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Packages

Package	Description
lifegame	
lifegame.controller	
lifegame.librairies.utils	
lifegame.librairies.xml	
lifegame.model	
lifegame.model.exceptions	
lifegame.model.listeners	
lifegame.model.providers	
lifegame.model.states	
lifegame.view	
lifegame.view.ui	

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Package lifegame.controller

Interface Summary

Interface	Description
CycleTaskListener	CycleTaskListener: Interface représentant l'état d'un cycle.

Class Summary

Class	Description
CycleTask	CycleTask <u>extends</u> TimerTask Permet de notifier de façon répétitive un cycle.

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currentCycle - nombre de cycles pass s.

Returns:

si **true**, tous les cycles seront ferm s.

cancel

void cancel()

Arr te tous les cycles en cours.

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lifegame.controller

Interface CycleTaskListener

All Known Implementing Classes:[LifeGame](#)

```
public interface CycleTaskListener
```

CycleTaskListener:

Interface repr sentant l' tat d'un cycle.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Method Summary

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

Modifier and Type	Method and Description
void	cancel () Arr�te tous les cycles en cours.
boolean	schedule (int currentCycle) Notifie de fa�on p�riodique le nombre de cycles pass�s.

Method Detail

schedule

```
boolean schedule(int currentCycle)
```

Notifie de fa on p riodique le nombre de cycles pass s.

Parameters:

`cancel, scheduledExecutionTime`

Methods inherited from class `java.lang.Object`

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

Constructor Detail

CycleTask

```
public CycleTask(CycleTaskListener listener)
```

Method Detail

run

```
public void run()
```

Specified by:

run in interface `java.lang.Runnable`

Specified by:

run in class `java.util.TimerTask`

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lifegame.controller

Class CycleTask

```
java.lang.Object
  java.util.TimerTask
    lifegame.controller.CycleTask
```

All Implemented Interfaces:

```
java.lang.Runnable
```

```
public class CycleTask
  extends java.util.TimerTask
```

CycleTask extends TimerTask

Permet de notifier de façon répétitive un cycle.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Constructor Summary

Constructors

Constructor and Description

```
CycleTask(CycleTaskListener listener)
```

Method Summary

All Methods Instance Methods Concrete Methods

Modifier and Type Method and Description

```
void                    run()
```

Methods inherited from class java.util.TimerTask

```
public static int random(double min,
                        double max)
```

G n re de fa on arbitraire un entier compris dans un intervalle d fini.

Parameters:

min - d but de l'intervalle.

max - fin de l'intervalle.

Returns:

entier g n r  al atoirement.

randomLocation

```
public static java.awt.Point randomLocation(int minX,
                                           int maxX,
                                           int minY,
                                           int maxY)
```

G n re de fa on arbitraire un point selon des coordonn es limites.

Parameters:

minX - coordonn e x minimum.

maxX - coordonn e x maximum.

minY - coordonn e y minimum.

maxY - coordonn e y maximum.

Returns:

point g n r  al atoirement.

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<code>static int</code>	<code>random</code> (double min, double max) G�n�re de fa�on arbitraire un entier compris dans un intervalle d�fini.
<code>static java.awt.Point</code>	<code>randomLocation</code> (int minX, int maxX, int minY, int maxY) G�n�re de fa�on arbitraire un point selon des coordonn�es limites.
<code>static void</code>	<code>runOnUiThread</code> (java.lang.Runnable runnable) Ex�cute une closure dans le thread principale.

Methods inherited from class java.lang.Object

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

Constructor Detail

AppUtil

```
public AppUtil()
```

Method Detail

closeApp

```
public static void closeApp()
```

Ferme l'application.

runOnUiThread

```
public static void runOnUiThread(java.lang.Runnable runnable)
```

Ex cute une closure dans le thread principale.

Parameters:

`runnable` - closure   ex cuter.

random

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lifegame.librairies.utils

Class AppUtil

java.lang.Object

lifegame.librairies.utils.AppUtil

```
public final class AppUtil
extends java.lang.Object
```

AppUtil

methods

- [closeApp](#):

Ferme l'application.

- [runOnUiThread](#):

ExÃ©cute une closure dans le thread principale.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Constructor Summary

Constructors

Constructor and Description

[AppUtil\(\)](#)

Method Summary

All Methods Static Methods Concrete Methods

Modifier and Type Method and Description

static void	closeApp() Ferme l'application.
-------------	--

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

Constructor Detail

DialogUtil

```
public DialogUtil()
```

Method Detail

canAppClosed

```
public static boolean canAppClosed(java.lang.String title,  
                                   java.lang.String message)
```

Demande à l'utilisateur si l'application doit être fermée.

Parameters:

title - titre de la fenêtre.

message - message de la fenêtre.

Returns:

si **true**, l'application peut être fermée.

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lifegame.librairies.utils

Class DialogUtil

java.lang.Object

lifegame.librairies.utils.DialogUtil

```
public final class DialogUtil
extends java.lang.Object
```

DialogUtil

methods

- canAppClosed:

Demande Ã l'utilisateur si l'application doit Ãatre fermÃ©e.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Constructor Summary

Constructors

Constructor and Description

DialogUtil()

Method Summary

All Methods Static Methods Concrete Methods

Modifier and Type

Method and Description

static boolean

canAppClosed(java.lang.String title,
java.lang.String message)
Demande Ã l'utilisateur si l'application doit Ãatre fermÃ©e.

Methods inherited from class java.lang.Object

```
public int getInt(java.lang.String id)
```

Résume un entier à partir d'un identifiant depuis integers.xml.

Parameters:

id - identifiant relatif à un entier.

Returns:

entier.

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RÃ©cupÃ©re un entier Ã partir d'un identifiant depuis integers.xml.

`java.lang.String` **getString**(`java.lang.String id`)

RÃ©cupÃ©re une chaÃ®ne de caractÃ©res Ã partir d'un identifiant depuis strings.xml.

`void` **initAppConfiguration**()

Charge les fichiers XML de configuration.

Methods inherited from class java.lang.Object

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

Method Detail

getInstance

```
public static Resources getInstance()
```

RÃ©cupÃ©re un singleton de cette classe.

Returns:

`Resources`.

initAppConfiguration

```
public void initAppConfiguration()
```

Charge les fichiers XML de configuration.

getString

```
public java.lang.String getString(java.lang.String id)
```

RÃ©cupÃ©re une chaÃ®ne de caractÃ©res Ã partir d'un identifiant depuis strings.xml.

Parameters:

`id` - identifiant relatif Ã une chaÃ®ne de caractÃ©res.

Returns:

une chaÃ®ne de caractÃ©res.

getInt

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lifegame.librairies.utils

Class Resources

java.lang.Object
lifegame.librairies.utils.Resources

```
public final class Resources  
extends java.lang.Object
```

Resources

methods

- getInstance:
RÃ©cupÃ©re un singleton de cette classe.
- initAppConfiguration:
Charge les fichiers XML de configuration.
- getString:
RÃ©cupÃ©re une chaÃªne de caractÃ©res Ã partir d'un identifiant depuis strings.xml.
- getInt:
RÃ©cupÃ©re un entier Ã partir d'un identifiant depuis integers.xml.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Method Summary

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

Modifier and Type	Method and Description
static Resources	getInstance() RÃ©cupÃ©re un singleton de cette classe.
int	getInt (java.lang.String id)

builder

```
protected final javax.xml.parsers.DocumentBuilder builder
```

Constructor Detail**ResourcesReader**

```
public ResourcesReader()  
    throws javax.xml.parsers.FactoryConfigurationError,  
           javax.xml.parsers.ParserConfigurationException
```

Throws:

javax.xml.parsers.FactoryConfigurationError
javax.xml.parsers.ParserConfigurationException

Method Detail**configuration**

```
public abstract java.util.Map<java.lang.String,java.lang.Object> configuration()
```

value

```
public abstract java.lang.String value(java.lang.String attribute)
```

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lifegame.librairies.xml

Class ResourcesReader

java.lang.Object
lifegame.librairies.xml.ResourcesReader

Direct Known Subclasses:[XmlReader](#)

```
public abstract class ResourcesReader  
extends java.lang.Object
```

Field Summary

Fields

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

protected javax.xml.parsers.DocumentBuilder	builder
---	-------------------------

Constructor Summary

Constructors

Constructor and Description

ResourcesReader ()

Method Summary

All Methods	Instance Methods	Abstract Methods
-------------	------------------	------------------

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

abstract java.util.Map<java.lang.String,java.lang.Object>	configuration ()
---	-----------------------------------

abstract java.lang.String	value (java.lang.String attribute)
---------------------------	--

Methods inherited from class java.lang.Object

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

Field Detail

Constructor Detail

XmlReader

```
public XmlReader(java.lang.String filename)
    throws javax.xml.parsers.FactoryConfigurationError,
           javax.xml.parsers.ParserConfigurationException,
           org.xml.sax.SAXException,
           java.io.IOException
```

Throws:

[javax.xml.parsers.FactoryConfigurationError](#)
[javax.xml.parsers.ParserConfigurationException](#)
[org.xml.sax.SAXException](#)
[java.io.IOException](#)

Method Detail

configuration

```
public java.util.Map<java.lang.String,java.lang.Object> configuration()
```

Specified by:

[configuration](#) in class [ResourcesReader](#)

value

```
public java.lang.String value(java.lang.String attribute)
    throws org.w3c.dom.DOMException
```

Specified by:

[value](#) in class [ResourcesReader](#)

Throws:

[org.w3c.dom.DOMException](#)

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lifegame.librairies.xml

Class XmlReader

java.lang.Object

lifegame.librairies.xml.ResourcesReader

lifegame.librairies.xml.XmlReader

```
public final class XmlReader
extends ResourcesReader
```

Field Summary

Fields inherited from class lifegame.librairies.xml.ResourcesReader

builder

Constructor Summary

Constructors

Constructor and Description

XmlReader(java.lang.String filename)

Method Summary

All Methods **Instance Methods** **Concrete Methods**

Modifier and Type

Method and Description

java.util.Map<java.lang.String, java.lang.Object> **configuration**()java.lang.String **value**(java.lang.String attribute)**Methods inherited from class java.lang.Object**

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

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```
public static final int RIGHT
```

Représente un mouvement vers la droite.

Valeur: **2**

See Also:

[Constant Field Values](#)

LEFT

```
public static final int LEFT
```

Représente un mouvement vers la gauche.

Valeur: **3**

See Also:

[Constant Field Values](#)

Constructor Detail

Movement

```
public Movement()
```

Method Detail

random

```
public static int random()
```

Génère aléatoirement un mouvement.

Returns:

un `Movement` pouvant être un mouvement suivant:

- UP
- DOWN
- RIGHT
- LEFT

Constructor and Description

Movement ()

Method Summary

All Methods **Static Methods** **Concrete Methods**

Modifier and Type	Method and Description
static int	random () GÃ©nÃ©re alÃ©atoirement un mouvement.

Methods inherited from class java.lang.Object

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

Field Detail

UP

public static final int UP

ReprÃ©sente un mouvement vers le haut.

Valeur: **0**

See Also:

[Constant Field Values](#)

DOWN

public static final int DOWN

ReprÃ©sente un mouvement vers le bas.

Valeur: **1**

See Also:

[Constant Field Values](#)

RIGHT

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lifegame.model

Class Movement

java.lang.Object
lifegame.model.Movement

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

Movement:

Utilitaire pour les mouvements.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Field Summary

Fields

Modifier and Type	Field and Description
static int	DOWN Représente un mouvement vers le bas.
static int	LEFT Représente un mouvement vers la gauche.
static int	RIGHT Représente un mouvement vers la droite.
static int	UP Représente un mouvement vers le haut.

Constructor Summary

Constructors

nouvelle instance de `Poisson`.

`isAlive`

```
public boolean isAlive()
```

DÃ©finie si le poisson est vivant ou mort.

Returns:

si **true**, le poisson est encore vivant.

`handlePosition`

```
protected java.awt.Point handlePosition()
```

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setPositionY

```
public void setPositionY(int positionY)
```

Modifie la position verticale du poisson

Parameters:

positionY - position verticale du poisson.

setAge

```
public void setAge(double age)
    throws PoissonException
```

Modifie l'Ã¢ge du poisson.

Parameters:

age - Ã¢ge du poisson.

Throws:

`PoissonException` - l'Ã¢ge doit Ã¢tre compris entre `MINIMAL_AGE` et `MAXIMAL_AGE`.

getAge

```
public double getAge()
```

RÃ©cupÃ©re l'Ã¢ge du poisson.

Returns:

Ã¢ge du poisson.

incrementAge

```
public void incrementAge()
```

IncrÃ©mente l'Ã¢ge du poisson de **1.0**.

born

```
public Poisson born()
```

Donne naissance Ã un nouveau poisson.

Returns:

equals

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

Overrides:

equals in class java.lang.Object

setPoissonListener

```
public void setPoissonListener(PoissonListener listener)
```

Mise en place d'un Ã©couteur sur les diffÃ©rents Ã©vÃ©nements que ce poisson rÃ©agit.

Parameters:

listener - Ã©couteur.

getPositionX

```
public int getPositionX()
```

RÃ©cupÃ©re la position horizontale du poisson.

Returns:

position horizontale du poisson.

getPositionY

```
public int getPositionY()
```

RÃ©cupÃ©re la position verticale du poisson.

Returns:

position verticale du poisson.

setPositionX

```
public void setPositionX(int positionX)
```

Modifie la position horizontale du poisson

Parameters:

positionX - position horizontale du poisson.

positionY

```
protected int positionY
```

Constructor Detail**Poisson**

```
public Poisson(int positionX,  
               int positionY)
```

Cr e une nouvelle instance de `Poisson`:

- Initialise l' ge du poisson   0.
- Initialise l' ge maximum de fa on al atoire en tenant compte d'un  ge certain.

Parameters:

`positionX` - position horizontale du poisson.

`positionY` - position verticale du poisson.

Poisson

```
public Poisson(Poisson poisson)
```

Method Detail**move**

```
public void move()
```

D place le poisson d'une case dans une direction d finie.

hashCode

```
public int hashCode()
```

Overrides:

`hashCode` in class `java.lang.Object`

Methods inherited from class java.lang.Object

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

Field Detail

MINIMAL_AGE

```
public static final double MINIMAL_AGE
```

Ãge minimal lÃ©gal.

Valeur: **0**

See Also:

[Constant Field Values](#)

MAXIMAL_AGE

```
public static final double MAXIMAL_AGE
```

Ãge maximal lÃ©gal (diffÃ©rent de l'Ãge maximum qui correspond Ã l'Ãge limite de vie du poisson).

Valeur: **20**

See Also:

[Constant Field Values](#)

listener

```
protected PoissonListener listener
```

age

```
protected double age
```

positionX

```
protected int positionX
```

Initialise l'Ã¢ge du poisson Ã 0.

Poisson(**Poisson** poisson)

Method Summary

All Methods **Instance Methods** **Concrete Methods**

Modifier and Type	Method and Description
Poisson	born() Donne naissance Ã un nouveau poisson.
boolean	equals (java.lang.Object object)
double	getAge() RÃ©cupÃ©re l'Ã¢ge du poisson.
int	getPositionX() RÃ©cupÃ©re la position horizontale du poisson.
int	getPositionY() RÃ©cupÃ©re la position verticale du poisson.
protected java.awt.Point	handlePosition()
int	hashCode()
void	incrementAge() IncrÃ©mente l'Ã¢ge du poisson de 1.0 .
boolean	isAlive() DÃ©finie si le poisson est vivant ou mort.
void	move() DÃ©place le poisson d'une case dans une direction dÃ©finie.
void	setAge (double age) Modifie l'Ã¢ge du poisson.
void	setPoissonListener (PoissonListener listener) Mise en place d'un Ã©couteur sur les diffÃ©rents Ã©vÃ©nements que ce poisson rÃ©git.
void	setPositionX (int positionX) Modifie la position horizontale du poisson
void	setPositionY (int positionY) Modifie la position verticale du poisson

Modifie l'Ã¢ge du poisson.

- `born()` :

Donne naissance Ã un nouveau Poisson.

- `isAlive()` :

DÃ©finie si le poisson est vivant ou mort.

- `moveTo(x, y)` :

DÃ©place le poisson aux nouvelles positions horizontale et verticale.

Version:

1.0

Author:

- Jesus GARNICA OLARRA.
- Hivinau GRAFFE.

Field Summary

Fields

Modifier and Type	Field and Description
protected double	age
protected PoissonListener	listener
static double	MAXIMAL_AGE Ãge maximal lÃ©gal (diffÃ©rent de l'Ã¢ge maximum qui correspond Ã l'Ã¢ge limite de vie du poisson).
static double	MINIMAL_AGE Ãge minimal lÃ©gal.
protected int	positionX
protected int	positionY

Constructor Summary

Constructors

Constructor and Description

Poisson(int positionX, int positionY)
CrÃ©e une nouvelle instance de **Poisson**:

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lifegame.model

Class Poisson

java.lang.Object
lifegame.model.Poisson

Direct Known Subclasses:

[Requin](#), [Sardine](#)

```
public abstract class Poisson  
extends java.lang.Object
```

Poisson:

- **attributes**

- age :

Ã¢ge courant du poisson.

- maxAge :

Ã¢ge maximum du poisson.

- positionX :

position horizontale du poisson.

- positionY :

position verticale du poisson.

- **methods**

- move() :

DÃ©place le poisson d'une case dans une direction dÃ©finie.

- getPositionX() :

RÃ©cupÃ©re la position horizontale du poisson.

- getPositionY() :

RÃ©cupÃ©re la position verticale du poisson.

- setAge(age) :

```
public void setRequinState(RequinState requinStateListener)
```

move

```
public void move()
```

Description copied from class: **Poisson**

Déplace le poisson d'une case dans une direction définie.

Overrides:

move in class **Poisson**

eat

```
public void eat(Sardine sardine)
```

Ajoute une sardine dans le compte totale de sardines mangées.

Parameters:

sardine - **Sardine** à ajouter.

getState

```
public int getState()
```

Récupère l'état du requin.

Returns:

l'état du requin.

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Constructor and Description

```
Requin(int positionX, int positionY)
```

Method Summary

All Methods **Instance Methods** **Concrete Methods**

Modifier and Type	Method and Description
void	<code>eat(Sardine sardine)</code> Ajoute une sardine dans le dÃ©compte totale de sardines mangÃ©es.
int	<code>getState()</code> RÃ©cupÃ©re l'Ã©tat du requin.
void	<code>move()</code> DÃ©place le poisson d'une case dans une direction dÃ©finie.
void	<code>setRequinState(RequinState requinStateListener)</code>

Methods inherited from class lifegame.model.Poisson

```
born, equals, getAge, getPositionX, getPositionY, handlePosition,
hashCode, incrementAge, isAlive, setAge, setPoissonListener,
setPositionX, setPositionY
```

Methods inherited from class java.lang.Object

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

Constructor Detail**Requin**

```
public Requin(int positionX,
               int positionY)
```

Method Detail**setRequinState**

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lifegame.model

Class Requin

java.lang.Object

[lifegame.model.Poisson](#)[lifegame.model.Requin](#)

```
public final class Requin  
extends Poisson
```

Requin extends [Poisson](#)

methods

- `stateChanged:`

Indique que l'état du requin a évolué.

- `move:`

Déplace le requin d'une case dans une direction définie.

- `eat:`

Ajoute une sardine dans le décompte totale de sardines mangées.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Field Summary

Fields inherited from class lifegame.model.Poisson

`age, listener, MAXIMAL_AGE, MINIMAL_AGE, positionX, positionY`

Constructor Summary

Constructors

Methods inherited from class `lifegame.model.Poisson`

`born`, `equals`, `getAge`, `getPositionX`, `getPositionY`, `handlePosition`, `hashCode`, `incrementAge`, `isAlive`, `move`, `setAge`, `setPoissonListener`, `setPositionX`, `setPositionY`

Methods inherited from class `java.lang.Object`

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

Constructor Detail

Sardine

```
public Sardine(int positionX,  
               int positionY)
```

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lifegame.model

Class Sardine

java.lang.Object

lifegame.model.Poisson

lifegame.model.Sardine

```
public final class Sardine
extends Poisson
```

Sardine extends **Poisson** methods

- move:

DÃ©place la sardine d'une case dans une direction dÃ©finie.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Field Summary

Fields inherited from class lifegame.model.Poisson

`age, listener, MAXIMAL_AGE, MINIMAL_AGE, positionX, positionY`

Constructor Summary

Constructors

Constructor and Description

`Sardine(int positionX, int positionY)`

Method Summary

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Package lifegame.model.exceptions

Exception Summary

Exception	Description
PoissonException	PoissonException

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Methods inherited from class java.lang.Object

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

Constructor Detail

PoissonException

```
public PoissonException(java.lang.String message)
```

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lifegame.model.exceptions

Class PoissonException

```
java.lang.Object
  java.lang.Throwable
    java.lang.Exception
      lifegame.model.exceptions.PoissonException
```

All Implemented Interfaces:

```
java.io.Serializable
```

```
public class PoissonException
  extends java.lang.Exception
```

PoissonException

Version:

```
1.0
```

Author:

```
Jesus GARNICA OLARRA, Hivinau GRAFFE
```

See Also:

```
Serialized Form
```

Constructor Summary

Constructors

Constructor and Description

```
PoissonException(java.lang.String message)
```

Method Summary

Methods inherited from class java.lang.Throwable

```
addSuppressed, fillInStackTrace, getCause, getLocalizedMessage,
getMessage, getStackTrace, getSuppressed, initCause, printStackTrace,
printStackTrace, printStackTrace, setStackTrace, toString
```

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Package lifegame.model.listeners

Interface Summary

Interface	Description
PoissonListener	PoissonListener: Interface permettant de gÃ©rer un poisson sur la mer.

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Parameters:

poisson - poisson à mettre à jour.

x - nouvelle position horizontale.

y - nouvelle position verticale.

availableDirection

```
int availableDirection(Poisson poisson)
```

Identifie le prochain mouvement du poisson.

Parameters:

poisson - poisson dont il faut identifier le prochain mouvement.

Returns:

le prochain [Mouvement](#) du poisson.

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lifegame.model.listeners

Interface PoissonListener

All Known Implementing Classes:

[Mer](#)

```
public interface PoissonListener
```

PoissonListener:

Interface permettant de gérer un poisson sur la mer.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Method Summary

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

Modifier and Type	Method and Description
int	availableDirection (Poisson poisson) Identifie le prochain mouvement du poisson.
void	update (Poisson poisson, int x, int y) Indique que le poisson est sur le point d'être déplacé.

Method Detail

update

```
void update(Poisson poisson,  
           int x,  
           int y)
```

Indique que le poisson est sur le point d'être déplacé.

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Package lifegame.model.providers

Class Summary

Class	Description
PoissonProvider	PoissonUtil: methods randomAge() : Calcule un Ã¢ge compris un Ã¢ge minimum et un Ã¢ge maximum de faÃ§on alÃ©atoire.

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Returns:

nouvelle instance de `Poisson`.

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de cette instance.

```
static double    randomAge(double minAge, double maxAge)
    Calcule un Ã¢ge compris un Ã¢ge minimum et un Ã¢ge maximum de
    faÃ§on alÃ©atoire.
```

Methods inherited from class java.lang.Object

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

Constructor Detail

PoissonProvider

```
public PoissonProvider()
```

Method Detail

randomAge

```
public static double randomAge(double minAge,
                                double maxAge)
```

Calcule un Ã¢ge compris un Ã¢ge minimum et un Ã¢ge maximum de faÃ§on alÃ©atoire.

Parameters:

minAge - Ã¢ge minimum.

maxAge - Ã¢ge maximum.

Returns:

Ã¢ge du poisson.

beBornFrom

```
public static Poisson beBornFrom(Poisson mum)
```

CrÃ©e une nouvelle instance de **Poisson** en dÃ©finissant la position de cette instance.

Parameters:

mum - poisson qui donne naissance Ã un nouveau poisson.

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lifegame.model.providers

Class PoissonProvider

java.lang.Object

lifegame.model.providers.PoissonProvider

```
public final class PoissonProvider
extends java.lang.Object
```

PoissonUtil:

- **methods**

- `randomAge()` :

Calcule un Âge compris un Âge minimum et un Âge maximum de façon aléatoire.

- `beBornFrom()` :

Crée une nouvelle instance de `Poisson` en définissant la position de cette instance.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Constructor Summary

Constructors

Constructor and Description

`PoissonProvider()`

Method Summary

All Methods Static Methods Concrete Methods

Modifier and Type	Method and Description
static Poisson	beBornFrom (Poisson mum) Crée une nouvelle instance de Poisson en définissant la position

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Package lifegame.model.states

Interface Summary

Interface	Description
RequinState	RequinState: Interface repr��sentant l'��tat d'un requin.

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```
void stateChanged(int state)
```

Indique la direction Ã prendre.

Parameters:

state - Ã©tat du requin.

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```
void stateChanged(int state)  
Indique la direction Ã prendre.
```

Field Detail

CHILD

```
static final int CHILD
```

Indique que le requin est enfant.

Valeur: **0x01**

See Also:

[Constant Field Values](#)

YOUNG

```
static final int YOUNG
```

Indique que le requin est adolescent.

Valeur: **0x02**

See Also:

[Constant Field Values](#)

ADULT

```
static final int ADULT
```

Indique que le requin est adulte.

Valeur: **0x03**

See Also:

[Constant Field Values](#)

Method Detail

stateChanged

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lifegame.model.states

Interface RequinState

All Known Implementing Classes:[Square](#)

```
public interface RequinState
```

RequinState:

Interface reprÃ©sentant l'Ã©tat d'un requin.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

Field Summary

Fields

Modifier and Type	Field and Description
static int	ADULT Indique que le requin est adulte.
static int	CHILD Indique que le requin est enfant.
static int	YOUNG Indique que le requin est adolescent.

Method Summary

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

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

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Package lifegame.view

Class Summary

Class	Description
LifeGame	LifeGame: Permet de g�rer une mer et des poissons.

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start

```
public void start()
```

DÃ©marre un nombre de cycles infini.

start

```
public void start(int cycles)
```

DÃ©marre un nombre de cycles dÃ©fini.

Parameters:

`cycles` - nombre de cycles max Ã dÃ©marrer.

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Constructor Detail

LifeGame

```
public LifeGame(int sardinesCount,  
                int requinsCount)
```

Cr e une nouvelle instance de `LifeGame`:

- Initialise les fichiers de configurations.
- Initialise les composants.

Parameters:

`sardinesCount` - nombre de sardines.

`requinsCount` - nombre de requins.

Method Detail

schedule

```
public boolean schedule(int currentCycle)
```

Description copied from interface: `CycleTaskListener`

Notifie de fa on p riodique le nombre de cycles pass s.

Specified by:

`schedule` in interface `CycleTaskListener`

Parameters:

`currentCycle` - nombre de cycles pass s.

Returns:

si `true`, tous les cycles seront ferm s.

cancel

```
public void cancel()
```

Description copied from interface: `CycleTaskListener`

Arr te tous les cycles en cours.

Specified by:

`cancel` in interface `CycleTaskListener`

contains, contains, createImage, createImage, createVolatileImage, createVolatileImage, disable, disableEvents, dispatchEvent, enable, enable, enableEvents, enableInputMethods, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getBaseline, getBaselineResizeBehavior, getBounds, getBounds, getColorModel, getComponentListeners, getComponentOrientation, getCursor, getDropTarget, getFocusListeners, getFocusTraversalKeysEnabled, getFont, getFontMetrics, getForeground, getGraphicsConfiguration, getHeight, getHierarchyBoundsListeners, getHierarchyListeners, getIgnoreRepaint, getInputMethodListeners, getInputMethodRequests, getKeyListeners, getLocation, getLocation, getLocationOnScreen, getMouseListeners, getMouseMotionListeners, getMousePosition, getMouseWheelListeners, getName, getParent, getPeer, getPropertyChangeListeners, getPropertyChangeListeners, getSize, getSize, getTreeLock, getWidth, getX, getY, gotFocus, handleEvent, hasFocus, imageUpdate, inside, isBackgroundSet, isCursorSet, isDisplayable, isDoubleBuffered, isEnabled, isFocusable, isFocusOwner, isFocusTraversable, isFontSet, isForegroundSet, isLightweight, isMaximumSizeSet, isMinimumSizeSet, isPreferredSizeSet, isValid, isVisible, keyDown, keyUp, list, list, list, location, lostFocus, mouseDown, mouseDrag, mouseEnter, mouseExit, mouseMove, mouseUp, move, nextFocus, paintAll, prepareImage, prepareImage, printAll, processComponentEvent, processFocusEvent, processHierarchyBoundsEvent, processHierarchyEvent, processInputMethodEvent, processKeyEvent, processMouseEvent, processMouseMotionEvent, processMouseWheelEvent, removeComponentListener, removeFocusListener, removeHierarchyBoundsListener, removeHierarchyListener, removeInputMethodListener, removeKeyListener, removeMouseListener, removeMouseMotionListener, removeMouseWheelListener, removePropertyChangeListener, removePropertyChangeListener, repaint, repaint, repaint, requestFocus, requestFocus, requestFocusInWindow, requestFocusInWindow, resize, resize, revalidate, setComponentOrientation, setDropTarget, setEnabled, setFocusable, setFocusTraversalKeysEnabled, setForeground, setIgnoreRepaint, setLocale, setMaximumSize, setName, setPreferredSize, show, size, toString, transferFocus, transferFocusBackward, transferFocusUpCycle

Methods inherited from class java.lang.Object

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

Methods inherited from interface java.awt.MenuContainer

getFont, postEvent

Methods inherited from class java.awt.Window

addPropertyChangeListener, addPropertyChangeListener,
addWindowFocusListener, addWindowListener, addWindowStateListener,
applyResourceBundle, applyResourceBundle, createBufferStrategy,
createBufferStrategy, dispose, getBackground, getBufferStrategy,
getFocusableWindowState, getFocusCycleRootAncestor, getFocusOwner,
getFocusTraversalKeys, getIconImages, getInputContext, getListeners,
getLocale, getModalExclusionType, getMostRecentFocusOwner, getOpacity,
getOwnedWindows, getOwner, getOwnerlessWindows, getShape, getToolkit,
getType, getWarningString, getWindowFocusListeners, getWindowListeners,
getWindows, getWindowStateListeners, hide, isActive, isAlwaysOnTop,
isAlwaysOnTopSupported, isAutoRequestFocus, isFocusableWindow,
isFocusCycleRoot, isFocused, isLocationByPlatform, isOpaque, isShowing,
isValidateRoot, pack, paint, postEvent, processEvent,
processWindowFocusEvent, processWindowStateEvent,
removeWindowFocusListener, removeWindowListener,
removeWindowStateListener, reshape, setAlwaysOnTop, setAutoRequestFocus,
setBounds, setBounds, setCursor, setFocusableWindowState,
setFocusCycleRoot, setIconImages, setLocation, setLocation,
setLocationByPlatform, setLocationRelativeTo, setMinimumSize,
setModalExclusionType, setSize, setSize, setType, setVisible, show,
toBack, toFront

Methods inherited from class java.awt.Container

add, add, add, add, add, addContainerListener, applyComponentOrientation,
areFocusTraversalKeysSet, countComponents, deliverEvent, doLayout,
findComponentAt, findComponentAt, getAlignmentX, getAlignmentY,
getComponent, getComponentAt, getComponentAt, getComponentCount,
getComponents, getComponentZOrder, getContainerListeners,
getFocusTraversalPolicy, getInsets, getLayout, getMaximumSize,
getMinimumSize, getMousePosition, getPreferredSize, insets, invalidate,
isAncestorOf, isFocusCycleRoot, isFocusTraversalPolicyProvider,
isFocusTraversalPolicySet, layout, list, list, locate, minimumSize,
paintComponents, preferredSize, print, printComponents,
processContainerEvent, remove, removeAll, removeContainerListener,
setComponentZOrder, setFocusTraversalKeys, setFocusTraversalPolicy,
setFocusTraversalPolicyProvider, setFont, transferFocusDownCycle,
validate, validateTree

Methods inherited from class java.awt.Component

action, add, addComponentListener, addFocusListener,
addHierarchyBoundsListener, addHierarchyListener, addInputMethodListener,
addKeyListener, addMouseListener, addMouseMotionListener,
addMouseWheelListener, bounds, checkImage, checkImage, coalesceEvents,

Constructor Summary

Constructors

Constructor and Description

LifeGame(int sardinesCount, int requinsCount)

Cr e une nouvelle instance de **LifeGame**:

Initialise les fichiers de configurations.

Method Summary

All Methods Instance Methods Concrete Methods

Modifier and Type	Method and Description
void	cancel () Arr�te tous les cycles en cours.
boolean	schedule (int currentCycle) Notifie de fa�on p�riodique le nombre de cycles pass�s.
void	start () D�marre un nombre de cycles infini.
void	start (int cycles) D�marre un nombre de cycles d�fini.

Methods inherited from class javax.swing.JFrame

addImpl, createRootPane, frameInit, getAccessibleContext, getContentPane, getDefaultCloseOperation, getGlassPane, getGraphics, getJMenuBar, getLayeredPane, getRootPane, getTransferHandler, isDefaultLookAndFeelDecorated, isRootPaneCheckingEnabled, paramString, processWindowEvent, remove, repaint, setContentPane, setDefaultCloseOperation, setDefaultLookAndFeelDecorated, setGlassPane, setIconImage, setJMenuBar, setLayeredPane, setLayout, setRootPane, setRootPaneCheckingEnabled, setTransferHandler, update

Methods inherited from class java.awt.Frame

addNotify, getCursorType, getExtendedState, getFrames, getIconImage, getMaximizedBounds, getMenuBar, getState, getTitle, isResizable, isUndecorated, remove, removeNotify, setBackground, setCursor, setExtendedState, setMaximizedBounds, setMenuBar, setOpacity, setResizable, setShape, setState, setTitle, setUndecorated

Nested classes/interfaces inherited from class java.awt.Window

`java.awt.Window.AccessibleAWTWindow, java.awt.Window.Type`

Nested classes/interfaces inherited from class java.awt.Container

`java.awt.Container.AccessibleAWTContainer`

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 inherited from class javax.swing.JFrame

`accessibleContext, EXIT_ON_CLOSE, rootPane, rootPaneCheckingEnabled`

Fields inherited from class java.awt.Frame

`CROSSHAIR_CURSOR, DEFAULT_CURSOR, E_RESIZE_CURSOR, HAND_CURSOR,
ICONIFIED, MAXIMIZED_BOTH, MAXIMIZED_HORIZ, MAXIMIZED_VERT, MOVE_CURSOR,
N_RESIZE_CURSOR, NE_RESIZE_CURSOR, NORMAL, NW_RESIZE_CURSOR,
S_RESIZE_CURSOR, SE_RESIZE_CURSOR, SW_RESIZE_CURSOR, TEXT_CURSOR,
W_RESIZE_CURSOR, WAIT_CURSOR`

Fields inherited from class java.awt.Component

`BOTTOM_ALIGNMENT, CENTER_ALIGNMENT, LEFT_ALIGNMENT, RIGHT_ALIGNMENT,
TOP_ALIGNMENT`

Fields inherited from interface javax.swing.WindowConstants

`DISPOSE_ON_CLOSE, DO_NOTHING_ON_CLOSE, HIDE_ON_CLOSE`

Fields inherited from interface java.awt.image.ImageObserver

`ABORT, ALLBITS, ERROR, FRAMEBITS, HEIGHT, PROPERTIES, SOMEBITS, WIDTH`

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lifegame.view

Class LifeGame

```
java.lang.Object
  java.awt.Component
    java.awt.Container
      java.awt.Window
        java.awt.Frame
          javax.swing.JFrame
            lifegame.view.LifeGame
```

All Implemented Interfaces:

```
java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable,
javax.accessibility.Accessible, javax.swing.RootPaneContainer,
javax.swing.WindowConstants, CycleTaskListener
```

```
public class LifeGame
  extends javax.swing.JFrame
  implements CycleTaskListener
```

LifeGame:

Permet de gÃ©rer une mer et des poissons.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

See Also:

[Serialized Form](#)

Nested Class Summary

Nested classes/interfaces inherited from class javax.swing.JFrame

javax.swing.JFrame.AccessibleJFrame

Nested classes/interfaces inherited from class java.awt.Frame

java.awt.Frame.AccessibleAWTFrame

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Package lifegame.view.ui

Class Summary

Class	Description
Mer	Mer: Contient une gridview.
Square	Square: ReprÃ©sente une case de la mer.

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Description copied from interface: `PoissonListener`

Identifie le prochain mouvement du poisson.

Specified by:

`availableDirection` in interface `PoissonListener`

Parameters:

`poisson` – poisson dont il faut identifier le prochain mouvement.

Returns:

le prochain `Movement` du poisson.

update

```
public void update(Poisson poisson,
                  int x,
                  int y)
```

Description copied from interface: `PoissonListener`

Indique que le poisson est sur le point d'Ãatre dÃ©placÃ©.

Specified by:

`update` in interface `PoissonListener`

Parameters:

`poisson` – poisson Ã mettre Ã jour.

`x` – nouvelle position horizontale.

`y` – nouvelle position verticale.

update

```
public void update()
```

DÃ©lÃ©gue les dÃ©placements de chaque poisson.

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```
isMinimumSizeSet, isPreferredSizeSet, isShowing, isValid, isVisible,
keyDown, keyUp, list, list, list, location, lostFocus, mouseDown,
mouseDrag, mouseEnter, mouseExit, mouseMove, mouseUp, move, nextFocus,
paintAll, postEvent, prepareImage, prepareImage, processComponentEvent,
processFocusEvent, processHierarchyBoundsEvent, processHierarchyEvent,
processInputMethodEvent, processMouseEvent, remove,
removeComponentListener, removeFocusListener,
removeHierarchyBoundsListener, removeHierarchyListener,
removeInputMethodListener, removeKeyListener, removeMouseListener,
removeMouseMotionListener, removeMouseWheelListener,
removePropertyChangeListener, removePropertyChangeListener, repaint,
repaint, repaint, resize, resize, setBounds, setBounds,
setComponentOrientation, setCursor, setDropTarget, setFocusable,
setFocusTraversalKeysEnabled, setIgnoreRepaint, setLocale, setLocation,
setLocation, setName, setSize, setSize, show, show, size, toString,
transferFocus, transferFocusBackward, transferFocusUpCycle
```

Methods inherited from class java.lang.Object

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

Constructor Detail

Mer

```
public Mer(int sardinesCount,
           int requinsCount)
```

Cr e une nouvelle instance de `Mer`:

- Initialise les composants.

Parameters:

`sardinesCount` - nombre de sardines.

`requinsCount` - nombre de requins.

Method Detail

availableDirection

```
public int availableDirection(Poisson poisson)
```

setMaximumSize, setMinimumSize, setNextFocusableComponent, setOpaque, setPreferredSize, setRequestFocusEnabled, setToolTipText, setTransferHandler, setUI, setVerifyInputWhenFocusTarget, setVisible, unregisterKeyboardAction, update

Methods inherited from class java.awt.Container

add, add, add, add, add, addContainerListener, addImpl, addPropertyChangeListener, addPropertyChangeListener, applyComponentOrientation, areFocusTraversalKeysSet, countComponents, deliverEvent, doLayout, findComponentAt, findComponentAt, getComponent, getComponentAt, getComponentAt, getComponentCount, getComponents, getComponentZOrder, getContainerListeners, getFocusTraversalKeys, getFocusTraversalPolicy, getLayout, getMousePosition, insets, invalidate, isAncestorOf, isFocusCycleRoot, isFocusCycleRoot, isFocusTraversalPolicyProvider, isFocusTraversalPolicySet, layout, list, list, locate, minimumSize, paintComponents, preferredSize, printComponents, processContainerEvent, processEvent, remove, remove, removeAll, removeContainerListener, setComponentZOrder, setFocusCycleRoot, setFocusTraversalPolicy, setFocusTraversalPolicyProvider, setLayout, transferFocusDownCycle, validate, validateTree

Methods inherited from class java.awt.Component

action, add, addComponentListener, addFocusListener, addHierarchyBoundsListener, addHierarchyListener, addInputMethodListener, addKeyListener, addMouseListener, addMouseMotionListener, addMouseWheelListener, bounds, checkImage, checkImage, coalesceEvents, contains, createImage, createImage, createVolatileImage, createVolatileImage, disableEvents, dispatchEvent, enable, enableEvents, enableInputMethods, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getBackground, getBounds, getColorModel, getComponentListeners, getComponentOrientation, getCursor, getDropTarget, getFocusCycleRootAncestor, getFocusListeners, getFocusTraversalKeysEnabled, getFont, getForeground, getGraphicsConfiguration, getHierarchyBoundsListeners, getHierarchyListeners, getIgnoreRepaint, getInputContext, getInputMethodListeners, getInputMethodRequests, getKeyListeners, getLocale, getLocation, getLocationOnScreen, getMouseListeners, getMouseMotionListeners, getMousePosition, getMouseWheelListeners, getName, getParent, getPeer, getPropertyChangeListeners, getPropertyChangeListeners, getSize, getToolkit, getTreeLock, gotFocus, handleEvent, hasFocus, imageUpdate, inside, isBackgroundSet, isCursorSet, isDisplayable, isEnabled, isFocusable, isFocusOwner, isFocusTraversable, isFontSet, isForegroundSet, isLightweight, isMaximumSizeSet,

Modifier and Type	Method and Description
int	availableDirection (Poisson poisson) Identifie le prochain mouvement du poisson.
void	update () Mise à jour des déplacements de chaque poisson.
void	update (Poisson poisson, int x, int y) Indique que le poisson est sur le point d'être déplacé.

Methods inherited from class javax.swing.JPanel

getAccessibleContext, getUI, getUIClassID, paramString, setUI, updateUI

Methods inherited from class javax.swing.JComponent

addAncestorListener, addNotify, addVetoableChangeListener, computeVisibleRect, contains, createToolTip, disable, enable, firePropertyChange, firePropertyChange, firePropertyChange, fireVetoableChange, getActionForKeyStroke, getActionMap, getAlignmentX, getAlignmentY, getAncestorListeners, getAutoscrolls, getBaseline, getBaselineResizeBehavior, getBorder, getBounds, getClientProperty, getComponentGraphics, getComponentPopupMenu, getConditionForKeyStroke, getDebugGraphicsOptions, getDefaultLocale, getFontMetrics, getGraphics, getHeight, getInheritsPopupMenu, getInputMap, getInputMap, getInputVerifier, getInsets, getInsets, getListeners, getLocation, getMaximumSize, getMinimumSize, getNextFocusableComponent, getPopupLocation, getPreferredSize, getRegisteredKeyStrokes, getRootPane, getSize, getToolTipLocation, getToolTipText, getToolTipText, getTopLevelAncestor, getTransferHandler, getVerifyInputWhenFocusTarget, getVetoableChangeListeners, getVisibleRect, getWidth, getX, getY, grabFocus, hide, isDoubleBuffered, isLightweightComponent, isManagingFocus, isOpaque, isOptimizedDrawingEnabled, isPaintingForPrint, isPaintingOrigin, isPaintingTile, isRequestFocusEnabled, isValidRoot, paint, paintBorder, paintChildren, paintComponent, paintImmediately, paintImmediately, print, printAll, printBorder, printChildren, printComponent, processComponentKeyEvent, processKeyBinding, processKeyEvent, processMouseEvent, processMouseEvent, putClientProperty, registerKeyboardAction, registerKeyboardAction, removeAncestorListener, removeNotify, removeVetoableChangeListener, repaint, repaint, requestDefaultFocus, requestFocus, requestFocus, requestFocusInWindow, requestFocusInWindow, resetKeyboardActions, reshape, revalidate, scrollRectToVisible, setActionMap, setAlignmentX, setAlignmentY, setAutoscrolls, setBackground, setBorder, setComponentPopupMenu, setDebugGraphicsOptions, setDefaultLocale, setDoubleBuffered, setEnabled, setFocusTraversalKeys, setFont, setForeground, setInheritsPopupMenu, setInputMap, setInputVerifier,

Nested classes/interfaces inherited from class java.awt.Container

`java.awt.Container.AccessibleAWTContainer`

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 inherited from class javax.swing.JComponent

`listenerList,` `TOOL_TIP_TEXT_KEY,` `ui,` `UNDEFINED_CONDITION,`
`WHEN_ANCESTOR_OF_FOCUSED_COMPONENT,` `WHEN_FOCUSED,` `WHEN_IN_FOCUSED_WINDOW`

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,` `HEIGHT,` `PROPERTIES,` `SOMEBITS,` `WIDTH`

Constructor Summary

Constructors

Constructor and Description

Mer(int sardinesCount, int requinsCount)

Cr e une nouvelle instance de **Mer**:

Initialise les composants.

Method Summary

All Methods

Instance Methods

Concrete Methods

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lifegame.view.ui

Class Mer

```
java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JPanel
          lifegame.view.ui.Mer
```

All Implemented Interfaces:

[java.awt.image.ImageObserver](#), [java.awt.MenuContainer](#), [java.io.Serializable](#),
[javax.accessibility.Accessible](#), [PoissonListener](#)

```
public class Mer
  extends javax.swing.JPanel
  implements PoissonListener
```

Mer:

Contient une gridview.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

See Also:

[Serialized Form](#)

Nested Class Summary

Nested classes/interfaces inherited from class javax.swing.JPanel

[javax.swing.JPanel.AccessibleJPanel](#)

Nested classes/interfaces inherited from class javax.swing.JComponent

[javax.swing.JComponent.AccessibleJComponent](#)

Specified by:

`stateChanged` in interface `RequinState`

Parameters:

`state` - État du requin.

setPoisson

```
public void setPoisson(Poisson poisson)
```

Modifie le poisson.

Parameters:

`poisson` - poisson qui occupera cet espace.

removePoisson

```
public void removePoisson()
```

Retire le poisson de cet espace.

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```

getPropertyChangeListeners, getSize, getToolkit, getTreeLock, gotFocus,
handleEvent, hasFocus, imageUpdate, inside, isBackgroundSet, isCursorSet,
isDisplayable, isEnabled, isFocusable, isFocusOwner, isFocusTraversable,
isFontSet, isForegroundSet, isLightweight, isMaximumSizeSet,
isMinimumSizeSet, isPreferredSizeSet, isShowing, isValid, isVisible,
keyDown, keyUp, list, list, list, location, lostFocus, mouseDown,
mouseDrag, mouseEnter, mouseExit, mouseMove, mouseUp, move, nextFocus,
paintAll, postEvent, prepareImage, prepareImage, processComponentEvent,
processFocusEvent, processHierarchyBoundsEvent, processHierarchyEvent,
processInputMethodEvent, processMouseEvent, remove,
removeComponentListener, removeFocusListener,
removeHierarchyBoundsListener, removeHierarchyListener,
removeInputMethodListener, removeKeyListener, removeMouseListener,
removeMouseMotionListener, removeMouseWheelListener,
removePropertyChangeListener, removePropertyChangeListener, repaint,
repaint, repaint, resize, resize, setBounds, setBounds,
setComponentOrientation, setCursor, setDropTarget, setFocusable,
setFocusTraversalKeysEnabled, setIgnoreRepaint, setLocale, setLocation,
setLocation, setName, setSize, setSize, show, show, size, toString,
transferFocus, transferFocusBackward, transferFocusUpCycle

```

Methods inherited from class java.lang.Object

```

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

```

Constructor Detail

Square

```
public Square()
```

Crée une nouvelle instance de [Square](#):

- Initialise les composants.

Method Detail

stateChanged

```
public void stateChanged(int state)
```

Description copied from interface: [RequinState](#)

Indique la direction à prendre.

```
setAlignmentY, setAutoscrolls, setBackground, setBorder,  
setComponentPopupMenu, setDebugGraphicsOptions, setDefaultLocale,  
setDoubleBuffered, setEnabled, setFocusTraversalKeys, setFont,  
setForeground, setInheritsPopupMenu, setInputMap, setInputVerifier,  
setMaximumSize, setMinimumSize, setNextFocusableComponent, setOpaque,  
setPreferredSize, setRequestFocusEnabled, setToolTipText,  
setTransferHandler, setUI, setVerifyInputWhenFocusTarget, setVisible,  
unregisterKeyboardAction, update
```

Methods inherited from class java.awt.Container

```
add, add, add, add, add, addContainerListener, addImpl,  
addPropertyChangeListener, addPropertyChangeListener,  
applyComponentOrientation, areFocusTraversalKeysSet, countComponents,  
deliverEvent, doLayout, findComponentAt, findComponentAt, getComponent,  
getComponentAt, getComponentAt, getComponentCount, getComponents,  
getComponentZOrder, getContainerListeners, getFocusTraversalKeys,  
getFocusTraversalPolicy, getLayout, getMousePosition, insets, invalidate,  
isAncestorOf, isFocusCycleRoot, isFocusCycleRoot,  
isFocusTraversalPolicyProvider, isFocusTraversalPolicySet, layout, list,  
list, locate, minimumSize, paintComponents, preferredSize,  
printComponents, processContainerEvent, processEvent, remove, remove,  
removeAll, removeContainerListener, setComponentZOrder,  
setFocusCycleRoot, setFocusTraversalPolicy,  
setFocusTraversalPolicyProvider, setLayout, transferFocusDownCycle,  
validate, validateTree
```

Methods inherited from class java.awt.Component

```
action, add, addComponentListener, addFocusListener,  
addHierarchyBoundsListener, addHierarchyListener, addInputMethodListener,  
addKeyListener, addMouseListener, addMouseMotionListener,  
addMouseWheelListener, bounds, checkImage, checkImage, coalesceEvents,  
contains, createImage, createImage, createVolatileImage,  
createVolatileImage, disableEvents, dispatchEvent, enable, enableEvents,  
enableInputMethods, firePropertyChange, firePropertyChange,  
firePropertyChange, firePropertyChange, firePropertyChange,  
firePropertyChange, getBackground, getBounds, getColorModel,  
getComponentListeners, getComponentOrientation, getCursor, getDropTarget,  
getFocusCycleRootAncestor, getFocusListeners,  
getFocusTraversalKeysEnabled, getFont, getForeground,  
getGraphicsConfiguration, getHierarchyBoundsListeners,  
getHierarchyListeners, getIgnoreRepaint, getInputContext,  
getInputMethodListeners, getInputMethodRequests, getKeyListeners,  
getLocale, getLocation, getLocationOnScreen, getMouseListeners,  
getMouseMotionListeners, getMousePosition, getMouseWheelListeners,  
getName, getParent, getPeer, getPropertyChangeListeners,
```

Method Summary

All Methods **Instance Methods** **Concrete Methods**

Modifier and Type	Method and Description
void	removePoisson() Retire le poisson de cet espace.
void	setPoisson(Poisson poisson) Modifie le poisson.
void	stateChanged(int state) Indique la direction Ã prendre.

Methods inherited from class javax.swing.JPanel

getAccessibleContext, getUI, getUIClassID, paramString, setUI, updateUI

Methods inherited from class javax.swing.JComponent

addAncestorListener, addNotify, addVetoableChangeListener, computeVisibleRect, contains, createToolTip, disable, enable, firePropertyChange, firePropertyChange, firePropertyChange, fireVetoableChange, getActionForKeyStroke, getActionMap, getAlignmentX, getAlignmentY, getAncestorListeners, getAutoscrolls, getBaseline, getBaselineResizeBehavior, getBorder, getBounds, getClientProperty, getComponentGraphics, getComponentPopupMenu, getConditionForKeyStroke, getDebugGraphicsOptions, getDefaultLocale, getFontMetrics, getGraphics, getHeight, getInheritsPopupMenu, getInputMap, getInputMap, getInputVerifier, getInsets, getInsets, getListeners, getLocation, getMaximumSize, getMinimumSize, getNextFocusableComponent, getPopupLocation, getPreferredSize, getRegisteredKeyStrokes, getRootPane, getSize, getToolTipLocation, getToolTipText, getToolTipText, getTopLevelAncestor, getTransferHandler, getVerifyInputWhenFocusTarget, getVetoableChangeListeners, getVisibleRect, getWidth, getX, getY, grabFocus, hide, isDoubleBuffered, isLightweightComponent, isManagingFocus, isOpaque, isOptimizedDrawingEnabled, isPaintingForPrint, isPaintingOrigin, isPaintingTile, isRequestFocusEnabled, isValidRoot, paint, paintBorder, paintChildren, paintComponent, paintImmediately, paintImmediately, print, printAll, printBorder, printChildren, printComponent, processComponentKeyEvent, processKeyBinding, processKeyEvent, processMouseEvent, processMouseMotionEvent, putClientProperty, registerKeyboardAction, registerKeyboardAction, removeAncestorListener, removeNotify, removeVetoableChangeListener, repaint, repaint, requestDefaultFocus, requestFocus, requestFocus, requestFocusInWindow, requestFocusInWindow, resetKeyboardActions, reshape, revalidate, scrollRectToVisible, setActionMap, setAlignmentX,

Nested classes/interfaces inherited from class java.awt.Container

`java.awt.Container.AccessibleAWTContainer`

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 inherited from class javax.swing.JComponent

`listenerList,` `TOOL_TIP_TEXT_KEY,` `ui,` `UNDEFINED_CONDITION,`
`WHEN_ANCESTOR_OF_FOCUSED_COMPONENT,` `WHEN_FOCUSED,` `WHEN_IN_FOCUSED_WINDOW`

Fields inherited from class java.awt.Component

`accessibleContext,` `BOTTOM_ALIGNMENT,` `CENTER_ALIGNMENT,` `LEFT_ALIGNMENT,`
`RIGHT_ALIGNMENT,` `TOP_ALIGNMENT`

Fields inherited from interface lifegame.model.states.RequinState

`ADULT,` `CHILD,` `YOUNG`

Fields inherited from interface java.awt.image.ImageObserver

`ABORT,` `ALLBITS,` `ERROR,` `FRAMEBITS,` `HEIGHT,` `PROPERTIES,` `SOMEBITS,` `WIDTH`

Constructor Summary

Constructors

Constructor and Description

Square ()

Cr e une nouvelle instance de **Square**:
Initialise les composants.

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lifegame.view.ui

Class Square

```
java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JPanel
          lifegame.view.ui.Square
```

All Implemented Interfaces:

[java.awt.image.ImageObserver](#), [java.awt.MenuContainer](#), [java.io.Serializable](#),
[javax.accessibility.Accessible](#), [RequinState](#)

```
public class Square
  extends javax.swing.JPanel
  implements RequinState
```

Square:

ReprÃ©sente une case de la mer.

Version:

1.0

Author:

Jesus GARNICA OLARRA, Hivinau GRAFFE

See Also:

[Serialized Form](#)

Nested Class Summary

Nested classes/interfaces inherited from class javax.swing.JPanel

[javax.swing.JPanel.AccessibleJPanel](#)

Nested classes/interfaces inherited from class javax.swing.JComponent

[javax.swing.JComponent.AccessibleJComponent](#)