
  - Nested |
  - Field |
  - Constr |
  - Method
- Detail:
  - Field |
  - Constr |
  - Method