Class Establishment

java.lang.Object
    greenfoot.Actor
        Establishment

Direct Known Subclasses:

Chateau, Garrison, Treasury

```
public abstract class Establishment
extends greenfoot.Actor
```

Establishment Class

Abstract superclass for all establishments, including the Chateau, Garrison, and Treasury. Includes basic functions that are used by each type of establishment, such as returning and setting the alliance and getting hit by troops.

Version:

April 2021

Author:

Andrew Qiao, James Li

Field Summary

Fields

Modifier and Type	Field	Description
protected int	alliance	
protected StatBar	healthBar	
protected int	hp	
protected int	maxHP	

Constructor Summary

Constructors

Constructor	Description

Method Summary

All Methods   Instance Methods   Abstract Methods   Concrete Methods

Modifier and Type	Method	Description
protected abstract void	**explode**()	Called when the establishment's HP reached below 0, abstract as each establishment acts differently.
int	**getAlliance**()	Getter method, returns the alliance variable.
void	**hit** (int damage)	Called by troops when the establishment gets hit, decreases HP, changes the properties of its health bar, and checks if HP has reached below 0 accordingly.
void	**setAlliance** (int alliance)	Setter method, sets the alliance of the establishment.

Methods inherited from class greenfoot.Actor

act, 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, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Field Detail

hp

protected int hp

maxHP

```
protected int maxHP
```

healthBar

```
protected StatBar healthBar
```

Constructor Detail

Establishment

```
public Establishment(int maxHP,
                     int alliance)
```

Constructor for Establishment class, sets its starting variables.

Parameters:

maxHP - The maximum HP the establishment can have

alliance - The alliance the establishment belongs to, 0 is gold, 1 is blue

Method Detail

getAlliance

```
public int getAlliance()
```

Getter method, returns the alliance variable.

SEARCH: Search

SUMMARY: NESTED | FIELD | CONSTR | METHOD   DETAIL: FIELD | CONSTR | METHOD

---

setAlliance

```
public void setAlliance(int alliance)
```

Setter method, sets the alliance of the establishment.

Parameters:

`alliance` - The alliance of the establishment

---

hit

```
public void hit(int damage)
```

Called by troops when the establishment gets hit, decreases HP, changes the properties of its health bar, and checks if HP has reached below 0 accordingly.

Parameters:

`damage` - The amount of damage that has been done to the establishment

---

explode

```
protected abstract void explode()
```

Called when the establishment's HP reached below 0, abstract as each establishment acts differently.

SUMMARY: NESTED | FIELD | CONSTR | METHOD   DETAIL: FIELD | CONSTR | METHOD