[2CEIT5PE5: MOBILE APPLICATION DEVELOPMENT]

Practical: 6

Study: Service, Types of Service, Drawable Icon Add in project, MediaPlayer, Add Raw folder, Add mp3 song in raw folder

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AIM: What is Service? Write down types of Service. Create an MP3 player application by using service by following below instructions.

1. Create MainActivity and design according to shown in below image.
2. Create Service Class and implement **MediaPlayer** Object

Activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.appcompat.widget.LinearLayoutCompat
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"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:text="MP3 Player"
        android:textSize="30dp"
        android:alpha="0.5"
        app:layout_constraintBottom_toBottomOf="parent"
        android:gravity="center"/>


    <ImageView
        android:background="@drawable/rounded"
        android:clipToOutline="true"
        android:id="@+id/imageView"
        android:layout_width="350dp"
        android:layout_height="350dp"
        app:srcCompat="@drawable/img"
        android:layout_gravity="center"
        android:layout_marginTop="20dp"
        />

    <androidx.cardview.widget.CardView
        android:layout_width="350dp"
```

```
            android:layout_height="wrap_content"
            android:background="@drawable/rounded"
            android:layout_gravity="center"
            android:layout_marginTop="50dp">
    <LinearLayout
            android:layout_width="match_parent"
            android:clipToOutline="true"
            android:background="@drawable/rounded"
            android:backgroundTint="#51000000"
            android:layout_height="wrap_content"
            android:orientation="vertical"
            android:paddingHorizontal="15dp"
            android:paddingVertical="25dp"
            >
        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Lofi chill Music.."
            android:textSize="20dp"
            android:gravity="center"
            />
        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"
            android:layout_marginTop="20dp"
            android:gravity="center"
            >

            <ImageView
                android:layout_width="45dp"
                android:layout_height="45dp"
                android:src="@drawable/shuffle_icon"
                android:backgroundTint="#505050"
                android:padding="5dp"
                android:background="@drawable/rounded"
                />
            <Space
                android:layout_width="0dp"
                android:layout_height="1dp"
                android:layout_weight="1" >
```

```
</Space>
<ImageView
    android:layout_width="55dp"
    android:layout_height="55dp"
    android:src="@drawable/previous_icon"
    android:backgroundTint="#505050"
    android:padding="5dp"
    android:background="@drawable/rounded"
    />
<Space
    android:layout_width="0dp"
    android:layout_height="1dp"
    android:layout_weight="1" >
</Space>
<ImageView
android:layout_width="70dp"
android:layout_height="70dp"
android:src="@drawable/play_arrow"
    android:id="@+id/Play_Button"
android:backgroundTint="#79371f"
android:padding="5dp"
android:background="@drawable/rounded"
/>
<Space
    android:layout_width="0dp"
    android:layout_height="1dp"
    android:layout_weight="1" >
</Space>
<ImageView
android:layout_width="55dp"
android:layout_height="55dp"
android:src="@drawable/next_icon"
android:backgroundTint="#505050"
android:padding="5dp"
android:background="@drawable/rounded"
/>
<Space
    android:layout_width="0dp"
    android:layout_height="1dp"
    android:layout_weight="1" >
</Space>
```

```xml
        <ImageView
        android:layout_width="45dp"
        android:layout_height="45dp"
            android:id="@+id/Pause_Button"
        android:src="@drawable/stop_icon"
        android:backgroundTint="#505050"
        android:padding="5dp"
        android:background="@drawable/rounded"
        />


    </LinearLayout>



  </LinearLayout>
  </androidx.cardview.widget.CardView>



    </androidx.appcompat.widget.LinearLayoutCompat>
```

MainActivity.kt:

```kotlin
Package
com.example.mad_practical6_2101011088
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import
com.google.android.material.floatingactionbutton.FloatingActionBu
tton
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
```

```kotlin
        val playButton: FloatingActionButton =
findViewById(R.id.playbtn)
        val stopButton: FloatingActionButton =
findViewById(R.id.stopbtn)
        playButton.setOnClickListener() {
            startMusic()
        }
        stopButton.setOnClickListener(){
            stopMusic()
        }
    }
    fun startMusic(){
Intent(applicationContext,MyService::class.java).putExtra(MyServi
ce.PLAYERKEY,MyService.PLAYERVALUE).apply {
            startService(this)
        }
    }
    fun stopMusic(){
Intent(applicationContext,MyService::class.java).putExtra(MyServi
ce.PLAYERKEY,MyService.PLAYERVALUE).apply {
            stopService(this)
        }
    }
}
```

MyService.kt:

```kotlin
        package
        com.example.mad_practical6_21012011088
        import android.app.Service
        import android.content.Intent
        import android.media.MediaPlayer
        import android.os.IBinder
        class MyService : Service() {
            lateinit var player: MediaPlayer
            companion object{
                val PLAYERKEY="Service"
                val PLAYERVALUE="play/pause"
            }
            override fun onBind(intent: Intent): IBinder {
                TODO("Return the communication channel to the
        service.")
            }
            override fun onStartCommand(intent: Intent?, flags: Int,
        startId: Int): Int {
                if (!this::player.isInitialized){
                    player= MediaPlayer.create(this,R.raw.song)
                }
                if (intent!=null){
                    val dataValue=intent.getStringExtra(PLAYERKEY)
```

```
                if (dataValue== PLAYERVALUE){
                if(!player.isPlaying){player.start()
                    }
                    else{
                        player.pause()
                    }
                }
            }
            else{
                player.stop()
            }
            return START_STICKY
    }
    override fun onDestroy() {
        player.stop()
        super.onDestroy()
    }
}
```

OUTPUT:-