## Database design phase 2 – Logical (and later Physical) Design

### Data Dictionary

Table descriptions

|  |  |  |
| --- | --- | --- |
| **Table name** | **Description** | **Occurrence** |
| productLine | Each product Line has multpl | All product must belong to a product Line |
| product | Smallest unit in Product related entities | Added when product line has new product |
| Customer | Anyone who logs in to the app | Added by signing up through Firebase console. |
| Receipt | Similar to an order | When customer add a product to purchase |

Table 1.1 Data Dictionary. Table descriptions.

Column descriptions with the data types of the chosen technical storage (Relational Database, MariaDB Database):

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table name** | **Column** | **Description** | **Data type and Length** | **NULL / UNIQUE** | **Primary/Alternate key** | **Special value domain?** |
| ProductLine | id | Unique identifier | INTEGER | PK | PRIMARY KEY (surrogate key) | 1-99 AUTOINCREMENT |
|  | name | Unique name | VARCHAR(255) | NOT NULL/ UNIQUE | ALTERNATE KEY |  |
|  |  |  |  |  |  |  |
| Product | id | Unique identifier | INTEGER | PK | PRIMARY KEY (surrogate key) | 101-999 AUTOINCREMENT |
|  | productLineId | productLine | INTEGER | NOT NULL | -FOREIGN KEY ProductLine\_id |  |
|  | Name | Member’s last name | VARCHAR(255) | NOT NULL | - |  |
|  | Description | Member’s email address | VARCHAR(255) | NOT NULL |  |  |
|  | Quantity |  | INTEGER | NOT NULL |  |  |
|  | unit |  | VARCHAR(50) | NOT NULL |  |  |
|  | price |  | DECIMAL(19,2) | NOT NULL |  |  |
|  |  |  |  |  |  |  |
| Customer | id | Unique identifier | INTEGER | PK | PRIMARY KEY (surrogate key) | 1001-9999 AUTOINCREMENT |
|  | firstName | Firstname, also name when logged in | VARCHAR(255) | NOT NULL | - | AUTO\_INCREMENT |
|  | lastName | Last name | VARCHAR(255) | NOT NULL |  | DEFAULT 'TBA' |
|  | email |  | VARCHAR(255) | NOT NULL UNIQUE | - | DEFAULT 'TBA' |
|  | phone |  | VARCHAR(255) | NOT NULL | - | DEFAULT 'TBA' |
|  | email |  | VARCHAR(255) | NOT NULL | - | DEFAULT 'TBA' |
|  | address |  | VARCHAR(255) | NOT NULL | - | DEFAULT 'TBA' |
|  | city |  | VARCHAR(10) | NULL | - | DEFAULT 'TBA' |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Receipt | id | Unique identifier | INTEGER | NOT NULL | PK |  |
|  | customerId | Customer making the receipt | INTEGER | NOT NULL | FOREIGN KEY Customer (id) |  |
|  | receiptDate | Date and time of the receipt creation | DATETIME | NOT NULL |  |  |
|  | status | Paid or not | INTEGER | NOT NULL | - |  |
|  | comment |  | VARCHAR(255) |  |  |  |
|  |  |  |  |  |  |  |
| Receipt\_Product | receiptId |  | INTEGER | NOT NULL | PK/ FOREIGN KEY Receipt(id) |  |
|  | productId |  | INTEGER | NOT NULL | PK/ FOREIGN KEY => Product(id) |  |
|  | quantity |  | INTEGER | NOT NULL |  |  |

Table 1.2 Data Dictionary. Column descriptions.