**package** shimj.pmtwopointfive;  
  
**import** android.bluetooth.BluetoothAdapter;  
**import** android.bluetooth.BluetoothDevice;  
**import** android.bluetooth.BluetoothSocket;  
**import** android.content.Intent;  
**import** android.content.res.Resources;  
**import** android.graphics.Bitmap;  
**import** android.graphics.BitmapFactory;  
**import** android.os.Bundle;  
**import** android.os.Handler;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.AdapterView;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.Button;  
**import** android.widget.ImageView;  
**import** android.widget.ListView;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**import** java.io.IOException;  
**import** java.io.InputStream;  
**import** java.io.OutputStream;  
**import** java.text.SimpleDateFormat;  
**import** java.util.Set;  
**import** java.util.UUID;  
  
**public class** MainActivity **extends** AppCompatActivity{  
 **private** Button **button\_paired**;  
 **private** Button **button\_find**;  
 **private** TextView **show\_data**;  
 **private** ListView **event\_listView**;  
 **private** TextView **DangerText**;  
 **private** ImageView **image**;  
  
 **private** ArrayAdapter<String> **deviceName**;  
 **private** ArrayAdapter<String> **devicelD**;  
 **private** String **choseID**;  
 **private** BluetoothDevice **bleDevice**;  
 **private** InputStream **mmInputStream**;  
 Thread **workerThread**;  
 **volatile boolean stopWorker**;  
 **private int readBufferPosition**;  
 **private byte**[] **readBuffer**;  
 **private static final int *REQUEST\_FINE\_LOCATION\_PERMISSION*** = 102;  
 **public int PMvalue**=0;  
 **public** Resources **res**;  
 **public** Bitmap **a**;  
  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **res** = getResources();  
 **a**=BitmapFactory.*decodeResource*(**res**, R.drawable.***a000***);  
 getView();  
 setListener();  
 **deviceName** = **new** ArrayAdapter<String>(**this**, android.R.layout.***simple\_expandable\_list\_item\_1***);  
 **devicelD** = **new** ArrayAdapter<String>(**this**, android.R.layout.***simple\_expandable\_list\_item\_1***);  
 **DangerText**.setText(**" "**);  
 **image**.setImageResource(R.drawable.***a000***);  
 }  
  
 **private void** getView() {  
 **button\_paired** = (Button) findViewById(R.id.***btn\_paired***);  
 **show\_data** = (TextView) findViewById(R.id.***txtShow***);  
 **event\_listView** = (ListView) findViewById(R.id.***Show\_B\_List***);  
 **button\_find** = (Button) findViewById(R.id.***btn\_conn***);  
 **DangerText** = (TextView) findViewById(R.id.***DangerText***);  
 **image** = (ImageView) findViewById(R.id.***pmimage***);  
 }  
  
 **private void** setListener() {  
 **button\_paired**.setOnClickListener(**new** Button.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 findPBT();  
 }  
 });  
 **button\_find**.setOnClickListener(**new** Button.OnClickListener(){  
 @Override  
 **public void** onClick(View v){  
 findPBT();  
 }  
 });  
 **event\_listView**.setAdapter(**deviceName**);  
 **event\_listView**.setOnItemClickListener(**new** AdapterView.OnItemClickListener(){  
 @Override  
 **public void** onItemClick(AdapterView<?> partent,View view, **int** position, **long** id){  
 **choseID** = **devicelD**.getItem(position);  
 **try** {  
 openBT();  
 } **catch** (IOException e) {  
 e.printStackTrace();  
 }  
 Toast.*makeText*(MainActivity.**this**, **"選擇了::"** + **choseID**, Toast.***LENGTH\_SHORT***).show();  
 **deviceName**.clear();  
 }  
 });  
 }  
  
 **private void** findPBT() {  
 BluetoothAdapter mBluetoothAdapter = BluetoothAdapter.*getDefaultAdapter*();  
 **if** (mBluetoothAdapter != **null**) {  
  
 }  
 **else show\_data**.setText(**"No bluetooth adapter available"**);  
  
  
 **assert** mBluetoothAdapter != **null**;  
 **if** (!mBluetoothAdapter.isEnabled()) {  
 Intent enableBluetooth = **new** Intent(BluetoothAdapter.***ACTION\_REQUEST\_ENABLE***);  
 startActivityForResult(enableBluetooth,1);  
 }  
 Set<BluetoothDevice> pairedDevices = mBluetoothAdapter.getBondedDevices();  
 **if** (pairedDevices.size() > 0) {  
 **for** (BluetoothDevice device : pairedDevices) {  
 String str = **"已配對完成的裝置有 "** + device.getName() + **" "** + device.getAddress() + **"\n"**;  
 *//String* String uid = device.getAddress();  
 **bleDevice** = device;  
 **deviceName**.add(str);  
 **devicelD**.add(uid);  
 }  
 **event\_listView**.setAdapter(**deviceName**);  
 }  
 }  
  
 **private void** openBT() **throws** IOException {  
 UUID uuid= UUID.*fromString*(**"00001101-0000-1000-8000-00805F9B34FB"**);  
 *//00001101-0000-1000-8000-00805F9B34FB* **if** (**bleDevice** != **null**) {  
 BluetoothSocket bluesoccket = **bleDevice**.createRfcommSocketToServiceRecord(uuid);  
  
 bluesoccket.connect();  
 OutputStream mmOuputStream = bluesoccket.getOutputStream();  
 **mmInputStream** = bluesoccket.getInputStream();  
  
 beginListenForData();  
  
 *//show\_data.setText("Bluetooth Opened: " + bleDevice.getName() + "" + bleDevice.getAddress());* View bl = findViewById(R.id.***btn\_conn***);  
 View b2 = findViewById(R.id.***btn\_paired***);  
 View b3 = findViewById(R.id.***Show\_B\_List***);  
  
 bl. setVisibility (View.***INVISIBLE***);  
 b2. setVisibility (View.***INVISIBLE***);  
 b3. setVisibility (View.***INVISIBLE***);  
  
 }  
 }  
  
 **private void** beginListenForData() {  
 **final** Handler handler = **new** Handler();  
 **final byte** delimiter = 10;  
  
 **stopWorker** = **false**;  
 **readBufferPosition** = 0;  
 **readBuffer** = **new byte**[1024];  
  
  
 **workerThread** = **new** Thread(**new** Runnable(){  
 @Override  
 **public void** run() {  
 **while** (!Thread.*currentThread*().isInterrupted() && !**stopWorker**) {  
  
  
 **try** {  
 **int** bytesAvailable = **mmInputStream**.available();  
 **if** (bytesAvailable > 0) {  
  
 **byte**[] packetBytes = **new byte**[bytesAvailable];  
 **mmInputStream**.read(packetBytes);  
 **for** (**int** i = 0; i < bytesAvailable; i++) {  
 **byte** b = packetBytes[i];  
 **readBufferPosition**++;  
 **if** (b == delimiter)  
 {  
 **byte**[] encodedBytes = **new byte**[**readBufferPosition**];  
 System.*arraycopy*(**readBuffer**, 0, encodedBytes, 0, encodedBytes.**length**);  
 **final** String data = **new** String(encodedBytes);  
 *// PMvalue = 0;  
 //for (int j = 0; j < encodedBytes.length - 1; j++) {  
 // PMvalue = PMvalue \* 10 + encodedBytes[j] - 48;  
 //}* **final int** cco = Integer.*parseInt*(data.replaceAll(**"[\\D]"**,**""**));  
 String tmp1 = String.*valueOf*(**PMvalue**);  
 Log.*d*(**"value"**, tmp1);  
 **readBufferPosition** = 0;  
 handler.post(**new** Runnable() {  
 @Override  
 **public void** run() {  
 **long** date = System.*currentTimeMillis*();  
 TextView tvDisplayDate = (TextView) findViewById(R.id.***DATE***);  
 SimpleDateFormat sdf = **new** SimpleDateFormat(**"yyyy/MM/dd a h:mm:ss"**);  
 String dateString = sdf.format(date);  
 tvDisplayDate.setText(**"Update: "** + dateString);  
 **if** (cco < 36) {  
  
 **if** (cco > 23)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a03***);  
 **else if** (cco > 11)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a02***);  
 **else if** (cco > 0)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a01***);  
 **image**.setImageBitmap(**a**);  
 **DangerText**.setText(**"良好 :-)"**);  
 **show\_data**.setText(data);  
 }  
 **else if** (cco < 54) {  
 **if** (cco > 47)  
 **a** = BitmapFactory.*decodeResource*(**res**,R.drawable.***a06***);  
 **else if** (cco > 41)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a05***);  
 **else if** (cco > 35)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a04***);  
 **image**.setImageBitmap(**a**);  
 **DangerText**.setText(**"警戒 :-("**);  
 **show\_data**.setText(data);  
 }  
 **else if** (cco < 71) {  
 **if** (cco > 64)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a09***);  
 **else if** (cco > 58)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a08***);  
 **else if** (cco > 53)  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a07***);  
 **image**.setImageBitmap(**a**);  
 **DangerText**.setText(**"過量QAQ"**);  
 **show\_data**.setText(data);  
 } **else if** (cco > 70) {  
 **a** = BitmapFactory.*decodeResource*(**res**, R.drawable.***a10***);  
 **image**.setImageBitmap(**a**);  
 **DangerText**.setText(**"危險!!!!"**);  
 **show\_data**.setText(data);  
 }  
 }  
  
  
 });  
 } **else** *//若沒有換行，一直存進來* {  
 **readBuffer**[**readBufferPosition**++] = b;  
 }  
 }  
 }  
 } **catch** (IOException ex) {  
 **stopWorker** = **true**;  
 }  
 }  
 }  
  
 });  
 **workerThread**.start();  
 }  
  
}