

Class Garrison

java.lang.Object

greenfoot.Actor

Establishment

Garrison

```
public class Garrison
extends Establishment
```

Garrison Class

Subclass of Establishment superclass, establishments that train troops for the kingdom. Can be upgraded by the Chateau, a higher level, means a higher level troop, leading to higher HP and more damage.

Version:

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Author:

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Field Summary

Fields inherited from class Establishment

alliance, healthBar, hp, maxHP

Constructor Summary

Constructors

Constructor	Description
Garrison (int hp, int alliance, Chateau chateau)	Constructor for Garrison class, calls the constructor of its superclass, initializes queue for its queue of troops, sets its image, and sets its starting values.

and Type

void	act()	Called every act, determines if a troop should be queued or added to the world.
protected void	castleDestroyed()	Called when the castle has been destroyed, essentially does the same as the explode() method but does not remove the garrison from the ArrayList.
protected void	explode()	Called when the HP of the garrison reaches less than or equal to 0, adds the image of the rubble, and removes this object from the garrisons ArrayList and from the world.
int	getLevel()	Returns the level of the garrison.
int	getQueueTime()	Calculates and returns the queue time of all the troops in its queue.
void	levelUp()	Called to level up the garrison, incremenets the level, and changes its image.
void	queueTroop (int troopType)	Adds a troop to the queue.

Methods inherited from class Establishment

getAlliance, hit, setAlliance

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, setRotation, setLocation, setRotation, turn, turnTowards

Methods inherited from class java.lang.Object

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

Constructor Detail

```
        int alliance,  
        Chateau chateau)
```

Constructor for Garrison class, calls the constructor of its superclass, initializes queue for its queue of troops, sets its image, and sets its starting values.

Parameters:

hp - Starting HP of the garrison

alliance - Alliance the garrison belongs to (0 - gold, 1 - blue)

chateau - Chateau the garrison belongs to

Method Detail

act

```
public void act()
```

Called every act, determines if a troop should be queued or added to the world.

Overrides:

act in class `greenfoot.Actor`

levelUp

```
public void levelUp()
```

Called to level up the garrison, increments the level, and changes its image.

explode

```
protected void explode()
```

Called when the HP of the garrison reaches less than or equal to 0, adds the image of the rubble, and removes this object from the garrisons ArrayList and from the world.

Specified by:

castleDestroyed

```
protected void castleDestroyed()
```

Called when the castle has been destroyed, essentially does the same as the explode() method but does not remove the garrison from the ArrayList.

getLevel

```
public int getLevel()
```

Returns the level of the garrison.

Returns:

int The level of the garrison

getQueueTime

```
public int getQueueTime()
```

Calculates and returns the queue time of all the troops in its queue.

Returns:

int Queue time in milliseconds

queueTroop

```
public void queueTroop(int troopType)
```

Adds a troop to the queue.

Parameters:

troopType - The type of troop to be added (0 - Serpentine, 1 - Dragon)

