**Class Definition:**

public abstract class GameObject implements Drawable

**Constructors:**

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| --- | --- |
| Identifier: | GameObject(int xPosition, int yPosition, Color color) |
| Parameters: | xPosition – an int representing the x coordinate of the GameObject  yPosition – an int representing the y coordinate of the GameObject  color – a Color object representing the color of the GameObject |
| Return Value: |  |
| Other: |  |

**Abstract Methods:**

|  |  |
| --- | --- |
| Identifier: | getBounds() |
| Parameters: |  |
| Return Value: | **Rectangle** – a Rectangle object that represents the hit box of the GameObject |
| Other: |  |

**Methods:**

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| --- | --- |
| Identifier: | getXPosition() |
| Parameters: |  |
| Return Value: | **int** – The x coordinate of the GameObject |
| Other: |  |

|  |  |
| --- | --- |
| Identifier: | getYPosition() |
| Parameters: |  |
| Return Value: | **int** – The y coordinate of the GameObject |
| Other: |  |

|  |  |
| --- | --- |
| Identifier: | getColor () |
| Parameters: |  |
| Return Value: | **Color** – The color of the GameObject |
| Other: |  |

|  |  |
| --- | --- |
| Identifier: | setXPosition(int xPosition) |
| Parameters: | xPosition – An int type representing the x coordinate of the GameObject. |
| Return Value: |  |
| Other: |  |

|  |  |
| --- | --- |
| Identifier: | setYPosition(int yPosition) |
| Parameters: | yPosition – An int type representing the y coordinate of the GameObject. |
| Return Value: |  |
| Other: |  |

|  |  |
| --- | --- |
| Identifier: | setColor(Color color) |
| Parameters: | color – A Color type representing the color of the Ball. |
| Return Value: |  |
| Other: |  |

|  |  |
| --- | --- |
| Identifier: | isColliding(GameObject other) |
| Parameters: | other – Another GameObject instance |
| Return Value: | **boolean** – whether or not the two GameObjects are colliding (overlapping) |
| Other: | To determine if two GameObjects are colliding (overlapping) a naïve form of collision detection can be used by getting an instance of the Rectangle class for each object that represents a bounding box for the GameObject and then using the intersects methods of the Rectangle class which will determine if two Rectangles overlap with each other. |