

Class Pinball

1/2

```
import java.awt.Color;
/**
 * @author      Nathan Chen
 * @author      Benjamin Tu
 * @teacher     Coglianese
 * @period      2
 * @version     11-7-18
 *
 * Class Pinball is a spot that can bounce from one boundary to another
 */
class Pinball extends Spot
{
    int dx,dy,rightEdge,bottomEdge;

    /**
     * Makes a pinball according to specifications
     *
     * @param      x      X position of pinball
     * @param      y      Y position of pinball
     * @param      r      Radius of pinball
     */
    public Pinball(int x, int y, int r)
    {
        super(x, y, r, Color.BLACK);
        dx = littlerandom();
        dy = littlerandom();
    }

    /**
     * setbounds sets the pinball's boundaries to specified integers
     *
     * @param      r      Right edge of boundary
     * @param      b      Left edge of boundary
     */
    public void setbounds(int r, int b)
    {
        rightEdge = r;
        bottomEdge = b;
    }

    /**
     * tick moves the ball and adjusts itself to bounce off boundaries
     */
    public void tick()
    {
        x += dx;
        y += dy;
        if (x - r <= 0) {
            dx = littlerandom();
        }
    }
}
```

```
        }
        if (x + r >= rightEdge) {
            dx = (-littlerandom());
        }
        if (y - r <= 0) {
            dy = littlerandom();
        }
        if (y + r >= bottomEdge) {
            dy = (-littlerandom());
        }
    }

/**
 * littlerandom returns a random integer used to calculate the speed
 */
public int littlerandom()
{
    return (int)(Math.random() * 6.0 + 3.0);
}
}
```