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Batch: Q-10

Divisions: BE 10

Assignment no : 5

Problem Statement : Design and Develop a GUI for FAN regulator that uses Android platform.

CODE :

MainActivity.java

```
package com.example.fan;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.view.animation.RotateAnimation;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity {

    ImageView imageView ;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        imageView = (ImageView) findViewById(R.id.fanImage);

    }
    public void changeSpeed(View view) {
        Animation animation =
        AnimationUtils.loadAnimation(getApplicationContext(), R.anim.rotate);
        System.out.println(view.getId());
        switch (view.getId()) {

            case (R.id.speed0):
                System.out.println(R.id.speed0);
                animation.setDuration(Integer.MAX_VALUE);
                break;
            case (R.id.speed1):
                animation.setDuration(150);
                break;
            case (R.id.speed2):
                animation.setDuration(100);
```

```

        break;
    case (R.id.speed3):
        animation.setDuration(50);
        break;
    }
    animation.setRepeatCount(Animation.INFINITE);
    imageView.setAnimation(animation);
    imageView.startAnimation(animation);
}
}

```

Activity_main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <ImageView
        android:layout_width="300dp"
        android:layout_height="300dp"
        android:id="@+id/fanImage"
        android:src="@drawable/fan1"
        android:layout_marginLeft="50dp"
        android:layout_marginRight="50dp"
        android:layout_marginTop="150dp"
        android:layout_marginBottom="150dp"
        />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="horizontal">

        <Button
            android:id="@+id/speed0"
            android:layout_width="50dp"
            android:layout_height="wrap_content"
            android:layout_marginLeft="50dp"
            android:onClick="changeSpeed"
            android:text="0" />

        <Button
            android:id="@+id/speed1"
            android:layout_width="50dp"
            android:layout_height="wrap_content"
            android:layout_marginLeft="30dp"
            android:onClick="changeSpeed"
            android:text="1" />
    </LinearLayout>
</RelativeLayout>

```

```
<Button
    android:id="@+id/speed2"
    android:layout_width="50dp"
    android:layout_height="wrap_content"
    android:layout_marginLeft="30dp"
    android:onClick="changeSpeed"
    android:text="2" />

<Button
    android:id="@+id/speed3"
    android:layout_width="50dp"
    android:layout_height="wrap_content"
    android:layout_marginLeft="30dp"
    android:onClick="changeSpeed"
    android:text="3" />

</LinearLayout>

</RelativeLayout>
```

Rotate.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">

    <rotate
        android:toDegrees="75"
        android:fromDegrees="0"
        android:pivotX="50%"
        android:pivotY="50%"
        android:duration="200"
        android:repeatMode="restart"
        android:repeatCount="infinite"

        />

</set>
```

OUTPUT :



