**PR-22**

**22 Develop a program to turn on, get visible, list devices and turnoff Bluetooth 2**

**XML Code**

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

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

android:orientation="vertical"

android:padding="16dp"

android:gravity="center"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/btnOn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Turn On Bluetooth" />

<Button

android:id="@+id/btnOff"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Turn Off Bluetooth"

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

<Button

android:id="@+id/btnVisible"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Make Discoverable"

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

<Button

android:id="@+id/btnList"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="List Paired Devices"

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

<ListView

android:id="@+id/deviceList"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="20dp"/>

</LinearLayout>

**Java Code**

package com.example.bluetoothdemo;

import androidx.appcompat.app.AppCompatActivity;

import android.bluetooth.BluetoothAdapter;

import android.bluetooth.BluetoothDevice;

import android.content.Intent;

import android.os.Bundle;

import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.ListView;

import android.widget.Toast;

import java.util.Set;

public class MainActivity extends AppCompatActivity {

Button btnOn, btnOff, btnVisible, btnList;

ListView deviceList;

BluetoothAdapter bluetoothAdapter;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

btnOn = findViewById(R.id.btnOn);

btnOff = findViewById(R.id.btnOff);

btnVisible = findViewById(R.id.btnVisible);

btnList = findViewById(R.id.btnList);

deviceList = findViewById(R.id.deviceList);

bluetoothAdapter = BluetoothAdapter.getDefaultAdapter();

btnOn.setOnClickListener(v -> {

if (!bluetoothAdapter.isEnabled()) {

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

startActivityForResult(i, 0);

Toast.makeText(getApplicationContext(), "Bluetooth Turned ON", Toast.LENGTH\_SHORT).show();

} else {

Toast.makeText(getApplicationContext(), "Bluetooth Already ON", Toast.LENGTH\_SHORT).show();

}

});

btnOff.setOnClickListener(v -> {

bluetoothAdapter.disable();

Toast.makeText(getApplicationContext(), "Bluetooth Turned OFF", Toast.LENGTH\_SHORT).show();

});

btnVisible.setOnClickListener(v -> {

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

startActivityForResult(i, 0);

});

btnList.setOnClickListener(v -> {

Set<BluetoothDevice> pairedDevices = bluetoothAdapter.getBondedDevices();

String[] devices = new String[pairedDevices.size()];

int index = 0;

for (BluetoothDevice device : pairedDevices) {

devices[index] = device.getName() + " - " + device.getAddress();

index++;

}

ArrayAdapter<String> adapter = new ArrayAdapter<>(getApplicationContext(),

android.R.layout.simple\_list\_item\_1, devices);

deviceList.setAdapter(adapter);

});

}

}