Activity\_main.xml

*<?***xml version="1.0" encoding="utf-8"***?>*

<**android.support.constraint.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"**>

<**EditText**

**android:id="@+id/inputText"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_margin="8dp"**

**android:hint="Enter your message"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**app:layout\_constraintLeft\_toLeftOf="parent"**

**app:layout\_constraintRight\_toRightOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"** />

<**Button**

**android:id="@+id/button"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="8dp"**

**android:text="Send Message"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/inputText"** />

<**TextView**

**android:id="@+id/textView"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="24dp"**

**android:text="Message received from the Service:\n"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"** />

</**android.support.constraint.ConstraintLayout**>

MainActivity.java

**package** com.example.jevitha.a24\_3\_intentservice;

**import** android.content.BroadcastReceiver;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.content.IntentFilter;

**import** android.support.v4.content.LocalBroadcastManager;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.Button;

**import** android.widget.EditText;

**import** android.widget.TextView;

**public class** MainActivity **extends** AppCompatActivity {

TextView **textView**;

Button **button**;

EditText **editText**;

MyReceiver **myReceiver**;

**public static final** String ***FILTER\_ACTION\_KEY*** = **"any\_key"**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**textView** = findViewById(R.id.***textView***);

**button** = findViewById(R.id.***button***);

**editText** = findViewById(R.id.***inputText***);

**button**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View v) {

String message = **editText**.getText().toString();

Intent intent = **new** Intent(MainActivity.**this**, MyIntentService.**class**);

intent.putExtra(**"message"**, message);

startService(intent);

}

});

}

@Override

**protected void** onStart() {

**myReceiver** = **new** MyReceiver();

IntentFilter intentFilter = **new** IntentFilter();

intentFilter.addAction(***FILTER\_ACTION\_KEY***);

LocalBroadcastManager.*getInstance*(**this**).

registerReceiver(**myReceiver**, intentFilter);

**super**.onStart();

}

@Override

**protected void** onStop() {

unregisterReceiver(**myReceiver**);

**super**.onStop();

}

**private class** MyReceiver **extends** BroadcastReceiver {

@Override

**public void** onReceive(Context context, Intent intent) {

String message = intent.getStringExtra(**"broadcastMessage"**);

**textView**.setText(**textView**.getText() + **"\n"** + message);

}

}

}

MyIntentService.java

**package** com.example.jevitha.a24\_3\_intentservice;

**import** android.app.IntentService;

**import** android.content.Intent;

**import** android.content.Context;

**import** android.os.SystemClock;

**import** android.support.v4.content.LocalBroadcastManager;

**public class** MyIntentService **extends** IntentService {

**public** MyIntentService() {

**super**(**"MyService"**);

}

@Override

**protected void** onHandleIntent(Intent intent) {

String message = intent.getStringExtra(**"message"**);

intent.setAction(MainActivity.***FILTER\_ACTION\_KEY***);

SystemClock.*sleep*(3000);

String echoMessage = **"IntentService after a pause "** +

**"of 3 seconds echoes "** + message;

LocalBroadcastManager.*getInstance*(getApplicationContext()).

sendBroadcast(

intent.putExtra(**"broadcastMessage"**,

echoMessage));

}

}

AndroidManifest.xml

*<?***xml version="1.0" encoding="utf-8"***?>*

<**manifest xmlns:android="http://schemas.android.com/apk/res/android"**

**package="com.example.jevitha.a24\_3\_intentservice"**>

<**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/AppTheme"**>

<**activity android:name=".MainActivity"**>

<**intent-filter**>

<**action android:name="android.intent.action.MAIN"** />

<**category android:name="android.intent.category.LAUNCHER"** />

</**intent-filter**>

</**activity**>

<**service**

**android:name=".MyIntentService"**

**android:exported="false"**></**service**>

</**application**>

</**manifest**>