## Class Planet

java.lang.Object

public abstract class **Planet**extends greenfoot.Actor

The planets are where fighters will land. Depending on the type of planet, they will influence the fighters differently.

Multiple planets can be created in a world. When a fighter hits a planet, they should call the hitByFighter method to update the planet's statistics. When the population is wiped by a comet, the wipePopulation method should be called.

**Version:** April 1, 2018 **Author:** Maggie Lin, Catherine Lee

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| **Field Summary** | |
| protected  int | [**actCounter**](http://docs.google.com/Planet.html#actCounter) |
| protected  greenfoot.GreenfootImage[] | [**bluePlanets**](http://docs.google.com/Planet.html#bluePlanets) |
| protected  greenfoot.GreenfootImage[] | [**greenPlanets**](http://docs.google.com/Planet.html#greenPlanets) |
| protected  int | [**imageNumber**](http://docs.google.com/Planet.html#imageNumber) |
| protected  greenfoot.GreenfootImage[] | [**purplePlanets**](http://docs.google.com/Planet.html#purplePlanets) |
| protected  greenfoot.GreenfootImage[] | [**redPlanets**](http://docs.google.com/Planet.html#redPlanets) |
| protected  int | [**size**](http://docs.google.com/Planet.html#size) |
| protected  int | [**speedOfRotation**](http://docs.google.com/Planet.html#speedOfRotation) |
| protected  char | [**state**](http://docs.google.com/Planet.html#state) |

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| **Constructor Summary** | |
| [**Planet**](http://docs.google.com/Planet.html#Planet(int,%20char))(int size, char state)            Constructs a planet with specified size and state. |

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| **Method Summary** | |
| char | [**getState**](http://docs.google.com/Planet.html#getState())()            Gets state of planet: whether it is conquered, neutral, or a healing planet. |
| abstract  void | [**hitByFighter**](http://docs.google.com/Planet.html#hitByFighter(boolean))(boolean isHuman)            If fighter hits planet successfully, fighter should call this method to update Planet's statistics. |
| protected  void | [**loadImages**](http://docs.google.com/Planet.html#loadImages())()            Load images into image arrays. |
| protected  void | [**rotate**](http://docs.google.com/Planet.html#rotate())()            Images update to appear to rotate. |
| protected  void | [**setInitialImage**](http://docs.google.com/Planet.html#setInitialImage())()            Sets initial image. |
| abstract  void | [**wipePopulation**](http://docs.google.com/Planet.html#wipePopulation())()            Population of planet is wiped and reset. |

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| **Methods inherited from class** |
| act, addedToWorld, getImage, getIntersectingObjects, getNeighbours, getObjectsAtOffset, getObjectsInRange, getOneIntersectingObject, getOneObjectAtOffset, getRotation, getWorld, getX, getY, intersects, isTouching, move, removeTouching, setImage, setImage, setLocation, setRotation, turn, turnTowards |

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| **Methods inherited from class** |
| clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait |

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| **Field Detail** |

### actCounter

protected int **actCounter**

### bluePlanets

protected greenfoot.GreenfootImage[] **bluePlanets**

### greenPlanets

protected greenfoot.GreenfootImage[] **greenPlanets**

### imageNumber

protected int **imageNumber**

### purplePlanets

protected greenfoot.GreenfootImage[] **purplePlanets**

### redPlanets

protected greenfoot.GreenfootImage[] **redPlanets**

### size

protected int **size**

### speedOfRotation

protected int **speedOfRotation**

### state

protected char **state**

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| **Constructor Detail** |

### Planet

public **Planet**(int size,  
 char state)

Constructs a planet with specified size and state.

**Parameters:**size - size of planet; must be greater than 0, ideally below 60state - state of planet (b: alien conquered, g: neutral, l: alien healing, p: human healing, r: human conquered)

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| **Method Detail** |

### getState

public char **getState**()

Gets state of planet: whether it is conquered, neutral, or a healing planet. A neutral planet is denoted with 'g'; alien conquered is 'p', human conquered is 'b', and healing is 'r'.

### hitByFighter

public abstract void **hitByFighter**(boolean isHuman)

If fighter hits planet successfully, fighter should call this method to update Planet's statistics.

### loadImages

protected void **loadImages**()

Load images into image arrays.

### rotate

protected void **rotate**()

Images update to appear to rotate.

### setInitialImage

protected void **setInitialImage**()

Sets initial image.

### wipePopulation

public abstract void **wipePopulation**()

Population of planet is wiped and reset.