**班车应用**

**数据结构设计初稿**

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**文档编号:**

**保密级别：公开**

1. **文档修订记录**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **变化状态** | **简要说明**  **变更内容和变更范围** | **变更人** | **变更日期** | **备注** |
| **A** | **新建** | **林亿开** | **20180206** |  |

1. **公共约定**
2. 额度管理系统TABLE表名一律以“GLT\_”开头，表名不超过15个字符。表内栏位命名以表名（除开“GLT\_”字符）开头。多个表之间相同含义或相同名称的栏位，命名相同。
3. 表清单

|  |  |  |  |
| --- | --- | --- | --- |
| 序号 | 表代号 | 表名 | 备注 |
| 1 | bus\_user | 用户表 | 用户基本信息 |
| 2 | bus\_line | 线路表 | 某班车路线的基本信息 |
| 3 | bus\_bus | 班车表 | 班车的基本信息 |

1. 表结构

用户表bus\_user

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 栏位代码 | 栏位中文名称 | 类型及长度 | 是否强制 | 是否键值 | 备注 |
| user\_id | 用户标识 | VARCHAR2(12) | M | Y |  |
| user\_name | 用户名称 | VARCHAR2(100) |  | N |  |
| user\_passwd | 用户密码 | VARCHAR2(50) |  | N |  |
| user\_tell | 手机 | VARCHAR2(20) |  | N |  |
| user\_line | 班车路线 | VARCHAR2(1) |  | N |  |
| user\_mode | 用户模式 | VARCHAR2(1) |  | N | D:司机  P:乘客 |
| user\_longitude | 经度 | VARCHAR2(10) |  |  |  |
| user\_latitude | 纬度 | VARCHAR2(10) |  |  |  |
| user\_chgdt | 修改日期 | VARCHAR2(8) |  |  |  |
| user\_chgtm | 修改时间 | VARCHAR2(12) |  |  |  |

路线表bus\_line

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 栏位代码 | 栏位中文名称 | 类型及长度 | 是否强制 | 是否键值 | 备注 |
| line\_id | 路线标识 | VARCHAR2(1) | M | Y |  |
| line\_stanum | 站点序号 | VARCHAR2(2) |  | Y |  |
| line\_staname | 站点名称 | VARCHAR2(200) |  |  |  |
| line\_longitude | 经度 | VARCHAR2(10) |  |  |  |
| line\_latitude | 纬度 | VARCHAR2(10) |  |  |  |
| line\_uptime | 上行时间 | VARCHAR2(12) |  |  |  |
| line\_downtime | 下行时间 | VARCHAR2(12) |  |  |  |
| line\_chgdt | 修改日期 | VARCHAR2(8) |  |  |  |
| line\_chgtm | 修改时间 | VARCHAR2(12) |  |  |  |

班车表bus\_bus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 栏位代码 | 栏位中文名称 | 类型及长度 | 是否强制 | 是否键值 | 备注 |
| bus\_id | 班车标识 | VARCHAR2(1) | M | Y |  |
| bus\_num | 班车牌号 | VARCHAR2(100) |  | N |  |
| bus\_line | 班车路线 | VARCHAR2(1) |  |  |  |
| bus\_driver | 班车司机 | VARCHAR2(100) |  |  |  |
| bus\_tell | 司机手机 | VARCHAR2(20) |  |  |  |
| bus\_longitude1 | 经度1 | VARCHAR2(10) |  |  |  |
| bus\_latitude1 | 纬度1 | VARCHAR2(10) |  |  |  |
| bus\_longitude2 | 经度2 | VARCHAR2(10) |  |  |  |
| bus\_latitude2 | 纬度2 | VARCHAR2(10) |  |  |  |
| bus\_longitude3 | 经度3 | VARCHAR2(10) |  |  |  |
| bus\_latitude3 | 纬度3 | VARCHAR2(10) |  |  |  |
| bus\_uploadid | 上传者ID | VARCHAR2(12) |  |  |  |
| bus\_uploaddt | 上传日期 | VARCHAR2(8) |  |  |  |
| bus\_uploadtm | 上传时间 | VARCHAR2(12) |  |  |  |
| bus\_laststa | 上一站点 | VARCHAR2(200) |  |  |  |
| bus\_lasttm | 经过上一站点的时间 | VARCHAR2(12) |  |  |  |
| bus\_nextsta | 下一站点 | VARCHAR2(200) |  |  |  |
| bus\_nexttm | 预计经过下一站点的时间 | VARCHAR2(12) |  |  |  |
| bus\_nextdis | 到达下一站点的距离 | VARCHAR2(200) |  |  |  |
| bus\_chgdt | 修改日期 | VARCHAR2(8) |  |  |  |
|  |  |  |  |  |  |
| bus\_chgtm | 修改时间 | VARCHAR2(12) |  |  |  |

**接口清单：**

## 01、BC0001-应用模式选择

用户进入应用时，需要选择模式：班车模式还是乘客模式。同一时间只允许一人处于班车模式，可反馈班车位置。

**URL**

**报文头上送段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | TRACDE | 前端交易码 | String | 6 | 必输 内容为接口的编码：如SI0001 |
| TRADAT | 交易日期 | String | 8 | yyyymmdd |
| TRATIM | 交易时间 | String | 12 | hhmmss |
| USRNAM | 登陆用户名 | String | 12 |  |
| body | mode | 应用模式 | String |  | 1 |
| line | 班车路线 | String |  | 1 |

{"head":{"TRACDE":"?","TRADAT":"?","TRATIM":"?","USRNAM":"?"},"body":{“line”:”?”,"mode":"?"}}

**报文头返回字段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | RTNSTS | 结果 | String | 1 | 成功-T，失败-M。 |
| ERRMSG | 错误描述 | String | 40 |  |
| body | null |  |  |  |  |

**接口返回范例**

{"head":{"RTNSTS":"?", "ERRMSG":"?"}}

TestCase:

Req:<http://localhost:8080/BocbusServer/Mode.do?param>={'head':{'TRACDE':'BC00001','TRADAT':'11111','TRATIM':'11111','USRNAM':'ling123'},'body':{'line':'1','mode':'P'}}

Res: {"head":{"RTNSTS":"0000","ERRMSG":"用户[ling123]在班车路线[1]模式为[P]正确"}}

**接口使用注意点**

## 02、BC0002-获取位置

获取班车当前位置

**报文头上送字段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | TRACDE | 前端交易码 | String | 6 | 必输 内容为接口的编码：如SI0001 |
| TRADAT | 交易日期 | String | 8 | yyyymmdd |
| TRATIM | 交易时间 | String | 12 | hhmmss |
| USRNAM | 登陆用户名 | String | 12 |  |
| body | **line** | 路线编码 | String |  | 1 |

{"head":{"TRACDE":"?","TRADAT":"?","TRATIM":"?","USRNAM":"?"},"body":{"**line**":"?"}}

**报文头返回字段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | RTNSTS | 结果 | String | 1 | 成功-T，失败-M。 |
| ERRMSG | 错误描述 | String | 40 | 成功返空值，失败返错误信息 |
| body | BUS\_BUS | 经度 | Float | 10 | 具体见表结构BUS\_BUS |

**接口返回范例**

{"head":{"RTNSTS":"?","ERRMSG":"?"},"body":{"LONGITUDE ":"?"," LATITUDE ":"?"}}

**接口使用注意点**

**TestCast:**

**Req:** [**http://localhost:8080/BocbusServer/QueryLocation.do?param**](http://localhost:8080/BocbusServer/QueryLocation.do?param)**={'head':{'TRACDE':'BC00001','TRADAT':'11111','TRATIM':'11111','USRNAM':'1'},'body':{'line':'1'}}**

**Res:** {"head":{"RTNSTS":"0000","ERRMSG":"查询班车[1]位置成功"},"body":{"bus\_id":"1","bus\_num":"B11boc","bus\_line":"1","bus\_driver":"???","bus\_tell":"13511111111","bus\_longitude1":"0","bus\_latitude1":"0","bus\_longitude2":"0","bus\_latitude2":"0","bus\_longitude3":"0","bus\_latitude3":"0","bus\_uploadid":"ling123","bus\_uploaddt":"20180208","bus\_uploadtm":"102400","bus\_laststa":"0","bus\_lasttm":"999999999","bus\_nextsta":"0","bus\_nexttm":"999999999","bus\_nextdis":"999999999","bus\_chgdt":"20180427","bus\_chgtm":"14203500168"}}

## 03、BC0003-选择路线

选择用户所乘坐班车路线 --暂时不需要

## 04、BC0004-查看路线

查看当前班车路线详细站点信息

**报文头上送字段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | TRACDE | 前端交易码 | String | 6 | 必输 内容为接口的编码：如SI0001 |
| TRADAT | 交易日期 | String | 8 | yyyymmdd |
| TRATIM | 交易时间 | String | 6 | hhmmss |
| USRNAM | 登陆用户名 | String | 12 |  |
| body | line | 路线编号 | String |  | 1 |

**接口上送范例**

{"head":{"TRACDE":"?","TRADAT":"?","TRATIM":"?","USRNAM":"?"},"body":{"line":"?"}}

**报文头返回字段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | RTNSTS | 结果 | String | 1 | 成功-T，失败-M。 |
| ERRMSG | 错误描述 | String | 40 | 成功返空值，失败返错误信息 |
| body | stationList | 站点列表 |  |  | List<BUS\_LINE>, BUS\_LINE 具体见表结构 |

**接口返回范例**

Req:<http://localhost:8080/BocbusServer/BusLine.do?param>={'head':{'TRACDE':'BC00004','TRADAT':'11111','TRATIM':'11111','USRNAM':'ling123'},'body':{'line':'1'}}

Res:{"head":{"RTNSTS":"0000","ERRMSG":"查询路线[1]位置成功"},"body":{"stationList":[{"line\_id":"1","line\_stanum":"1","line\_staname":"坪洲地铁站","line\_longitude":"116.481028","line\_latitude":"37.989643","line\_uptime":"072300","line\_downtime":"181000","line\_chgdt":"20180208","line\_chgtm":"072500"},{"line\_id":"1","line\_stanum":"2","line\_staname":"同仁医院","line\_longitude":"115.481028","line\_latitude":"39.989643","line\_uptime":"072300","line\_downtime":"181000","line\_chgdt":"20180208","line\_chgtm":"072500"},{"line\_id":"1","line\_stanum":"3","line\_staname":"群贤花园","line\_longitude":"114.481028","line\_latitude":"36.989643","line\_uptime":"072300","line\_downtime":"181000","line\_chgdt":"20180208","line\_chgtm":"072500"},{"line\_id":"1","line\_stanum":"4","line\_staname":"西乡路口","line\_longitude":"115.581028","line\_latitude":"35.089643","line\_uptime":"072300","line\_downtime":"181000","line\_chgdt":"20180208","line\_chgtm":"072500"},{"line\_id":"1","line\_stanum":"5","line\_staname":"宝体东","line\_longitude":"113.481028","line\_latitude":"33.989643","line\_uptime":"072300","line\_downtime":"181000","line\_chgdt":"20180208","line\_chgtm":"072500"},{"line\_id":"1","line\_stanum":"6","line\_staname":"径贝花园","line\_longitude":"112.481028","line\_latitude":"32.989643","line\_uptime":"072300","line\_downtime":"181000","line\_chgdt":"20180208","line\_chgtm":"072500"},{"line\_id":"1","line\_stanum":"7","line\_staname":"南头检查站","line\_longitude":"111.481028","line\_latitude":"31.989643","line\_uptime":"072300","line\_downtime":"181000","line\_chgdt":"20180208","line\_chgtm":"072500"}]}}

## 05、BC0005-上传位置

上传当前位置（经度，纬度）

**报文头上送字段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | TRACDE | 前端交易码 | String | 6 | 必输 内容为接口的编码：如SI0001 |
| TRADAT | 交易日期 | String | 8 | yyyymmdd |
| TRATIM | 交易时间 | String | 6 | hhmmss |
| USRNAM | 登陆用户名 | String | 12 |  |
| body | line | 路线编号 | String |  | 1 |
| toc | 上/下行标识 | String | 1 | 1-上行（上班）  0-下行（下班） |
| **longitude** | 经度 | String | 10 |  |
| **latitude** | 纬度 | String | 10 |  |

**接口上送范例**

{"head":{"TRACDE":"?","TRADAT":"?","TRATIM":"?","USRNAM":"?"},"body":**{'line':'?','toc':'?','longitude':'?','latitude':'?'}}**

**报文头返回字段**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 字段名 | 中文描述 | 类型 | 最大长度 | 备注 |
| head | RTNSTS | 结果 | String | 1 | 成功-T，失败-M。 |
| ERRMSG | 错误描述 | String | 40 | 成功返空值，失败返错误信息 |
| body | BUS\_BUS | 班车位置 |  |  | BUS\_BUS 具体见表结构 |

**接口返回范例**

{"head":{"RTNSTS":"?","ERRMSG":"?"},"body":{}}

**Req:**[**http://localhost:8080/BocbusServer/UploadLocation.do?param**](http://localhost:8080/BocbusServer/UploadLocation.do?param)**={'head':{'TRACDE':'BC00002','TRADAT':'11111','TRATIM':'11111','USRNAM':'1'},'body':{'line':'1','toc':'1','longitude':'115.521028','latitude':'34.084643'}}**

**Res:**{"head":{"RTNSTS":"0000","ERRMSG":"B初始化班车[1]位置[115.521028,34.084643]成功"},"body":{"bus\_id":"1","bus\_num":"B11boc","bus\_line":"1","bus\_driver":"???","bus\_tell":"13511111111","bus\_longitude1":"0","bus\_latitude1":"0","bus\_longitude2":"0","bus\_latitude2":"0","bus\_longitude3":"115.521028","bus\_latitude3":"34.084643","bus\_uploadid":"ling123","bus\_uploaddt":"20180208","bus\_uploadtm":"102400","bus\_laststa":"0","bus\_lasttm":"999999999","bus\_nextsta":"0","bus\_nexttm":"999999999","bus\_nextdis":"999999999","bus\_chgdt":"20180427","bus\_chgtm":"15163400534"}}