### Lab Exercise 14: Create Service

### ActivityMain.java

```
package com.example.lab14;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
    public void startService(View view) {
        Intent startIntent = new Intent(this, MyService.class);
        startService(startIntent);
    public void stopService(View view) {
        Intent stopIntent = new Intent(this, MyService.class);
        stopService(stopIntent);
```

### strings.xml

#### AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
   package="com.example.lab14">
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic launcher"
        android:label="@string/app name"
        android:roundIcon="@mipmap/ic launcher round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Lab14">
        <service
            android:name=".MyService"
            android:enabled="true"
            android:exported="true"></service>
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```

### activity main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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">
    <TextView
        android:id="@+id/textView"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:fontFamily="serif"
        android:text="@string/service"
        android:textSize="35sp"
        android:textStyle="bold"
        app:layout constraintBottom toBottomOf="parent"
        app:layout constraintLeft toLeftOf="parent"
        app:layout constraintRight toRightOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintVertical bias="0.418" />
    <Button
        android:id="@+id/startSer"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:layout marginTop="52dp"
        android:text="@string/start service"
        android:onClick="startService"
        app:layout constraintEnd toEndOf="@+id/textView"
        app:layout constraintHorizontal bias="0.494"
        app:layout_constraintStart toStartOf="@+id/textView"
        app:layout constraintTop toBottomOf="@+id/textView" />
    <Button
        android:id="@+id/stopSer"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="@string/stop service"
        android:onClick="stopService"
        app:layout constraintBottom toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="@+id/startSer"
        app:layout_constraintHorizontal bias="0.555"
        app:layout_constraintStart_toStartOf="@+id/startSer"
        app:layout constraintTop toBottomOf="@+id/startSer"
        app:layout constraintVertical bias="0.192" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

### MyService.java

```
package com.example.lab14;
import android.app.Service;
import android.content.Intent;
import android.os.IBinder;
import android.util.Log;
import android.widget.Toast;
public class MyService extends Service {
    public MyService() {
    private static String TAG = "My Service";
    @Override
    public void onCreate() {
        super.onCreate();
        Toast.makeText(this, "Service Created", Toast.LENGTH SHORT).show();
        Log.i(TAG, "Service is Created");
    }
    @Override
    public int onStartCommand(Intent intent, int flags, int startId) {
        Toast.makeText(this, "Service Started", Toast.LENGTH_SHORT).show();
        Log. i(TAG, "Service is Started");
        return START STICKY;
    }
    @Override
    public void onDestroy() {
        super.onDestroy();
        Toast.makeText(this, "Service Destroyed", Toast.LENGTH SHORT).show();
        Log. i(TAG, "Service is Destroyed");
    @Override
    public IBinder onBind(Intent intent) {
       return null;
```

# **OUTPUT**



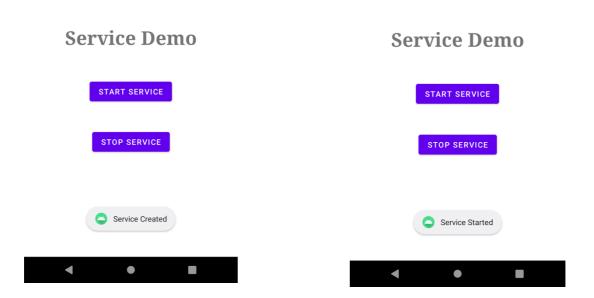
## **Service Demo**





## Service Started:







## Service Stopped:



## **Service Demo**

