**Car**

The Car class is a subclass of Object and implements the vertical and horizontal speed of the car. Also, it overrides the getHitbox class from Object and create a new Area, with the given corners of the car image.

Extends: Object  
Implements: -  
Direct Subclasses: EnemyCar, PlayerCar

**Attributes:**

|  |  |
| --- | --- |
| private double | verticalSpeed |
| private double | horizontalSpeed |

**Constructors:**

|  |
| --- |
| Car(double x, double y) |
| Car(double x, double y, String imagePath) |

**Public functions:**

|  |  |
| --- | --- |
| void | setHorizontalSpeed(double horizontalSpeed) |
| double | getHorizontalSpeed() |
| void | setVerticalSpeed(double verticalSpeed) |
| double | getVerticalSpeed() |
| void | setSpeed(double horizontalSpeed, double verticalSpeed) |
| java.awt.geom.Area | getHitbox() |

|  |
| --- |
| Methods inherited from class Object |
| checkHitboxIntersection, checkHitboxIntersection, draw, getBoundingRect, getHeight, getImage, getWidth, getX, getY, height, hide, isVisible, move, moveHorizontal, moveRelative, moveRelativeHorizontal, moveRelativeVertical, moveTo, moveVertical, setImage,setImage, setVisible, setX, setY, show, width, x, y |

**Private Functions:**

|  |
| --- |
| Methods inherited from class Object |
| initVars, setHeight, setWidth, updateDimensions |

**Detailed Description:**

**Attributes:**

|  |
| --- |
| **verticalSpeed** |
| private double verticalSpeed = 0  This property holds the vertical speed of a Car instance.  By default, this property has a value of 0.  **Access methods:**   |  |  | | --- | --- | | double | getVerticalSpeed() | | void | setVerticalSpeed(double verticalSpeed) | |

|  |
| --- |
| **horizontalSpeed** |
| private double horizontalSpeed = 0  This property holds the horizontal speed of a Car instance.  By default, this property has a value of 0.  **Access methods:**   |  |  | | --- | --- | | double | getHorizontalSpeed() | | void | setHorizontalSpeed(double verticalSpeed) | |

**Public Functions:**

|  |
| --- |
| **getHitbox** |
| public java.awt.geom.Area getHitbox()  Returns the hitbox of the Object as Area.  **Overrides:**  getHitbox in class Object  **Returns:**  An Area, which is the hitbox of the car and can be used for intersection checks. |

|  |
| --- |
| **setSpeed** |
| public void setSpeed(double horizontalSpeed, double verticalSpeed)  Set horizontal- and vertical speed of the Car instance.  **Parameters:**  horizontalSpeed – new horizontal Speed  verticalSpeed – new vertical Speed |