# QR code + RD545 API Teach

https://github.com/Chen-Wi-Ki/QRcode_RD545_System

# How get QR code?

https://quickmark.com.tw/cht/qrcode-datamatrix-generator/default.asp?qrText

條碼產生器

QR Code | Quick Code | Data Martix | 中国移动规格 | 進階設定

網頁
- 網頁網址
- 網頁書籤

通訊錄
- 連絡人 (vCard)
- 連絡人 (meCard)

簡訊、電子郵件
- 電話號碼
- 簡訊傳送
- 電子郵件

安全加密
- 加密

其他
- 文字
- 魔法拼
- 地理資

文字資料 0912345678|0000|1|1999-09-09|180.5|0|0.5

phone number
country number?
gender
Birthday
Height
weight?
Clothing weight

This is the code provided by Tanita.

QR-Code 條碼產生器

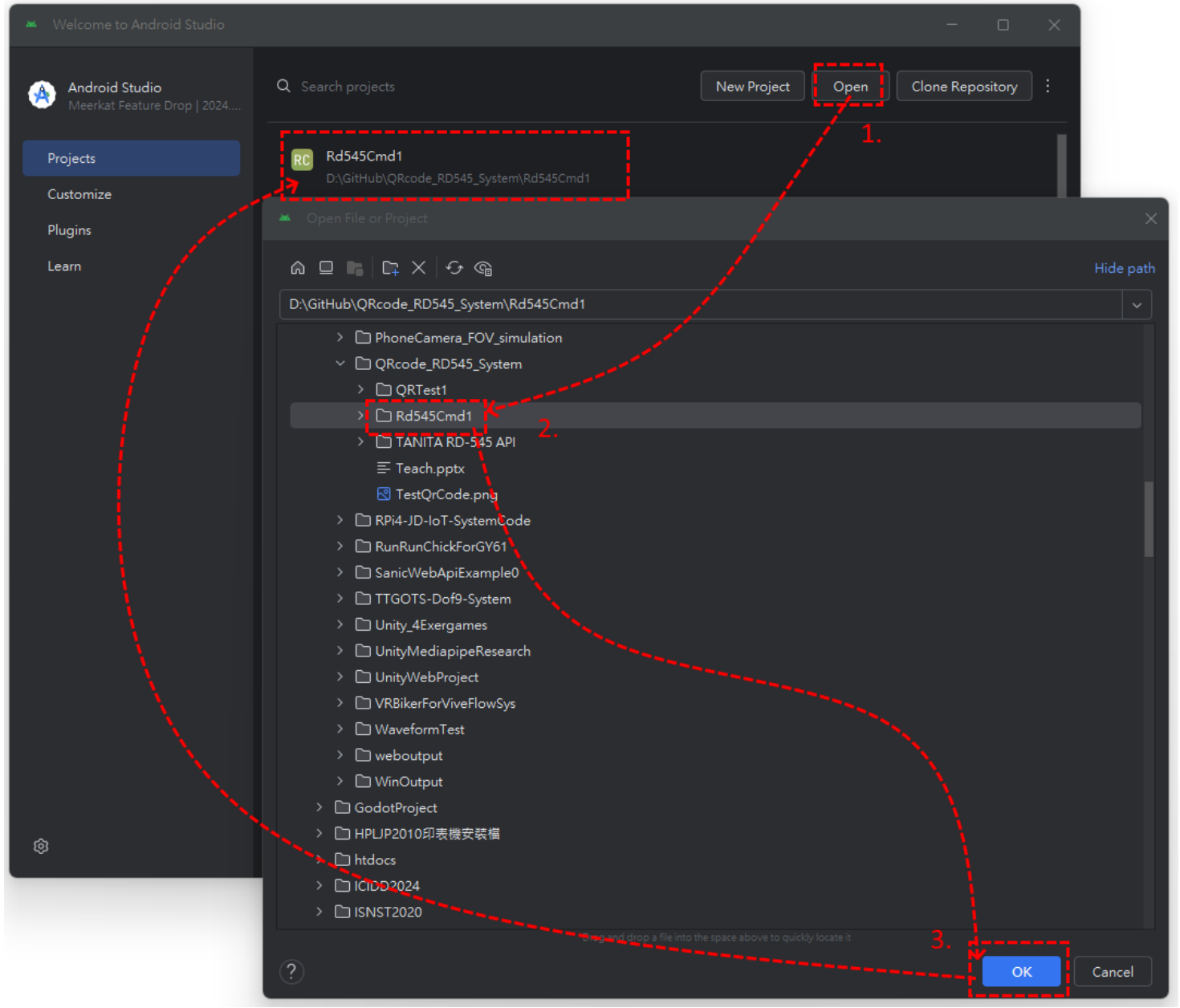
文字資料 0912345678|0000|1|1999-09-09|180.5|0|0.5

請輸入任意文字。

產生

下載條碼 PNG | JPG | GIF | SVG

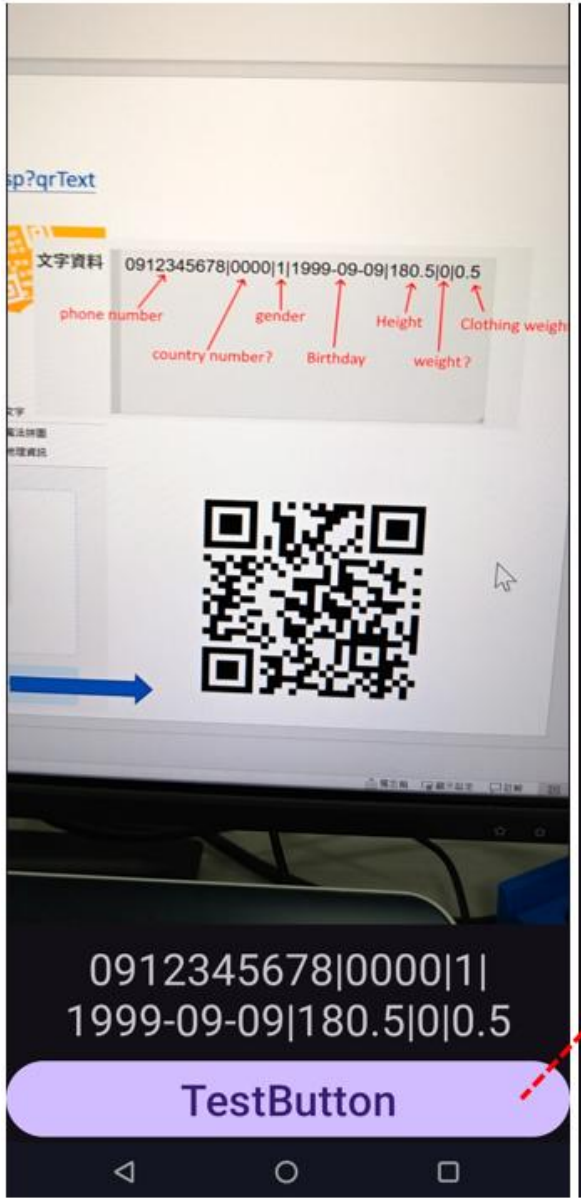
# How import Project to Android Studio?



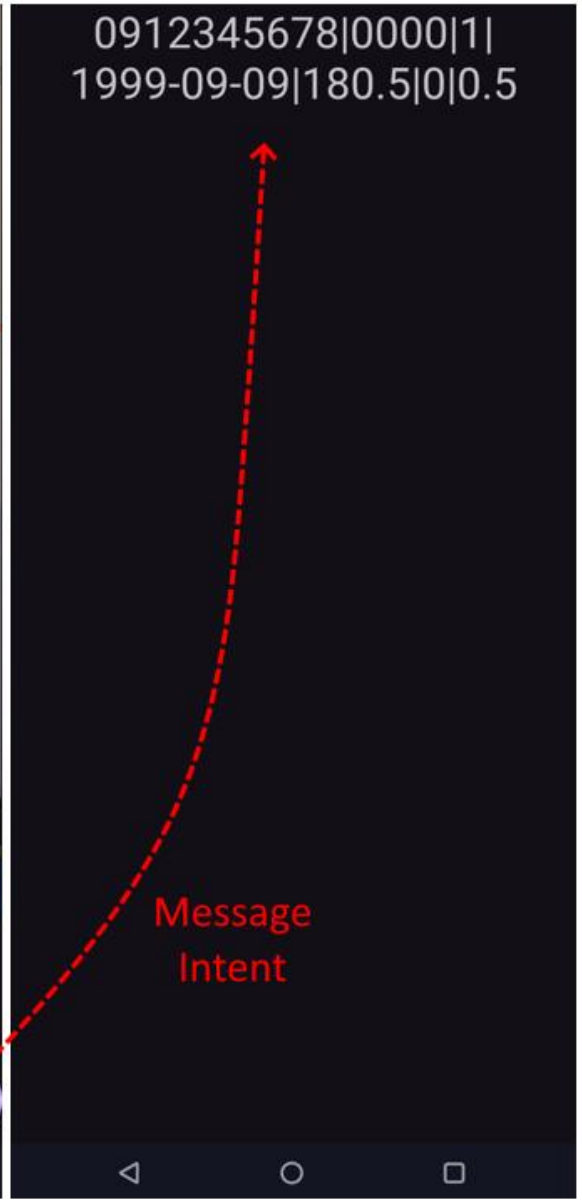
Reference from AI

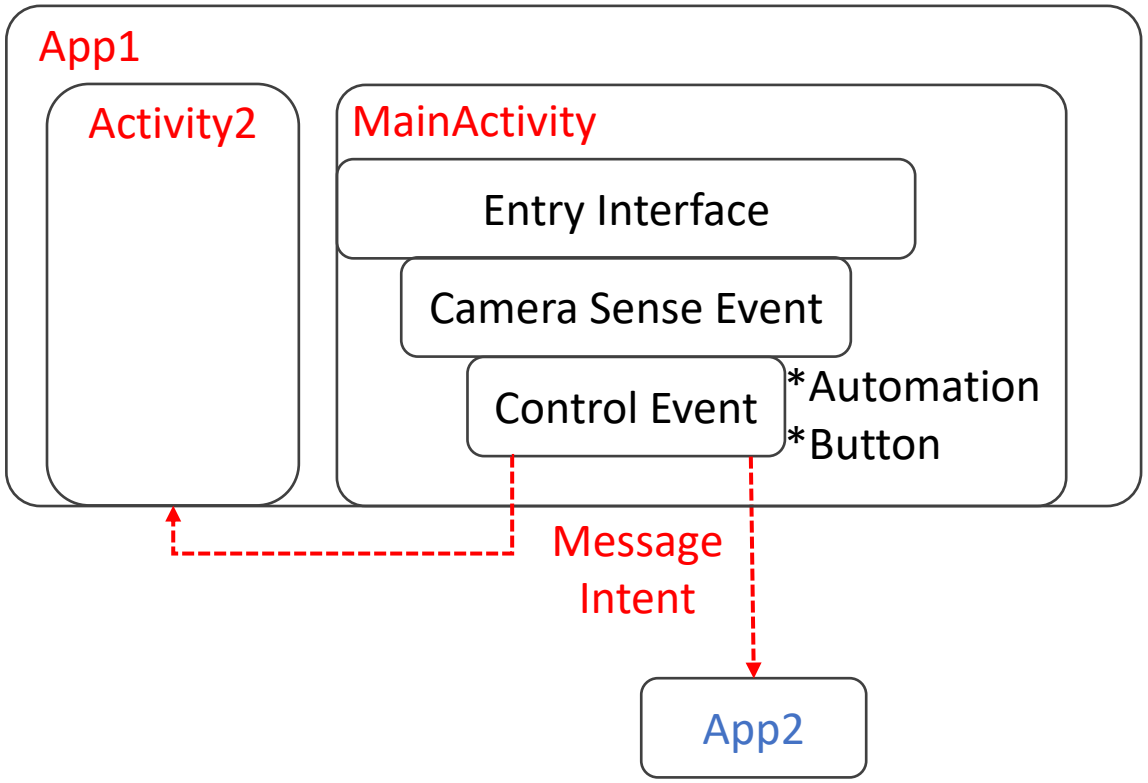
# QRTest1-- Read QR Code Example

APP1—Activity1




APP1—Activity2 or APP2




Most of the time, APP1 and APP2 are produced by two different unit engineers.

Therefore, Intent method is needed to call the other party's APP and transmit messages.

Reference from AI

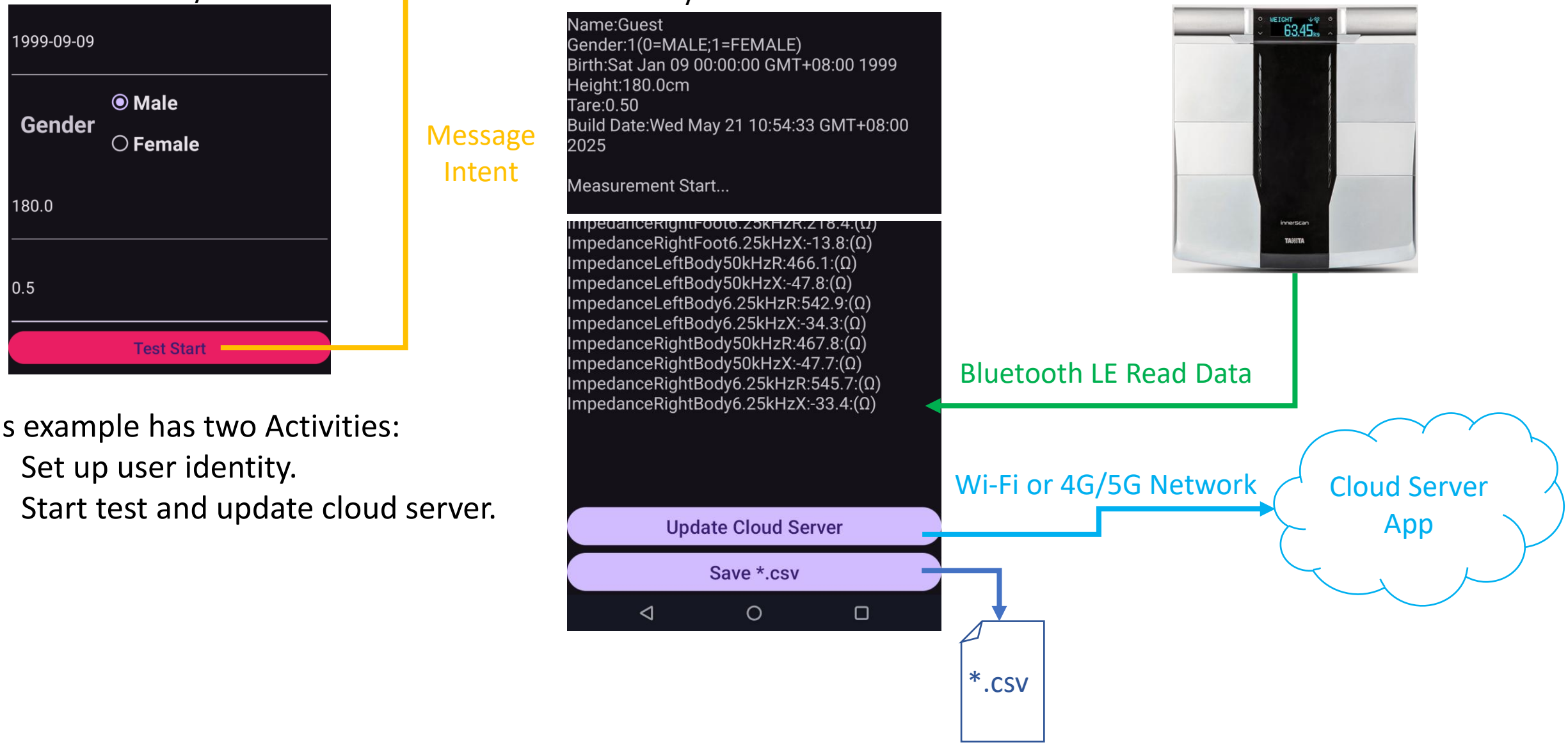
# QRTest1-- Read QR Code Example

The only point of this app is... switching between the front and back cameras.

```
73          cameraSource = new CameraSource.Builder( context: this, barcodeDetector)
74                  //.setRequestedPreviewSize(300, 300) // You can customize the preview window content size
75                  //.setFacing(CameraSource.CAMERA_FACING_FRONT) // You can use front camera.
76                  .setAutoFocusEnabled(true) // Autofocus
77                  .build();
```

Reference from TANITA API

# Rd545cmd1-- Rd545 Api call Example




This example has two Activities:

1. Set up user identity.
2. Start test and update cloud server.

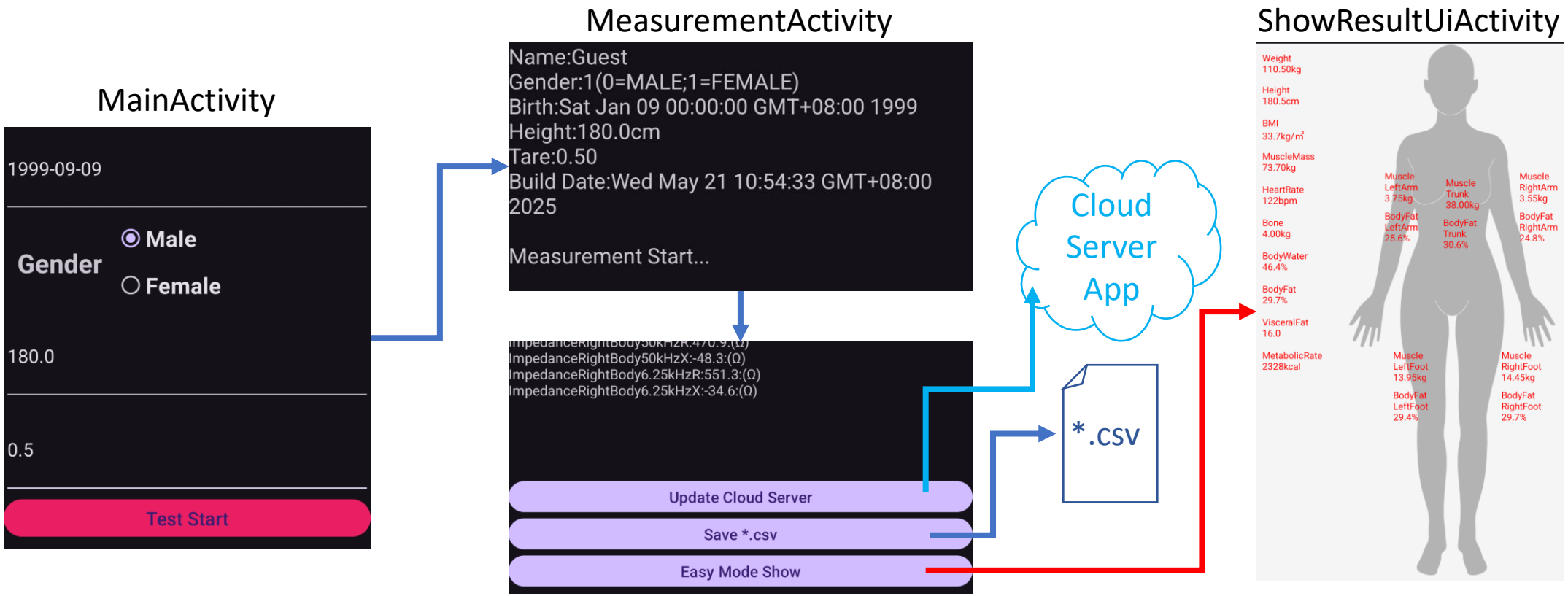
Reference from TANITA API

# Rd545cmd1-- Rd545 Api call Example

‘MainActivity’ is used to set user information, including birthday, gender, height, clothing weight, etc. Then this information is passed to ‘MeasurementActivity.java’ through the Intent method and opened.

‘MeasurementActivity’ Activity will automatically call the Rd545 library to wake up the RD545 device and enter the measurement state. The basic measurement information is set based on the user information of the previous Activity.

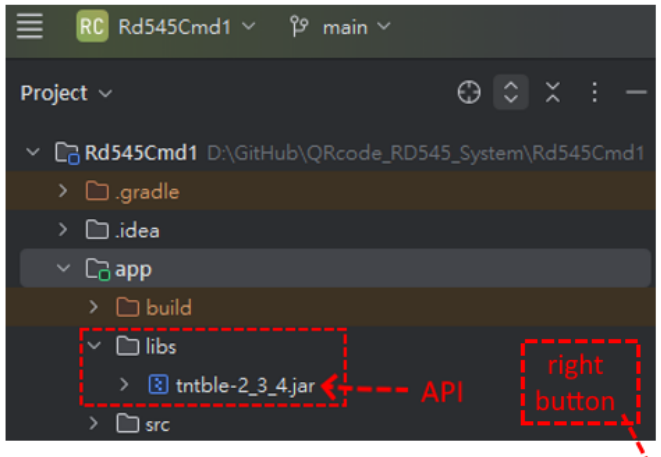
‘ShowResultUiActivity’ is a UI visualization view that displays all the data measured by ‘MeasurementActivity.java’ in a simple data display.

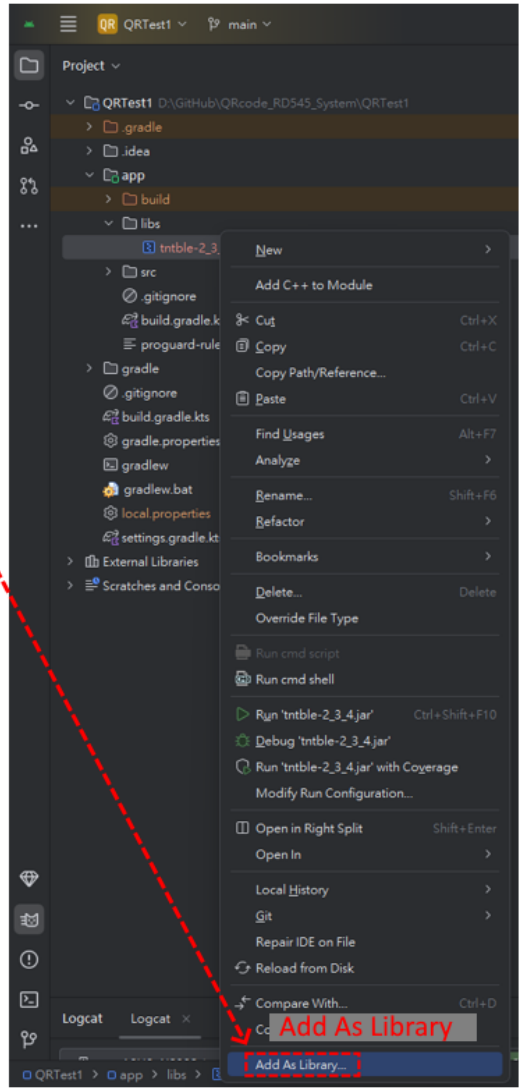


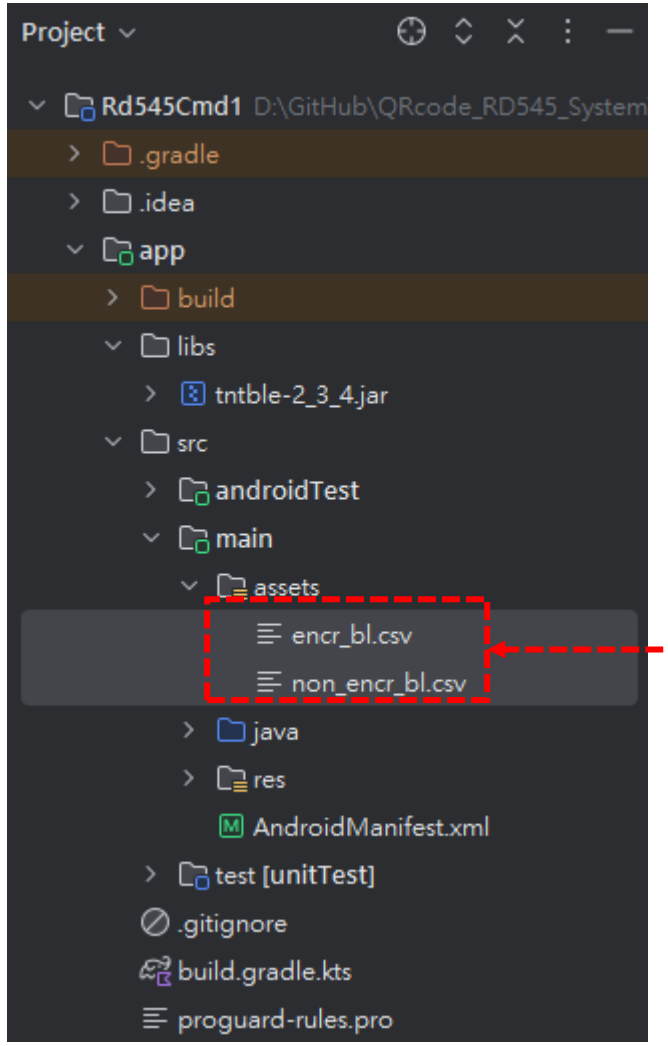
Reference from TANITA API

# Rd545cmd1-- Rd545 Api call Example

Api Setting




Setup:
encr_bl.csv
non_encr_bl.csv

*if not setup ,the program will be back off when call library.

Reference from TANITA API

# Rd545cmd1-- Rd545 Api call Example

Code in 'AndroidManifest.xml' ,this is a unified management interface for APP permissions.

```
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.BLUETOOTH" />
<uses-permission android:name="android.permission.BLUETOOTH_ADMIN" />
<uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />
<uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
<uses-permission android:name="android.permission.BLUETOOTH_SCAN" />
<uses-permission android:name="android.permission.BLUETOOTH_CONNECT" />
<uses-feature
    android:name="android.hardware.bluetooth_le"
    android:required="true" />

<application
...
<uses-library
        android:name="org.apache.http.legacy"
        android:required="false" />
...
</application>
```

This is the permission statement for smart devices to read and write Rom files.

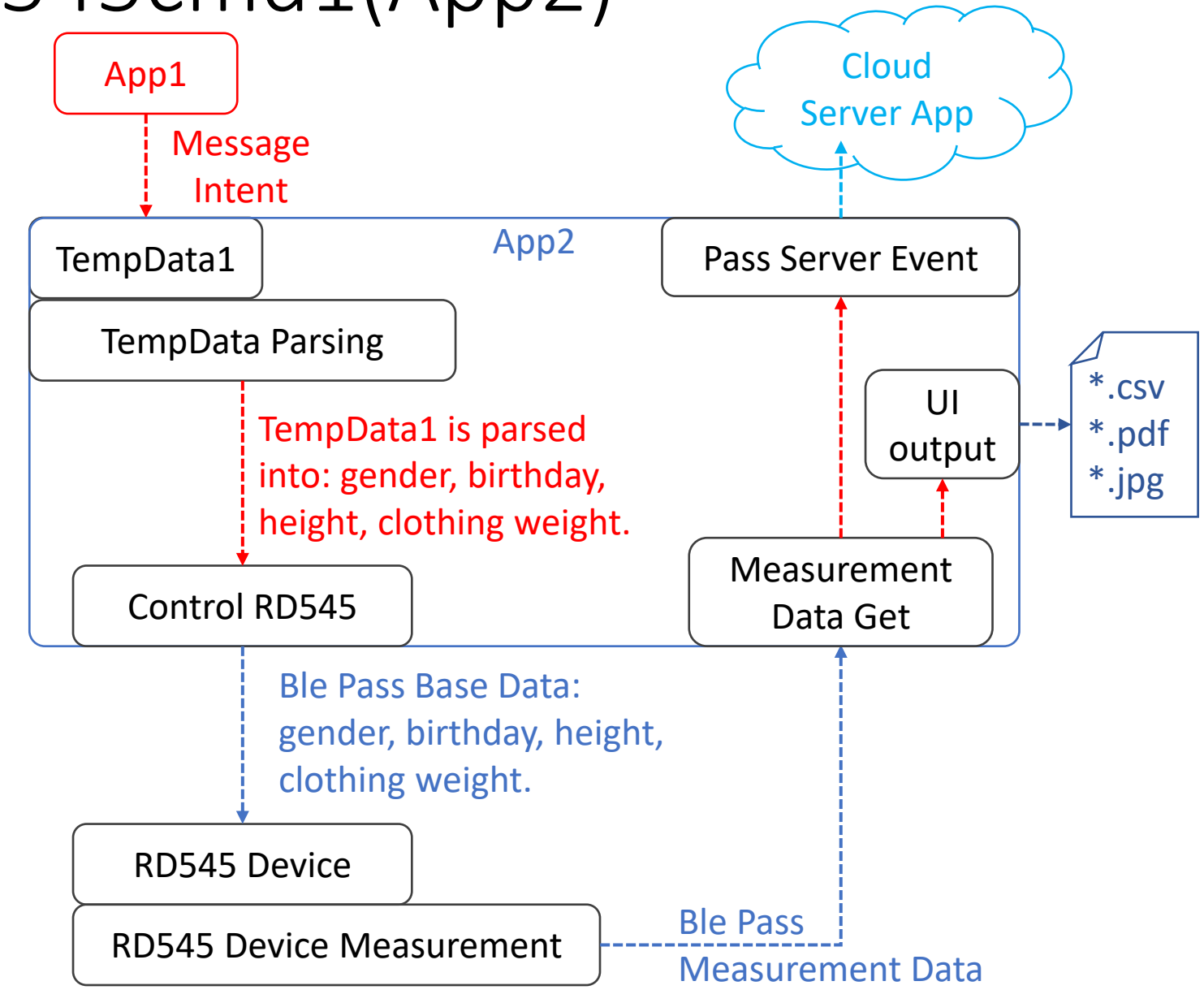
This is the permission statement for smart devices to internet.

This is the permission statement for smart devices to bluetooth control.

This is the permission statement for smart devices to internet library. Different libraries may be required, but this example only requires this one. If this library is not called, the program will be back off when the BIA measurement completed.

# QRTest1(App1) Call Rd545cmd1(App2)

Reference from AI

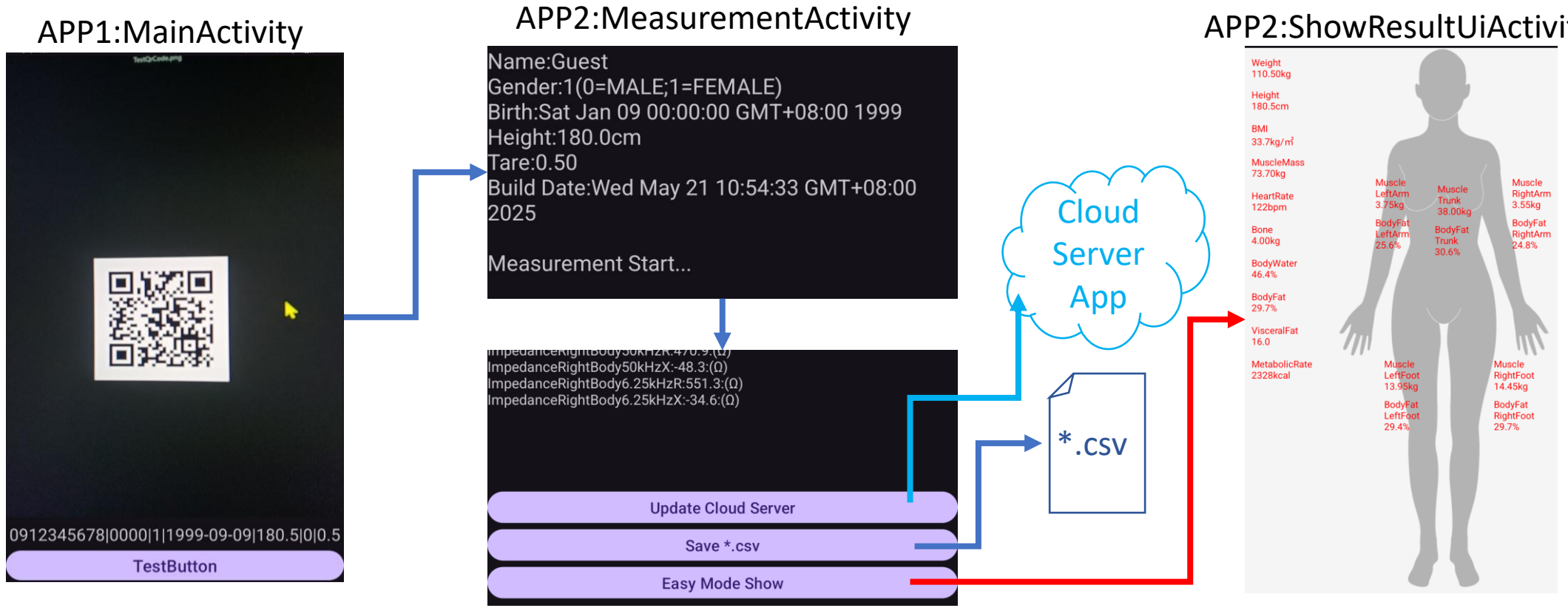
# QRTest1(App1) Call Rd545cmd1(App2)

Reference from AI

‘APP1:MainActivity’ sets user information form QR code, including birthday, gender, height, clothing weight. Then this information is passed to ‘MeasurementActivity.java’ through the Intent method and opened.

‘APP2:MeasurementActivityis Activity will automatically call the Rd545 library to wake up the RD545 device and enter the measurement state. The basic measurement information is set based on the user information of the previous Activity.

‘APP2:ShowResultUiActivity’ is a UI visualization view that displays all the data measured by ‘MeasurementActivity.java’ in a simple data display.



# QRTest1(App1) Call Rd545cmd1(App2)

'App1:MainActivity' -- Button Event change call Object.

```
35      public class MainActivity extends AppCompatActivity {
151         public void BtnClick(View v)
152         {
153             Intent intent = new Intent( packageContext: this, MeasurementActivity.class);
154             intent.putExtra( name: "key", textView.getText());
155             startActivity(intent);
156             /*
157             Intent intent = new Intent();
158             intent.setComponent(new ComponentName(
159                     "wi.ki.rd545cmd1", // package name of APP2
160                     "wi.ki.rd545cmd1.MeasurementActivity" // call to Activity2 Name of APP2
161             ));
162             String[] parts = textView.getText().toString().split("\\|");
163             intent.putExtra("Phone",parts[0]);
164             intent.putExtra("Area",parts[1]);
165             intent.putExtra("Gender",parts[2]);
166             intent.putExtra("Birthday",parts[3]);
167             intent.putExtra("Height",parts[4]);
168             intent.putExtra("Weight",parts[5]);
169             intent.putExtra("ClothesWeight",parts[6]);
170             startActivity(intent);
171             */
172         }
173     }
```

This Code is call Activity2 of App1.

This Code is call Activity2 of App2.

# QRTest1(App1) Call Rd545cmd1(App2)

‘App2:MeasurementActivity’ external call permission settings in ‘App2:AndroidMainfest.xml’.

AndroidManifest.xml

```
2   <manifest xmlns:android="http://schemas.android.com/apk/res/android"
14      <application
27          <activity
28              android:name=".MeasurementActivity"
29              android:exported="true"/>
30          <activity
31              android:name=".MainActivity"
32              android:exported="true">
33              <intent-filter>
34                  <action android:name="android.intent.action.MAIN" />
35
36                  <category android:name="android.intent.category.LAUNCHER" />
37              </intent-filter>
38          </activity>
39      </application>
40
41  </manifest>
```

Exported=“true”:
This can be called externally.

Exported=“false”:(Default)
This cannot be called externally.