

Design and implementation of fruit online store management system based on SSM

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ABSTRACT : Due to the arrival of the information age, people have also opened up another new way of life. That is online shopping, which brings convenience and tangible benefits to people's lives. At the same time, offline shops are affected by the epidemic, and various industries have changed from offline mode to online in order to reduce the flow of people. This system is to let more people who like to eat fruit can buy online, to realize the freedom of shopping. This system is a fruit shopping management system based on SSM. The framework technology adopted by the system is mainly based on SpringMVC, IDE integrated development environment for IDEA, markup language is HTML, Tomcat server and Mysql database to establish connections between data. This paper mainly introduces the necessity of system design, functional analysis, implementation process, database design and the operation process of the system, which enables people to really buy satisfactory goods online without leaving home.

Key words : Fruit sales ; convenient and swift ; SSM Framework technology ; Mysql data base

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I. Introduction

1.1 Background of project development

The progress of the times has also changed people's lifestyles, and with the popularization of the Internet, people's communication has changed from face-to-face to online, and people's shopping concepts have also undergone earth-shaking changes. In order to not interfere with each other between life and study Xi work, the idea of online shopping has emerged, and in recent years, due to the impact of the epidemic, offline stores have not been very prosperous, and online shopping has become the darling of the times. Many e-commerce websites in China occupy a certain position and have achieved good results, but its application is not very extensive, both in the design concept and the design of the database There is a certain room for improvement, and many offline stores in China have not yet opened online business, which provides different opportunities for many people [1]. For this feature, I immediately thought of designing a fruit-related fruit online store management system, which has perfect management functions and powerful human-computer interaction.

The advantages of this system are obvious, the fruit online store management system promotes the standardization and normalization of the fruit sales industry, and at the same time allows the operation to be orderly. Compared with the traditional offline sales model, it reduces some unnecessary randomness and improves the efficiency of sales to a large extent. Due to the relatively low operating costs, short capital flow cycle, and fast information update, operators stand out in the highly competitive market [2]. Once again, the system provides convenience to users, allowing users to buy fruits anytime and anywhere, saving time. In many ways, it makes sense to do this system and it is worth developing.

1.2 Source and purpose of system design

Nowadays, online shopping software is also emerging in an endless stream, but most of them are sold at the same time of various types of goods, which may be a little dazzling for some people when browsing the interface, and lose the shopping experience for a while. After collecting a lot of information and observing the application software in the market, I found that there were few online fruit specialty stores, so I thought of developing a system for fruit direction. At present, the competition in the sales market is also fierce, and if you want to survive, you will eventually be eliminated by the times if you have been using the traditional way, so online sales came into being. Due to the large number of offline purchasers, it is unable to meet the needs of most people and better serve customers, so this system was developed to provide better services to each consumer and let consumers experience different life experiences [3]. Online sales save time waiting in line and avoid crowds of people, which is the best of both worlds. The emergence of the "fruit online store" management system can bring convenience to the public, although it is to buy fruit online, but consumers can rest assured in terms of quality, it is impossible to send bad fruit, rotten fruit, once you receive the goods and find that the fruit has quality problems, you can contact customer service to apply for return, after all, the brand is the guarantee of quality.

1.3 Development Environment

The IDE used in the development process of the fruit online store management system is IDEA, the server system is Tomcat, and the database is open source MySQL [4], which is developed in the form of front-end and back-end separation on the basis of the java language.

II. System development platform and technology

In the process of implementation, the system needs the combination of environment configuration and technology, the environment configuration mainly includes jdk1.8, server Tomcat9.0, database Mysql and writing software IDEA, and the project technology mainly includes SSM framework, JavaScript and JQuery and so on.

2.1 Development platform IDEA

IDEA is a collection of tools that make the software development process simpler, more powerful, and less buggy. It promotes intelligent coding, reduces the work of programmers, and it has a variety of special features: intelligent selection, coding assistance, flexible typesetting, and so on.

2.2 JavaScript

JavaScript, abbreviated as JS, is currently the most popular and widely used client-side scripting language, which is used to add some dynamic effects and interactive functions to web pages. Although it has made it famous as a scripting language for developing web pages, it is very well used in many non-browser environments, and JavaScript is based on prototyping, a multi-paradigm dynamic scripting language, and supports object-oriented, imperative, declarative, and functional programming paradigms [5].

2.3 SSM Framework

The SSM architecture integrates SpringMVC, Spring and Mybatis, SpringMVC is mainly responsible for request forwarding and view management, Spring Framework is a layered Java SE/EE application based on IoC (reverse control) and AOP (cutting programming) full-stack lightweight open source framework, providing the presentation layer SpringMVC and the persistence layer Spring JDBCTemplate and business-level transaction management and many other enterprise-level application technologies. Mybatis acts as a persistence engine for data objects.

III. System overview design

3.1 Feasibility Analysis

The fruit online store management system to be designed and implemented is analyzed and studied from the aspects of technical feasibility, operational feasibility and social feasibility, combined with the technical language characteristics of the database to facilitate modification and later maintenance, improve the safety and stability of the operation [6], and facilitate the development of the system.

3.1.1 Technical feasibility

The fruit online store management system is based on Java and SSM framework technology, and the connection between data is an open-source Mysql database [7], and the characteristics of front-end and back-end separation are described in detail. The Java language is the main programming language, and its features include high security, strong encapsulation, and platform-agnostic advantages, among other things, it is also widely used.

For the establishment and maintenance of databases, it is necessary to establish a database with strong data integrity, good data security, and high data stability [8].

3.1.2 Operational feasibility

The system allows users to purchase goods on the Internet, and the system interface design is simple and beautiful, easy to learn for users, and the system has the characteristics of easy operation, easy management and strong interactivity. The interface is flexible during use, does not make the user wait for a long time, and responds later when the corresponding button is triggered, so the system is operationally feasible.

3.1.3 Social feasibility

People now have higher requirements for life, pay attention to life efficiency, and hope to buy the fruits they want without going out of the house, so that they can make good use of their time to enjoy life. The project still has a certain impact on people's lives, it brings convenience to people and ensures the quality of life.

3.2 System function analysis and description

The fruit online store management system is mainly divided into two functional modules: administrator and member, as follows

Admin functions: homepage, fruit information maintenance and management, fruit type management, fruit order management [9], and general user management, etc.

Membership features: homepage, change delivery address information, cancel fruit order, browse fruit order information, add items to cart, submit orders, select payment methods, search for items, etc.

After the system runs, enter the main page, the user registers an account and logs in to the system to view the goods, or you can enter your favorite fruit in the search box, you can add it to the shopping cart first and then buy or buy directly, the premise of buying goods is that you must log in to your personal account first, otherwise you will not be able to purchase goods, and the system will give corresponding prompts in time when you are not logged in.

3.2.1 Administrator Function Analysis

The administrator can log in to the personal account and enter the background management page of the fruit online store, at this time the administrator can change the password, add different administrators, view the basic information of the administrator, add fruit information, browse fruit orders, and view the information of fruits, mainly to manage the information of users and goods, and the administrator also needs to log in to the account before entering the system.

3.2.2 Membership Function Analysis

Members can register and log in to their personal accounts, add products to the shopping cart, delete the products in the shopping cart to search and purchase goods, view product types and price information, modify and edit the delivery address, pay for the order and cancel the order, and can choose the payment method when paying for the order.

3.3 Data flow diagram design

At present, the main users of the fruit online store management system are generally ordinary users, and the top-level data flow diagram of the system is shown in Figure 3-1.

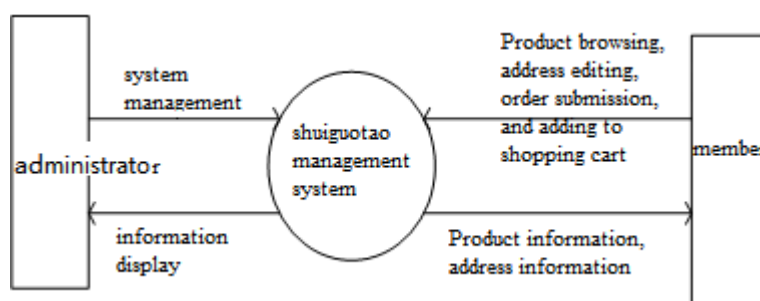


Figure 3-1 Top-level data flow diagram of the system

The steps of the fruit online store management system are further subdivided, and the underlying data flow diagram of the system is obtained, as shown in Figure 3-2.

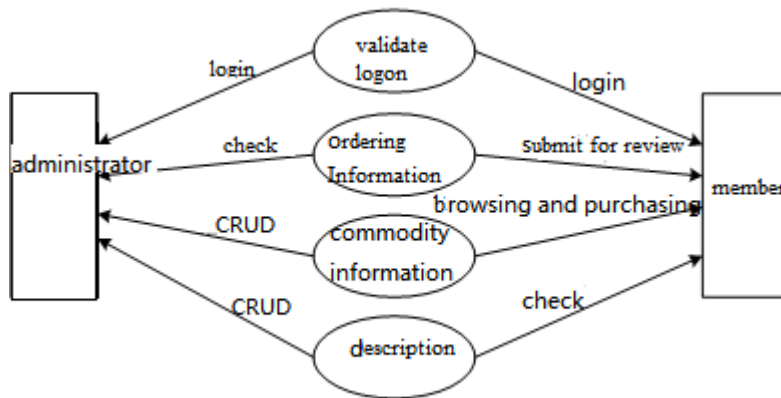


Figure 3-2 Underlying data flow diagram of the system

3.4 Overall structural design

The purpose of the overall design is to generalize how the system is implemented from a macro perspective, specifically to clarify which modules the system consists of and how to determine the relationship between these modules.

3.4.1 System functional structure design

The design is divided into two main categories of people: including administrators and members (ordinary users), given the difference

Roles will have corresponding functions and operations, so their operations are also different. Figure 3-3 below.

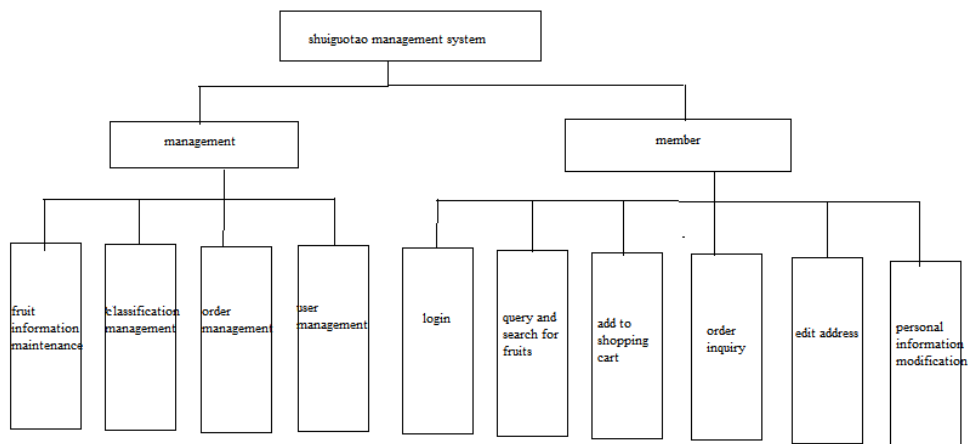


Figure 3-3 Functional structure design

Users can register and log in to their personal account, and after entering the main page, they can perform a series of operations, such as searching/browsing products, modifying the delivery address, adding products to the shopping cart and purchasing products. Figure 3-4 shows the details.

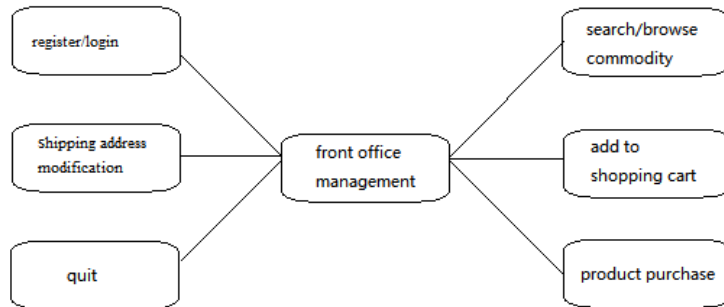


Figure 3-4 Frontend Management Module

The administrator logs in to the existing account to enter the background management module of the fruit online store, which mainly covers user information, fruit type, commodity information and fruit order information, and each module can be subdivided into multiple sub-modules, and the corresponding functions are different when different modules are selected, as shown in Figure 3-5.

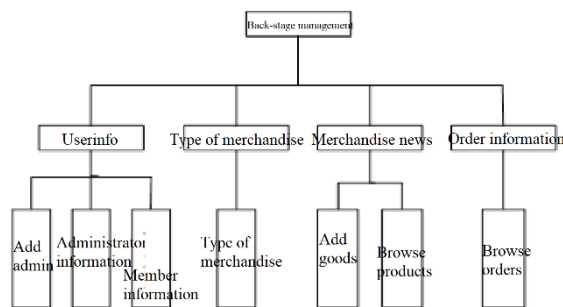


Figure 3-5 Background Management Module

In the order submission module, users can log in to the existing account to enter the system, they can browse fruit information and view fruit details, add fruits to the shopping cart, buy fruits, submit fruit orders and other operations. Figure 3-6 shows the details.

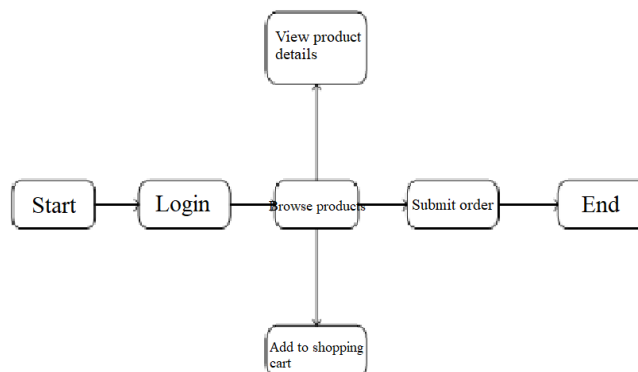


Figure 3-6 Order Submission Module

3.5 Use Case Diagram

After analyzing the needs of the users, it was determined that the design required two roles, namely administrator and member. From the management level, the administrator can operate some information on members and products, and the main user group of the system is the public, and the analysis of the use case diagram in this part is described around the management personnel and members.

The administrator mainly includes the management of members and the order information of fruits and some information of fruits, and the user information under the submenu of the product type includes adding administrator, administrator information and viewing member information, and the product type under the submenu includes the permission operations of adding products and browsing products. Figure 3-7 shows the administrator use case.

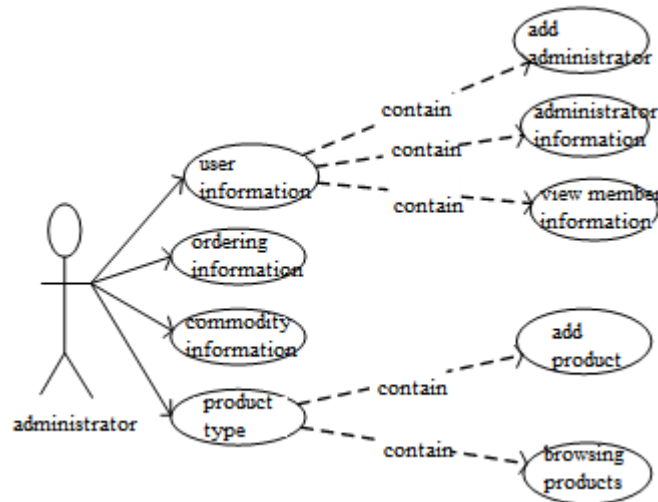


Figure 3-7 Administrator Use Case Diagram

Membership includes a series of operations such as registering and logging in to the system, searching and browsing fruit information, editing and changing the recipient address, adding fruits to the shopping cart, purchasing selected fruits, and selecting payment methods. Figure 3-8 shows the membership use case.

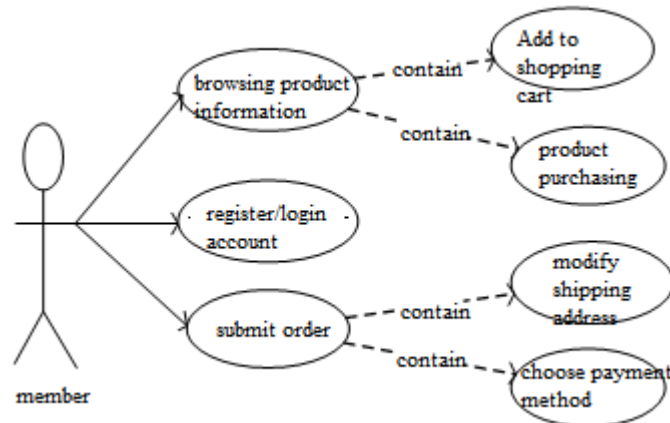


Figure 3-8 Membership Use Case Diagram

3.6 System process analysis

According to the design and analysis of the system, the operation process of the whole system module, the interaction between the function pages, and the association between the user and the data, the flow chart is drawn according to the division of the user function module, which mainly includes the process of the two modules of member login and commodity purchase.

3.6.1 Member Login Process

After the user registers the account as required, the user returns to the login page at this time and enters the user name, password and verification code according to the prompts, and the data entered will be compared with the existing information in the database, only when the user name, password and verification code are entered correctly, it will enter the personal main page, otherwise the user name or password is incorrect, please re-enter. Figure 3-9 shows the flowchart for member registration.

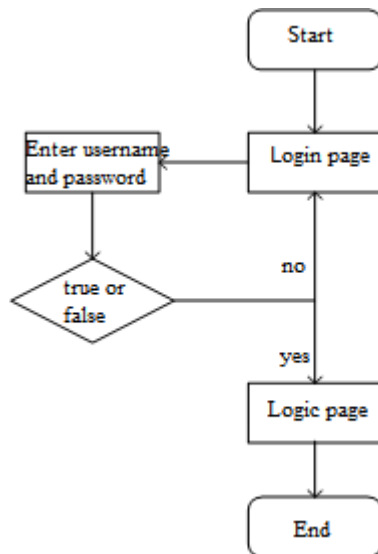


Figure 3-9 Flowchart of Member Login

3.6.2 Product Purchase Process

After the system runs, the user enters the main page, you can browse the goods on the home page or search for the goods you want in the input box, the user can add the goods to the shopping cart or buy directly, if you do not log in in the process of purchase, you can not buy the goods or add them to the shopping cart, you must first log in to the personal account to enter the main page. Figure 3-10 shows the product purchase flowchart.

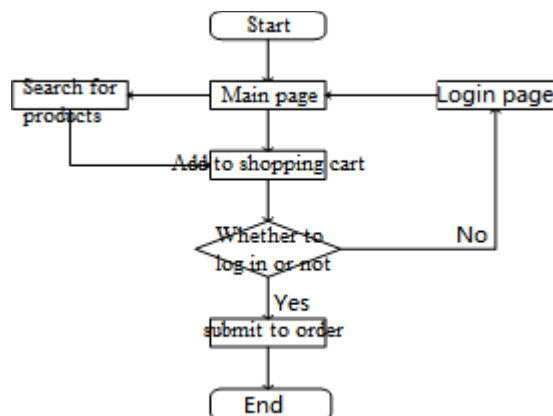


Figure 3-10 Flowchart of product purchase

IV. Database Design

Database design mainly includes three aspects of design, namely conceptual structure, logical structure and physical structure design. This section is designed to provide people using the system with a clearer understanding of the specific data and how the tables are stored and how they relate to each other.

4.1 Database Requirements Analysis

At the beginning of database design, it is requirements analysis, which is simply to meet customer standards by analyzing the real needs of users. The result will have a certain impact on the subsequent series of designs, and also determine the overall quality of the design.

4.2 Database Conceptual Model Design

E-R diagram design, also known as conceptual structural design, covers multiple entities. Conceptual structure design is the information structure that extracts user needs from the requirements analysis, which is particularly important for the entire database design.

The attributes of the administrator information entity mainly include: administrator password and mobile phone number.

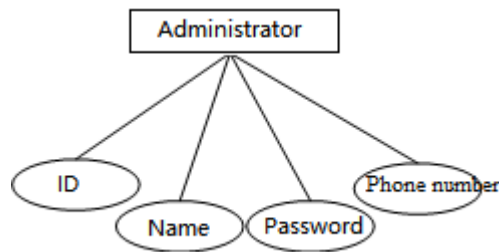


Figure 4-1 Administrator Information Entity Diagram

The entity attributes of member information mainly include: member name and password, contact information, member e-mail address^[10], registration date, etc.

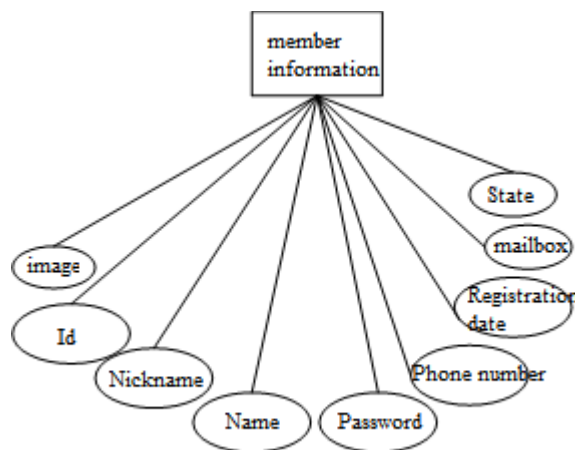


Figure 4-2 Entity diagram of member information

The entity attributes of the product type mainly include: the name of the product type, the image of the product type, and so on.

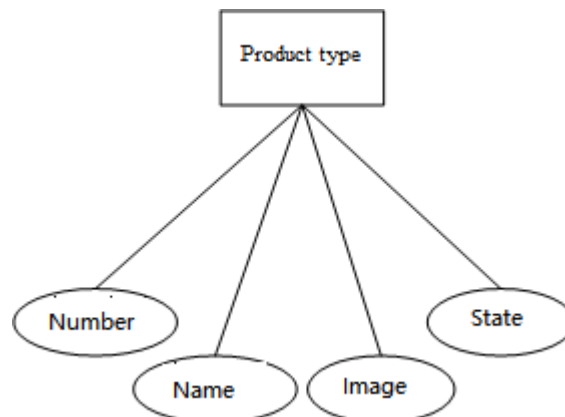


Figure 4-3 Entity diagram of the product type

The entity attributes of the product information mainly include: the name of the product, the unit price of the product, the image of the product, the shelf life, the inventory of the product, the type of the product, the unit^[11], the net weight and description of the product, etc.

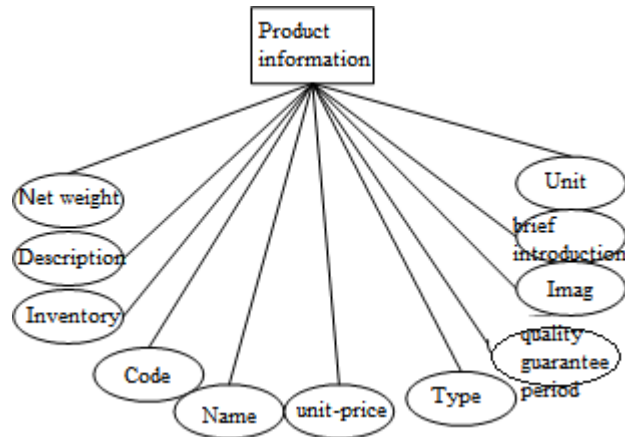


Figure 4-4 Entity diagram of product information

City entity attributes include: Number, Rank, Parent Number, First Name, and Status.

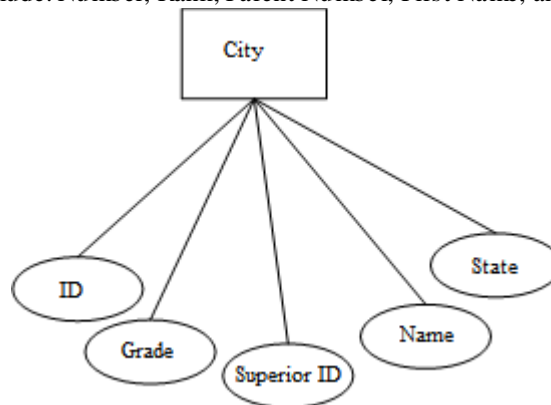


Figure 4-5 Entity diagram of the city

Cart entity attributes include: cart number, membership number, item number, and quantity.

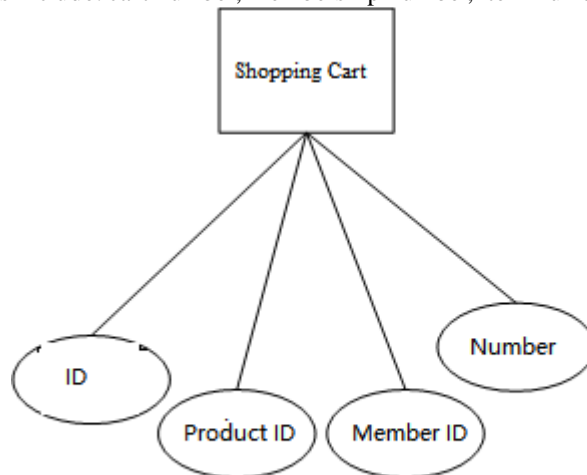


Figure 4-6 Shopping cart entity

The entity attributes of the delivery address mainly include: user name, user contact information, default delivery address and status, and so on^[12].

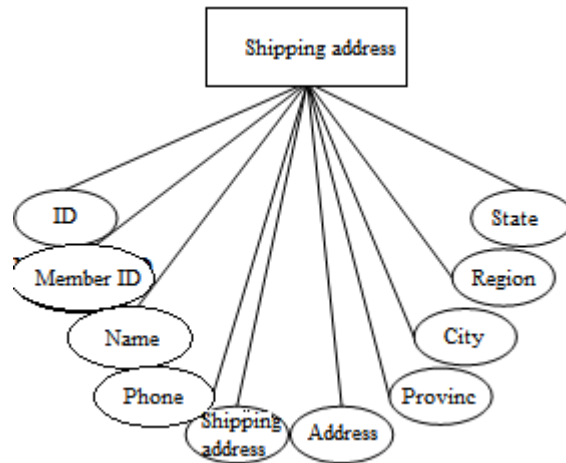


Figure 4-7: Physical diagram of the delivery address

The entity attributes of the order mainly include: the date of the order, the delivery address and date, the total amount of the order, the status of the order, whether the invoice is issued, etc.

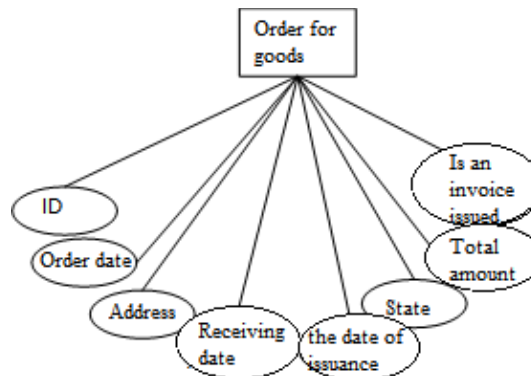


Figure 4-8 Order Entity Diagram

The detailed entity attributes of an order mainly include: item number, order number, quantity of purchased goods, unit price of purchased goods, and so on^[13].

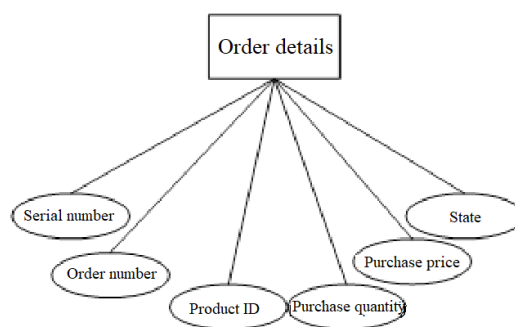


Figure 4-9 Detailed entity diagram of the order

An administrator can manage multiple members, a member can purchase multiple products, a product can be purchased by multiple members, a product can be composed of multiple orders, an order can be composed of multiple products, and members can cancel orders. According to the correlation between each entity, after analysis, the overall entity relationship E-R diagram can be formed.

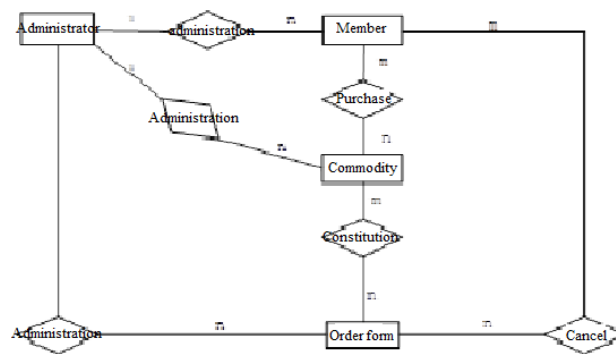


Figure 4-10 Overall E-R diagram

4.3 Data table design

According to the conceptual model design of the database, the system can be divided into 9 tables, and the specific table design is shown in Table 4.1-4.9 below.

Administrator Information Table: This table is used to store some information about administrators, and the main attributes include the administrator's name, administrator password, and contact information [14].

Table 4.1 Administrator information: adminInfo

attribute	type	Whether it is empty or not	length	description
aid	int	not	10	Primary key, auto-increment
aname	varchar	not	100	Administrator's name
pwd	varchar	not	100	Administrator password
tel	varchar	not	11	Mobile phone number

Membership Information Form: Used to store members' personal information, the main attributes include members' name, password, mobile phone number^[15], email address, image, registration date and status, etc.

Table 4.2 Membership Information Table: memberInfo

attribute	type	Whether it is empty or not	length	description
mno	int	not	10	Primary key
nickName	varchar	not	100	nickname
realName	varchar	be	100	name
pwd	varchar	not	100	password
tel	varchar	not	11	Mobile phone number
email	varchar	not	100	number mailbox
photo	varchar	be	100	image
regDate	datetime	be	19	Date of registration
status	int	be	10	state

Product type table: This table is used to store some types of product information, including product type name, product type image and product status, etc.

Table 4.3 Product Type Table: goodsType

attribute	type	Whether it is empty or not	length	description
tno	int	not	10	Primary key
tname	varchar	not	15	The name of the product type
pic	varchar	be	15	Type Image

status	int	be	2	state
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Product information table: This table is used to store the basic information of some products, including product name, product inventory, product shelf life, product unit price, product description, product picture and product net weight, etc.

Table 4.4 Product Information Table: goods Info

attribute	type	Whether it is empty or not	length	description
gno	int	not	10	Primary key
gname	varchar	not	15	The title of the product
tno	int	be	10	Type
price	decimal	be	10	The unit price of the product
intro	varchar	be	50	Brief introduction
balance	int	be	10	Inventory levels
pics	varchar	be	15	Image
unit	varchar	be	50	unit
qperied	varchar	be	50	Shelf life
weight	varchar	be	50	net weight
descr	text	be	50	description

City Table: This table describes some city information in the drop-down list, and the main attributes include level, parent number, name, and status.

Table 4.5 City Table: city

attribute	type	Whether it is empty or not	length	description
cid	varchar	not	15	Primary key
clevel	varchar	be	15	grade
fcode	varchar	be	15	Parent number
cname	varchar	be	15	name
status	varchar	be	2	state

Shopping Cart Table: This table is used to store certain product information stored by members in the shopping cart, and the attributes mainly include product number and product quantity, etc.

Table 4.6 Cart Table: cartInfo

attribute	type	Whether it is empty or not	length	description
cno	int	not	10	Primary key
mno	int	be	10	Membership number
gno	int	be	10	Item number
num	int	be	10	quantity

Delivery address table: This table is used to store the delivery address information of the goods purchased by the member, and the attributes mainly include the name of the consignee, the contact information of the consignee and the default delivery address, etc.

Table 4.7 Delivery Address Table: addrInfo

attribute	type	Whether it is empty or not	length	description
ano	int	not	10	Primary key
mno	int	be	10	Membership number
name	varchar	not	10	Consignee's name
tel	varchar	not	11	Consignee phone number
province	varchar	not	15	province
city	varchar	not	15	city
area	varchar	not	15	district
addr	varchar	not	15	address
flag	int	be	10	Default shipping address
status	int	be	2	state

Order Table: This table is used to store some information about the order placed by the member, the main attributes include the order date, delivery address, shipping date, receipt date, order status and order total, etc.

Table 4.8 Order Table: orderInfo

attribute	type	Whether it is empty or not	length	description
ono	varchar	not	15	Primary key
odate	varchar	not	15	The date the order was placed
ano	varchar	not	15	Delivery address
sdate	datetime	not	15	Ship date
rdate	datetime	not	15	Receipt date
status	int	be	10	Order status
price	decimal	not	10	The total amount of the order
invoice	int	be	2	Whether or not to issue an invoice

Order Detail Table: This table is used to store the detailed information of the order, including the quantity of purchased goods, the unit price of purchased goods, and the detailed order status.

Table 4.9 Order Details: orderItemInfo

attribute	type	Whether it is empty or not	length	description
ino	int	not	10	Primary key
ono	varchar	not	15	Order number
gno	int	not	10	Item number
nums	int	not	10	Quantity purchased
price	decimal	not	10	The unit price of the purchase
status	int	be	10	state

V. System function module design

5.1 Foreground Pages

5.1.1 Registration Module

Run the Tomcat server to enter the system registration page, the user needs to register according to the interface prompts, enter the complete information in the input box and click the registration button, the system will give a prompt for successful registration, then the system will write the user's data information into the database, indicating the completion of the registration module. Figure 5-1 shows the user registration page.

user registration [log in](#)

username:

password:

confirm password:

phone number:

verification code:

mailbox:
This mailbox can be used

unlocking succeeded!

Agree to the fruit pottery user agreement

Figure 5-1 Registration page

5.1.2 Login Module

The user logs in with the existing account, enters the user name, password and verification code information, at this time the system will compare the information entered with the data in the database, if the information entered is correct, the user will enter the main page of the system, otherwise the system will prompt the user name and password to enter the wrong please re-enter. At this point, the login module is complete, and the login page is shown in Figure 5-2.

users login [sign up right away](#)

remember username [forget the password](#)

Figure 5-2 Login module

When the user logs in, the following screen appears, as shown in Figure 5-3.

localhost:8080
land successfully, about to jump to the home page

users login [sign up right away](#)

remember username [forget the password](#)

Figure 5-3 Login Success page

If the login is unsuccessful, click OK to clear the data in time and re-enter the information, as shown in Figure 5-4.

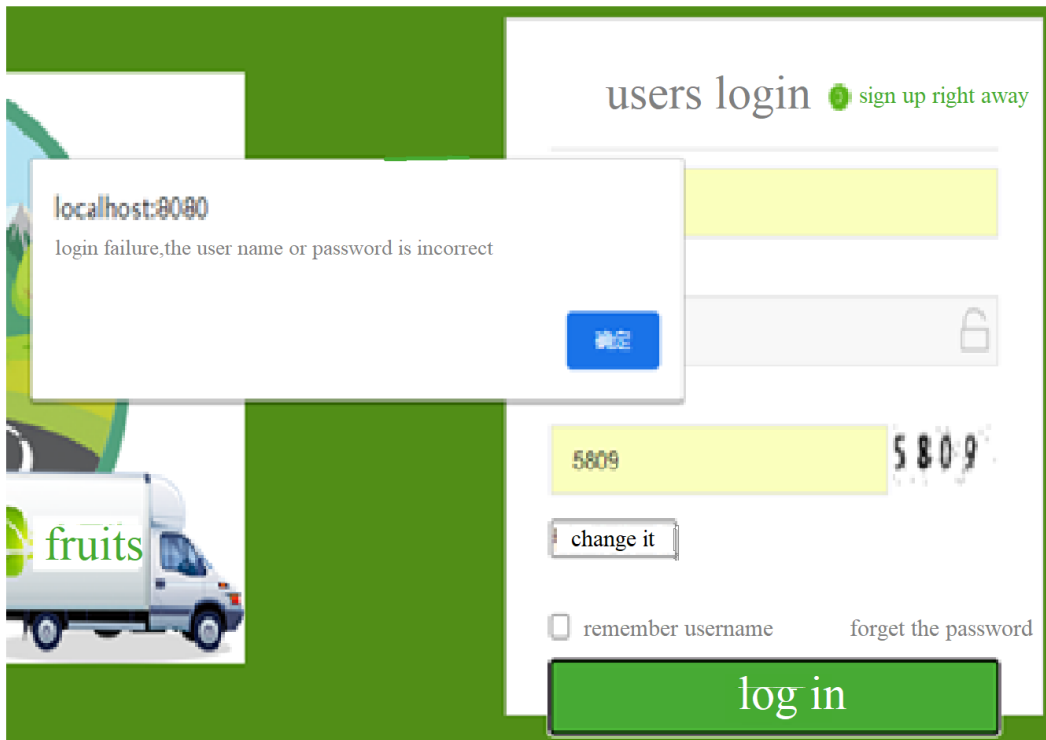


Figure 5-4 Login Failure Module

5.1.3 Shopping Cart Module

After the user enters the personal main page, select the product in the interface or enter the product he wants to buy in the search box, select the quantity and add it to the shopping cart, remind me that adding to the shopping cart in the state of not logging in will prompt you to log in first, and then check the "My Shopping Cart" at this time to find that the product you just selected has been added, and the number of shopping carts will be displayed. The shopping cart page is shown in Figure 5-5.

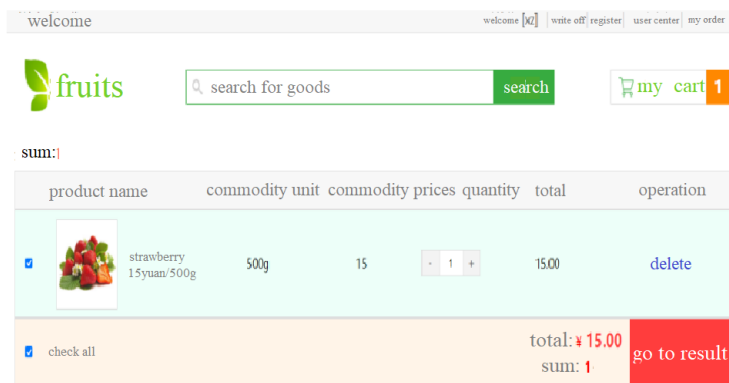


Figure 5-5 Shopping Cart page

5.1.4 Fruit search module

If the user does not find the desired fruit on the existing page, it will appear by entering the name of the fruit in the search box, as shown in Figure 5-6.

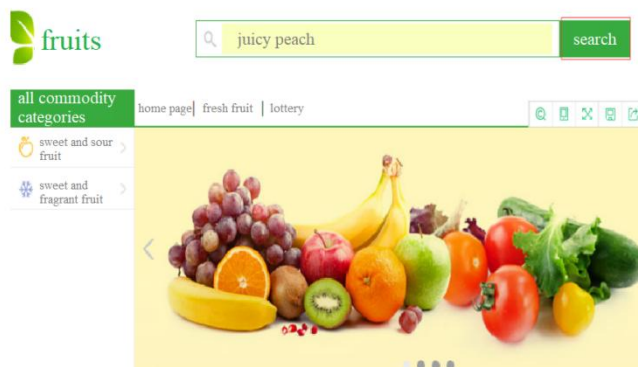


Figure 5-6 Fruit Search page

5.2 Backend Pages

5.2.1 Administrator Management Module

The administrator logs in to the background management page of the fruit online store, which contains four modules: user information, product information, product type, order information, click on any module to have a submenu, and you can operate it accordingly. This is shown in Figures 5-7 to 5-9.

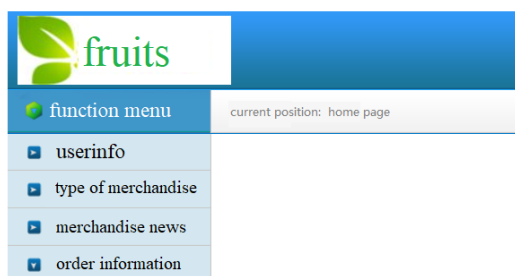


Figure 5-7 Administrator Management page

5.2.2 Browse the Orders module

Browse the order module is the administrator on the premise of logging in to the system, after the administrator enters the background management page of the fruit online store, select the browse order module under the "order information", and then you can see the user's specific order on the right side of the interface.

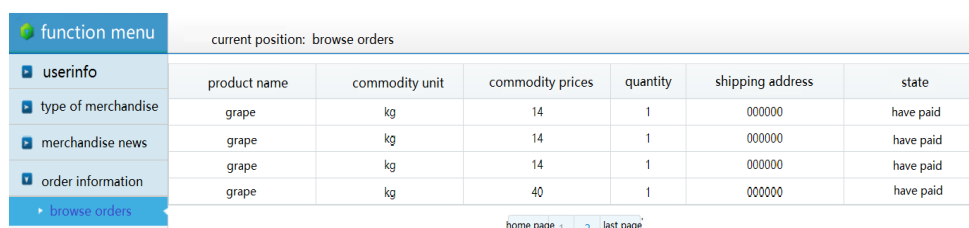


Figure 5-8: Browse the order page

5.2.3 Add a product module

The administrator selects the submenu "Add Product" under the product information module, selects a

series of information such as the product name, type, picture, etc. in the interface that appears, and clicks the Add button to complete the addition of fruit information after all the information is filled, and the user can log in to the system to see the new product and make a purchase.

Figure 5-9 Adding a product page

VI. System Testing

6.1 System login module test

The results of this test show that the system can only enter the main page of the system when the user name, password and verification code are all correct, otherwise it will cause the user to fail to log in, and the system will give a prompt message. This is shown in Table 6.1.

Table 6.1 Login Authentication Test Table

Test serial number	The name of the module	Test the title	Presets	input	Perform the steps	Expected output
DL-01	login	Whether the username, password, and verification code are incomplete	1. The login page is displayed normally 2. The main page is opened successfully	Username: Password: Captcha:	Click the Login button	Username and password are unequal to blank
DL-02	login	If the username, password, and verification code are not completely correct, can the login be successful?	1. The login page is displayed normally 2. The main page is opened successfully	Username: zmx Passcode: 1234 Captcha: 5089	Click the Login button	Wrong username or password
DL-03	login	Whether the username, password, and verification code are completely correct and can be successfully logged in	1. The login page is displayed normally 2. The main page is opened successfully	Username: zmx Password: 123456 Captcha: 5089	Click the Login button	Log in successfully to enter the main page

This test legend shows that when the login information of a user is not completely correct, the system will give a corresponding prompt message^[16], as shown in Figure 6-1.

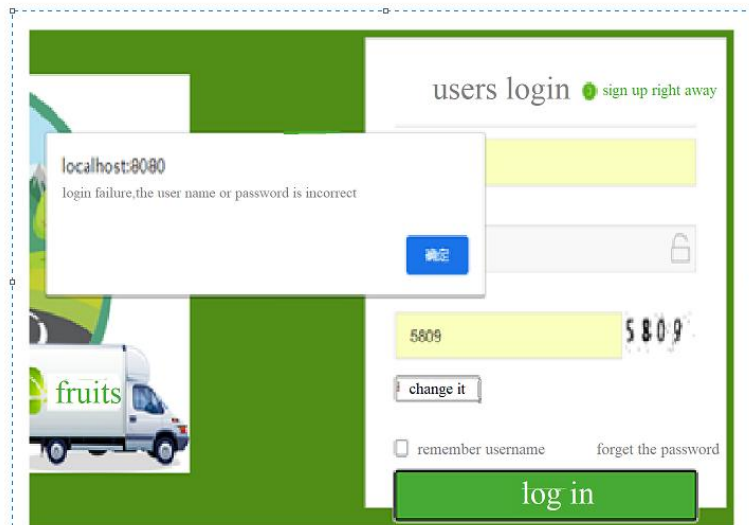


Figure 6-1 Login Information Matching Error Message

6.2 Module test of the user's purchase of goods

After this test, if it is feasible for users to browse products without logging in, then adding to the shopping cart or purchasing products is not allowed by the system, and they must log in before performing relevant operations. This is shown in Table 6.2.

Table 6.2 User Purchase Module Test Table

Test serial number	The name of the module	Test the title	Presets	input	Perform the steps	Expected output
GM-01	Purchase of goods	Whether the user is logged in to browse the product	The main page opens	View product details	Click on any product to view it	You can browse the products
GM-02	Purchase of goods	Whether a user can purchase goods without logging in	The main page opens Purchase of goods	Add to cart to purchase items	Click Buy Directly	You are prompted to log in before performing related operations
GM-03	Purchase of goods	Whether the user can successfully purchase the product after logging in	1. The main page opens 2. Enter your personal account to purchase goods	Browse products to make a purchase	Purchase of goods	Successful purchase of the item

This test legend shows that the user purchases goods without logging in, and the system will give a prompt, as shown in Figure 6-2.

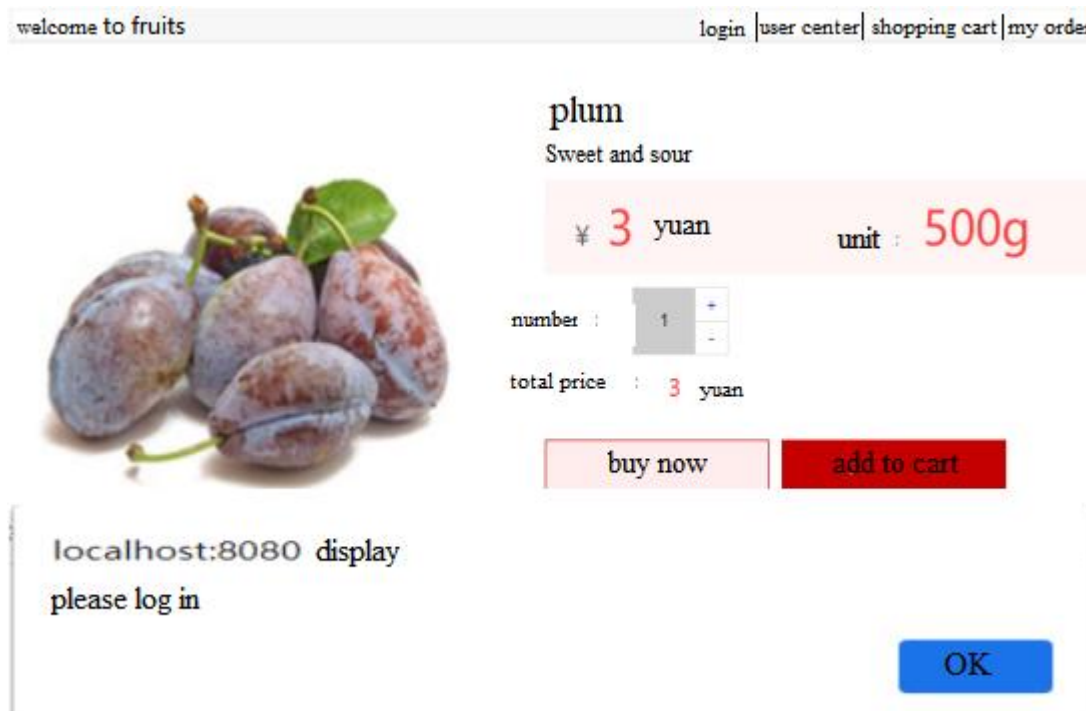


Figure 6-2: The user is not logged in to purchase a product

6.3 Administrators add product module tests

After this test, if the administrator does not log in, he will not be able to enter the background management page of the fruit online store, nor will he be able to add the operation of products. This is shown in Table 6.3.

Table 6.3 Administrator adds the Product Module Test Table

Test serial number	The name of the module	Test the title	Presets	input	Perform the steps	Expected output
TJ-01	Add a product	If the administrator is not logged in, can view the background situation	I can't get in without logging in Not viewable	Log in first	Enter your username and password	You are prompted to log in before performing related operations
TJ-02	Add a product	If the administrator is not logged in, can I add products	I can't get in without logging in Products cannot be added	Log in first	Enter your username and password	You are prompted to log in before performing related operations
TJ-03	Add a product	Whether the product can be successfully added after the administrator logs in	Log in successfully to enter the background management page Add your products	Follow the prompts to enter the relevant information	Click the Add button	The product was added successfully

This test legend is that the administrator adds the product without logging in, which is not allowed by the system, and the system prompt will be given at this time, as shown in Figure 6-3.

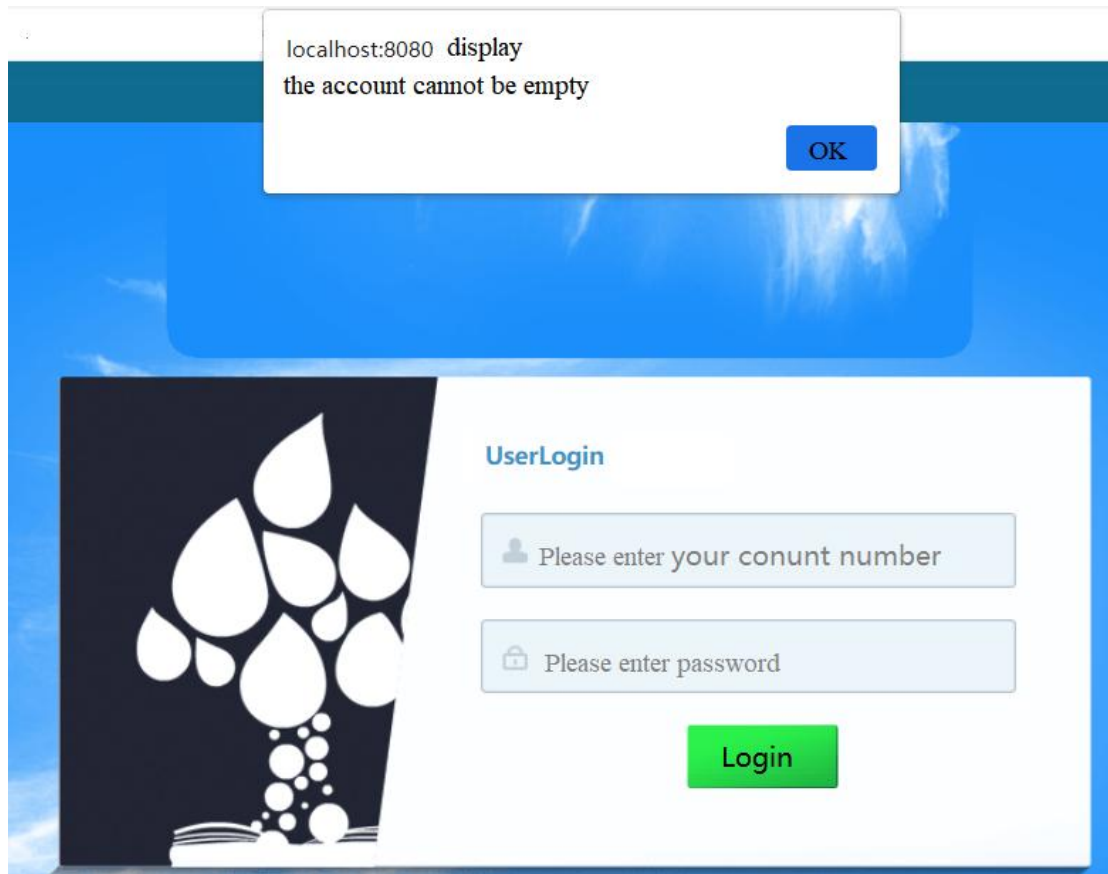


Figure 6-3 The system prompt is not logged in to the administrator

6.4 Administrator View Membership Information Test

After testing, if the administrator is not logged in, it is not possible to view member information and perform some operations.

This is shown in Table 6.4.

Table 6.4 Administrator View Membership Information Test Form

Test serial number	The name of the module	Test the title	Presets	input	Perform the steps	Expected output
CK-01	View Members	If the administrator is not logged in, can I view the member information	1. I can't get in without logging in 2. Not viewable	Log in first	Enter your username and password	You are prompted to log in before performing related operations
CK-02	View Members	Is it possible for an administrator to do something with the member information if they are not logged in	1. I can't get in without logging in 2. Do not manipulate member information	Log in first	Enter your username and password	You are prompted to log in before performing related operations
CK-03	View Members	Whether the administrator can view the member information after logging in	Login successful View member information	Account number and password	Click on "Member Information" under "User Information" to view	View member information and related actions

6.5 Administrator browses the order module information test

It has been tested that if an administrator browses an order without logging in, this behavior is not feasible for the administrator. This is shown in Table 6.5.

Table 6.5 Administrator browses the order module information test table

Test serial number	The name of the module	Test the title	Presets	input	Perform the steps	Expected output
LL-01	Browse the order	If the administrator is not logged in, can view the product order information	1. I can't get in without logging in 2. Not viewable	Log in first	Enter your username and password	You are prompted to log in before performing related operations
LL-02	Browse the order	Can an administrator do something with the order information if they are not logged in	1. I can't get in without logging in 2. You cannot manipulate the order information	Log in first	Enter your username and password	You are prompted to log in before performing related operations
LL-03	Browse the order	Whether the administrator can view the information of the product order after logging in	Login successful You can view the product order information	Account number and password	Click "Browse Orders" under "Order Information" to view it	Browse product order information and related actions

VII Conclusion

In this paper, the overall design is carried out according to the requirements analysis, system design, system function description, structural design, module design, and system testing, and the design ideas of the paper are elaborated^[17]. Introduce the process of the system from many aspects, clarify the design purpose, improve the specific function, and in terms of system design, take safety, feasibility and operability as the design requirements, so that the system becomes more practical.

The system is divided into two roles, namely administrator and member, according to different roles to enter the corresponding interface, the operation is naturally different, and the functions realized are not the same. Users can have their own account and change

Personal shipping address, purchase and view product order information. The manager can log in to his personal account to enter the background management page of the fruit online store, where he can update some information of the product, view the user's basic information and browse the order, and even modify his own account. Regardless of the role, the purpose of the system is to serve the public, bring consumers a different way of shopping, and experience a diversified life.

The system is gradually improved in continuous improvement, and there is no perfect program that is smooth to the end, and it is slowly carried out in debugging. Although the system can complete some basic functions, there are still some deviations from the original expectations, and some functions have not been realized. With the development of e-commerce, the demand for shopping websites will definitely prompt more manpower and material resources to improve such systems, whether it is the payment for processing orders or the interface design.

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