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Department of MCA

Telephony API

Sending SMS

```
smsManager.sendTextMessage(phoneNumber, null, message, null, null);
```

```
BroadcastReceiver smsSentReceiver, smsDeliveredReceiver;  
PendingIntent piSent=PendingIntent.getBroadcast(this, 0, new Intent("SMS_SENT"), 0);  
PendingIntent piDelivered=PendingIntent.getBroadcast(this, 0, new  
Intent("SMS_DELIVERED"), 0);  
//PendingIntent piSent = PendingIntent.getBroadcast(mContext, 0, new Intent(SENT), 0);  
// PendingIntent piDel-ivered = PendingIntent.getBroadcast(mContext, 0,new  
Intent(DELIVERED), 0);
```

```
SmsManager smsManager = SmsManager.getDefault();
```

```
int length = message.length();  
if(length > MAX_SMS_MESSAGE_LENGTH) {
```

```
    ArrayList<String> messagelist = smsManager.divideMessage(message);  
    smsManager.sendMultipartTextMessage(phoneNumber, null, messagelist,null,null);  
    }  
    else  
    {  
        smsManager.sendTextMessage(phoneNumber, null, message,  
        piSent,piDelivered);  
    }
```

```
smsSentReceiver=new BroadcastReceiver()  
{  
    @Override  
    public void onReceive(Context arg0, Intent arg1) {  
        // TODO Auto-generated method stub  
        switch (getResultCode()) {  
            case Activity.RESULT_OK:  
                Toast.makeText(getApplicationContext(), "SMS has been sent",  
                Toast.LENGTH_SHORT).show();  
                break;  
            case SmsManager.RESULT_ERROR_GENERIC_FAILURE:
```

```

        Toast.makeText(getApplicationContext(), "Generic Failure",
Toast.LENGTH_SHORT).show();
        break;
    }
};
smsDeliveredReceiver=new BroadcastReceiver() {
    @Override
    public void onReceive(Context arg0, Intent arg1) {
        // TODO Auto-generated method stub
        switch(getResultCode()) {
            case Activity.RESULT_OK:
                Toast.makeText(getApplicationContext(), "SMS Delivered",
Toast.LENGTH_SHORT).show();
                break;
            case Activity.RESULT_CANCELED:
                Toast.makeText(getApplicationContext(), "SMS not delivered",
Toast.LENGTH_SHORT).show();
                break;
        }
    }
};

registerReceiver(smsSentReceiver, new IntentFilter("SMS_SENT"));
registerReceiver(smsDeliveredReceiver, new IntentFilter("SMS_DELIVERED"));

```

Receive SMS

```

Bundle bundle = intent.getExtras();
SmsMessage[] msgs = null;
String str = "";
if (bundle != null) {
    //---retrieve the SMS message received---
    Object[] pdus = (Object[]) intent.getExtras().get("pdus");
    msgs = new SmsMessage[pdus.length];
    for (int i=0; i<msgs.length; i++)
    {
        msgs[i] = SmsMessage.createFromPdu((byte[])pdus[i]);
        str += "SMS from " + msgs[i].getOriginatingAddress();
        str += " ";
        str += msgs[i].getMessageBody().toString();
        str += "\n";
    }
    //---display the new SMS message---
    Toast.makeText(context, str, Toast.LENGTH_SHORT).show();
}

```

```
<uses-permission android:name="android.permission.SEND_SMS"/>
<uses-permission android:name="android.permission.RECEIVE_SMS"/>
```

```
<receiver android:name=".SMSReceiver">
  <intent-filter>
    <action android:name=
      "android.provider.Telephony.SMS_RECEIVED" />
  </intent-filter>
</receiver>
```

Making Phone Call

```
Intent i = new Intent(Intent.ACTION_DIAL);
i.setData(Uri.parse("tel:123456"));
startActivity(i);
```

Receiving Phone Call

```
private class PhoneCallListener extends PhoneStateListener {

    String TAG = "LOGGING PHONE CALL";

    private boolean phoneCalling = false;

    @Override
    public void onCallStateChanged(int state, String incomingNumber) {

        if (TelephonyManager.CALL_STATE_RINGING == state) {
            // phone ringing
            Log.i(TAG, "RINGING, number: " + incomingNumber);
        }

        if (TelephonyManager.CALL_STATE_OFFHOOK == state) {
            // active
            Log.i(TAG, "OFFHOOK");
            phoneCalling = true;
        }

        // When the call ends launch the main activity again
        if (TelephonyManager.CALL_STATE_IDLE == state) {

            Log.i(TAG, "IDLE");
            if (phoneCalling) {
                Log.i(TAG, "restart app");
                Intent i = getBaseContext().getPackageManager()
```

```

        .getLaunchIntentForPackage(
getBaseContext().getPackageName());
        i.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TOP);
        startActivity(i);
        phoneCalling = false;
    }
}
}

```

```

<uses-permission android:name="android.permission.CALL_PHONE" />
<uses-permission android:name="android.permission.READ_PHONE_STATE" />

```

Retrieving Service State Information

```

public void onServiceStateChanged(ServiceState serviceState) {
    // TODO Auto-generated method stub
    super.onServiceStateChanged(serviceState);
    int i = serviceState.getState();
    String s = "";
    switch(i)
    {
        case ServiceState.STATE_EMERGENCY_ONLY:
            s = "emergency";
            break;
        case ServiceState.STATE_IN_SERVICE:
            s = "in service";
            break;
        case ServiceState.STATE_OUT_OF_SERVICE:
            s = "out of service";
            break;
        case ServiceState.STATE_POWER_OFF:
            s = "power off";
            break;
    }
    Log.d("ta5b", s);
}

```