**StreetManager**

The StreetManager class manages multiple Street objects, as if they are one road. It has its own speed and creates the streets itself, for the matching number of horizontal and vertical disposed Streets in a given JPanel.

Extends: -  
Implements: -  
Direct Subclasses: -

**Attributes:**

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| private int | horizontalStreetCount |
| private JPanel | panel |
| private static Street | sampleStreet |
| private int | spacing |
| private double | speed |
| private ArrayList<Street> | streets |
| private int | verticalStreetCount |
| private int | xAdditive |
| private int | y |

**Constructors:**

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| StreetManager(JPanel panel) |

**Public Methods:**

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| void | draw(Graphics2D g2d) |
| void | draw(Graphics2D g2d, JPanel observer) |
| java.awt.Rectangle | getBoundingRect() |
| int | getHorizontalStreetCount() |
| int | getSpacing() |
| double | getSpeed() |
| int | getVerticalStreetCount() |
| int | getXAdditive() |
| double | getY() |
| void | initStreets() |
| void | move() |
| void | setSpacing(int spacing) |
| void | setSpeed(double speed) |
| void | update() |

**Public Static Methods:**

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| Street | getSampleStreet() |

**Private Methods:**

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| void | setHorizontalStreetCount(int horizontalStreetCount) |
| void | setVerticalStreetCount(int verticalStreetCount) |
| void | setXAdditive(int xAdditive) |

**Detailed Description:**

**Attributes:**

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| **horizontalStreetCount** |
| private int horizontalStreetCount = 0  This property holds the amount of horizontal streets  By default, this property has a value of 0.  **Access methods:**   |  |  | | --- | --- | | int | getHorizontalStreetCount() | | void | setHorizontalStreetCount(int horizontalStreetCount) | |

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| **panel** |
| private JPanel panel  This attribute is a reference for the JPanel, for which the StreetManager updates if the JPanel gets resized. |

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| **sampleStreet** |
| private static Street sampleStreet = new Street(0, 0)  This attribute is a reference to a Street object. It is used check the dimensions of a Street object at initializing the StreetManager.  **Access methods:**   |  |  | | --- | --- | | Street | getSampleStreet() | |

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| **spacing** |
| private int spacing = 30  This property is the minimal space, between the shoulder and the panel-border on the left and right side.  By default, this property has a value of 30.  **Access methods:**   |  |  | | --- | --- | | int | getSpacing() | | void | setSpacing(int spacing) | |

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| **speed** |
| private double speed = 5  This property is the speed, which all Street objects has.  By default, this property has a value of 5.  **Access methods:**   |  |  | | --- | --- | | double | getSpeed() | | void | setSpeed(double speed) | |

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| **streets** |
| private java.util.ArrayList<Street> streets  This ArrayList hold all the Street objects, which are drawn to the screen and handled by this StreetManager. |

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| **verticalStreetCount** |
| private int verticalStreetCount = 0  This property holds the amount of vertical streets  By default, this property has a value of 0.  **Access methods:**   |  |  | | --- | --- | | int | getVerticalStreetCount() | | void | setVerticalStreetCount(int verticalStreetCount) | |

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| **xAdditive** |
| private int xAdditive = 0  this property holds the distance, between the panel-border and the outer Street objects.  By default, this property has a value of 0.  **Access methods:**   |  |  | | --- | --- | | int | getXAdditive() | | void | setXAdditive(int xAdditive) | |

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| **y** |
| private double y = 0  This property holds the y coordinate of the highest Street object(s). The y coordinate is 0 – the height of the sampleStreet and resets itself to this value, if y gets 0.  By default, this property has a value of 0. |

**Public Functions:**

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| **draw** |
| public void draw(Graphics2D g2d)  This method draws the streets of the StreetManager, which are held in the streets ArrayList, to the JPanel, which is stored in panel.  **Parameters:**  g2d – this is the painting device |

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| **draw** |
| public void draw(Graphics2D g2d, JPanel observer)  This method draws the streets of the StreetManager, which are held in the streets ArrayList, to the JPanel, which is stored in given as observer.  **Parameters:**  g2d – this is the painting device  observer – this is the JPanel, to which is drawn at |

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| **getBoundingRect** |
| public java.awt.Rectangle getBoundingRect()  This method returns the bounding rectangle of the StreetManager, and is the border, containing all streets |

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| **initStreets** |
| public void initStreets()  This methods initialize the Street objects, which are stored in streets. It initialize a matching count for the height of the JPanel, stored in panel and it’s width. |

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| **move** |
| public void move()  Moves all the Street objects, stored in streets, as if they are one big road. |

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| **update** |
| public void update()  Updates all the components in StreetManager. |