XXX Project

Version: 0.0.2

Database Design Document

April 2018

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 2018/4/25 | 0.0.1 |  | Jack |
| 2018/4/26 | 0.0.2 |  | Jack |
|  |  |  |  |

1. **Introduction**
   1. **Purpose**
   2. **Backgound**
2. **Architecture Design**
   1. **Surroundings**
3. **Database Design**
   1. **Entity-relationship diagram**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business | | | |
| **Desc** | **商户** | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | id | bigint(20) | No | 商户ID |
| 2 | custom\_id | varchar(200) | Yes | 商户ID |
| 3 | name | varchar(255) | No | 商户名 |
| 4 | branch\_name | varchar(255) | Yes | 分店名 |
| 5 | avg\_price |  |  |  |
| 6 | review\_count |  |  | 点评数量 |
| 7 | review\_list\_url |  |  | 点评页面URL链接 |
| 8 | business\_url |  |  | 商户页面链接 |
| 9 | specialties |  |  | 商户标签（无线上网,可以刷卡,朋友聚餐） |

SQL Code:

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-- Table `business`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `business` (

`id` bigint(20) NOT NULL,

`custom\_id` varchar(200) NULL,

`name` varchar(255) NOT NULL,

`branch\_name` varchar(255) NULL,

PRIMARY KEY (`id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_photo | | | |
| **Desc** |  | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No | 商户ID |
|  | photo\_url | varchar(255) |  | 照片链接，照片最大尺寸700×700 |
|  | s\_photo\_url | varchar(255) |  | 小尺寸照片链接，照片最大尺寸278×200 |

SQL Code:

-- -----------------------------------------------------

-- Table `business\_photo`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `business\_photo` (

`business\_id` bigint(20) NOT NULL,

`photo\_url` varchar(255) NULL,

`s\_ photo\_url` varchar(255) NULL,

PRIMARY KEY (`business\_id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_contact | | | |
| **Desc** |  | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No |  |
| 2 | telephone | varchar(255) | No | 带区号的电话 |
| 3 | telephone2 | varchar(255) | Yes | Mobile |

SQL Code:

-- -----------------------------------------------------

-- Table `business\_contact`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `business\_contact` (

`business\_id` bigint(20) NOT NULL,

`telephone` varchar(255) NOT NULL,

`telephone2` varchar(255) NULL,

PRIMARY KEY (`business\_id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_categories | | | |
| **Desc** | **所属分类信息列表，如[宁波菜，婚宴酒店]** | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No | 商户ID |
| 2 | category\_id | varchar(200) | No | 分类ID |

SQL Code:

-- -----------------------------------------------------

-- Table `business\_categories`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `business\_categories` (

`business\_id` bigint(20) NOT NULL,

`category\_id` varchar(200) NOT NULL,

PRIMARY KEY (`business\_id`,`category\_id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | category | | | |
| **Desc** | **所属分类信息列表，如[宁波菜，婚宴酒店]** | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | id | bigint(20) | No | 分类ID |
| 2 | label | varchar(255) | No |  |
| 3 | description | varchar(255) | Yes |  |
| 4 | parent\_id | varchar(200) | Yes |  |

SQL Code:

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-- Table `category`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `category` (

`id` INT(11) NOT NULL,

`label` varchar(255) NOT NULL,

`description` varchar(255) NULL,

`parent\_id` INT(11) NOT NULL,

PRIMARY KEY (`id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_geolocation | | | |
| **Desc** |  | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No | 商户ID |
| 2 | latitude | decimal(5,10) | Yes | 纬度坐标 |
| 3 | longitude | decimal(5,10) | Yes | 经度坐标 |

SQL Code:

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-- Table `business\_geolocation `

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `business\_geolocation` (

`business\_id` bigint(20) NOT NULL,

`latitude` decimal(10,10) NULL,

`longitude` decimal(10,10) NULL,

PRIMARY KEY (`business\_id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_address | | | |
| **Desc** |  | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No | 商户ID |
| 2 | address | varchar(255) |  |  |
| 3 | country | varchar(255) |  |  |
| 4 | province | varchar(255) |  |  |
| 5 | city | varchar(255) |  |  |
| 6 | regions | varchar(255) |  |  |

SQL Code:

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-- Table `business\_address`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `business\_address` (

`business\_id` bigint(20) NOT NULL,

`address` varchar(255) NULL,

`country` varchar(255) NULL,

`province` varchar(255) NULL,

`city` varchar(255) NULL,

`regions` varchar(255) NULL,

PRIMARY KEY (`business\_id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_rating | | | |
| **Desc** |  | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No | 商户ID |
| 2 | avg\_rating | decimal(1,1) |  | 星级评分，5.0代表五星，4.5代表四星半，依此类推 |
| 3 | rating\_img\_url | varchar(255) |  | 星级图片链接 |
| 4 | rating\_s\_img\_url | varchar(255) |  | 小尺寸星级图片链接 |
| 5 | product\_grade | int(11) |  | 产品/食品口味评价，1:一般，2:尚可，3:好，4:很好，5:非常好 |
| 6 | decoration\_grade | int(11) |  | 环境评价，1:一般，2:尚可，3:好，4:很好，5:非常好 |
| 7 | service\_grade | int(11) |  | 服务评价，1:一般，2:尚可，3:好，4:很好，5:非常好 |
| 8 | product\_score | decimal(1,1) |  | 产品/食品口味评价单项分，精确到小数点后一位（十分制） |
| 9 | decoration\_score | decimal(1,1) |  | 环境评价单项分，精确到小数点后一位（十分制） |
| 10 | service\_score | decimal(1,1) |  | 服务评价单项分，精确到小数点后一位（十分制） |

SQL Code:

-- -----------------------------------------------------

-- Table `business\_address`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `tbl\_business\_rating` (

`business\_id` varchar(200) NOT NULL,

`avg\_rating` decimal(1,1) NULL,

`country` varchar(255) NULL,

`province` varchar(255) NULL,

`city` varchar(255) NULL,

`regions` varchar(255) NULL,

PRIMARY KEY (`business \_id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_coupon | | | |
| **Desc** |  | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No | 商户ID |
| 2 | has\_coupon | int(11) | Yes | default(0) |
| 3 | coupon\_id | int(11) | Yes |  |
| 4 | coupon\_description | varchar(255) | Yes |  |
| 5 | coupon\_url | varchar(255) | Yes |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | business\_photo | | | |
| **Desc** |  | | | |
| **Field Seq** | **Field Name** | **Data Type** | **Null-able** | **Memo** |
| 1 | business\_id | bigint(20) | No | 商户ID |
| 2 | photo\_url | varchar(255) |  | 照片链接，照片最大尺寸700×700 |
| 3 | s\_photo\_url | varchar(255) |  | 小尺寸照片链接，照片最大尺寸278×200 |
| 4 | photo\_count | int(11) |  | 照片数量 |
| 5 | photo\_list\_url | varchar(255) |  | 照片页面URL链接 |