My Solution on Assignment 2 - Problem 2

This is my Solution of Assignment 2 - Problem 2 from the Computer Science Course CS106A of Prof. Mehran Sahami at the STANFORD University.

Target.java

```
/*
 * File: Target.java
 * Name:
 * Section Leader:
 * -----------------
 * This file is the starter file for the Target problem.
 * Assignment 2 , Problem 2
 */

import acm.graphics.*;
import acm.program.*;
import java.awt.*;

import javax.swing.plaf.synth.ColorType;

public class Target extends GraphicsProgram {

    public static final int dpi = 72; // 72 dots/pixel per inch is
assumed

    public void run() {
        GetCanvasSizeAndFillVars(); // fills CanvasX and CanvasY Class-
Variables
        DrawTargetAt(CanvasX/2,CanvasY/2); // Draw (almost) in the
Middle of the Canvas
    }

    public void DrawTargetAt(int X, int Y) {
        /*
         * This Method draws the "logo" or "Target" itself. It defines
the
         * LOOK of the Logo and how its build up.
         * X and Y define the CENTER POINT of the Logo/Target Sign.
         */
        DrawCircleAt(X,Y,1,Color.red);
        DrawCircleAt(X,Y,0.65,Color.white);
        DrawCircleAt(X,Y,0.3,Color.red);
    }

    public void DrawCircleAt(int CenterX,int CenterY,double
RadiusInch,Color Colour) {
        /*
```

```
         * This Method draws a CIRCLE with its Centerpoint at X,Y with
the Radius
         * given in INCH. Circles are of a SINGLE SOLID COLOR (filled).
         * Actual Size on the Screen depends on the Value set by the
"dpi" Constant
         */

        //Calculate Radius in PIXEL
        double RadiusPixels = RadiusInch * dpi;
        //Calculate REAL Starting Point (Upper Left Coordinates) for a
GOval Object
        double X = CenterX - RadiusPixels;
        double Y = CenterY - RadiusPixels;

        GOval aCircle = new GOval(X, Y, 2*RadiusPixels,
2*RadiusPixels); // Width and Height is TWICE the Radius in Pixel
        aCircle.setColor( Colour ); // set Outline as same Color
        aCircle.setFillColor( Colour ); // set Fill as same Color
        aCircle.setFilled(true); // yes make it filled
        add(aCircle);
    }

    public void GetCanvasSizeAndFillVars() {
        /*
         * Get Canvas Sizes and fill in Class Variables
         */
        CanvasX = getWidth();
        CanvasY = getHeight();
    }


    public int CanvasX, CanvasY; // some public Class Variables
}
```

— *Axel Werner 2011-02-06 16:26*

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