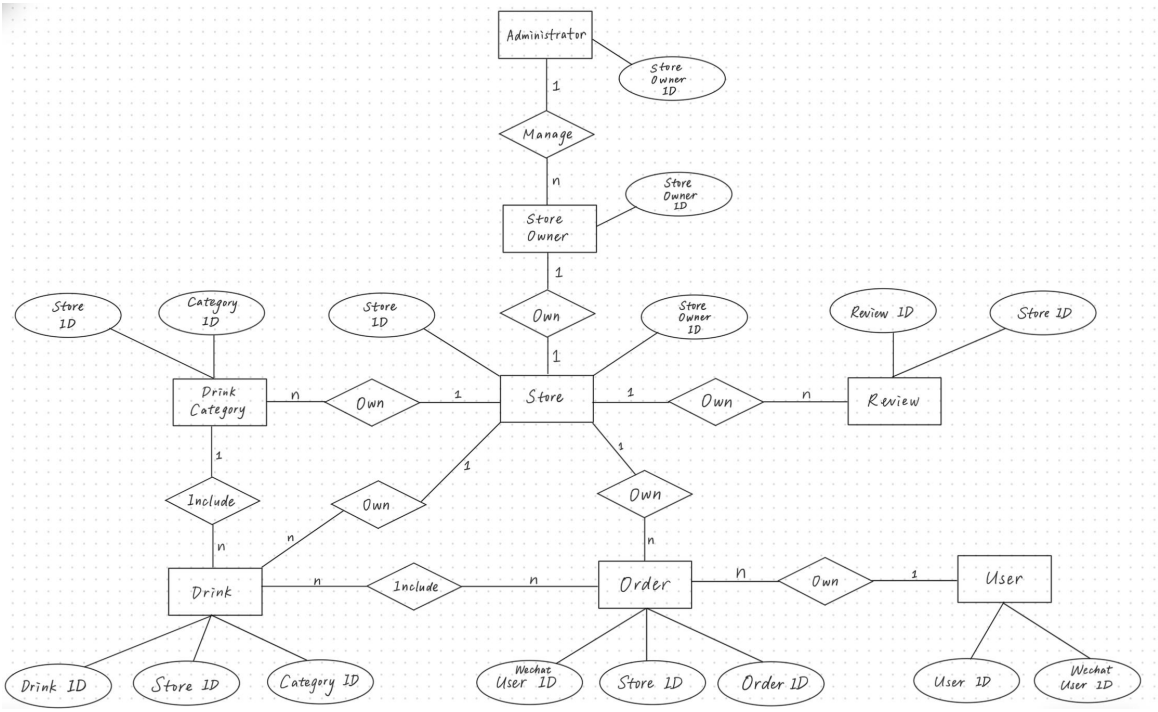
Database Design Appendix

This ordering system uses the E-R model for the conceptual design structure of the database.



System ER (Entity-Relationship) Diagram

The entire system has designed 7 database tables.

The beverage table contains 8 fields, namely category ID, beverage description, beverage ID, name, price, image address, whether to enable recommendation, and store ID. The specific field names and data types are shown in the following table.

Drinks List

Field Name	Data Type	Nullable	Description
category_id	int	NO	Category ID
description	varchar(255)	YES	Drink description
id	int	NO	Drink ID
img_src	varchar(255)	YES	URL of the drink image
is_recommend	bit(1)	NO	Enable "Today's Recommendation"
name	varchar(20)	NO	Drink name
price	decimal(10,2)	NO	Drink price
shop_id	int	NO	Store ID

The merchant table contains 11 fields. The specific field names and data types are

shown in the table.

Merchant List

Field Name	Data Type	Nullable	Description
closed	bit(1)	NO	Is the store currently open
id	int	NO	Store ID
is_shut_down	bit(1)	NO	Is the store published
owner_name	varchar(20)	YES	Store owner's name
phone_number	varchar(20)	YES	Store phone number
shop_name	varchar(20)	YES	Store name
shop_src	varchar(255)	YES	URL of store image
stars	int	NO	Store rating
summary	varchar(255)	YES	Store description
user_id	int	NO	Store owner's ID
weight	int	NO	Store weight (priority)

The beverage category table contains three fields, namely category ID, category name, and store ID. The specific field names and data types are shown in the table.

Drink Category List

Field Name	Data Type	Nullable	Description
id	int	NO	Category ID
name	varchar(20)	NO	Category Name
shop_id	int	NO	Store ID

The user table contains 4 fields, namely store owner ID, whether the user is an administrator, login password, and login user name. The specific field names and data types are shown in the table.

User List

Field Name	Data Type	Nullable	Description
id	int	NO	Store owner ID
is_admin	bit(1)	NO	Is this an administrator
password	varchar(255)	NO	Store owner login password
username	varchar(255)	NO	Store owner login username

The order table contains 12 fields. The specific field names and data types are shown

in the table.

Order List

Field Name	Data Type	Nullable	Description
address	varchar(255)	YES	Delivery address
admin_delete	bit(1)	YES	store owner deletes the order
app_delete	bit(1)	YES	Mini Program Delete Order
commented	bit(1)	YES	commented or not
created	timestamp	YES	Creation time
id	int	NO	Order ID
name	varchar(20)	YES	Consignee's name
open_id	varchar(255)	YES	User openid
phone	varchar(20)	YES	Consignee's phone number
shop_id	int	YES	Store ID
status	int	YES	Order Status
updated	timestamp	YES	Update time

The order beverage table contains 4 fields. The specific field names and data types are shown in the table.

Drinks Order List

Field Name	Data Type	Nullable	Description
count	int	YES	Number of drinks
id	int	NO	Drink Order id
order_id	int	YES	Order ID
food_id	int	YES	Drink ID

The comment table contains 4 fields. The specific field names and data types are shown in the table.

Comment List

Field Name	Data Type	Nullable	Description
id	int	NO	The primary key, uniquely identifies each comment.
shop_id	int	DEFAULT	The ID of the shop associated with the comment. References the id in the o_shop

			table.
name	varchar(20)	NO	The WeChat name of the user who made the comment. This name is uploaded from the frontend.
content	varchar(255)	NO	The content of the user's comment.
reply	varchar(255)	DEFAULT	The content of the shop owner's reply to the comment.
is_reply	bit(1)	NOT	Indicates whether the shop owner has replied to the comment. If 0, the reply button is shown in backend management.
create_date	timestamp	NOT	The date and time when the comment was created.
reply_date	timestamp	DEFAULT	The date and time when the shop owner replied to the comment. Automatically updates to the current timestamp when a reply is made.