

POLITECNICO DI TORINO



Politecnico
di Torino



THESIS OF GRADUATE

DESIGN OF ORDERING SYSTEM BASED ON MOBILE INTERNET

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Design of Ordering System Based on Mobile Internet

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ZHENG XIONGYI

1. Introduction

As a high-level programming language, the popularity of Python has been on the rise in recent years. Every year, Python officials will make an annual report for the developer community, count the development of the year, and release a research report. This year is no exception. More than 20,000 developers from more than 150 countries have joined this in-depth investigation. The report just released provides an interpretation of the current status, trends, and future of Python's use from seven perspectives.

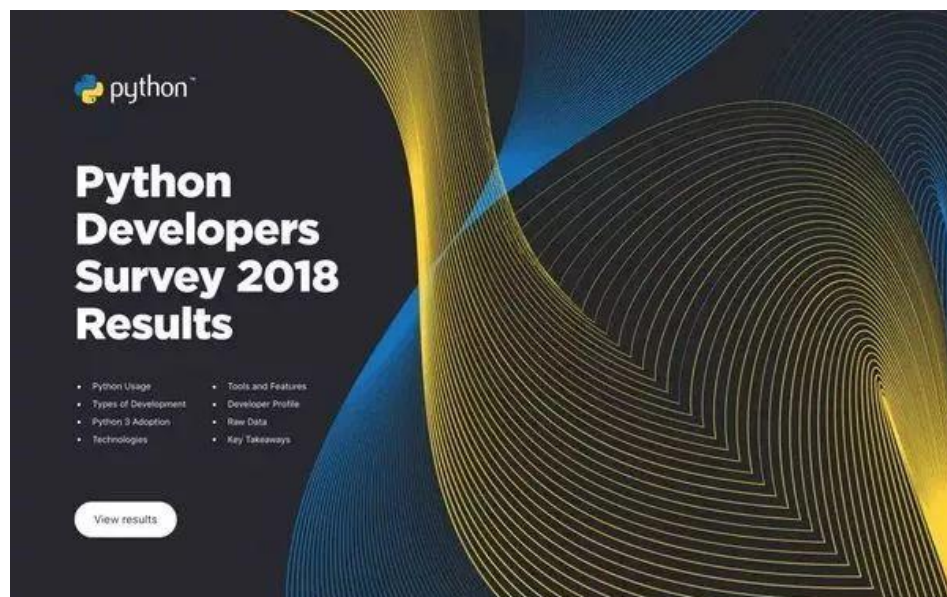


Figure 1

Here are a few of the latest trends:

1. Half of the developers who use Python as their main language also use JavaScript.

Python is also often used with HTML/CSS, Bash/Shell, SQL, C/C++ and Java.

2. Python is more widely used for data analysis than for Web development, and data

analysis accounts for 58%.

3. 84% of users have used Python3, and the proportion of Python2 is only 16%. In 2017, the usage rate of Python3 was only 75%.

4. Flask and Django are the most popular frameworks among web developers, and their share is almost the same.

5. NumPy, Pandas, Matplotlib and SciPy are the most popular data science frameworks and libraries. Libraries dedicated to machine learning such as SciKit-Learn, TensorFlow, Keras, etc. are also very popular.

6. AWS is the most popular cloud platform for Python developers, followed by Google Cloud Platform, Heroku, DigitalOcean and Microsoft Azure.

7. In 2018, the number of operation and maintenance developers increased significantly (an increase of 8% compared with 2017). Among Python users who use Python as a secondary language, operation and maintenance has replaced Web development as the number one.

8. The professional and community editions of PyCharm are the most popular Python development tools. VS Code has increased from 7% in 2017 to 16% in 2018, becoming the second most popular editor for Python development.

9. Almost two-thirds of Python developers choose Linux as their operating system for development.

Let's look at the details together.

Python as Main vs Secondary Language



Figure 2

Python's popularity among developers is true.

Regarding the question of whether to use Python as the first programming language, the official survey shows: In the survey, 84% of Python users use Python as their first programming language and 16% as their second language. This is slightly different from the data distribution in 2017, when the situation was: 79% of users used Python as the primary language, and 21% as the second language. Half of the programmers who use Python also use JavaScript. It can also be seen from the above figure that the data in 2018 is almost the same as the data in 2017. Some interesting phenomena are: Shell has increased from 36% in 2017 to 45% in 2018, Go and SQL have both increased by 2%, and the proportion of languages such as C/C++, Java and C# has decreased. The proportions for personal, teaching and sideline purposes are similar to those of work needs, 21% and 19% respectively. The largest proportion is the user population whose work and personal purpose are both considered. Statistics show that data analysis has become the most commonly used Python purpose by users, and web development has lost its dominance. Although the share has risen from 49% in 2017 to 52% in 2017, the growth rate is

obviously not as good as 8 a year. Percentage of data analysis. The next rankings are: operation and maintenance/system management/automatic scripting, machine learning, web page analysis and crawling, software testing/automated testing, teaching purposes, software prototypes, network programming, desktop development, computer graphics, embedded development, games Development, mobile terminal development, multimedia application development, other

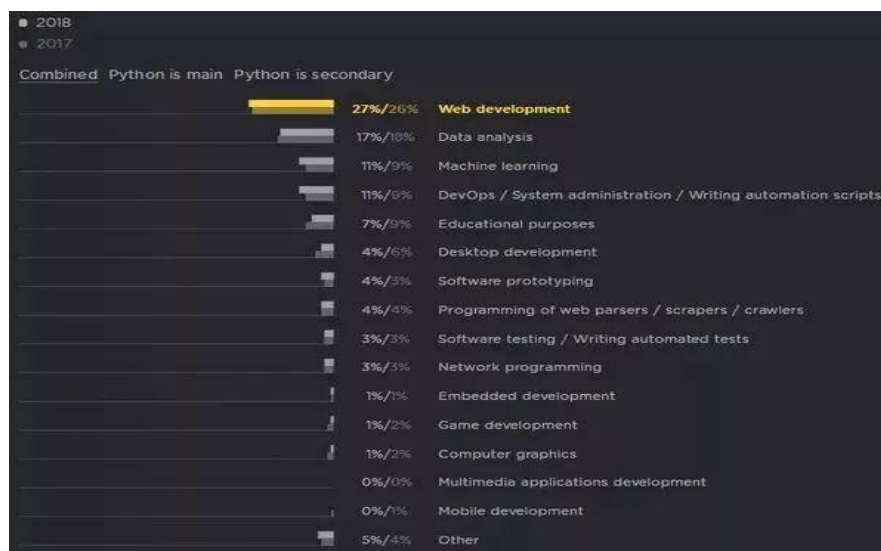


Figure 3

There is also a multiple choice question about what you do with Python. In this question, the interviewed user can only choose one option. At first glance, Web development accounted for 27% of the share of the boss, and 17% of the data analysis. However, don't forget that data analysis and machine learning together can be roughly regarded as "data science", with a 28% share in this field.



Figure 4

Compared with the previous year, the usage of Flask has increased by 15%, so Flask has become the most popular web framework in 2020. Of course, 45% of respondents (41% in 2019) chose Django.

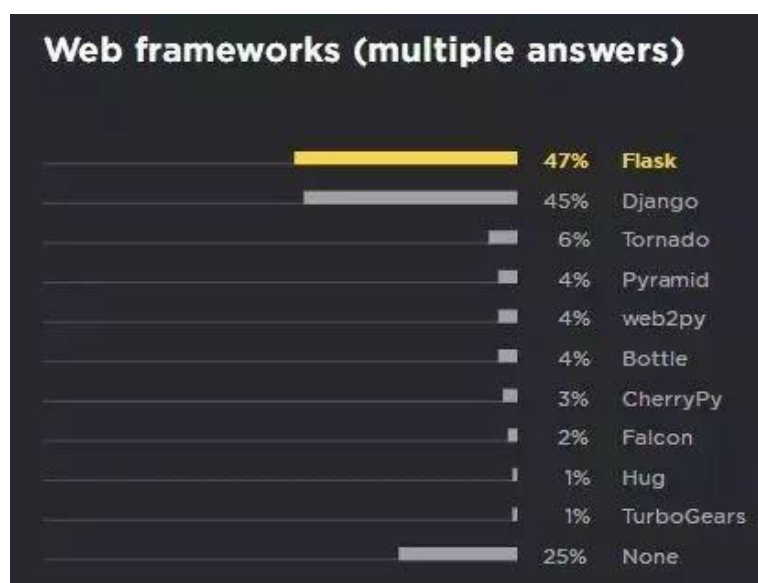


Figure 5

According to statistics, the most popular data science frameworks and libraries are: NumPy, Pandas, Matplotlib and SciPy. Libraries in the machine learning field, such as Scikit-Learn, TensorFlow, Keras, etc., are also very popular, which is related to the increasing popularity of machine learning.

The general Python library ranking. More than half of Python users use Requests. Pillow is also very popular. One in five Python users use scrapy.

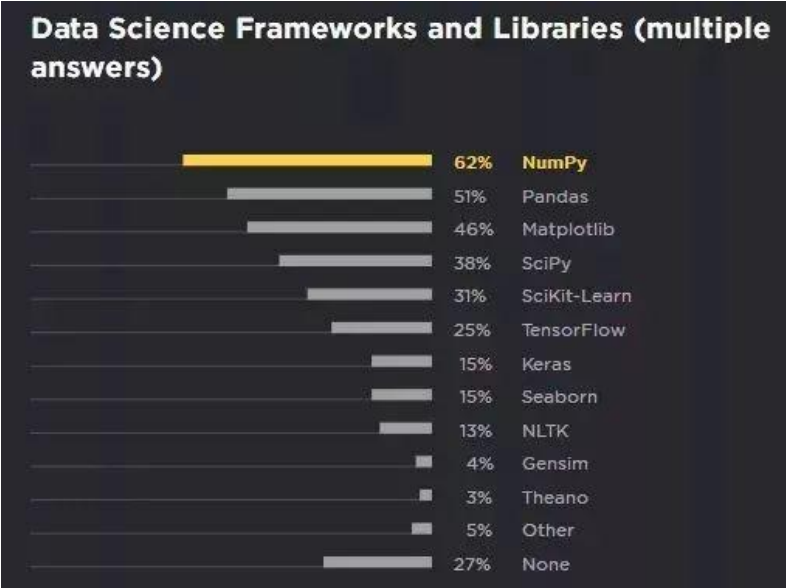


Figure 6

55% of Python users who use cloud platforms prefer AWS. Google Cloud Platform ranked second, followed by Heroku, DigitalOcean and Microsoft Azure. About one-third of respondents do not use any cloud platform.

In addition, OpenStack and Linode each accounted for 6%, OpenShift accounted for 3%, and Rackspace accounted for 2%. Relatively speaking, these platforms are relatively niche.

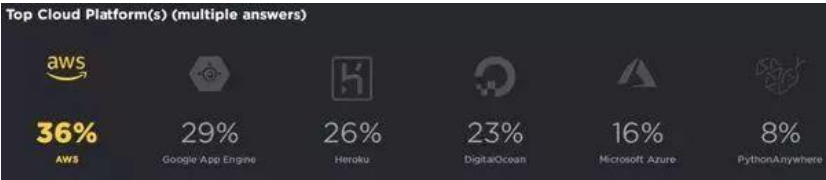


Figure 7

According to statistics, nearly two-thirds of respondents choose Linux as their development environment operating system. Of course, according to the official

statement, multiple choices are allowed for this question. So it is impossible to get the conclusion of system popularity.



Figure 8

For database deployment most people use free or open source databases such as PostgreSQL, MySQL or SQLite. Non-relational databases such as MongoDB and Redis are also very popular because many Python users are doing some form of machine learning and data science.

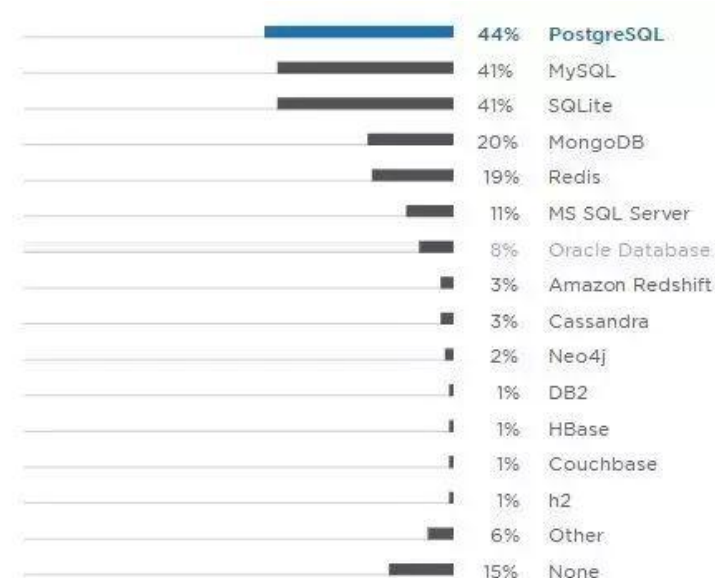


Figure 9

PyCharm is the most popular Python development tool. The combined share of PyCharm Professional Edition and Community Edition is 35%.

Interestingly, VS Code rose from 7% in 2017 to 16% in 2018, becoming the second most popular Python development editor. Most likely because of the rapid growth of VS Code, the user share of many other editors has decreased.

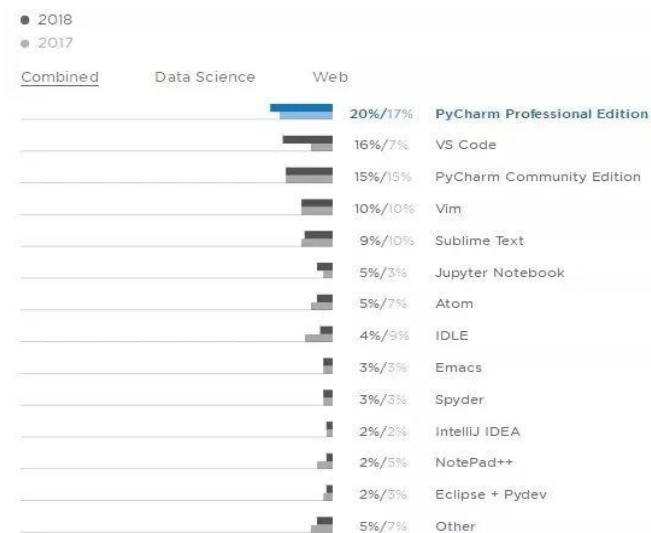


Figure 10

The popularity of tools and features is obvious: version control, code completion, code refactoring, writing unit tests, and virtual environments using Python projects are all essential features. According to the official statement, in 2018, the interviewees had fewer middle school students and more experienced developers. They can only draw the conclusion: the longer the people who work in the professional team, the more experience they have, and the tools and expertise they use. The more technology.



Figure 11

The survey involves more than 20,000 developers in 150 countries, of which 21% live in the United States, and only 4% of Chinese respondents...



Figure 12

This project have three goals

1. Intelligent ordering to enhance user dining experience The traditional ordering mode requires frequent calls to the waiter, and payment and other methods also need to go to the front desk. This form is increasingly unable to meet the needs of users. With the

intelligent ordering of food ordering APP, users can complete all the previous steps with only one mobile phone, which improves the user experience.

2. Facilitate the system management of the restaurant itself Traditional ordering is generally managed by humans. In this way, some mistakes will inevitably occur, leaving a bad impression on users, and it will also have a certain negative impact on the restaurant itself. Therefore, this is also one of the advantages of food ordering APP development. Systematic management can make ordering, payment, and verification more accurate, ensuring that there will be no careless problems in the ordering process.

3. Reasonable use of human resources to reduce costs intelligent ordering allows restaurant waiters not to wait for users to order food all the time, just wait for the system to send reminders, and human resources can also be used more reasonably. Improve and optimize the human resource management of the restaurant itself, strive to maximize the profit model, and improve the quality of service while increasing the income of the restaurant itself.

Based on the python language, I developed an intelligent electronic ordering system, which integrates a wireless software system and a touch screen hardware system. It is a visual restaurant ordering tool realized through wireless transmission. Whether the development of high technology is in line with the innovation of the times, one of the most commonly used test criteria is to see whether it can bring people better services. The Internet self-service ordering system was born to bring better services to people. But the realistic issues that is if you want to order food, you must register. This requires permission to obtain location information, mobile phone number, gender, nickname...

Scanning a QR code to order a meal is not as simple as it seems. Consumers have to follow the official account, register a member, register a mobile phone number, and "agree" "A series of actions, such as obtaining the geographic location, can start ordering. Now netizens exploded: "Isn't this a disguised "Overlord Clause" that violates personal privacy?" However, in reality, it is a very common behavior to ask for user data in the QR code ordering system. Many restaurants require scanning the QR code to follow the official account or authorization before consumption. More than 90% of the merchants have the above-mentioned mandatory behaviors in order to achieve precision marketing. Some media conducted a sample survey of 100 restaurants in a certain city in China, and 72 restaurants provided scanning code ordering services. After scanning the code, 35 restaurants can only order after paying attention to the official account, and 20 restaurants need to enter their mobile phone number before ordering. In this regard, some lawyers said that the above practices violated consumers' right to choose, and there is also the risk of personal information leakage. If the business deliberately leaks information, it may involve criminal offences. But the realistic issues that is if you want to order food, you must register. This requires permission to obtain location information, mobile phone number, gender, nickname... Scanning a QR code to order a meal is not as simple as it seems. Consumers have to follow the official account, register a member, register a mobile phone number, and "agree" "A series of actions, such as obtaining the geographic location, can start ordering. Now netizens exploded: "Isn't this a disguised "Overlord Clause" that violates personal privacy?" However, in reality, it is a very common behavior to ask for user data in the QR code ordering system. Many restaurants

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2. Abstract

With the rapid development of the modern information exhibition industry, online ordering has become more and more popular with people, and various ordering apps are also popular on the market, which make people's lives more convenient and improves people's life efficiency. This system uses Python language, adopts an object-oriented development method, relies on Pycharm and WeChat Web Developer Tool (WebBuilder) as development tools, uses Mysql network database to store data. The function of online payment is a good solution to the problem of group ordering meals.

The topic of this project is based on the ordering system of the Internet platform. On the basis of combing the existing ordering system, the basic structure is proposed: the connection of each terminal such as the database, server, management personnel, and customers. At the technical realization level, python is used. The language is used as a compilation tool for the server. The database is built using MySQL technology, and the entire program must have front-end, back-end (Python), and database (MySQL) to coordinate with each other. At the functional design level, this project is based on the actual actual needs of the market. , The client is designed with login module, password reset, order module, checkout module, coupon module, and server side has order management, order management, and password management.

The project has realized the functions of users searching the surrounding food on the Internet, parents ordering meals for their children, and online payment, which can solve the problem of group collective ordering meals.

3. System Design

3.1 Two Endpoints :

In order to meet the needs of users to order meals without leaving home, the software fully implements end-to-end digital services. The entire system is divided into two ends, UserConsole and AdminConsole. UserConsole is carried in the mobile app and is used by target users. On the UserConsole side, you can select meals, order meals, maintain personal addresses, and view orders. AdminConsole is for administrators. The administrator can configure meals on the AdminConsole interface, such as the icon of the meal, the price of the meal, and the description of the meal. You can also modify the status information of the order. For example, the status of the order can be changed to received and shipped. The target user can check the latest status of the order on their App.

3.2 Supplier Access

The final source of the food in the software is a third-party supplier, so third-party suppliers need to be managed in AdminConsole, such as KFC, McDonald, Burger King and other food companies, and their information is entered into the management background, and at the same time, it is also checked in AdminConsole. The types of meals they provide are collected, and information is collected for the meals under each category. The main information collected is meal pictures, meal names, meal prices, meal specifications, meal descriptions, etc.

3.3 User Systems

The target user needs to perform a simple registration before using the software. The software will collect the user's mobile phone number as the login account. The user can successfully register as a member by providing a valid SMS verification code and enjoy the services provided by the platform. The background administrator can see all member information, as well as their order information. If malicious members pay attention, they can also block their accounts.

3.4 Data Analysis

After the platform has been used for a period of time, operators will have data analysis needs. For example, the supplier's meals are very popular. For example, when users generally order meals, operators need to analyze these based on order data. The scenario is to optimize the services provided by the entire software platform. If a certain supplier's meal is very popular, he will have the opportunity to get more exposure and increase the company's order volume. If users often place orders at noon, this can optimize the category of lunch, allowing more people to have more choices before placing an order. Data analysis is necessary for continuous software updates.

4. System Implement

4.1 Technical Features

The software uses a mobile phone APP + management back-end CS combined with BS hybrid software architecture, where the CS architecture is reflected in the APP used by the end user, and the BS architecture is reflected in the management back-end used by the administrator. APP is a mixed development of H5's front-end languages. The specific front-end Vue framework used is because H5+Vue has the characteristics of flexibility, scalability, and hot update, which meets the needs of modern mobile Internet APPs that need to be updated and iteratively. The back-end is developed using Python language, because Python has powerful functions, fast development speed, and low entry barriers. It is very suitable for the development of small and medium-sized software projects and can greatly save development costs. [5]The back-end WEB framework adopts the Flask+SQLALCHEMY framework. [1]Flask has a complete MVC hierarchical structure, which makes the code developed by WEB well organized and maintainable. [4]SQLALCHEMY is a database ORM mapping tool, and members do not need to focus on SQL when developing database applications. In terms of language, it replaces the development of SQL statements with code calling, which has good code readability. The database is selected as [3]Mysql database. Because the database is open source and powerful, it is sufficient for the initial use of the software. The load balancing solution uses Nginx+Gateway+Eureka+microservices

flat	layer	language	Technology stack	packing
User	Presentation layer	JS+HTML	uniapp+VUE	Android-AP P
	Interface layer	Python	Flask	Py
Admin	Presentation layer	JS+HTML	layui	H5
	Interface layer	Python	Flask	Py
storage	storage	SQLAlchemy	mysql	

4.2 Logical Structure

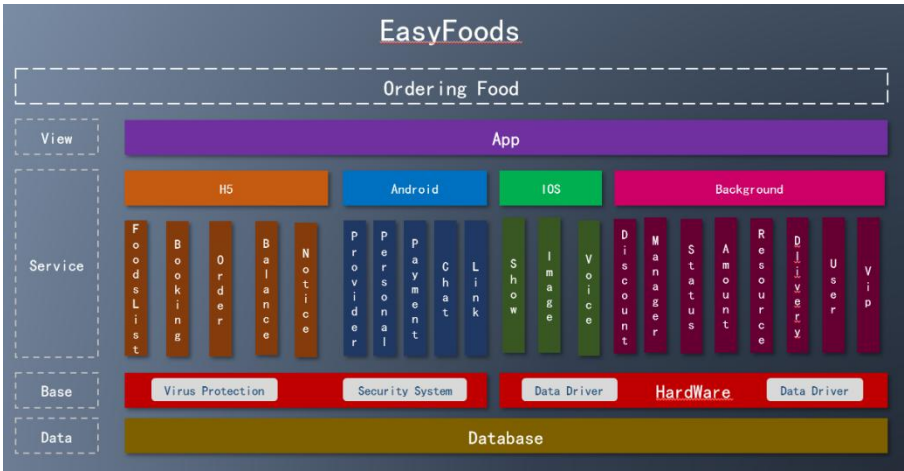


Figure 13

4.3 Deployment Archtechture

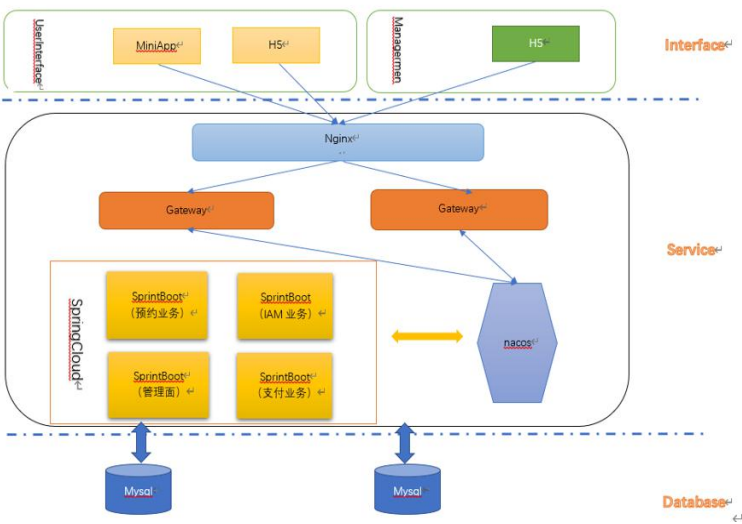


Figure 14

5. Database Design

5.1 Chart Structure Design

A. Meal operation category list :

Field	type	describtion	length
id	varchar	Primary key	32
name	varchar	name	20
id_link	varchar	ID link	255
name_link	varchar	Name link	255

sorter	int	Sort value	32
create_time	datetime	Creation time	0
create_admin	varchar	creator	32
update_time	datetime	Change the time	0
update_admin	varchar	Modifier	32

Field	type	description	length
id	varchar	Primary key	32
name	varchar	Supplier name	32
create_time	datetime	Create time	0
create_admin	varchar	creator	32
update_time	datetime	Change the time	0
update_admin	varchar	Modifier	32

B. Supplier form

field	type	description	length
id	varchar	Primary key	32

type_id	varchar	Type ID	32
provider_id	varchar	Merchant ID	32
title	varchar	Title	255
sub_title	varchar	subtitle	255
saleable	int	Put on and off the shelf(0 off, 1 on)	1
enable	int	status(0 off , 1 run)	1
images	text	Statics image	0
price	double	price	0
specifications	text	specification	0
delete	int	Delete mark	1
create_time	datetime	Create time	0
create_admin	varchar	creator	32
update_time	datetime	Modifiy time	0
update_admin	varchar	modifier	32

C. Meal form

field	type	describition	length
id	varchar	Primary key	32
no	varchar	Order number	50
user_id	varchar	UserI D	32
total	double	Total Amount	0
amount	double	Amounts payable	0
coupon	double	Discounted price	0
status	int	Status	1
provider_id	varchar	Supplier ID	32
dinner_id	varchar	Meal ID	32
create_time	datetime	Order time	0
pay_time	datetime	Pay time	0
confirm_time	datetime	Comfirm time	0
deliver_time	datetime		0
evaluation_time	datetime	Evaluation time	0
finish_time	datetime	Complete time	0
address_id	varchar	Address ID	32

star	int	score	1
pay_state	int	Payment status	1
pay_timeout	datetime	Payment overtime	0
pay_source	varchar	Payment channel	100
pay_account	varchar	Payment accout	100
pay_source_no	varchar	Payment channel number	50
pay_param	text	Payment parameters	0
client_delete	int	Client delete	0
extra_param	text	Extra parameters	0

6. Function Module And Implement

UserConsole It is a user interface. Anyone who uses the system to enjoy order services is interacted on the UserConsole page. This module is not limited to APP, H5, applets and other multi-end implementations. Some users like to use WeChat applets, which feels cool out of the box. We will provide a small program ordering service. Some users like to install the app. Not many will like it. However, the advantage of the app is that it is large and can carry more services. To put it plainly, UserConsole is a set of human-computer interaction pages. The back-end interface program that has supported these page functions can be used by users to log in, register, change passwords, place orders, pay, view orders, view balances and other service functions.

6.1 User Authentication

User authentication includes three functions: user registration, user login, and password modification. When the user uses the system for the first time, the system needs to guide the user to register. As long as the user completes the registration, the service brought by the system can be enjoyed. The user needs to log in to the system before using it to ensure that the user is legal, because the user decides to place an order to buy For products, the background needs to determine the user's identity. Only the system registered user system can determine the user's name, user's mobile phone number, user's address and other basic information. The system also provides the user to modify the password function. Modifying the password is actually resetting the password to

prevent the user from being unable to log in to the system after forgetting the password

6.1.1 User Registration

Function Description

The user needs to be a registered user of the system to enjoy the services provided by the system. The system requires user registration and requires the user to fill in the mobile phone number as the user's unique user name to be stored in the system. In order to confirm that the mobile phone number is the user's own mobile phone, the user's mobile phone number needs to be given Send a short message. The content of the short message is a verification code generated temporarily for the user. The user needs to fill in the mobile phone number, user verification code, and user password when registering. The background needs to check the parameters according to the information filled in by the user, such as whether the mobile phone number conforms to the specification, whether the verification code is valid, whether the user password is set too simple, the system requires the user's password to be digits, letters, and special symbols. Two combinations, and no more than 10 characters, the background uses regular expressions to verify the data submitted by the user. If each field is verified, the user will be recorded in the database and become an official member of the system. In addition to the key login fields such as user name and user password, the user table also sets extended fields such as user gender, name, age, hobbies, etc. Through these fields, we can label users well when we do data analysis in the future.。

Interface Effect

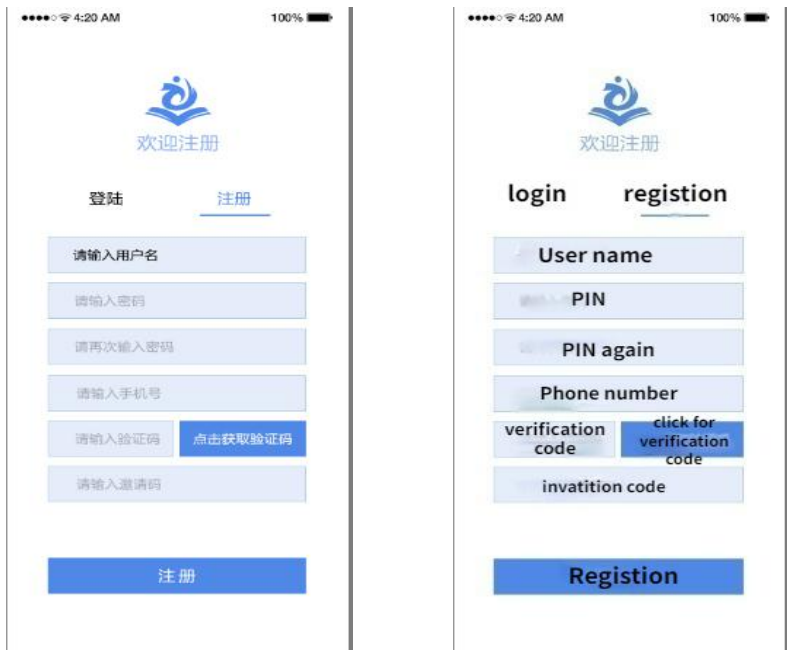


Figure 15

Business Process

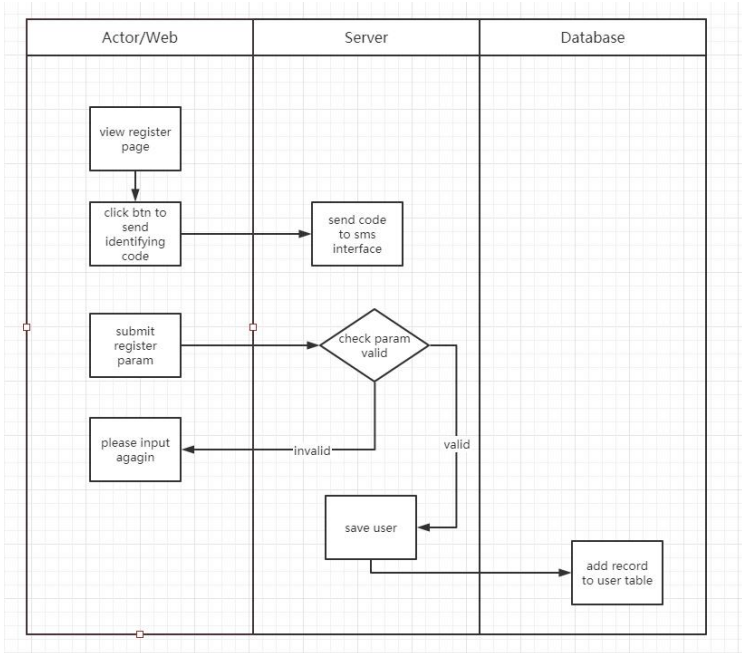


Figure 16

The user needs to enter the mobile phone number on the registration page, click the Get Verification Code button, and send a verification code SMS to the mobile number after receiving the request in the background. After the user receives the SMS, remember the verification code, fill in the verification code in the registration interface, and the password is included before The three parameters of the mobile phone number filled in are sent to the python background to send a registration message. After the relevant parameters are received in the python background controller, the parameter verification is performed. The mobile phone number verification is in compliance with the specification. For example, the Chinese mobile phone number is 11 digits. At the beginning of 1, and then verify the verification code, the user verification code is only valid for 10 minutes in the background, and will be automatically deleted from the background memory after 10 minutes. If the background determines that the verification code entered by the user is still in the memory, the verification code is valid. If it does not exist, the verification code is invalid. You need to return a message to the front end to remind the user that the verification code is invalid. Please obtain it again. After the user fills in the correct and valid verification code, the background check is correct and then the password parameters are judged. The password must meet two of the three combinations of numbers, letters, and special characters, and the length cannot exceed 10 characters and cannot be less than 6. Characters. If the user password is not enough to meet the requirements of this regular expression, you need to return a user error message and prompt the user to re-enter the password. When the user password meets the requirements, the system stores the user information in the database, and the user has

completed all the registration procedures.

Related Code

```
@system_controller.route('/login')
@as_json
def login():
    logging.info("login")
    print("login")
    username = request.values.get("admin_username")
    password = request.values.get("admin_pwd")
    pwdchipher = hashlib.md5(password.encode('utf-8')).hexdigest()
    admin = Admin.query.filter_by(admin_username=username, admin_pwd=pwdchipher).one_or_none()
    logging.info(admin)
    if admin:
        session["loginuser"] = to_dict(admin)
        ga = AuthGroupAccess.query.filter(AuthGroupAccess.uid == admin.admin_id).one_or_none()
        session["role"] = ga.group_id

        # 首页地址
        index = "/home/admin"

        # 判断是否绑定商户
        parters = Parter.query.filter_by(admin_id=admin.admin_id).all()
        if len(parters) > 0:
            session["parter"] = parters[0].id
            index = "/home/partar"
            if parters[0].air5_open == 1:
                index = "/air5/user/index"
            if parters[0].ysj_open == 1:
                index = "/ysj/user/index"
        else:
```

Figure 17

Related Interface

Submit verification code

URL	[2]https://domain /politoedu/code
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameters name	Parameters type	length	Is it required?	Parameter Description

Parameter list

Parameters name	Parameters type	length	Is it required?	Parameter Description
phone	String	11	yes	Phone number

Return value

Parameters name	Parameters mean	length	Is it required?	Parameter Description
status	whether succeed	10	yes	whether succeed
If return status is True				
If return status is False				
msg	Wrong information			Wrong information

Data dictionary

Parameters name	Parameters mean	length	Is it rrequired?	Parameters description

User registion

URL	https://domain /politoedu/code
Request method	POST
Request method	content-type: application/json
Return method	content-type: application/json

Header parameters

Parameter name	Parameter name	Length	Is it required	Parameter description

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
phone	String	11	yes	Phone number
password	String	6~8	yes	User password (no less than 6 and no more than 10 digits)
code	String	6	yes	Verification code

Return value

Parameter name	Parameter meaning	length	Is it required	Parameter description
status	Is it success	10	yes	Is it success
If return status is true				
If return status is false				
msg	Error message			Error message

Data dictionary

Parameter name	Parameter meaning	length	Is it required	Parameter description
----------------	-------------------	--------	----------------	-----------------------

6.1.2 User Login

Function description

Users need to use certain authentication methods to log in to the system to meet the security needs of the system. The current authentication methods that the system can take are password login, Alipay scan code login, and WeChat scan code login. The user name and password authentication method is the most traditional authentication method. First, the user needs to enter the user name and password when registering. The user's password needs to be stored in MD5 encryption instead of the user's plain text password to prevent personal information leakage. Alipay login is An authentication method of OAuth2.0 system developed by Ant Financial. The business process is that the user clicks the Alipay login button and then jumps to the Alipay authentication page. If your mobile

phone has Alipay software installed, and the software is currently logged in, it will pop up directly. The prompt box is whether to use the Alipay account to log in to the ordering platform. If Alipay is not currently logged in, the user will be prompted to log in to the system before authorizing access to the ordering platform. When the user clicks to authorize access to the ordering platform, Alipay will notify the authorized platform, that is The ordering platform. After receiving the authentication information from Alipay, the ordering platform obtains the Alipay user ID of the user and determines whether the database has a user with the Alipay ID. If it is not found, the user binds the mobile phone number to establish an Alipay account and local An account relationship. If the database has a user with the Alipay account ID, find the system account corresponding to the Alipay account ID, and then log in to the ordering platform. The principle of WeChat authentication is the same.

Interface Effect

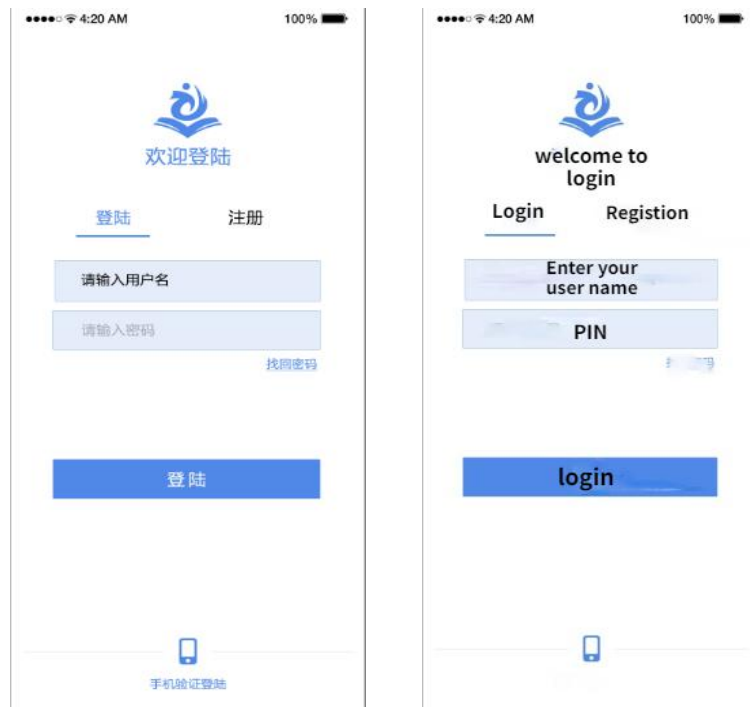


Figure 18

Business Process

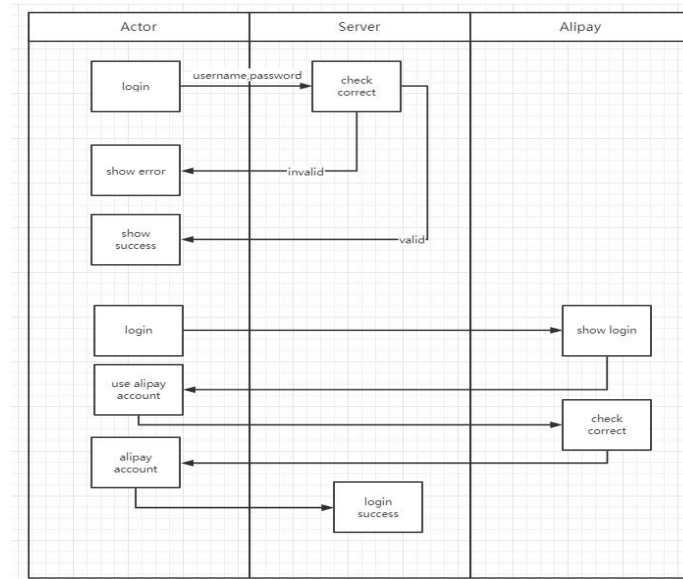


Figure 19

The user first logs in by selecting the login mode, mode 1, user name and password login.

The user needs to enter the correct user name and password, click the login button and send a message to the background. After receiving the message, the background will encrypt the password with MD5, and then query the database for data records that match the user name and user password. If there is, it means that the user input is correct User name and password, and then write user data in the session. Mode 2, Alipay authentication, the user clicks on Alipay authentication and then calls the interface in the Alipay SDK to automatically open the Alipay page, where the user selects his Alipay account to log in, if the login is successful, the Alipay user ID will be redirected to the platform login page After obtaining the user's Alipay user ID, the database is retrieved, if there is the ID, the user corresponding to the ID is directly obtained, and the user information is written into the session.

Related Code

```

@system_controller.route('/login')
@as_json
def login():
    logging.info("login")
    print("login")
    username = request.values.get("admin_username")
    password = request.values.get("admin_pwd")
    pwdchipher = hashlib.md5(password.encode('utf-8')).hexdigest()
    admin = Admin.query.filter_by(admin_username=username, admin_pwd=pwdchipher).one_or_none()
    logging.info(admin)
    if admin:
        session["loginuser"] = to_dict(admin)
        ga = AuthGroupAccess.query.filter(AuthGroupAccess.uid == admin.admin_id).one_or_none()
        session["role"] = ga.group_id

        # 首页地址
        index = "/home/admin"

        # 判断是否绑定商户
        parters = Parter.query.filter_by(admin_id=admin.admin_id).all()
        if len(parters) > 0:
            session["parter"] = parters[0].id
            index = "/home/partner"
            if parters[0].air5_open == 1:
                index = "/air5/user/index"
            if parters[0].ysj_open == 1:
                index = "/ysj/user/index"
        else:
            # 判断是否是子商户

```

Figure 20

Related Interface

Submit verification code

URL	https://domain /politoedu/code
Request method	POST
Request method	content-type: application/json
Return method	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
phone	String	11	yes	Phone number

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success
If return status is true				
If return status is false				
msg	Error message			Error message

Data dictionary

Parameter name	Parameter meaning	Length	Is it required	Parameter description
----------------	-------------------	--------	----------------	-----------------------

User registion

URL	https://domain /politoedu/code			
Request method	POST			
Request format	content-type: application/json			
Return format	content-type: application/json			

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters lists

Parameter name	Parameter type	Length	Is it required	Parameter description
phone	String	11	yes	Phone number
password	String	6~8	yes	User password (no less than 6 and no more than 10 digits)
code	String	6	yes	Verification code

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
If return status is false				
msg	Error message			Error message

Data dictionary

Parameter name	Parameter meaning	Length	Is it required	Parameter description
----------------	-------------------	--------	----------------	-----------------------

6.1.3 User Logout

Function Description

User logging out of the system requires the user to log out of the account he logged in on the app. The function of logout is that the user needs to log out of his session from the server. This is the most important means for user privacy protection and privacy security. If you do not log out from the app, other people may use his account to log in after the phone is lost. Consumption on the platform will cause economic losses to the parties and may also be seen by other people. The platform cannot control the occurrence of other people's use of this information for threats. The user can click the logout button in the personal center of the app, and the background server will first find out whether the user session is valid, and if it is valid, the session will be cleared. At the same time, if there are other services that need to perceive behaviors such as user logout, the user authentication module needs to send this message Broadcast out, let the business module that pay attention to this news carry on corresponding logic processing.

Business Process

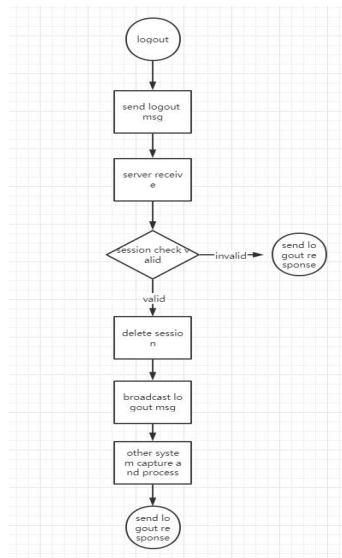


Figure 21

To log out of the business system, users need to click the logout button in the personal center of the app. After the server receives the user's logout request, it first determines whether the session exists. If the user's session does not exist, it directly returns a message indicating that the user has successfully logged out. The app will direct the user to the login page after receiving the message. If the user's session exists, set the session to Invalid and then broadcast the user's login message to other business systems, and the business system interested in the message will perform logical processing after receiving the message. At the same time, the system that accepts the logout message returns to the user a logout success message, and the app guides the user to the login interface after receiving the message.

Related Code

```
@system_controller.route('/denied')
@as_json
def denied():
    print("denied")
    session.clear()
    return {"code": 1001, "msg": ''}

@system_controller.route('/logout')
@as_json
def logout():
    session.clear()
    return {"code": 0, "msg": "退出成功", "data": None}
```

Figure 22

Related Interface

User logout

URL	https://domain /politoedu/logout
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
If return status is false				
msg	Error message			Error message

6.1.4 Password Forget

Function Description

The password retrieval function is that if the user forgets the password or the password is not stolen by others, the user can submit an application to retrieve the password on the platform, and the user can retrieve the password. There are two ways to retrieve the password. One is to verify through the bound mobile phone number. If you are the holder of the mobile phone number, you can receive a verification code to retrieve your password. After the verification code is entered correctly, the system The user will be prompted to set a new password. Another way is to take into account the situation of some users changing their mobile phone numbers. If they are not the holder of the mobile phone number and cannot receive the SMS verification code, they will retrieve the password through manual customer service, and the customer service staff needs to ask about User account related questions to verify whether the user is the account holder.

Interface Effect

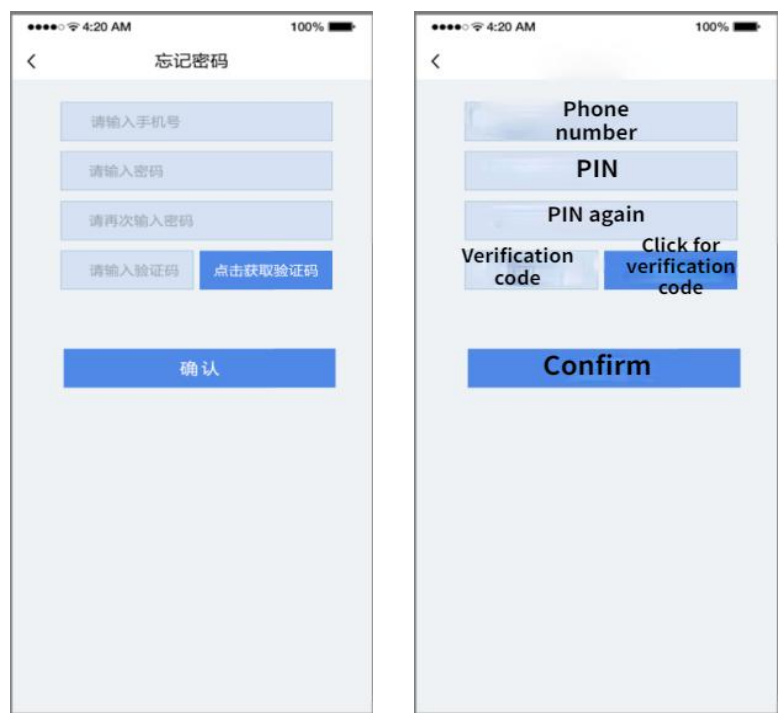


Figure 23

Business Process

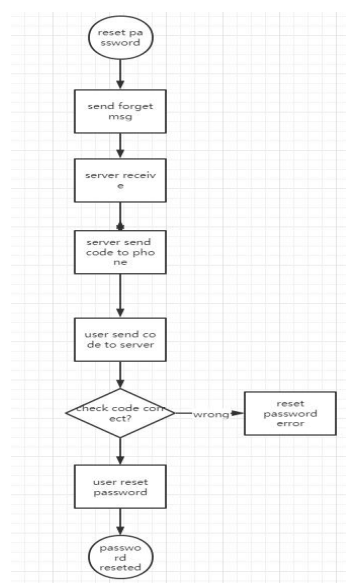


Figure 24

First, the user clicks on the forgotten password on the platform login interface to enter the reset password interface. Second, the user enters the mobile phone number bound to the account in the recharge password interface, and clicks to send the verification code. If the user normally receives the verification code, enter the verification code into the table. In a single item, it is sent to the background for automatic review. The background judges that the verification code is correct. It records the reset password mark in the user's session and guides the user to reset the password in the foreground. The user enters the password to be reset, and repeats the same in the confirm password. Password. Taking into account that the user enters a password once, because the probability of input deviation is relatively high, it is necessary to let the user enter the password again in the reset password box, and submit the password to the background after the two passwords are entered. The background first needs to determine that the user's session is heavy. Set the password mark, if not, return abnormal information. Secondly, the background also needs to determine whether the password strength meets the specifications, and the abnormal information is prompted if the password does not meet the specifications. If the audit is passed, the user's password will be updated to the database.

Related Code

```
@system_controller.route('/admin/changePassword')
@as_json
def admin_chg_passwd():
    uid = session["loginuser"]["admin_id"]
    old_password = request.args.get("oldPassword")
    new_password = request.args.get("password")
    admin = Admin.query.get(uid)
    if not admin:
        return {"code": -1, "msg": "未找到用户"}
    chiper = hashlib.md5(old_password.encode('utf-8')).hexdigest()
    if chiper != admin.admin_pwd:
        return {"code": -1, "msg": "原始密码错误"}
    admin.admin_pwd = hashlib.md5(new_password.encode('utf-8')).hexdigest()
    db.session.commit()
    return {"code": 0, 'msg': '修改成功', 'status': 1}
```

Figure 25

Related Interface

User logout

URL	https://domain/politoedu/changePassword
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
If return status is false				
msg	Error message			Error message

6.2 Meal Module

The meal module is a module that classifies and manages all meals entered in the system, and belongs to the basic content data of the meal ordering system. After logging in to the app, users can browse the meal information entered in the system, including meal pictures, meal introductions, meal prices, meal tastes, etc. Users choose meals according to their preferences. The administrator can maintain the meals in the management background, such as adding meals, modifying meal information, querying meals, and deleting meals. Due to the large number of meals involved in the later period, they need to be classified and displayed according to the types of meals, such as Chinese food, Western food, supper, breakfast, etc., and discount meals and event meals can also be set according to whether the meals are discounted. The browsing and selection of meals is the core function of the entire system. Only by developing a smooth user experience and beautifying the photos of the merchant's meals can users be interested in this software product and promote users to place orders.。

6.2.1 Meal Classification

Function Description

Meal classification is an important means for meal management. On the one hand, meal classification provides convenience for server maintenance. If there are a wide variety of

meals that are not classified, it will cause great distress to data maintenance personnel. After categorizing and storing the data according to the types of meals, data maintainers can quickly locate the meals they want to find through classification, and also provide help for later data analysis. For example, data analysts will use meals Classification is used to determine the sales of food products. For example, which type of food is very popular, and which type of food has poor sales. The classification method is used to increase the supply and page exposure of the best-selling food, and to sell deserted food. Reduce exposure and traffic. At the same time, the classification of meals is also user-friendly, and users can quickly find the meals they want according to the types of meals. Reduce user selection time.

Interface Effect

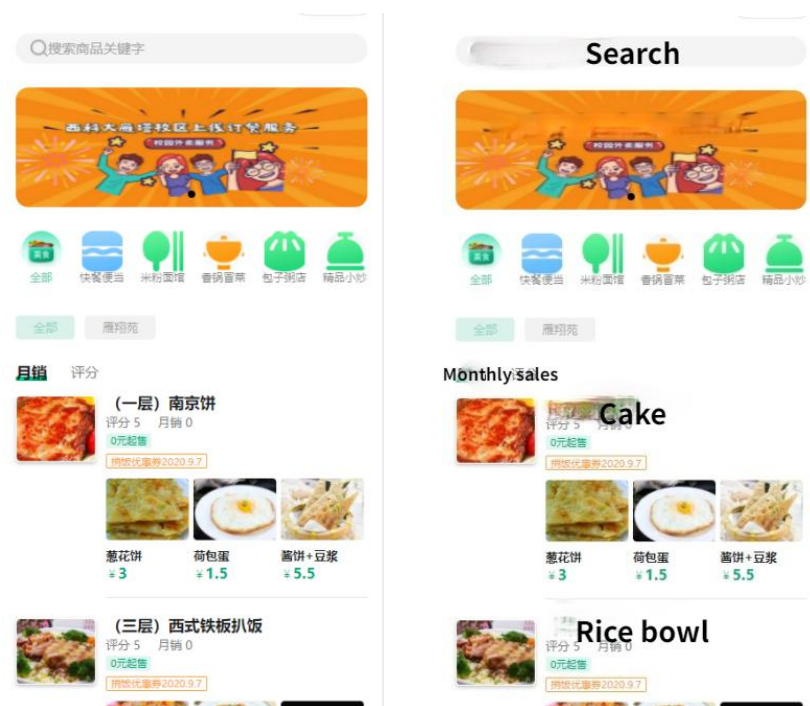


Figure 26

Bussiness Process

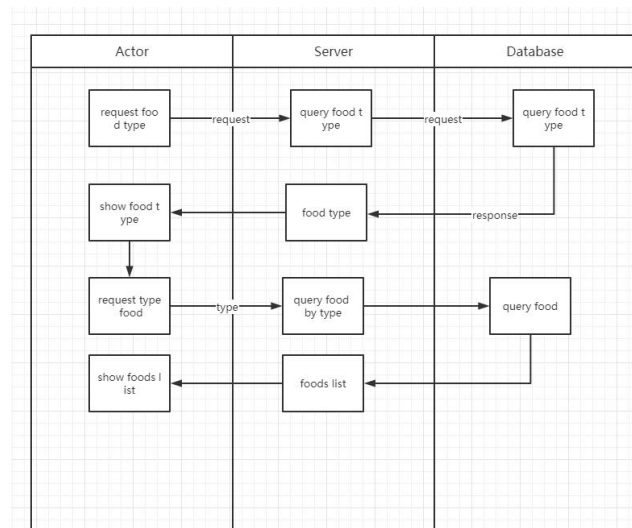


Figure 27

After the user is authenticated, the client app will first request the server to obtain the menu list, and the server will query the menu list record through the database. Because the design is designed to only have a first-level menu, it can be returned in the form of a list, and the user can see it on the app Menu category. After the user clicks on a category, the user requests the server to obtain the meal list under that category. After the server receives the meal information, it selects the meal list under the type through the query condition type, and the server returns it to Front-end app, users can see the list of meals under the type of their choice on the app.

Related Code

```
# 餐品列表
@dinner_controller.route('/food/list')
@as_json
def dinner_food_list():
    if "parter" not in session:
        return {"code": -1, "msg": "未绑定商户"}
    parter_id = session["parter"]
    page = request.values.get("page") or 1
    limit = request.values.get("limit") or 1000
    page_data = DinnerFood.query.filter(and_(DinnerFood.parter_id == parter_id, DinnerFood.delete == 0)).paginate(
        int(page), int(limit))
    items = page_data.items
    total = page_data.total
    return {"code": 0, "count": total, "data": [to_dict(item) for item in items]}
```

Figure 28

Related Interface

Submit verification code

URL	https://domain /politoedu/mealType
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
name	type name	10	yes	Meal type name
icon	icon	10	yes	image for meal
description	description	10	yes	meal's infomation
If return status is false				
msg	Error message			Error message

Data dictionary

Parameter name	Parameter meaning	Length	Is it required	Parameter description
----------------	-------------------	--------	----------------	-----------------------

6.2.2 Meal List

Fuction Description

The meal list is to display the information of the meal in the form of a list. It can be completely combined with the sliding operation of the mobile phone, and the screen can be swiped up and down to trigger the scrolling of the list to view the summary information of each meal. The gesture operation of the meal list supports three operations.

Pull down to refresh

When the user slides down on the screen while holding the screen, a loading and refreshing animation will appear at the top of the interface. When the user let go, the interface will pop up at the top, and the list elements in the interface will be refreshed to the latest.

Pull up loading

In fact, pull-up loading is a variant of paging. Due to the limitation of mobile terminal memory, mobile phones can only load a limited set of data at a time. We can define that only 20 pieces of meal information can be loaded on a page, then the user swipes up on the screen. , When the last record is displayed at the bottom of the screen, it will

automatically obtain the next 20 pieces of data from the server, and stitch these data to the bottom of the list to continue scrolling. It looks like a list of unlimited data collections.

The third operation can display the latest updated meal information in real time.

Click on the list item

When the user clicks on a certain item of data in the list, it will jump to the meal details interface. The meal list will display the summary information of the meal, including the icon of the meal, the name of the meal, the introduction of the meal, the price of the meal, and other information, which is convenient for users to perform initial screening.

Interface Effect

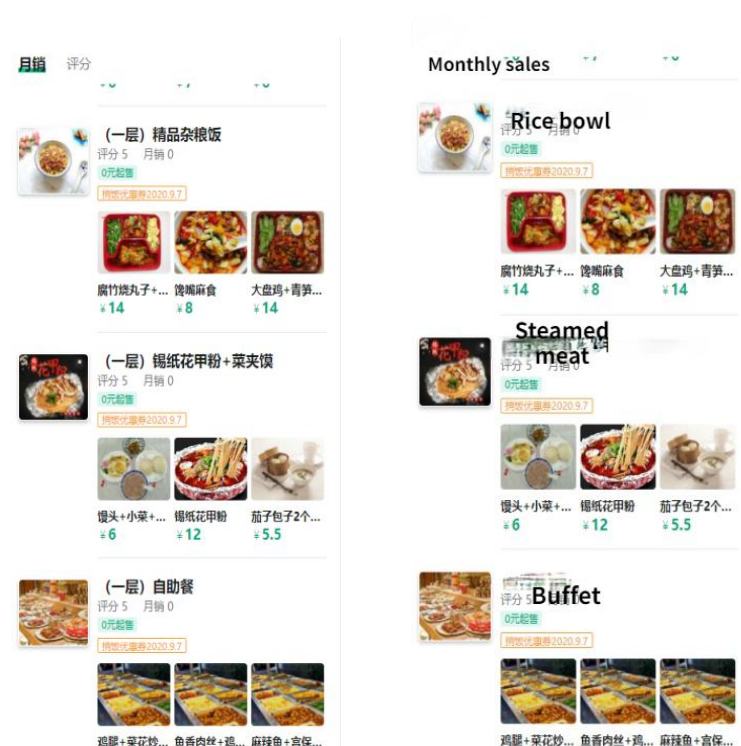


Figure 29

Bussiness Process

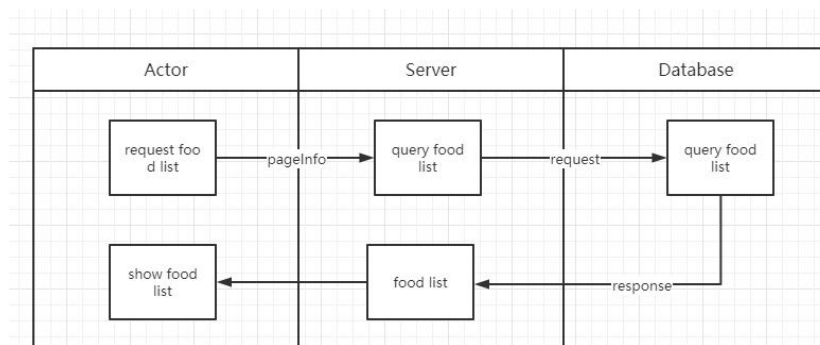


Figure 30

The user clicks on the single product type menu on the APP, and the APP will send a request to the server to obtain the list of meals under this type. After the server receives the message, it will perform the filtering operation by sending SQL to the database. After the database returns the meal list, it is forwarded to the APP through the server, and the APP uses the front-end list component to display the meal list..

Related Code

```

@dinner_controller.route('/food/list')
@as_json
def dinner_food_list():
    if "parter" not in session:
        return {"code": -1, "msg": "未绑定商户"}
    parter_id = session["parter"]
    page = request.values.get("page") or 1
    limit = request.values.get("limit") or 1000
    page_data = DinnerFood.query.filter(and_(DinnerFood.parter_id == parter_id, DinnerFood.delete == 0)).paginate(
        int(page), int(limit))
    items = page_data.items
    total = page_data.total
    return {"code": 0, "count": total, "data": [to_dict(item) for item in items]}
  
```

Figure 31

Related Interface

Submit verification code

URL	https://domain /politoedu/meallist
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
mealId	String	32	yes	UUID
name	type name	10	yes	Meal's name
icon	icon	10	yes	image for meal
description	description	10	yes	meal's information
If return status is false				
msg	Error message			Error message

6.2.3 Meal Details

Function Description

The meal details page means that after the user initially selects the meal that he wants to order in the meal list, click on the meal image to enter the details interface. In the details interface, the user can view the detailed introduction of the meal, including the

ingredients of the meal and the high-definition of the meal. The big picture, the text description of the meal, whether it supports the specification selection, etc. If the meal selected by the specification is supported, the customer needs to set the specification, such as slightly spicy, medium spicy, heavy spicy, etc., beverages can choose no sugar or less sugar , Polysaccharides. After selecting the specifications, the latest price will be generated. The user can add meals with configured specifications to the shopping cart, or place an order directly.

Interface Effect

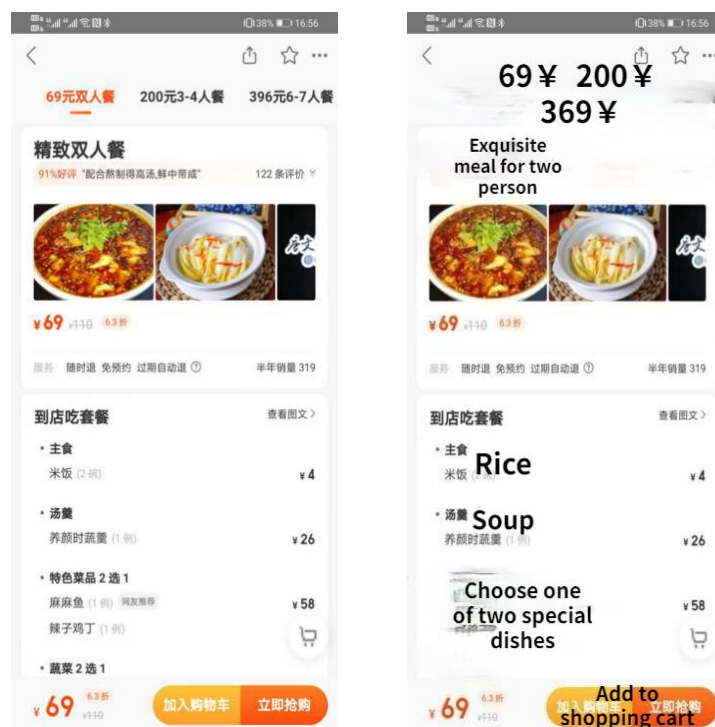


Figure 32

Bussiness Process

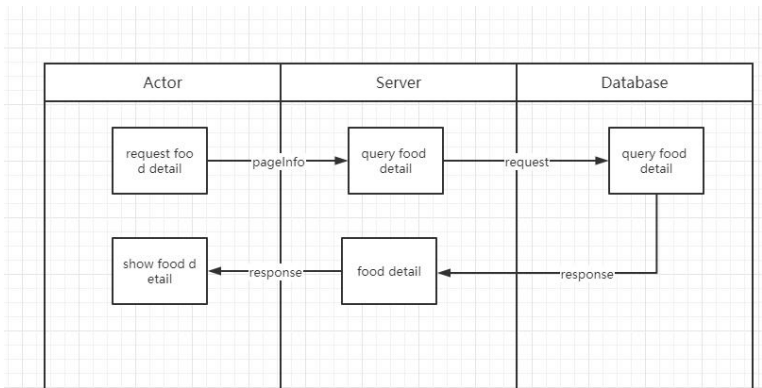


Figure 33

After the user clicks on the picture of a meal in the meal list on the APP, the APP will send a request to the server to obtain the detailed information of the meal under this type. After the server receives the message, it will perform the filtering operation by sending SQL to the database. After the database returns the meal details, it is forwarded to the APP through the server, and the APP uses the front-end list component to display the meal details.

Related Codes

```
@dinner_controller.route('/food/info')
@as_json
def dinner_food_info():
    parter_id = session.get("parter")
    if not parter_id:
        return {"code": -1, "msg": "未绑定商户"}
    parter = Parter.query.get(parter_id) if parter_id else None
    if not parter:
        return {"code": -1, "msg": "未绑定商户"}
    # 新建页面的查询操作直接返回
    from_create = request.args.get("fromCreate")
    if from_create == "1":
        return {'code': 0, 'msg': 'OK'}
    id = request.args.get("id")
    if not id:
        return {'code': -1, 'msg': '未找到餐品'}
    food = DinnerFood.query.get(id)
    if not food:
        return {'code': -1, 'msg': '未找到餐品'}
    item = to_dict(food)
    return {'code': 0, "data": item, 'msg': 'ok'}
```

Figure 34

Related Interface

Submit verification code

URL	https://domain /politoedu/mealDetail
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
mealId	String	32	yes	UUID

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
price	price	11	yes	price of meal
name	name	32	yes	name of meal
description	description	255	yes	information of meal
icon	icon	32	yes	image of meal
If return status is false				
msg	Error message			Error message

6.2.4 Meal Purchase

Function Description

After the user selects the meal, he will enter the order confirmation interface. The order confirmation interface will display the user's choice of meal list, the name, quantity, and unit price of each meal. If the meal has a specification configuration, it will display the

specification selected by the user. In addition to processing the displayed meal details, it will also count the total consumption amount required. If the operation is to promote a certain product, a certain number of coupons will be issued, then the user can select the coupons that have been received in the order confirmation interface to make the amount Deduction, the amount after the deduction is the amount the user needs to actually pay. In addition to these important information, the user's mobile phone number and the address information of the food delivery will be displayed. This information is entered into the system when the user registers. The payment method is also optional, and the background will be connected to commonly used payment methods, such as Alipay and WeChat. After confirming the order, the user will directly jump to the WeChat payment interface for payment operations。

Interface Effect

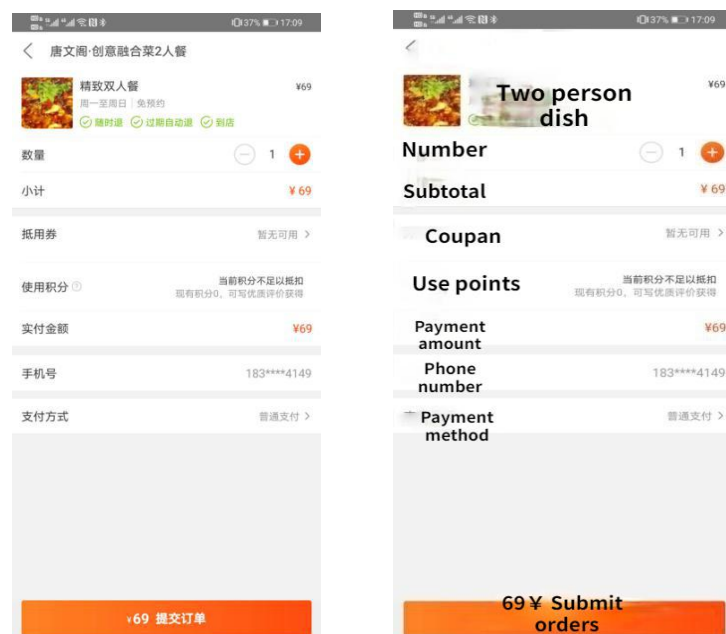


Figure 35

Business Process



Figure 36

After the user clicks the Buy Now button, it will enter the order confirmation page. The order confirmation page will grab the list of the user's shopping cart and generate a list of the ordered items. The user clicks to use the coupon and will jump to the coupon selection list interface, and the user chooses After the coupon to be used, it returns to the order confirmation interface. The user selects the payment type button to enter the payment type selection interface. After the user selects the payment type to be used, it returns to the order confirmation interface. Finally, the user clicks to pay now and enters the corresponding payment Interface, complete the payment operation, the successful payment operation will display the order payment success interface.

Related Code

```
@ads_controller.route('/provider/recharge/alipay/public/submit', methods=['POST'])
def ads_alipay_recharge_submit():
    # 获取登陆用户信息
    loginuser = session.get("loginuser")
    if not loginuser:
        logging.debug("/wechat/recharge 绑定登陆用户为null")
        return {"code": -1, "msg": "绑定登陆用户为null"}
    # 获取登陆人ID
    admin_id = loginuser.get("admin_id")
    recharge_value = request.values.get("amount")
    if not recharge_value:
        return {"code": -1, "msg": "充值金额异常"}
    amount = Decimal(recharge_value).quantize(Decimal("0.00"))
    logging.info("用户充值金额: " + str(amount) + " 用户ID: " + str(admin_id))

    pc = ParterChildren.query.filter_by(admin_id=admin_id).one_or_none()
    if not pc:
        return "未绑定商户"
    providers = AdsProvider.query.filter_by(admin_id=admin_id).all()
    data = {}
    data['parter_id'] = pc.parter_id
    data['provider_id'] = providers[0].id
    data['amount'] = str(amount)
    data['pay_type'] = 2 # 支付宝PC支付
    data['user_id'] = admin_id
    data['return_url'] = DOMAIN + "/index.html"
    data['business_key'] = "ads_provider_recharge"
    jsonData = json.dumps(data, ensure_ascii=False)
```

Figure 37

Submit verification code

URL	https://domain /politoedu/orderPay
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
mealId	String	32	yes	UUID
count	int	11	yes	count for meal

Return valure

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
amount	amount	11		amount for payment
If return status is false				
msg	Error message			Error message

6.3 Order Module

The order module is that the user needs to form a sales contract with the platform after selecting the meal. This contract is the order. After the user completes the meal selection in the meal list, he can use the confirm purchase button on the interface to enter the order page. On this page, users can see the order number of this purchase, the type of meal purchased, the name of the meal, the price of the meal, and the total price. On the order page, you can choose to use coupons for discounts. The user clicks on the coupons and enters the coupon selection page, selects the coupons that can be used and returns to the order interface, you can see that the total price has been updated and how much the coupons are exempted And other information. If the user finally confirms that the order is correct, click the“Pay Now” button to call up the Alipay or WeChat payment page to pay, and the user will be prompted after the payment is successful.。

6.3.1 Order List

Function Description

After the user selects the meal, he will enter the order confirmation interface. The order confirmation interface will display the user's choice of meal list, the name, quantity, and unit price of each meal. If the meal has a specification configuration, it will display the specification selected by the user. In addition to processing the displayed meal details, it will also count the total consumption amount required. If the operation is to promote a certain product, a certain number of coupons will be issued, then the user can select the

coupons that have been received in the order confirmation interface to make the amount Deduction, the amount after the deduction is the amount the user needs to actually pay. In addition to these important information, the user's mobile phone number and the address information of the food delivery will be displayed. This information is entered into the system when the user registers. The payment method is also optional, and the background will be connected to commonly used payment methods, such as Alipay and WeChat. After confirming the order, the user will directly jump to the WeChat payment interface for payment operations。

Interface Effect

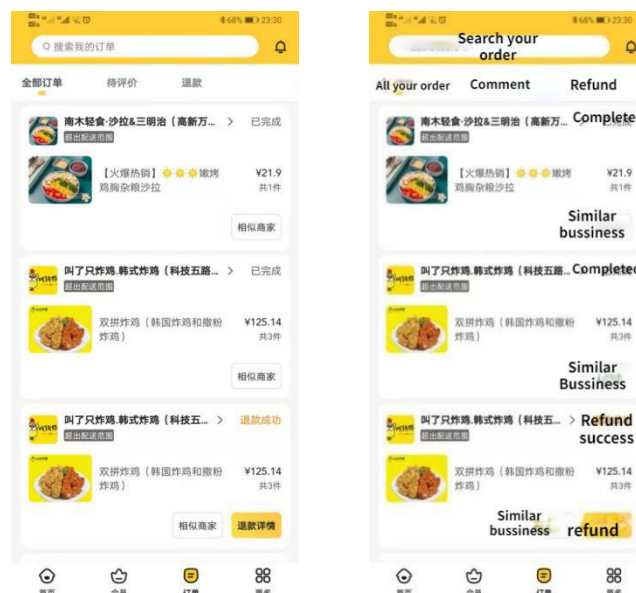


Figure 38

Bussiness Process

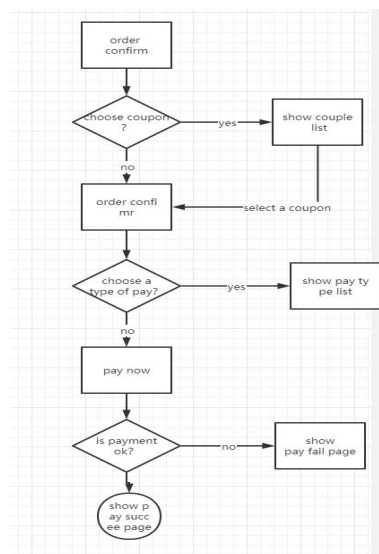


Figure 39

After the user clicks the Buy Now button, it will enter the order confirmation page. The order confirmation page will grab the list of the user's shopping cart and generate a list of the ordered items. The user clicks to use the coupon and will jump to the coupon selection list interface, and the user chooses After the coupon to be used, it returns to the order confirmation interface. The user selects the payment type button to enter the payment type selection interface. After the user selects the payment type to be used, it returns to the order confirmation interface. Finally, the user clicks to pay now and enters the corresponding payment Interface, complete the payment operation, the successful payment operation will display the order payment success interface.

Related Code

```
@order_controller.route('/order/table')
@as_json
def user_list():
    page = request.values.get("page") or 1
    limit = request.values.get("limit") or 1000
    business_model = request.values.get("business_model") or 1
    page_data = Order.query.filter(Order.business_model == business_model).paginate(int(page), int(limit))
    # db.session.commit()
    items = page_data.items
    return {"code": 0, "count": page_data.total, "data": [to_dict(item) for item in items]}
```

Figure 40

Related Interface

Submit verification code

URL	https://domain /politoedu/orderList
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
orderId	orderId	32		UUID
price	price	11		price for meal
state	state	1		state for order
If return status is false				
msg	Error message			Error message

6.3.2 Order Details

The order details interface is an interactive interface that is convenient for users to browse the detailed information of the order. When users pay for the order, they will automatically browse this page to confirm the information of the food they ordered in the order, including the type and quantity of the food, Meal unit price and total order price and other parameters related to the meal. It also contains the status information of the order. The status information of the order is divided into 5 categories, pending payment, pending confirmation, pending delivery, completed, and cancelled. The order details page also contains the user's contact information, delivery address and other personal privacy data. This information is for the user to check whether the order's delivery information is complete and accurate. Since the software focuses on the protection of user privacy, the mobile phone number will be displayed on the interface. When doing desensitization treatment. The order details interface also includes coupon information. If the user uses the coupon in this order, the total amount will be deducted. The user can see the order details interface in two entrances. One is to enter the order details page after the user places an order. At the bottom of the page, a button for immediate payment will be designed. When the user clicks on the payment now, a payment box will pop up, prompting Which electronic payment method the user uses, such as paypal, wechat, alipay, etc. The other entry is in the user's order list interface. If the user wants to see the details of an order, he can switch to the order details interface of the currently selected order by clicking on the entry in the order list.。

Interface Effect

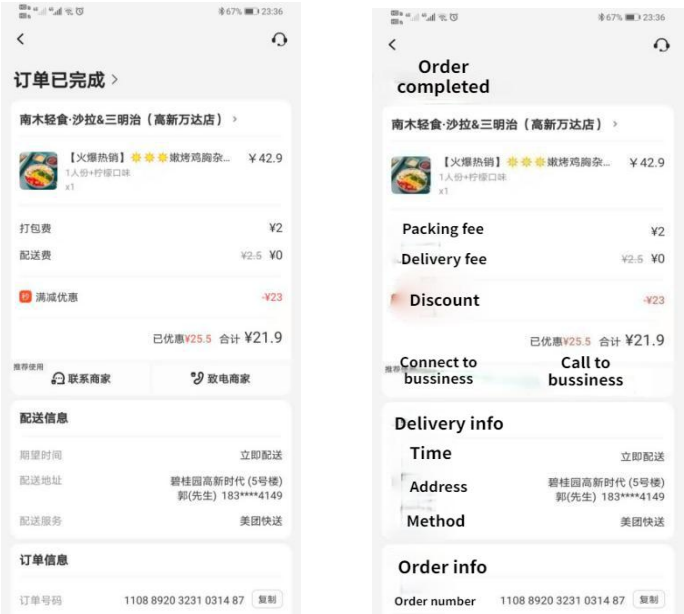


Figure 41

Bussiness Process

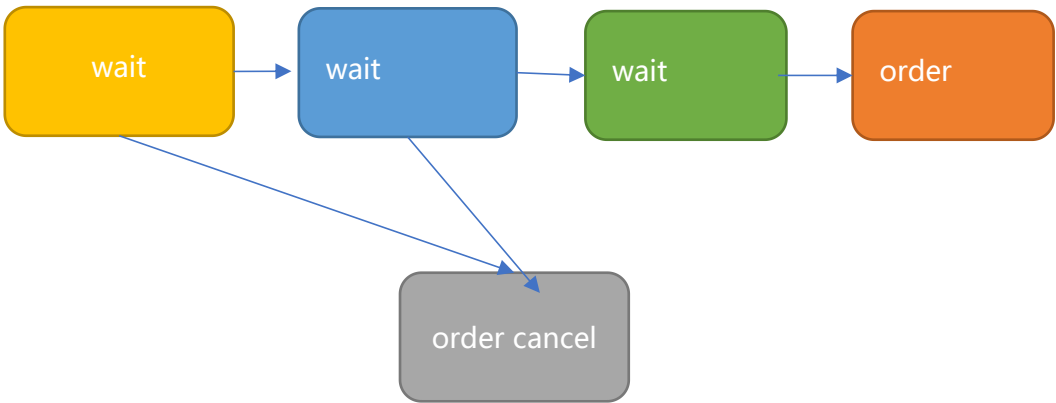


Figure 42 (Order status switch diagram)

When the user clicks the pay now button after selecting a good meal, an order will be

generated for the user. The status of the order is pending payment. This means that the user can close the payment interface and exit the APP directly. It also takes into account that the user is about to pay. If the mobile phone is out of power, the order will be reserved for the user for 30 minutes of payment time. If it exceeds 30 minutes, the order will be discarded. When the user completes the payment, the status of the order will be updated to pending confirmation. At this time, the management background can see the latest order waiting to be confirmed. The customer service staff needs to check whether the meal ordered by the user is sufficient. If there is enough supply, the customer service staff needs to check in the background. The order is confirmed. After confirmation, the status of the order is updated to the pending delivery status. The pending delivery status refers to the entire process from the start of production to the delivery of the order. When the user receives the modified order, the order status will be updated to completed. Among them, the order status can be cancelled by the user if it is in the pending payment and pending confirmation status, and the cancelled order cannot be paid again. When the user is prompted to pay for the first time and did not pay for various reasons, he can also enter the personal center to view the order list, and select the order to be paid to pay again.

Related Code

```
@order_controller.route('/order/info')
@as_json
def user_info():
    no = request.values.get("no")
    business_model = request.values.get("business_model") or 1
    if not id:
        return {"code": 0, "data": None}
    order_info = Order.query.filter(Order.business_model == business_model).filter(Order.no == no).all()
    if not order_info:
        return {"code": 0, "data": None}
    return {"code": 0, "data": to_dict(order_info[0])}
```

Figure 43

Related Interface

Submit verification code

URL	https://domain /politoedu/orderInfo
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
orderId	String	11	yes	OrderId

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
orderId	orderId	32		UUID
price	price	11		price for meal
state	state	1		state for order
If return status is false				
msg	Error message			Error message

6.4 Personal Center

The personal center interface is the display interface of the user's own information on the platform. Users can view their nickname, order list, number of orders, total order amount, delivery address and other information on the personal center interface. The personal center contains two parts of data, one is the user's personal privacy data, if the user name, desensitized mobile phone number, delivery address, etc., the other is the data generated by the user using the platform, such as order data, and some user data statistics. Such as the number of orders, the amount of orders, etc.

6.4.1 User Information

Function Description

When using the platform, the user needs to upload the user's personal privacy data, such as the user's mobile phone number, user's name, avatar, delivery address, etc. The platform has this information to provide users with basic ordering and delivery services. Because the delivery person will find the delivery address of the user according to the information provided by the user, and need to contact the user through the user's mobile phone number to sign for the meal. After using the platform, users will produce a lot of business data. The most important thing is user order data. Every order a user orders is saved in the system. The order information mainly includes the type of meal, the quantity of the meal, the price of the meal, whether Use coupons, delivery address, order status, order time and other key information.

Interface Effect

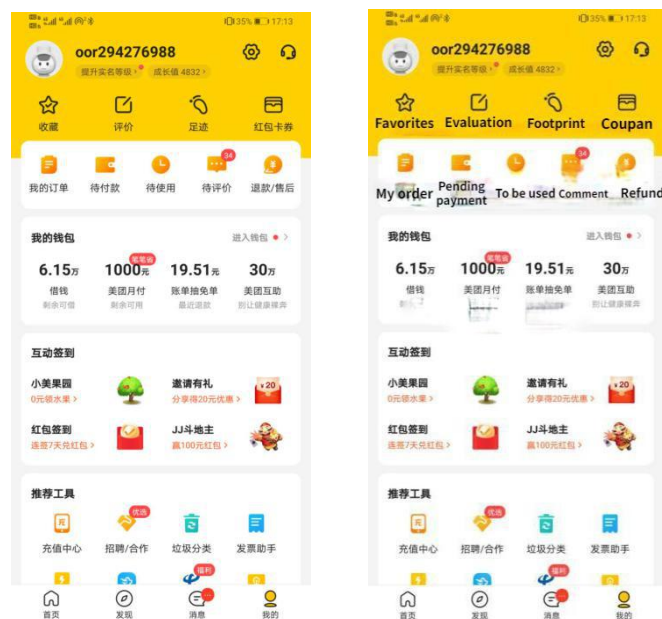


Figure 44

Bussiness Process

When the user clicks on the My Picture of the Toolbar button, it will enter the personal center interface. The client will request the server to obtain the personal information data of the currently logged-in user, including the user name, user avatar, desensitized mobile phone number, order quantity and other information. The user can Click the button next to the avatar to enter the update interface of the personal center to modify personal information, such as modifying nickname, avatar, delivery address and other information. After the user completes the modification, he submits the form to the server. The server first verifies the data after receiving the data. If the data is safe and legal, it will operate

the data to update the data of the logged-in user

Related Code

```
def ads_shop_fans_info():
    admin = session["loginuser"]
    shop = AdsShop.query.filter(AdsShop.admin_id == admin["admin_id"]).first()
    if not shop:
        return {"code": -1, "msg": "未绑定门店"}
    id = request.args.get("id")
    if not id:
        return {'code': -1, 'msg': '未找到粉丝'}
    fans = AdsFans.query.get(id)
    if not fans:
        return {'code': -1, 'msg': '未找到粉丝'}
    item = queryToDict(fans)
    if item["phone"]:
        item["phone"] = item["phone"].replace(item["phone"][3:7], "****")
    item['ads_shop'] = AdsShop.query.get(fans.shop_id).shop_name
    item['ads_provider'] = AdsProvider.query.get(fans.provider_id).name
    return {'code': 0, "data": item, 'msg': 'ok'}
```

Figure 45

Related Interface

Submit verification code

URL	https://domain /politoedu/Person
Request method	POST
Request format	content-type: application/json
Return format	content-type: application/json

Header parameters

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Parameters list

Parameter name	Parameter type	Length	Is it required	Parameter description
----------------	----------------	--------	----------------	-----------------------

Return value

Parameter name	Parameter meaning	Length	Is it required	Parameter description
status	Is it success?	10	yes	Is it success?
If return status is true				
nickname	nickname	128		nickname

age	age	10		age
icon	icon	10		headicon
orderCount	orderCount	11		order's count
If return status is false				
msg	Error message			Error message

7. Reference

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