



UNIVERSIDAD AUTÓNOMA DE SAN LUIS POTOSÍ



FACULTAD DE INGENIERÍA

ÁREA DE COMPUTACIÓN E INFORMÁTICA

PROGRAMACION ORIENTADA A OBJETOS

Profesor. Cesar Augusto Puente Montejano

MANUAL DEL PROGRAMADOR

ALUMNO:

Agustín Israel Vergara Navor

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Diagrama de clases

Agenda de elaboración del trabajo

1ra Semana de Junio – Propuesta de proyecto.

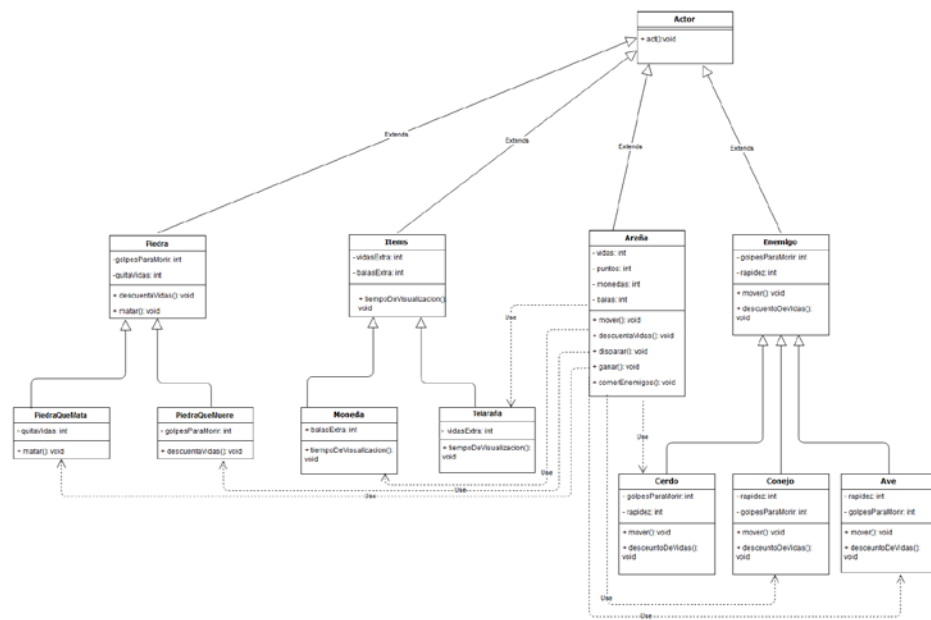
2da Semana de Junio – Elaboración de clases y asignación de imágenes

3ra Semana de Junio – Elaboración de comportamiento de clases, enemigos, mundo, jugador.

4ta Semana de Junio – falta de conocimiento en algunas clases de Greenfoot, recortar algunas funciones debido a que no había tiempo para realizarlo.

Diagrama de clases

Test



Test

Class Enemigo

java.lang.Object

greenfoot.Actor

Enemigo

```
public class Enemigo extends greenfoot.Actor
```

La clase Enemigo hereda a Cerdo, Conejo y Ave.

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

Enemigo ()	
-----------------------------	--

Method Summary

void	act () Act - do whatever the Enemigo wants to do.
------	---

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Enemigo

```
public Enemigo()
```

Method Detail

act

```
public void act()
```

Act - do whatever the Enemigo wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `greenfoot.Actor`

Class Cerdo

```
java.lang.Object
```

```
greenfoot.Actor
```

```
Enemigo
```

```
Cerdo
```

```
public class Cerdo extends Enemigo
```

Write a description of class Cerdo here.

Version:

(a version number or a date)

Author:

(your name)

Constructor Summary

[Cerdo](#)()

Method Summary

void	act () Act - do whatever the Cerdo wants to do.
void	lookForAraña () Método que espera a la araña para poder matarla
void	muevete () Método Muevete el cual le da un movienito aleatorio al enemigo
void	puntos () Método que genera puntos a la araña al matar un cerdo

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Cerdo

```
public Cerdo()
```

Method Detail

act

```
public void act()
```

Act - do whatever the Cerdo wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `Enemigo`

lookForAraña

```
public void lookForAraña()
```

Método que espera a la araña para poder matarla

muevete

```
public void muevete()
```

Método Muevete el cual le da un movienito aleatorio al enemigo

puntos

```
public void puntos()
```

Método que genera puntos a la araña al matar un cerdo

Class Conejo

```
java.lang.Object
```

greenfoot.Actor

Enemigo

Conejo

```
public class Conejo extends Enemigo
```

Write a description of class Conejo here.

Version:

(a version number or a date)

Author:

(your name)

Constructor Summary

[Conejo](#) ()

Constructor de La clase Conejo

Method Summary

void [act](#) ()

Act - do whatever the Conejo wants to do.

void [lookForAraña](#) ()

Método que espera a la araña para poder matarla

void [muevete](#) ()

Método Muevete el cual le da un movienito aleatorio al enemigo

void [puntos](#) ()

Método que genera puntos a la araña al matar un conejo

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Conejo

```
public Conejo()
```

Constructor de La clase Conejo

Method Detail

act

```
public void act()
```

Act - do whatever the Conejo wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `Enemigo`

lookForAraña

```
public void lookForAraña()
```

Método que espera a la araña para poder matarla

muevete

```
public void muevete()
```

Método Muevete el cual le da un movienito aleatorio al enemigo

puntos

public void **puntos**()

Método que genera puntos a la araña al matar un conejo

Class Ave

java.lang.Object

greenfoot.Actor

Enemigo

Ave

public class **Ave** extends Enemigo

Write a description of class Ave here.

Version:

(a version number or a date)

Author:

(your name)

Constructor Summary

[Ave](#)()

Method Summary

void	<code>act()</code> Act - do whatever the Ave wants to do.
void	<code>lookForAraña()</code> Método que espera a la araña para poder matarla
void	<code>muevete()</code> Método Muevete el cual le da un movienito aleatorio al enemigo
void	<code>puntos()</code> Método que genera puntos a la araña al matar un ave

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Ave

```
public Ave()
```

Method Detail

[`act`](#)

```
public void act()
```

Act - do whatever the Ave wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `Enemigo`

lookForAraña

```
public void lookForAraña()
```

Método que espera a la araña para poder matarla

muevete

```
public void muevete()
```

Método Muevete el cual le da un movienito aleatorio al enemigo

puntos

```
public void puntos()
```

Método que genera puntos a la araña al matar un ave.

Class Araña

`java.lang.Object`

`greenfoot.Actor`

Araña

```
public class Araña extends greenfoot.Actor
```

La clase Araña es el jugador principal el cual se mueve y mata a los

Version:

4-07-2018

Author:

AIVN

Constructor Summary

[Araña](#) ()

Constructor de la Clase Araña

Method Summary

void	act () Act - do whatever the Araña wants to do.
void	checkPressKey () Método que realiza el cambio de movimiento de la araña y dispar la bala
int	decrementaVidas () Método que quita vidas y si vidas = 0 enviaun mensaje que has muerto
void	dispara () Metodo que dispara una bala y la elimina cuando llega al finalde al coordenada x
void	lookForAve () Método que espera un Ave si lo toca este desaparece del mundo y muere
void	lookForCerdo () Método que espera un Cerdo si lo toca este desaparece del mundo y muere
void	lookForConejo () Método que espera un Conejo si lo toca este desaparece del mundo y muere
void	lookForMoneda () Metodo que espera hasta tocar una moneda
void	lookforRocaMata () Método que muestra en el mundo una roca si la tocas te quita una vida
void	lookForRocaMuere () Método que espera una Roca para destruirla y le da vidas a la araña

void	<u>lookForTelaraña</u> () Método que espera hasta que toques la telaraña y te de una vida
void	<u>muevete</u> () Método que realiza el movimiento de la araña
int	<u>puntos</u> () Método que indica los puntos que vas a acumulando
void	<u>quitaVida</u> () Método que te quita vidas y te coloca en una posición inicial cada vez que pierdes una.
void	<u>sumaVida</u> () Método que suma vidas y te pasa al nivel 2
void	<u>sumaVida2</u> () Método que te da la opción de tomar la moneda y te envía al nivel 3
void	<u>switchImage</u> () Método que realiza el cambio de imágenes
void	<u>verificaVidas</u> () Método que verifica si ya no tienes vidas cuando vidas = 0 envía un texto en pantalla para indicar que perdiste.

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Araña

```
public Araña()
```

Constructor de la Clase Araña

Method Detail

act

```
public void act()
```

Act - do whatever the Araña wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `greenfoot.Actor`

Class Bala

`java.lang.Object`

`greenfoot.Actor`

Bala

```
public class Bala extends greenfoot.Actor
```

La clase Bala permite elimina del mundo a los enemigos.

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

Bala ()	
--------------------------	--

Method Summary

void	act ()
	Act - do whatever the Bala wants to do.
void	lookForAve ()
void	lookForCerdo ()
void	lookForConejo ()

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Bala

```
public Bala()
```

Method Detail

act

```
public void act()
```

Act - do whatever the Bala wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `greenfoot.Actor`

lookForAve

```
public void lookForAve()
```

lookForCerdo

```
public void lookForCerdo()
```

lookForConejo

```
public void lookForConejo()
```

Class Boton

`java.lang.Object`

`greenfoot.Actor`

Boton

```
public class Boton extends greenfoot.Actor
```

Clase Boton, permite crear los botones que nos permitan cambiar de escenario

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

Boton (int n) Constructor Boton	
--	--

Method Summary

void	act () Método que muestra los botones definidos, a traves del metodo muestra
void	muestra (int n) Método que crea botones ya definidos dependiendo del parámetro que llega

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Boton

```
public Boton(int n)  
    Constructor Boton
```

Method Detail

act

```
public void act()  
    Método que muestra los botones definidos, a traves del metodo muestra
```

Overrides:

act in class `greenfoot.Actor`

muestra

```
public void muestra(int n)  
    Método que crea botones ya definidos dependiendo del parámetro que llega
```

Class `Obstaculo`

`java.lang.Object`

`greenfoot.Actor`

Obstaculo

```
public class Obstaculo extends greenfoot.Actor
```

La clase `Obtculo` hereda a `RocaMata` y a `RocaMuere`.

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

Obstaculo ()	
-------------------------------	--

Method Summary

void	act () Act - do whatever the Obstaculo wants to do.
------	---

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

[Obstaculo](#)
`public Obstaculo()`

Method Detail

act

```
public void act()
```

Act - do whatever the Obstaculo wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `greenfoot.Actor`

Class RocaMata

```
java.lang.Object
```

```
    greenfoot.Actor
```

```
    Obstaculo
```

```
    RocaMata
```

```
public class RocaMata extends Obstaculo
```

La clase RocaMata este al momento de tocarla te quita una vida o te mueres.

Version:

(a version number or a date)

Author:

(your name)

Constructor Summary

[RocaMata](#)()

Method Summary

void [act](#)()

Act - do whatever the RocaMata wants to do.

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

RocaMata

public **RocaMata**()

Method Detail

act

public void **act**()

Act - do whatever the RocaMata wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class Obstaculo

Class RocaMuere

java.lang.Object

greenfoot.Actor

Obstaculo

RocaMuere

```
public class RocaMuere extends Obstaculo
```

La clase RocaMuere es un Obstaculo que muere al tocarlo.

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

RocaMuere ()	
-------------------------------	--

Method Summary

void	act () Act - do whatever the RocaMuere wants to do.
------	---

void	puntos () metodo que muere al tocarlo y ortorga 10 puntos
------	---

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

RocaMuere

public **RocaMuere**()

Method Detail

act

public void **act**()

Act - do whatever the RocaMuere wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class Obstacle

puntos

public void **puntos**()

método que muere al tocarlo y ortorga 10 puntos

lass Items

java.lang.Object

greenfoot.Actor

Items

public class **Items** extends greenfoot.Actor

La clase Items es una clase que hereda a La clase Moneda y a la Clase Telaraña.

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

Items ()	
---------------------------	--

Method Summary

void	act ()
------	-------------------------

Act - do whatever the Items wants to do.

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY,


```
intersects, isAtEdge, isTouching, move, removeTouching, setImage,
setImage, setLocation, setRotation, turn, turnTowards
```

Methods inherited from class java.lang.Object

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

Constructor Detail

Items

```
public Items()
```

Method Detail

act

```
public void act()
```

Act - do whatever the Items wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `greenfoot.Actor`

Class Moneda

java.lang.Object

greenfoot.Actor

Items

Moneda

```
public class Moneda extends Items
```

La clase moneda es un item que da pase al siguiente nivel.

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

Moneda ()	
----------------------------	--

Method Summary

void	act () Act - do whatever the Moneda wants to do.
------	--

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Moneda

```
public Moneda()
```

Method Detail

act

```
public void act()
```

Act - do whatever the Moneda wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class `Items`

Class Telaraña

`java.lang.Object`

`greenfoot.Actor`

`Items`

Telaraña

```
public class Telaraña extends Items
```

La clase es in item que otorga una vida al jugador.

Version:

4 jul 2018

Author:

AIVN

Constructor Summary

[Telaraña](#)()

Method Summary

void [act](#)()

Act - do whatever the Telaraña wants to do.

Methods inherited from class greenfoot.Actor

addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getWorldOfType, getX, getY, intersects, isAtEdge, isTouching, move, removeTouching, setImage, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

Telaraña

```
public Telaraña()
```

Method Detail

act

```
public void act()
```

Act - do whatever the Telaraña wants to do. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

Overrides:

act in class Items
