

```
package com.example.bouncingball;

import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Paint;
import android.util.AttributeSet;
import android.view.View;

public class BallView extends View {

    private Paint paint;
    private float ballX, ballY;
    private float radius = 50;
    private float dx = 8, dy = 8; // Speed in x and y direction
    private int width, height;

    public BallView(Context context, AttributeSet attrs) {
        super(context, attrs);
        paint = new Paint();
        paint.setColor(0xFFFF0000); // Red color
    }

    @Override
    protected void onSizeChanged(int w, int h, int oldw, int oldh) {
        super.onSizeChanged(w, h, oldw, oldh);
        width = w;
        height = h;
        ballX = width / 2;
        ballY = height / 2;
    }

    @Override
    protected void onDraw(Canvas canvas) {
        super.onDraw(canvas);
        canvas.drawCircle(ballX, ballY, radius, paint);
        updateBallPosition();
        invalidate(); // Redraw continuously
    }

    private void updateBallPosition() {
        ballX += dx;
        ballY += dy;

        // Bounce off the edges
        if (ballX - radius <= 0 || ballX + radius >= width) {
            dx = -dx;
        }
        if (ballY - radius <= 0 || ballY + radius >= height) {
            dy = -dy;
        }
    }
}
```