**AndroidManifest.xml**

**<uses-permission android:name="android.permission.BLUETOOTH"/>**

**<uses-permission android:name="android.permission.BLUETOOTH\_ADMIN"/>**

**<uses-permission android:name="android.permission.BLUETOOTH\_CONNECT"/>**

**MainActivity.java**

**package com.example.btapp;**

**import android.Manifest;**

**import android.bluetooth.\*;**

**import android.content.\*;**

**import android.content.pm.PackageManager;**

**import android.os.\*;**

**import android.widget.\*;**

**import androidx.appcompat.app.AppCompatActivity;**

**import androidx.core.app.ActivityCompat;**

**import androidx.core.content.ContextCompat;**

**import java.util.Set;**

**public class MainActivity extends AppCompatActivity {**

**BluetoothAdapter btAdapter;**

**Button btnOn, btnDisc, btnList, btnOff;**

**@Override**

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

**super.onCreate(savedInstanceState);**

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

**if (Build.VERSION.SDK\_INT >= Build.VERSION\_CODES.S &&**

**ContextCompat.checkSelfPermission(this, Manifest.permission.BLUETOOTH\_CONNECT) != PackageManager.PERMISSION\_GRANTED) {**

**ActivityCompat.requestPermissions(this, new String[]{Manifest.permission.BLUETOOTH\_CONNECT}, 100);**

**return; }**

**btAdapter = BluetoothAdapter.getDefaultAdapter();**

**btnOn = findViewById(R.id.btnTurnOn);**

**btnDisc = findViewById(R.id.btnDiscoverable);**

**btnList = findViewById(R.id.btnListDevices);**

**btnOff = findViewById(R.id.btnTurnOff);**

**btnOn.setOnClickListener(v -> {**

**if (btAdapter == null) toast("Not supported");**

**else if (!btAdapter.isEnabled()) startActivity(new Intent(BluetoothAdapter.ACTION\_REQUEST\_ENABLE));**

**else toast("Already ON"); });**

**btnDisc.setOnClickListener(v -> {**

**Intent i = new Intent(BluetoothAdapter.ACTION\_REQUEST\_DISCOVERABLE);**

**i.putExtra(BluetoothAdapter.EXTRA\_DISCOVERABLE\_DURATION, 120);**

**startActivity(i); });**

**btnList.setOnClickListener(v -> {**

**Set<BluetoothDevice> devices = btAdapter.getBondedDevices();**

**if (!devices.isEmpty())**

**for (BluetoothDevice d : devices) toast("Device: " + d.getName());**

**else toast("No paired devices"); });**

**btnOff.setOnClickListener(v -> {**

**if (btAdapter.isEnabled()) {**

**btAdapter.disable();**

**toast("Turned OFF");**

**} else toast("Already OFF"); }); }**

**void toast(String msg) {**

**Toast.makeText(this, msg, Toast.LENGTH\_SHORT).show(); } }**

**activity\_main.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" android:gravity="center"**

**android:padding="24dp" android:background="#FAFAFA">**

**<Button android:id="@+id/btnTurnOn" android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content" android:text="Turn ON Bluetooth"/>**

**<Button android:id="@+id/btnDiscoverable" android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content" android:text="Make Discoverable"**

**android:layout\_marginTop="16dp"/>**

**<Button android:id="@+id/btnListDevices" android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content" android:text="List Paired Devices"**

**android:layout\_marginTop="16dp"/>**

**<Button android:id="@+id/btnTurnOff" android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content" android:text="Turn OFF Bluetooth"**

**android:layout\_marginTop="16dp"/>**

**</LinearLayout>**