

Appendix - Star

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package src;

import java.awt.Color;
import java.awt.Graphics2D;

public class Star {
    private double x;
    private double y;
    private Color color;
    private int size;
    private int tosize;
    private int group;
    private boolean sizedir;
    private boolean rup;
    private boolean gup;
    private boolean bup;
    public Star(Dictator d, double mx, double my, double mbrightness, int group){
        this.group = group;
        x = mx;
        y = my;
        size = 1;
        tosize = 1;
        color = new Color(group*255/16, group*255/16, group*255/16);
        sizedir = true;

        rup = false;
        gup = false;
        bup = false;
    }
    void drawStar(Graphics2D gg){

        gg.setColor(color);
        gg.drawOval((int)x-(size/2),(int) y-(size/2), (int) size ,(int) size);
    }

    public void setColor(Color a){
        this.color = a;
    }
    public void setToSize(int toasize){
        size = toasize;
        tosize = toasize;
    }
    void update(Dictator dic){
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x+=.1*dic.StarCaptain.getVelocity().getX();
y+=.1*dic.StarCaptain.getVelocity().getY();

//      if(size!=tosize&& dic.getTime()%60 == 0){
//          if(size>tosize){
//              size--;
//          }else if(tosize>size){
//              size++;
//          }
//      }
size = tosize;
if(x < 0.0f){
    x += dic.SIZE_X;
}
if(y < 0.0f){
    y += dic.SIZE_Y;
}
x %= dic.SIZE_X;
y %= dic.SIZE_Y;

twinkle();
}
private void twinkle(){
    Color k = color;
    int r = k.getRed();
    if(rup){
        if(r+1 >= 255){
            r -= 1;
            rup = false;
        }else{
            r+=1;
        }
    }else if(!rup){
        if(r-1 <= 0){
            r += 1;
            rup = true;
        }else{
            r-=1;
        }
    }

    int g = k.getGreen();
    if(gup){
        if(g+1 >= 255){
            g -= 1;
            gup = false;

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        }else{
            g+=1;
        }
    }else if(!gup){
        if(g-1 <= 0){
            g += 1;
            gup = true;
        }else{
            g-=1;
        }
    }
    int b = k.getRed();
    if(bup){
        if(b+1 >= 255){
            b -= 1;
            bup = false;
        }else{
            b+=1;
        }
    }else if(!bup){
        if(b-1 <= 0){
            b += 1;
            bup = true;
        }else{
            b-=1;
        }
    }

    Color f = new Color(r,g,b);
    color = f;
}
public int getGroup() {
    // TODO Auto-generated method stub
    return group;
}
}

```