Example : **Simple service to send Random Numbers whenever the Activity requests for it**!

**main\_layout.xml**

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical">

<TextView

android:id="@+id/text\_service"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:text="Service Example"

android:layout\_marginTop="10dp" />

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:id="@+id/start"

android:text="Request NUmber"/>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textSize="30dp"

android:layout\_gravity="center"

android:id="@+id/serviceText"

android:text="Center Text"/>

</LinearLayout>

ServiceActivity.java

public class ServiceActivity extends Activity{

BoundedService mBoundService;

Boolean mServiceBound = false;

Button startService;

TextView serviceText;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.main\_layout);

startService = (Button) findViewById(R.id.start);

serviceText = (TextView) findViewById(R.id.serviceText);

startService.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

int randomNuber = mBoundService.genRandomNumber();

serviceText.setText(String.valueOf(randomNuber));

}

});

}

@Override

protected void onStart() {

startService(new Intent(this, BoundedService.class));

Intent intent = new Intent(this,BoundedService.class);

bindService(intent,mServiceConnection, Context.BIND\_AUTO\_CREATE);

super.onStart();

}

@Override

protected void onStop() {

unbindService(mServiceConnection);

stopService(new Intent(this,BoundedService.class));

super.onStop();

}

private ServiceConnection mServiceConnection = new ServiceConnection() {

@Override

public void onServiceDisconnected(ComponentName name) {

mServiceBound = false;

}

@Override

public void onServiceConnected(ComponentName name, IBinder service) {

BoundedService.LocalBoundedService myBinder = (BoundedService.LocalBoundedService) service;

mBoundService = myBinder.getService();

mServiceBound = true;

}

};

}

###### **BoundedService.java**

import android.app.Service;

import android.content.Intent;

import android.os.Binder;

import android.os.IBinder;

import android.support.annotation.Nullable;

import java.util.Random;

public class BoundedService extends Service {

private IBinder mBinder = new LocalBoundedService();

Random randomNumber = new Random();

@Nullable

@Override

public IBinder onBind(Intent intent) {

return mBinder;

}

@Override

public boolean onUnbind(Intent intent) {

return true;

}

public int genRandomNumber()

{

return randomNumber.nextInt(10000);

}

public class LocalBoundedService extends Binder {

BoundedService getService() {

return BoundedService.this;

}

}

}

**AndroidManifest.xml**

<service android:name=".BoundedService" />