Bluetooth setup

**package** com.example.xunhu.bluetoothsensor;

**import** android.annotation.TargetApi;

**import** android.bluetooth.BluetoothAdapter;

**import** android.bluetooth.BluetoothDevice;

**import** android.content.BroadcastReceiver;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.content.IntentFilter;

**import** android.os.Build;

**import** android.os.Bundle;

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

**import** android.view.View;

**import** android.widget.Button;

**import** java.util.Set;

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

BluetoothAdapter **bluetoothAdapter**;

**private** IntentFilter **filter**;

Button **button**;

@TargetApi(Build.VERSION\_CODES.***M***)

@Override

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

**super**.onCreate(savedInstanceState);

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

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

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

@Override

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

startBluetoothSensor();

}

});

*//for android 6.0 users, you have to check the permission by using the following devices*

*// if (ActivityCompat.checkSelfPermission(this, Manifest.permission.ACCESS\_FINE\_LOCATION) != PackageManager.PERMISSION\_GRANTED && ActivityCompat.checkSelfPermission(this, Manifest.permission.ACCESS\_COARSE\_LOCATION) != PackageManager.PERMISSION\_GRANTED) {*

*// requestPermissions(new String[] {Manifest.permission.ACCESS\_FINE\_LOCATION}, 1);*

*// return;*

*// }*

}

**public void** startBluetoothSensor(){

*//ask the permission to enable your bluetooth device*

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

**if** (**bluetoothAdapter**.isEnabled()==**false**){

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

startActivity(intent);

}

*//to start scanning whether there are any other Bluetooth devices*

**bluetoothAdapter**.startDiscovery();

*//register the BroadcastReceiver to broadcast discovered devices*

**filter** = **new** IntentFilter();

**filter**.addAction(BluetoothDevice.***ACTION\_FOUND***);

registerReceiver(**receiver**, **filter**);

*//return paired devices*

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

**if** (pairedDevices.size() > 0) {

*// Loop through paired devices*

**for** (BluetoothDevice device : pairedDevices) {

System.***out***.println(**"@ paired devices: "**+device.getName());

}

}

}

@Override

**protected void** onResume() {

**super**.onResume();

}

*//remember to unregister your broadcast receiver when the activity is destroyed*

@Override

**protected void** onDestroy() {

**super**.onDestroy();

*// do not forget to unregister you broadcast receiver*

unregisterReceiver(**receiver**);

}

*//Create a BroadcastRecevier for ACTION\_FOUND*

**private final** BroadcastReceiver **receiver** = **new** BroadcastReceiver() {

@Override

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

String action = intent.getAction();

*//when discovery finds a device*

**if** (BluetoothDevice.***ACTION\_FOUND***.equals(action)){

*// Get the BluetoothDevice object from the Intent*

BluetoothDevice device = intent.getParcelableExtra(BluetoothDevice.***EXTRA\_DEVICE***);

System.***out***.println(**"@ discovered devices: "**+device.getName());

}

}

};

}