The database ordering\_system contains all 8 tables needed in the project. Their names are “administrators”, “users”, “shops”, “products”, “orders”, “products\_in\_orders”, “applications” and “bookmarks” respectively.

* administrators(administrator\_name, administrator\_password)

The table stores the information of administrators.

Primary Key:

(administrator\_name)

* users(user\_id, email, user\_password, user\_name, user\_avatar , user\_contact, available\_balance, frozen\_balance, user\_status)

The table stores the basic information and the balance of users.

Primary Key:

(user\_id)

* shops(shop\_id, user\_id, shop\_name, shop\_avatar, shop\_info, shop\_delivery\_fee, shop\_rate, shop\_rate\_number, shop\_balance, shop\_contact, shop\_location, shop\_location\_detail, shop\_opening\_time, shop\_closing\_time, shop\_license\_number, shop\_status)

The table stores the basic information, owner’s ID, the balance and the rate of shops.

Primary Key:

(shop\_id)

Foreign Key:

(user\_id) references the table “users”, indicating the owner of a shop.

* products(product\_id, shop\_id, product\_name, product\_avatar, product\_info, product\_price, month\_sell)

The table stores the basic information and the month sell of products.

Primary Key:

(product\_id)

Foreign Key:

(shop\_id) references the table “shops”, indicating the shop that a product belongs to.

* orders(order\_id, shop\_id, user\_id, user\_contact, user\_location, delivery\_fee, create\_time, order\_status)

The table stores some information of orders, including the ID of the seller and the ID of the customer, but it does not store the products in orders.

Primary Key:

(order\_id)

Foreign Key:

(shop\_id) references the table “shops”, indicating the seller of an order.

(user\_id) references the table “users”, indicating the customer of an order.

* products\_in\_orders(product\_id, order\_id, product\_name, product\_price, quantity)

The table stores the information and the quantity of the products in orders, which may be different from the ones in shops if the shops edit their products after selling them.

Primary Key:

(product\_id)

Foreign Key:

(order\_id) references the table “orders”, indicating the order that a product belongs to.

* applications(application\_id, user\_id, application\_type, shop\_name, shop\_info, shop\_contact, shop\_location, shop\_location\_detail, shop\_opening\_time, shop\_closing\_time, shop\_license\_number, application\_status)

The table stores the information of applications and the information of shops which may open in the future.

Primary Key:

(application\_id)

Foreign Key:

(user\_id) references the table “users”, indicating the user who submits an application.

* bookmarks(user\_id, shop\_id)

The table stores the bookmarks of all users.

Primary Key:

(user\_id, shop\_id)

Foreign Key:

(user\_id) references the table “users”.

(shop\_id) references the table “shops”.