

1、实现方式

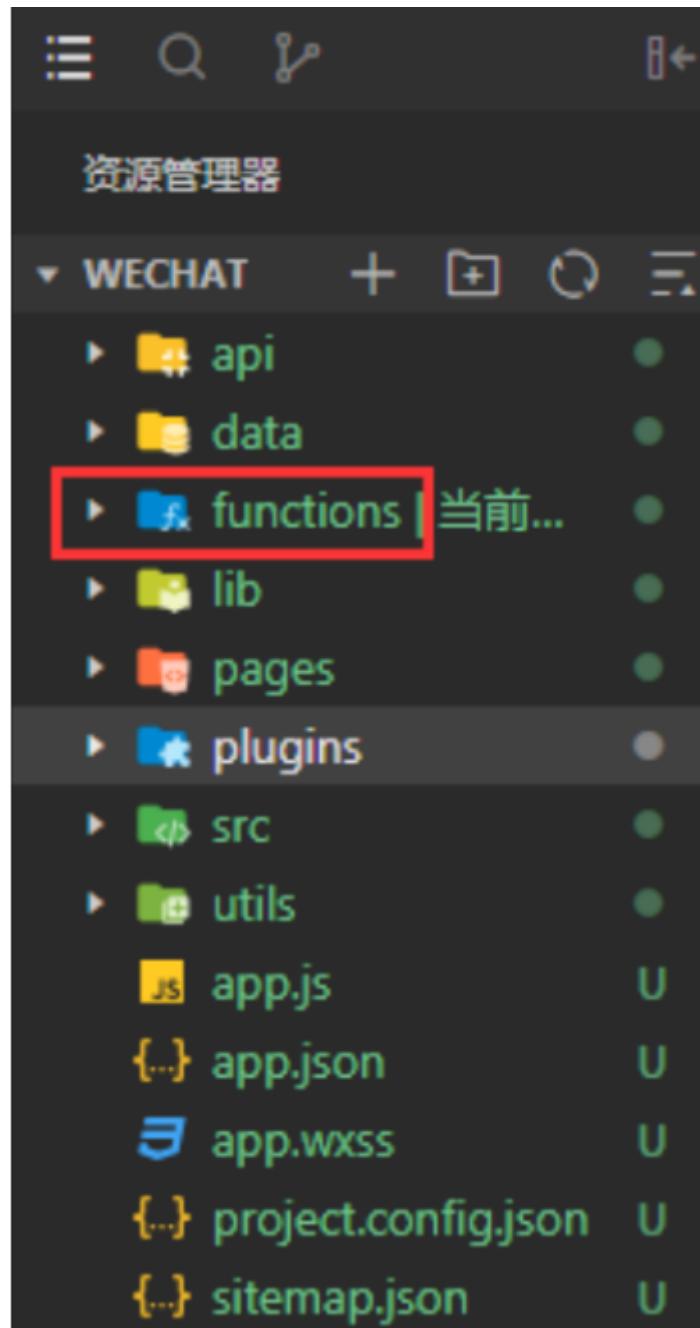
前端调用相机组件实现人脸在线采集，
通过采集到的人脸图片的base64字符串调用云开发侧实现的腾讯云人脸识别云函数，
然后将识别结果回调到小程序页面中。

2. 实现流程

第一步：开通云开发控制台并创建云端项目环境



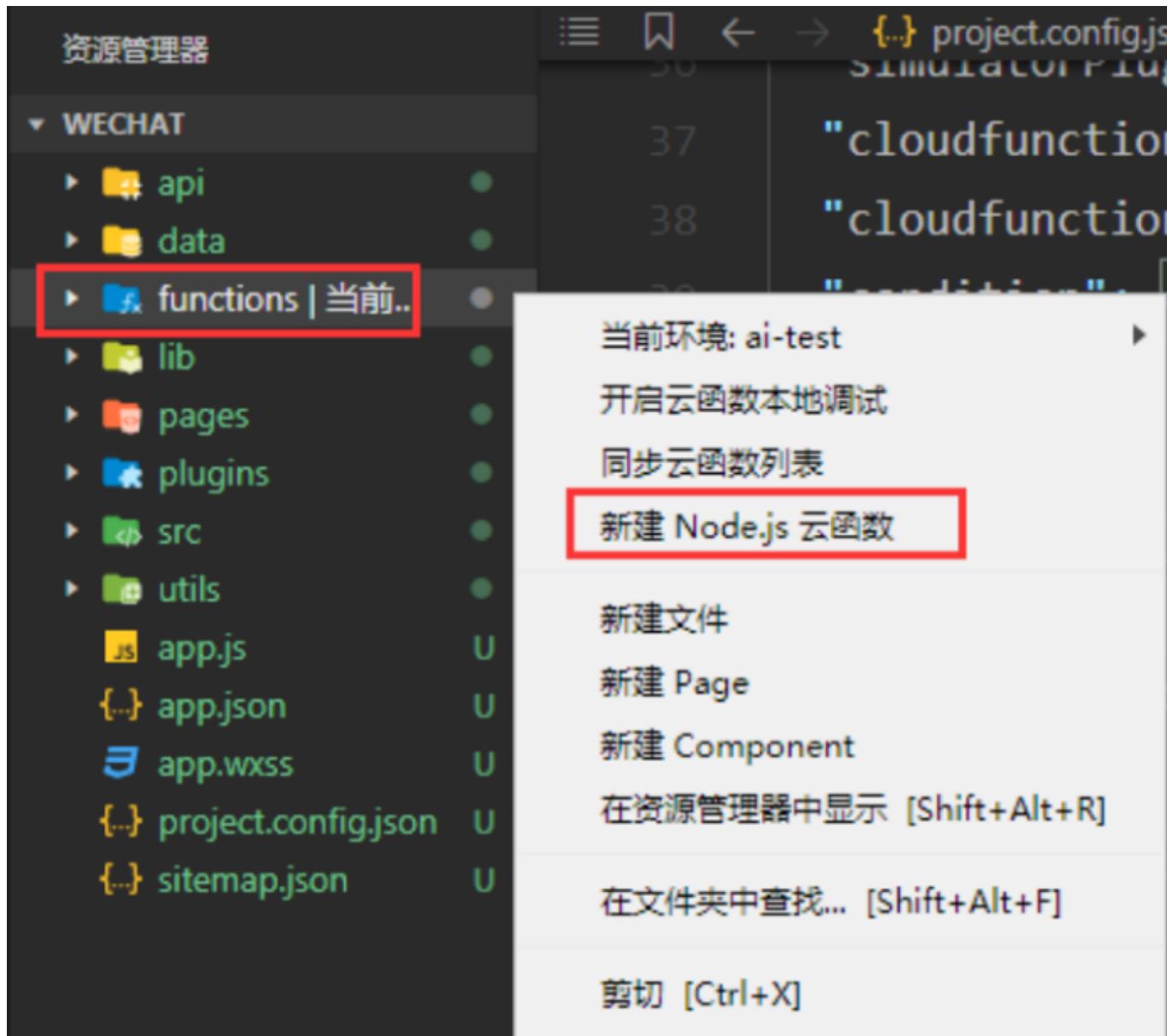
第二步：在小程序项目根目录下创建本地云函数根目录functions，在项目根目录找到 project.config.json 文件，新增 cloudfunctionRoot 字段，值为刚才创建的本地云函数根目录名称

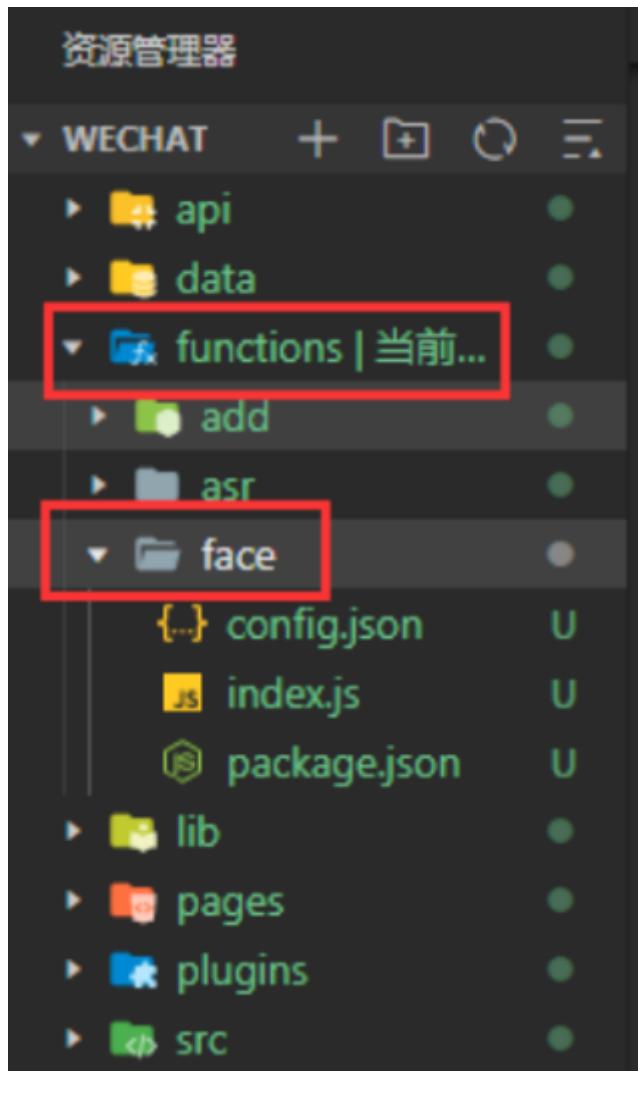


```
37 "cloudfunctionRoot": "functions/",  
38 "cloudfunctionTemplateRoot": "cloudfunctionTemplate",  
39 "condition": [  
40     "search": {  
41         "current": -1,  
42         "list": []  
43     },  
44     "conversation": {  
45         "current": -1,  
46         "list": []  
47     }  
48 ]
```

The screenshot shows the 'project.config.json' file content. The 'cloudfunctionRoot' key is set to 'functions/'. The 'condition' array contains two objects: one for 'search' and one for 'conversation'. Both objects have 'current' and 'list' properties.

第三步：创建人脸识别云函数并配置tencentcloud-sdk-nodejs依赖



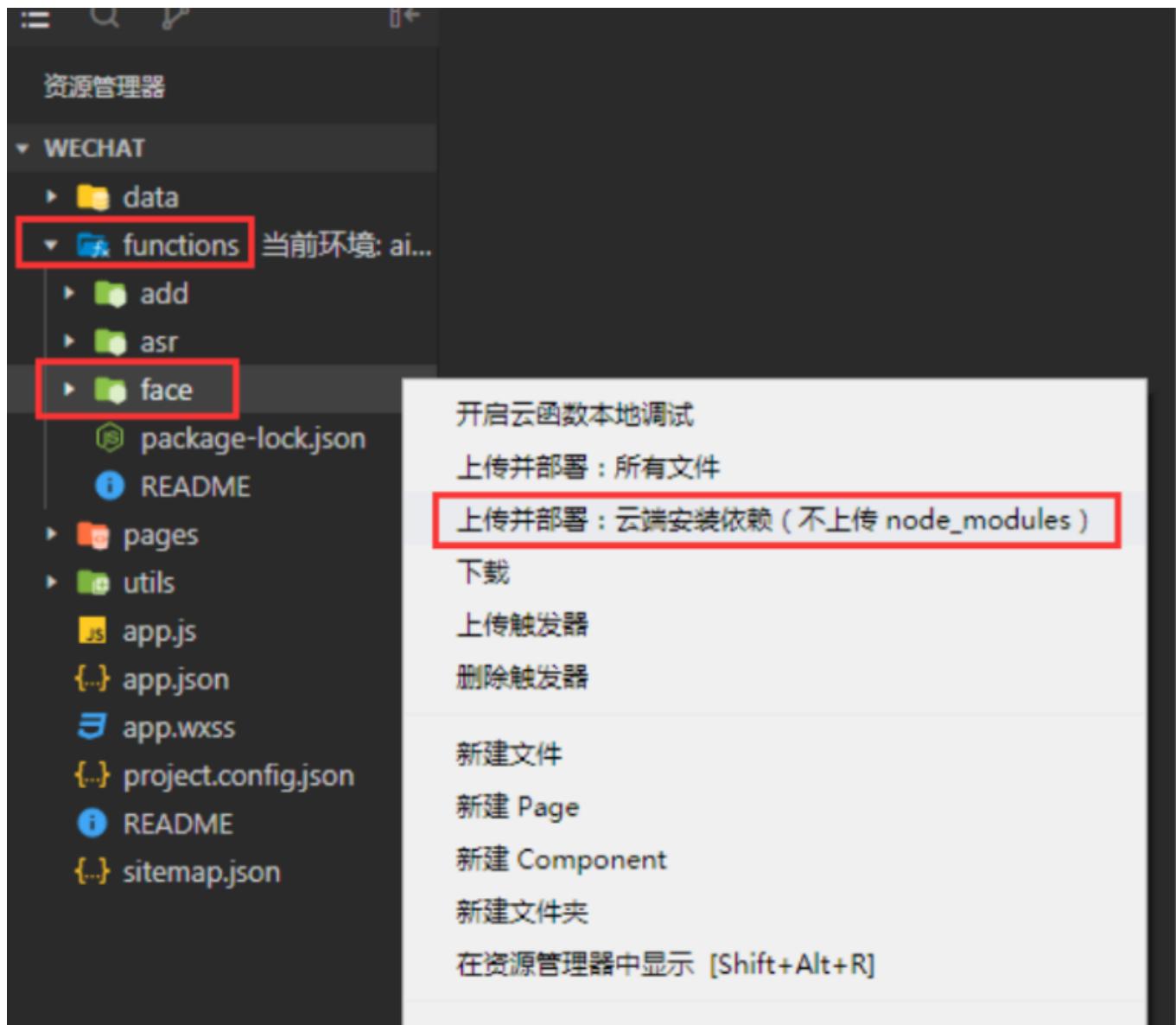


```
1 "name": "face",
2 "version": "1.0.0",
3 "description": "",
4 "main": "index.js",
5 "scripts": {
6   "test": "echo \"Error: no test specified\" && exit 1"
7 },
8 "author": "",
9 "license": "ISC",
10 "dependencies": {
11   "wx-server-sdk": "latest",
12   "tencentcloud-sdk-nodejs": "latest"
13 }
```

第四步：在人脸识别云函数目录下的入口文件index.js中实现人脸识别-人脸检测与分析的API调用
Demo，然后上传Demo至云端

```
// 云函数入口文件
const cloud = require('wx-server-sdk') // 引入云开发服务的内核SDK
cloud.init( //初始化一个'wx-server-sdk' SDK 实例
{
  env: 'cloud1-5gui9ks84b86e290' // 开通云开发服务后创建的云环境的环境ID（默认可以创建两个ID）
})
```

```
)\n\n// 云函数入口函数\nexports.main = async (event, context) => {\n    const tencentcloud = require("tencentcloud-sdk-nodejs");\n    const IaiClient = tencentcloud.iai.v20200303.Client;\n    const clientConfig = {\n        credential: {\n            secretId: "自己腾讯云的secretId",\n            secretKey: "自己腾讯云的secretKey",\n        },\n        region: "ap-guangzhou",\n        profile: {\n            httpProfile: {\n                endpoint: "iai.tencentcloudapi.com",\n            },\n        },\n    },\n};\n\nconst client = new IaiClient(clientConfig);\nlet base64Data = event.x //接收客户端post的x参数, 值类型为base64字符串\nconst params = {\n    Image: base64Data,\n    NeedFaceAttributes: 1\n} // 定义SDK的请求参数字典\n\n// params = JSON.stringify(params) // 转换为json字符串\nreturn new Promise((resolve, reject) => { // 通过Promise容器来接收异步API的回调, 然后通过当前脚本\n    // 返回给客户端\n    client.DetectFace(params, function (errMsg, response) { // 此接口是异步的, 那么当前脚本无法对外直接访问接口返回值\n        if (errMsg) {\n            resolve({\n                "Result": errMsg\n            })\n        }\n        // resp = response.to_json_string()\n        resolve({\n            "Result": response\n        })\n    });\n})\n}
```



第五步：小程序中实现人脸图片在线采集页面

在小程序公共配置文件app.json中，添加页面生成参数

```
"pages/camerac/camerac",
```

camerac.wxml

```
<!--pages/camerac/camerac.wxml-->
<camera device-position="front" flash="off" binderror="error" style="width:100%; height: 300px;">
</camera>
<button type="primary" bindtap="takePhoto">拍照</button>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Gender'] > 50}}>性别: 男</view>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Gender'] < 50}}>性别: 女</view>
```

```

<view>年龄: {{ FaceInfos['0']['FaceAttributesInfo']['Age'] }}</view>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Expression'] == 0 }}">表情: 正常</view>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Expression'] < 50 }}>表情: 微笑</view>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Expression'] > 50 }}>表情: 大笑</view>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Beauty'] == 0 }}>魅力值: 一般</view>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Beauty'] < 50 }}>魅力值: 有点迷人</view>
<view wx:if="{{ FaceInfos['0']['FaceAttributesInfo']['Beauty'] > 50 }}>魅力值: 偶像级</view>
<view>请求的图片宽度: {{ ImageWidth }}</view>
<view>请求的图片高度: {{ ImageHeight }}</view>
<view>人脸框左上角横坐标: {{ FaceInfos['0']['X'] }}</view>
<view>人脸框左上角纵坐标: {{ FaceInfos['0']['Y'] }}</view>
<view>人脸框宽度: {{ FaceInfos['0']['Width'] }}</view>
<view>人脸框高度: {{ FaceInfos['0']['Height'] }}</view>
<image mode="widthFix" src="{{src}}"></image>

```

camerac.js

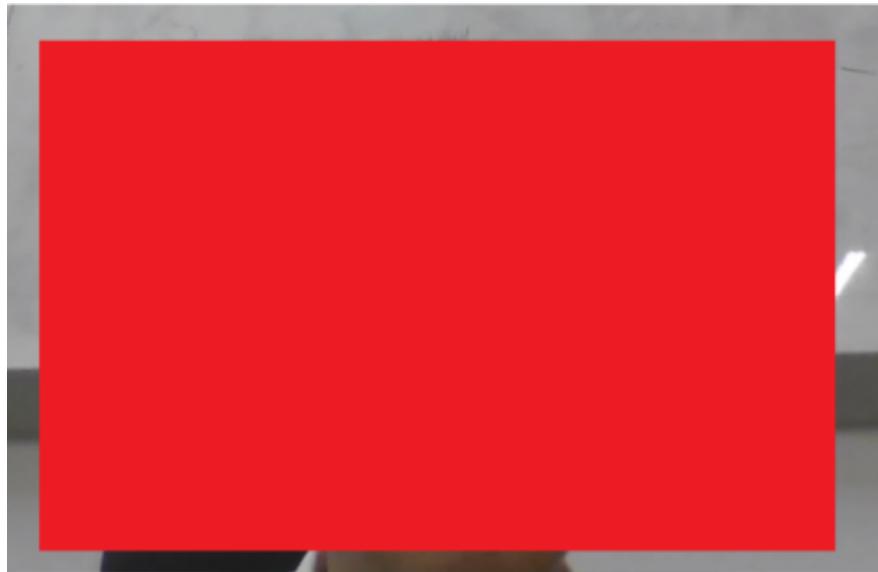
```

Page({
  takePhoto() { // 定义绑定的事件处理函数
    var that=this; // 指定this到that, 避免绑定的对象改变
    const ctx = wx.createCameraContext() // 创建 camera 上下文 CameraContext 对象
    ctx.takePhoto({
      quality: 'high',
      success: (res) => {
        this.setData({
          src: res.tempImagePath
        })
        var base64=wx.getFileSystemManager().readFileSync(res.tempImagePath,'base64')
        wx.cloud.init()
        wx.cloud.callFunction({
          // 云函数名称
          name: 'face',
          // 传给云函数的参数
          data: {
            x:base64 // 传图片的base64字符串
          },
          success: function(res) {
            that.setData({
              ImageWidth: res.result.Result.ImageWidth+"px",
              ImageHeight: res.result.Result.ImageHeight+"px",
              FaceInfos: res.result.Result.FaceInfos,
            })
          },
          fail: console.error
        })
      }
    })
  },
  error(e) {
    console.log(e.detail)
  }
})

```

camerac.css

```
.photo {  
    display: flex;  
    margin-top: 10px;  
    height: 100px;  
}  
  
.ph {  
    border: 1px dashed #909090;  
    margin-right: 30px;  
    width: 80px;  
    height: 60px;  
}  
  
.phzz {  
    border: 1px dashed #909090;  
    margin-right: 70px;  
    margin-left: 70px;  
    width: 100px;  
    height: 60px;  
}  
  
.phright{  
    border: 1px dashed #909090;  
    margin-left: 20px;  
    width: 80px;  
    height: 60px;  
}  
  
.textp{  
    margin-left: 70px;  
    font-size: 14px;  
}  
  
.text{  
    margin-left: 25px;  
    font-size: 14px;  
}  
  
.text2{  
    margin-left: 80px;  
    font-size: 14px;  
}  
  
.text3{  
    margin-left: 98px;  
    font-size: 14px;  
}
```



拍照

年龄:

请求的图片宽度:

请求的图片高度:

人脸框左上角横坐标:

人脸框左上角纵坐标:

人脸框宽度:

人脸框高度:

