

```
package edu.illinois.cs498.dots;

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

/**
 * Created by Administrator on 2/12/2016.
 */
public class DotsView extends View {

    private Paint mPaint;
    private Bitmap mBitmap;
    private Canvas mCanvas;

    public DotsView(Context context) {
        super(context);
        initDotsView();
    }

    public DotsView(Context context, AttributeSet attrs) {
        super(context, attrs);
        initDotsView();
    }

    public DotsView(Context context, AttributeSet attrs, int defStyleAttr) {
        super(context, attrs, defStyleAttr);
        initDotsView();
    }

    public DotsView(Context context, AttributeSet attrs, int defStyleAttr,
int defStyleRes) {
        super(context, attrs, defStyleAttr, defStyleRes);
        initDotsView();
    }

    private void initDotsView() {
        mPaint = new Paint();
    }

    @Override
    protected void onSizeChanged(int w, int h, int oldw, int oldh) {
        super.onSizeChanged(w, h, oldw, oldh);
        mBitmap = Bitmap.createBitmap(w, h, Bitmap.Config.ARGB_8888);
        mCanvas = new Canvas(mBitmap);
    }

    @Override
    protected void onDraw(Canvas canvas) {
        canvas.drawBitmap(mBitmap, 0, 0, mPaint);
    }
}
```

```
}
```

File - C:\android\AndroidStudioProjects\Dots-step-1\app\src\main\res\values\colors.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="colorPrimary">#3F51B5</color>
    <color name="colorPrimaryDark">#303F9F</color>
    <color name="colorAccent">#FF4081</color>
    <color name="oldPaper">#F8ECC2</color>
    <color name="white">#FFFFFF</color>
</resources>
```

File - C:\android\AndroidStudioProjects\Dots-step-1\app\src\main\res\layout\activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">

    <edu.illinois.cs498.dots.DotsView
        android:id="@+id/dots_view"
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:background="@color/oldPaper"
        android:layout_weight="1"
        android:layout_gravity="fill_vertical"/>

</LinearLayout>
```