**数据表**

fingerprint\_record:每一条指纹数据为一条记录

signal\_record:每一个RSS值为一条记录,以外键与fingerprint\_record关联

fingerprint\_lib:原始指纹库(底图)和更新后的指纹库

**数据表内容**

fingerprint\_record:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 字段 | 类型 | 空 | 主键 | 解释 |
| id | **int(10)** | **no** | **yes** | **主键,自动增加** |
| address | **varchar(40)** | **no** |  | **地址** |
| signal\_type | **int(10)** | **no** |  | **信号类型（1 = WIFI；2 = 蓝牙）** |
| coordinate\_x | **float(10,3)** | **no** |  | **x坐标** |
| coordinate\_y | **float(10,3)** | **no** |  | **y坐标** |
| signal\_time | **varchar(40)** | **yes** |  | **采集时间** |
| uploading\_device | **varchar(40)** | **no** |  | **采集设备** |

signal\_record:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 字段 | 类型 | 空 | 主键 | 解释 |
| id | **int(10)** | **no** | **yes** | **主键,自动增加** |
| record\_id | **int(10)** | **no** |  | **外键,对应fingerprint\_record主键** |
| valid\_num | **int(10)** | **no** |  | **每失效一次，同点同AP的该值加1** |
| signal\_mac\_address | **varchar(20)** | **yes** |  | **AP的MAC地址** |
| signal\_name | **varchar(20)** | **yes** |  | **AP的NAME** |
| signal\_strength | **int(10)** | **no** |  | **信号强度** |

fingerprint\_lib:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 字段 | 类型 | 空 | 主键 | 解释 |
| id | **int(10)** | **no** | **yes** | **主键,自动增加** |
| model\_num | **int(10)** | **no** |  | **模型序号(每次底图采集模型序号+1)** |
| update\_num | **Int(10)** | **no** |  | **更新次数序号(0为底图)** |
| address | **varchar(40)** | **no** |  | **地址** |
| signal\_type | **int(10)** | **no** |  | **信号类型（1 = WIFI；2 = 蓝牙）** |
| coordinate\_x | **int(10)** | **no** |  | **x坐标** |
| coordinate\_y | **int(10)** | **no** |  | **y坐标** |
| signal\_mac\_address | **varchar(20)** | **yes** |  | **AP的MAC地址** |
| signal\_strength | **int(10)** | **no** |  | **信号强度** |

**接口**

1. **输入原始数据格式**

单点单次数据的json格式：

{

"PosLon": 114.35489935727901,

"PosLat": 30.529410302175254,

"Building ID": "LIESMARS",

"Floor ID": "4",

"Date": "2018-03-04 18:07:44",

“Signal\_type”:”1/2”, #注释：1 = WIFI，2 = 蓝牙

“Uploading\_device”:”xiaomi note3”, #注释：上传设备的名称

"ScanInfo": [{

"BSSID": "d8:24:bd:76:98:3f",

"SSID": "liesmars123",

"Level": 49

}, {

"BSSID": "9c:21:6a:02:7b:36",

"SSID": "ELEPHANT",

"Level": 78

},

……

{

"BSSID": "d8:c7:c8:a8:c2:a0",

"SSID": "WHU-WLAN",

"Level": 76

}]

}

1. **输出指纹库格式**

指纹库json格式：

[{

"Point NO": 0,

"PosLon": 114.35489935727901,

"PosLat": 30.529410302175254,

"Building ID": "LIESMARS",

"Floor ID": "4",

"Date": "2018-03-04 18:07:44",

“Signal\_type”:”1/2”, #注释：1 = WIFI，2 = 蓝牙

"ScanInfo": [{

"BSSID": "d8:24:bd:76:98:3f",

"SSID": "liesmars123",

"Level": 49

},

……

{

"BSSID": "d8:c7:c8:a8:c2:a0",

"SSID": "WHU-WLAN",

"Level": 76

}]

},

{

"Point NO": 1,

"PosLon": 118.35489935727901,

"PosLat": 32.529410302175254,

"Building ID": "LIESMARS",

"Floor ID": "4",

"Date": "2018-03-04 18:07:44",

“Signal\_type”:”1/2”, #注释：1 = WIFI，2 = 蓝牙

"ScanInfo": [{

"BSSID": "d8:24:bd:76:98:3f",

"SSID": "liesmars123",

"Level": 51

},

……

{

"BSSID": "d8:c7:c8:a8:c2:a0",

"SSID": "WHU-WLAN",

"Level": 76

}]

},

……

……

]