

# 现代操作系统应用开发实验报告

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## 一．参考资料

参考的 ppt

[http://api.map.baidu.com/telematics/v3/weather?location=汕尾](http://api.map.baidu.com/telematics/v3/weather?location=汕尾&output=xml&ak=11ffd27d38deda622f51c9d314d46b17)  
&output=xml&ak=11ffd27d38deda622f51c9d314d46b17

<https://api.douban.com/v2/music/search?q=>

## 二．实验步骤

```
string url = "http://api.map.baidu.com/telematics/v3/weather?location=汕尾&output=xml&ak=11ffd27d38deda622f51c9d314d46b17";
HttpClient client = new HttpClient();
string xmlString = await client.GetStringAsync(url);
XmlDocument xml = new XmlDocument();
xml.LoadXml(xmlString);

XmlNodeList weather = xml.GetElementsByTagName("weather");
XmlNodeList wind = xml.GetElementsByTagName("wind");
XmlNodeList temperature = xml.GetElementsByTagName("temperature");
XmlNodeList date = xml.GetElementsByTagName("date");

string str = "";
for (int i = 0; i < weather.Count; ++i)
{
    str += date[i + 1].InnerText + "\n"
        + wind[i].InnerText + "\n"
        + temperature[i].InnerText + "\n"
        + weather[i].InnerText + "\n\n";
}
var md = new MessageBox(str).ShowAsync();
```

这是对 xml 的解析（实在找不到返回 xml 的接口，用了舍友的）

```
private async void Button_Click(object o, RoutedEventArgs a)
{
    if (SearchText.Text.Length == 0)
    {
        Result.Visibility = Visibility.Collapsed;
        var mes = new MessageDialog("you did not input anything").ShowAsync();
        return;
    }
    else
    {
        Result.Visibility = Visibility.Visible;
    }
    string url = "https://api.douban.com/v2/music/search?q=" + SearchText.Text;
    HttpClient client = new HttpClient();
    string jsonObject;
    try
    {
        jsonObject = await client.GetStringAsync(url);
    }
    catch (Exception e)
    {
        jsonObject = "null";
        var mes = new MessageDialog("Nothing found").ShowAsync();
        return;
    }
    //string jsonObject = await client.GetStringAsync(url);
    JObject res = (JObject)JsonConvert.DeserializeObject(jsonObject);
    int num = (int)res["total"];
    if (num == 0)
    {

```

```

    }
    if (num == 0)
    {
        Result.Visibility = Visibility.Collapsed;
        var mes = new MessageDialog("Nothing found").ShowAsync();
        return;
    }
    JArray array = (JArray)res["musics"];
    JArray a1 = (JArray)res["musics"][0]["author"];
    singer.Text = "歌手: " + (String)a1[0]["name"];
    name.Text = "歌名: " + (String)res["musics"][0]["title"];
    img.Source = new BitmapImage(new Uri(res["musics"][0]["image"].ToString()));
}

```

这是对 json 的解析

### 三．实验结果截图





## 四 . 实验过程遇到的问题

关键的代码给的 demo 都有，包括 json 的解析，显示等等  
解析 xml 的话，则是用标签访问，很方便

## 五 . 思考与总结

利用现有的 api 来完善自己的应用是不错的选择  
访问 api 必须异步