Snake.java

```java
package snakegame. logic;
import javafx.scene.paint.Color;
import java.util.LinkedList;
import java.util.List;
public class Snake {
public static final Color COLOR = Color. CORNSILK;
public static final Color DEAD = Color. RED;
private Grid grid;
private int length;
private boolean safe;
private List< Point> points;
private Point head;
private int xVelocity;
private int yVelocity;
public Snake (Grid grid, Point initialPoint) {
length = 1;
points = new LinkedList<> ();
points.add (initialPoint);
head = initialPoint;
safe = true;
this.grid = grid;
xVelocity = 0;
yVelocity = 0;
}
private void growTo (Point point) {
length ++;
checkAndAdd (point);
}
private void shiftTo (Point point) {
// The head goes to the new location
checkAndAdd (point);
// The last/ oldest position is dropped
points.remove ();
}
private void checkAndAdd (Point point) {
point = grid.wrap (point);
safe & =! points.contains (point);
points.add (point);
head = point;
}
```