## Class GameWorld

java.lang.Object

public class **GameWorld**extends greenfoot.World

Write a description of class GameWorld here.

**Version:** (a version number or a date) **Author:** (your name)

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| **Field Summary** | |
| static int | [**money**](http://docs.google.com/GameWorld.html#money) |

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| **Constructor Summary** | |
| [**GameWorld**](http://docs.google.com/GameWorld.html#GameWorld())()            Constructor for objects of class GameWorld. |
| [**GameWorld**](http://docs.google.com/GameWorld.html#GameWorld(int,%20char))(int wave, char scene)            Constructor for objects of class GameWorld. |

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| **Method Summary** | |
| void | [**act**](http://docs.google.com/GameWorld.html#act())()            Coordinates everything wihtin the world. |
| void | [**addMoney**](http://docs.google.com/GameWorld.html#addMoney(int))(int amount)            Adds money to user's current amount and updates counter. |
| void | [**addObstacles**](http://docs.google.com/GameWorld.html#addObstacles(int))(int num)            Adds obstacles to the grid randomly, as well as along the top and bottom. |
| void | [**changeWave**](http://docs.google.com/GameWorld.html#changeWave())()            Changes the wave in the world |
| void | [**createWave**](http://docs.google.com/GameWorld.html#createWave(int))(int wave)            Creates world according to what wave it is in. |
| boolean | [**enemiesGone**](http://docs.google.com/GameWorld.html#enemiesGone())()            Checks if all the enemies have disappeared from the screen. |
| Cursor | [**getCursor**](http://docs.google.com/GameWorld.html#getCursor())()            Returns the cursor. |
| int | [**getDeathCount**](http://docs.google.com/GameWorld.html#getDeathCount())()            Get the number of enemies that have died. |
| Grid | [**getGrid**](http://docs.google.com/GameWorld.html#getGrid())()            Returns the grid that is currently in the world. |
| void | [**increaseDeathCount**](http://docs.google.com/GameWorld.html#increaseDeathCount(int))(int deathIncrease)            Should call when an enemy dies. |
| void | [**loadGrid**](http://docs.google.com/GameWorld.html#loadGrid(int))(int wave)            Loads the new grid into the world. |
| void | [**mouseClicked**](http://docs.google.com/GameWorld.html#mouseClicked())()            -------------------------------------------------- api -------------------------------------------------- |
| void | [**setCurrentButtonSelected**](http://docs.google.com/GameWorld.html#setCurrentButtonSelected(Button))(Button button)            -------------------------------------------------- api -------------------------------------------------- |
| void | [**setMoney**](http://docs.google.com/GameWorld.html#setMoney(int))(int money)            Sets money user has and updates counter. |
| int | [**updateLives**](http://docs.google.com/GameWorld.html#updateLives(int))(int decreaseLives)            Update the users lives. |

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| **Methods inherited from class** |
| addObject, getBackground, getCellSize, getColorAt, getHeight, getObjects, getObjectsAt, getWidth, numberOfObjects, removeObject, removeObjects, repaint, setActOrder, setBackground, setBackground, setPaintOrder, started, stopped |

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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** |

### money

public static int **money**

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| **Constructor Detail** |

### GameWorld

public **GameWorld**()

Constructor for objects of class GameWorld. Builds a world with wave 1, grass scene.

### GameWorld

public **GameWorld**(int wave,  
 char scene)

Constructor for objects of class GameWorld.

**Parameters:**wave - What wave the object is in (goes up to 4)scene - What scene has been chosen (u: underwater, f: fire, g: grass)

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| **Method Detail** |

### act

public void **act**()

Coordinates everything wihtin the world. This method is called whenever the 'Act' or 'Run' button gets pressed in the environment.

**Overrides:**act in class greenfoot.World

### addMoney

public void **addMoney**(int amount)

Adds money to user's current amount and updates counter.

**Parameters:**amount - Amount money increases by

### addObstacles

public void **addObstacles**(int num)

Adds obstacles to the grid randomly, as well as along the top and bottom.

**Parameters:**num - Number of obstacles to add

### changeWave

public void **changeWave**()

Changes the wave in the world

### createWave

public void **createWave**(int wave)

Creates world according to what wave it is in.

**Parameters:**wave - Which wave the world is in

### enemiesGone

public boolean **enemiesGone**()

Checks if all the enemies have disappeared from the screen.

**Returns:**boolean True if all the enemies are gone, otherwise false

### getCursor

public Cursor **getCursor**()

Returns the cursor.

**Returns:**Cursor The cursor that is in the world

### getDeathCount

public int **getDeathCount**()

Get the number of enemies that have died.

**Returns:**int The number of dead enemies

### getGrid

public Grid **getGrid**()

Returns the grid that is currently in the world.

### increaseDeathCount

public void **increaseDeathCount**(int deathIncrease)

Should call when an enemy dies. Changes the death count, and user gets 2 coins.

**Parameters:**deathIncrease - The increase in the number of deaths

### loadGrid

public void **loadGrid**(int wave)

Loads the new grid into the world.

**Parameters:**wave - Wave of the new grid

### mouseClicked

public void **mouseClicked**()

-------------------------------------------------- api --------------------------------------------------

### setCurrentButtonSelected

public void **setCurrentButtonSelected**(Button button)

-------------------------------------------------- api --------------------------------------------------

### setMoney

public void **setMoney**(int money)

Sets money user has and updates counter.

**Parameters:**money - Amount of money the user has

### updateLives

public int **updateLives**(int decreaseLives)

Update the users lives.

**Parameters:**decreaseLives - Number of lives lost **Returns:**int Return the current number of lives the user has