

1. 권한설정

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

2. Layout



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.example.choikt.openapitest.MainActivity">

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="HTTP"
        android:id="@+id/button"
        android:onClick="btnHttpClick"
        android:layout_alignParentTop="true"
        android:layout_alignParentStart="true" />

    <Button
        style="?android:attr/buttonStyleSmall"
```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Weather"
        android:id="@+id/button2"
        android:onClick="btnWeatherClick"
        android:layout_alignParentTop="true"
        android:layout_toEndOf="@+id/button" />

```

```

<Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="attend"
    android:id="@+id/button3"
    android:layout_alignParentTop="true"
    android:layout_toEndOf="@+id/button2"
    android:onClick="btnAttendClick"/>

```

```

<EditText
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:inputType="textMultiLine"
    android:ems="10"
    android:id="@+id/editText"
    android:layout_below="@+id/button"
    android:layout_alignParentStart="true"
    android:layout_alignParentBottom="true" />

```

```

<Button
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Parsing"
    android:id="@+id/button4"
    android:layout_above="@+id/editText"
    android:layout_toEndOf="@+id/button3"
    android:onClick="btnParsingClick"/>

```

```

<ImageView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/imageView"
    android:layout_above="@+id/editText"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_toEndOf="@+id/button4"
    android:src="@android:drawable/sym_def_app_icon" />

```

```

</RelativeLayout>

```

3. JavaCode

```

import android.os.AsyncTask;
import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
import android.view.View;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.Toast;

import org.json.JSONArray;

```

```

import org.json.JSONException;
import org.json.JSONObject;

import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStream;
import java.io.InputStreamReader;
import java.net.HttpURLConnection;
import java.net.URL;

public class MainActivity extends AppCompatActivity {

    EditText etMemo = null;
    ImageView ivIcon = null;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        etMemo = (EditText)findViewById(R.id.editText);
        ivIcon = (ImageView)findViewById(R.id.imageView);
    }

    public void btnHttpClick(View v) {
        String c = "http://www.google.co.kr";
        new HttpTask().execute(c);
    }

    public void btnWeatherClick(View v) {
        //http://openweathermap.org/
        //http://openweathermap.org/img/w/03d.png
        //http://www.latlong.net/
        String c =
"http://api.openweathermap.org/data/2.5/weather?lat=37.276101&lon=127.130824&APPID=8ff8987";
        new HttpTask().execute(c);
    }

    public void btnParsingClick(View v) throws JSONException {
        //String str = "{ 'coord':{ 'lon':12.34}, 'weather':[{ 'main': 'clouds' }],
'main':{ 'temp':290.38, 'humidity':45.8} }";

        String str = etMemo.getText().toString();

        JSONObject jsonObj = new JSONObject(str);
        JSONObject cord = jsonObj.getJSONObject("coord");
        JSONObject main = jsonObj.getJSONObject("main");

        etMemo.setText("");
        etMemo.append(cord.getString("lon") + "\n");
        etMemo.append(main.getString("humidity") + "\n");
        etMemo.append(main.getString("temp") + "\n");

        JSONArray weathers = jsonObj.getJSONArray("weather");
        JSONObject weather = weathers.getJSONObject(0);
        etMemo.append(weather.getString("main") + "\n");
    }
}

```

```

String icon = weather.getString("icon");

//int resID = getResources().getIdentifier("i" + icon, "drawable",
getPackageName());
int resID = getResources().getIdentifier("i02d", "drawable", getPackageName());
ivIcon.setImageDrawable(getResources().getDrawable(resID ));

}

public void btnAttendClick(View v) {
String c = "code=mobilecomputing&type=begin&";
c = "http://localhost/register.php?" + c + "&phone=01032214331&api=qwerty12345";
new HttpTask(new OnCompletionListener() {
    public void onComplete(String result) {

        JSONObject jsonObj = null;
        try {
            jsonObj = new JSONObject(result);

            JSONObject response = jsonObj.getJSONObject("response");
            String tmp = response.getString("msg") + " " + response.getString("phone");
            Toast.makeText(getApplicationContext(), tmp, Toast.LENGTH_SHORT).show();
        } catch (JSONException e) {
            e.printStackTrace();
        }

    }
}).execute(c);
}

interface OnCompletionListener {
    void onComplete(String result);
}

class HttpTask extends AsyncTask<String , Void , String> {

    OnCompletionListener listener = null;

    public HttpTask() {
    }

    public HttpTask(OnCompletionListener listener) {
        this.listener = listener;
    }

    protected String doInBackground(String... params)
    {
        String line = null;
        try {

            URL url = new URL(params[0]);
            HttpURLConnection conn = (HttpURLConnection) url.openConnection();
            conn.setRequestMethod("GET");
            InputStream is = conn.getInputStream();

            BufferedReader reader = new BufferedReader(new InputStreamReader(is, "UTF-
8"));

```

```

        line = reader.readLine();
    } catch (IOException e) {
        e.printStackTrace();
        line = e.toString();
    }
    return line;
}

protected void onPostExecute(String result)
{
    if ( listener != null) listener.onComplete(result);
    etMemo.setText(result);
}
}
}

```

4. Server Php

```

<?php
    $msg = "ok";

    if (! isset($_GET['key']) ) $msg = "no api key";
    else if ( $_GET['key'] != "qwerty12345" ) $msg = "invalid api key";

    $phone = "none";
    if (! isset($_GET['phone']) ) $msg = "no phone number";
    else $phone = $_GET['phone']
?>
{
    "response":{
        "msg":"<?=$msg?>",
        "phone":"<?=$phone?>"
    }
}
}

```