**1. 需求**

* 客制化项目：电池温度过高，主机将自动关机
* 具体条件：电池温度 59 摄氏度以上，主机弹出“关机提醒”后自动关机

**2. 开发说明**

**2.1 电池温度信息**

* Linux 的节点：/sys/devices/platform/battery/Battery\_Temperature
* 应用层：注册电池广播即可

**2.1 具体思路**

后台运行常驻服务，监听广播，当温度达到阈值情况下，弹出对话框提示，对话框消失后执行关机指令。

**2.1.1 电池广播**

**private** **class** **PowerUIReceiver** **extends** **BroadcastReceiver** {

public void init() {

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

filter.addAction(**Intent**.**ACTION\_BATTERY\_CHANGED**);

mContext.registerReceiver(**this**, filter);

}

**2.1.2 判断条件**

**@Override**

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

**if** (intent == **null**) {

**return**;

}

String action = intent.getAction();

**int** temperature = intent.getIntExtra(BatteryManager.EXTRA\_TEMPERATURE, -1);

**if** (temperature >= PowerSaveManagerContant.HIGHT\_BATTERY\_TEMP\_SHUTDOWN) {

**if** (mISystemStatusCallBack != **null** && !isShutdownFlag) {

isShutdownFlag = **true**;

mISystemStatusCallBack.highTemperature(temperature);

}

}

**2.1.3 对话框**

android:theme="@\*android:style/Theme.Material.Light.Dialog.Alert" >

<activity

android:name="com.android.lava.powersave.ui.ShutdownActivity"

android:configChanges="orientation|keyboardHidden|screenSize|mcc|mnc"

android:exported="false"

android:label="@string/high\_temp\_shutdown\_title"

android:theme="@\*android:style/Theme.Material.Light.Dialog.Alert" >

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.DEFAULT" />

</intent-filter>

</activity>

UI

public **class** **ShutdownActivity** **extends** **Activity** {

public static **final** int **MSG\_SHUTDOWN** = 0;

public static **final** int **DELAY\_TIME** = 5000;

**private** **Ringtone** mRingtone;

**private** static **final** **Uri** **WARNING\_SOUND\_URI** = **Uri**.parse("file:///system/media/audio/ui/VideoRecord.ogg");

**private** **final** **Handler** mHandler = **new** **ShutdownHandler**(**this**);

**private** static **class** **ShutdownHandler** **extends** **WeakHandler<ShutdownActivity>** {

public **ShutdownHandler**(**ShutdownActivity** owner) {

**super**(owner);

}

**@Override**

public void handleMessage(**Message** msg) {

**ShutdownActivity** activity = getOwner();

**if** (activity == null)

**return**;

**if** (msg.what == **MSG\_SHUTDOWN**) {

**PowerSaveController**.shutdown(activity);

activity.finish();

}

}

}

**@Override**

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

**super**.onCreate(savedInstanceState);

requestWindowFeature(**Window**.**FEATURE\_NO\_TITLE**);

setContentView(**R**.layout.dialog\_shutdown\_confirm);

mHandler.sendEmptyMessageDelayed(**MSG\_SHUTDOWN**, **DELAY\_TIME**);

playAlertSound(**WARNING\_SOUND\_URI**);

}

**2.1.4 关机指令**

注意需要权限和系统进程id

*/\*\**

*\* Shutdown*

*\**

*\* 1. <uses-permission android:name="android.permission.SHUTDOWN" />*

*\* 2. android:sharedUserId="android.uid.system"*

*\*/*

**public** **static** **void** **shutdown**(Context mContext) {

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

intent.putExtra(Intent.EXTRA\_KEY\_CONFIRM, false);

intent.setFlags(Intent.FLAG\_ACTIVITY\_NEW\_TASK);

mContext.startActivity(intent);

}

**3. 界面效果**

