

Mobile Application Development

Practical 5: Life Cycle Activity

CODE:

Andriod_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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="match_parent"
        android:layout_height="match_parent"
        android:src="@drawable/arjunn"
    >

    </ImageView>

</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.andriodlab5;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.text.Html;
import android.util.Log;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    public static class MusicManager implements
    MediaPlayer.OnPreparedListener {

        static MediaPlayer mPlayer;
```

```

Context context;
private int mySoundId;

public MusicManager(Context ctx, int musicID) {
    context = ctx;
    mySoundId = musicID;
    mPlayer = MediaPlayer.create(context, mySoundId);
    mPlayer.setOnPreparedListener(this);
}

public void play() {
    mPlayer = MediaPlayer.create(context, mySoundId);
}

public void stop() {
    mPlayer.stop();
    mPlayer.release();
}

@Override
public void onPrepared(MediaPlayer player) {
    player.start();
    mPlayer.setLooping(true);
    mPlayer.setVolume(80, 80);
}

}
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    System.out.println("Arjun");
    Log.i("Arjun", "on Create Called");
    Toast.makeText(getApplicationContext(), Html.fromHtml("<font
color='yellow' ><b>" + "onCreate Called" + "</b></font>"),
        Toast.LENGTH_LONG).show();
}

protected void onStart() {
    super.onStart();
    Log.i("Arjun", "on Start Called");
    Toast.makeText(getApplicationContext(), Html.fromHtml("<font
color='green' ><b>" + "on Start Called" + "</b></font>"),
        Toast.LENGTH_LONG).show();
    MusicManager mm = new MusicManager(this, R.raw.back);
    mm.play();
}

protected void onRestart() {
    super.onRestart();
    Log.i("Arjun", "on Restart Called");
    Toast.makeText(getApplicationContext(), Html.fromHtml("<font
color='pink' ><b>" + "on retsart Called" + "</b></font>"),
        Toast.LENGTH_LONG).show();
    MusicManager mm = new MusicManager(this, R.raw.back2);
}

```

```

        mm.play();
    }
    protected void onResume() {

        super.onResume();
        Log.i("Arjun","On Resume Called");
        Toast.makeText(getApplicationContext(), Html.fromHtml("<font
color='black' ><b>" + "on Resume Called" + "</b></font>"),
            Toast.LENGTH_LONG).show();
        MusicManager mm = new MusicManager(this, R.raw.back3);
        mm.play();
    }
    protected void onPause() {

        super.onPause();
        Log.i("Arjun","On Pause Called");
        Toast.makeText(getApplicationContext(), Html.fromHtml("<font
color='purple' ><b>" + "on Pause Called" + "</b></font>"),
            Toast.LENGTH_LONG).show();
        MusicManager mm = new MusicManager(this, R.raw.back4);
        mm.play();
    }

    protected void onStop() {

        super.onStop();
        Log.i("Arjun","On Stop Called");
        Toast.makeText(getApplicationContext(), Html.fromHtml("<font
color='red' ><b>" + "on Stop Called" + "</b></font>"),
            Toast.LENGTH_LONG).show();
        MusicManager mm = new MusicManager(this, R.raw.back5);
        mm.play();
    }
    protected void onDestroy() {

        super.onDestroy();
        Log.i("Arjun","On Destroy Called");
        System.out.println("Arjun");
        Toast.makeText(getApplicationContext(),Html.fromHtml("<font
color='red' ><b>" + "on Destroy Called" + "</b></font>"),
            Toast.LENGTH_LONG).show();
    }
}

```

Output



on Start Called

2021-08-13 19:40:12.782 8181-8181/com.example.all_activity_log I/System.out: Arjun

2021-08-13 19:40:12.782 8181-8181/com.example.all_activity_log I/Arjun: on Create Called

2021-08-13 19:40:12.807 8181-8181/com.example.all_activity_log I/Arjun: on Start Called

2021-08-13 19:40:13.444 8181-8181/com.example.all_activity_log I/Arjun: On Resume Called

2021-08-13 19:41:10.424 8181-8181/com.example.all_activity_log I/Arjun: On Pause Called

2021-08-13 19:41:11.490 8181-8181/com.example.all_activity_log I/Arjun: On Stop Called
2021-08-13 19:41:22.878 8181-8181/com.example.all_activity_log I/Arjun: on Restart Called
2021-08-13 19:41:22.981 8181-8181/com.example.all_activity_log I/Arjun: on Start Called
2021-08-13 19:41:23.035 8181-8181/com.example.all_activity_log I/Arjun: On Resume Called
2021-08-13 19:41:31.671 8181-8181/com.example.all_activity_log I/Arjun: On Pause Called
2021-08-13 19:41:32.205 8181-8181/com.example.all_activity_log I/Arjun: On Stop Called
2021-08-13 19:41:34.974 8181-8181/com.example.all_activity_log I/Arjun: On Destroy Called
2021-08-13 19:41:34.980 8181-8181/com.example.all_activity_log I/System.out: Arjun