

PROJECT 1 RESTAURANT MANAGEMENT ON SERVER-SIDE WITH SPRING BOOT AND THYMELEAF

By

BARCELONA TEAM

Submitted to: LIKELION VIETNAM

February 2023

Project 1: https://github.com/LocDuong112/FoodShinhanDS.git

Project 2: https://github.com/Lucky-Star-999/food-service-v1.git

ACKNOWLEDGMENTS

The team wants to start by expressing gratitude to the company - Likelion Vietnam for not only establishing a professional, helpful, and joyful working atmosphere for us, but also for sharing the expertise to enhance our career. It was helpful for the team to apply both theoretical knowledge and practical experience to take on a challenging technology project.

The team also wants to sincerely thank the advisors at Likelion Vietnam for not only providing invaluable knowledge and inspiration, but also for the encouragement and support we require to succeed and learn more about the field.

Finally, thanks to the team mates for always supporting each other during working on the project.

Thank you!

Table of Contents

ACKNOWLEDGMENTS	3
I. Project Schedule	5
II. Project Description	6
1. Description	6
2. Requirements	6
3. Tasks	7
a. Dương Minh Lộc	7
b. Lê Hoàng Nhân	7
c. Phan Hồng Hà	8
d. Võ Văn Đăng Khoa	8
e. Nguyễn Hoàng Linh	9
f. Đỗ Việt Bách	9
5. Finished API	10
III. Result	15
IV. Skills and Experiences	15
V. Conclusion	

I. Project Schedule

Week	Task
1	Training
-	Team meeting with each other
2	Training
	Setting up project's environment
3	Training
	Come up with project requirements
4	Training
4	Design the system
5-7	Training
5-7	Teamwork and finish the project

II. Project Description

1. Description

"Restaurant management" is a tool for helping online ordering for a restaurant.

The technologies that "Restaurant management" used are:

- Spring Boot
- OracleDB
- Github

The project will eventually be turned into a microservice project, and the team plans to launch it using Docker.

2. Requirements

Admin

- + Account management
- + CRUD on accounts

Restaurant manager

- + Show list of available orders
- + Create new order
- + Change shipping status of order
- + Show bill of order
- + Paying
 - + Payment confirmation (customer pay by cash)
 - + Create QR code for paying
- + View sales, reports (monthly)
- + Menu management

+ CRUD on food of the restaurant

User

- Login/logout
 - + Create new account
 - + Sign in with Google account
 - + Reset password
 - + Update account
- + Show trending food on homepage
- + Sort food by category
- + Add food to cart
- + Show cart
 - + Show bill
 - + Update food quantity
 - + Delete food
- + Show order status
- + Create feedback on food

3. Tasks

a. Dương Minh Lộc

Sign in, sign up (don't need JWT yet)

INPUT: username, password

OUTPUT: Login notification (success?), account dto

Reset password, modified account information

INPUT: account dto, @PathVariable accountId

OUTPUT: new account dto

Customer see all products (5-10 products each load)

Use function to check for customer role

See all products (load 5-10)

- 1. INPUT: last product id
- 2. OUTPUT: 5-10 next products

b. Lê Hoàng Nhân

Admin manage account

Function to check for admin role

CREATE

INPUT: account dto

OUTPUT:none

READ

- + List of account
 - + INPUT: none
 - + OUTPUT: all account in database with and without filter, pagination
- + Individual account
 - + INPUT: accountId
 - + OUTPUT: an account dto
- + Template account for creation

UPDATE

INPUT: account dto OUTPUT: none

DELETE

INPUT: accountId OUTPUT: none

c. Phan Hồng Hà

Manager sees all orders

Function to check for manager role

INPUT: none

OUTPUT: All order dto in db

Manager create new order

Use function above to check for manager role

INPUT: order dto

OUTPUT: new order dto

Customer sees cart

Delete product from cart

Use function to check for customer role

INPUT: product id, cart id

OUTPUT: All product dto in cart

d. Võ Văn Đăng Khoa

Manager change status of order

Use function to check for manager role

INPUT: order dto, @PathVariable order id

OUTPUT: new order dto

Manager sees bill of order

Use function to check for manager role

INPUT: @PathVariable order id

OUTPUT: order dto with bill dto (create new dto for this)

Customer sees order status

Use function to check for customer role

INPUT: account id

OUTPUT: All order dto with account role as customer

e. Nguyễn Hoàng Linh

Manager search for product

Use function to check for manager role

INPUT: @Param any String

OUTPUT: All product dto match product name

Customer see 5-10 most buy products

Function to check for customer role

INPUT: none

OUTPUT: 5-10 most buy product

Customer search for product

Function to check for customer role

INPUT: @Param any String

OUTPUT: All product dto match product name

f. Đỗ Việt Bách

Customer add product to cart

Use function to check for customer role

INPUT: account id, product id, product quantity

OUTPUT: All product dto in cart

Modify quantity of product in cart

Use function to check for customer role

INPUT: product id, product quantity, cart id

OUTPUT: All product dto in cart

Add loyalty point to customer after having an order (order price / 1000)

Use function to check for customer role

INPUT: order id

OUTPUT: account dto

5. Finished API

Restaurant management			
No.	API	Function	Người làm
1	GET /admin/viewAllAccount Request param: + account_type + page	Return a model view for a list of accounts (include info of the total page number and current page, view all types of accounts by default)	
2	GET /admin/takeAllAccount Request param:	Return a list of accounts only	
3	GET /admin/IndividualAccount Request param: + account_id	Return information of an individual account	
4	PUT /admin/IndividualAccount Request body: + AdminEditAccountDto	Check if old information is changed and update the account, then redirect to the previous page	Nhân
5	DELETE /admin/IndividualAccount Request param: + account_id	Soft delete 1 account and redirect to the previous page	
6	GET /admin/templateIndividualAccount	Return dummy information of an individual account	
7	POST /admin/IndividualAccount Request body: + AdminCreateAccountDto	Create a new account and redirect to the previous page	
8	PUT /api/updateAccount/{id} Path variable: id Request body: Account DTO	Update account	Lộc
9	GET /api/signIn	Sign in	

	Request param: + email + password		
10	POST /api/signUp/{role} Path variable: role Request body: Account DTO	Sign up	
11	GET /api/allProductsCustomer Request param: + lastProductsId + fectNum	Get all products with customer role	
12	GET /api/product/manager/{name} GET /api/product/manager/ GET /api/product/manager (branch linh-branch-1)	Manager search for product	
13	GET /api/product/customer/{name} GET /api/product/customer/ GET /api/product/customer (branch linh-branch-1)	Customer search for product	Linh
14	GET /api/product/customer/most-buy-product (branch linh-branch-1)	Customer see 5-10 most buy products	
15	GET /bill/order/{orderId} PathVariable: orderId	Get bill of order	
16	POST /bill/addBill RequestBody: billDto	Get all bill	Khoa
17	PUT /order/status/{id PathVariable: id RequestBody: orderDto	Update to change status of order	
18	GET/api/orders RequestBody: orderDto	Get all orders in database	
19	GET/api/carts RequestBody: cartDto	Get all carts in database	
20	POST/order/createOrder RequestBody: orderDto	Create order	Hà
21	DELETE/cart/product/{id} PathVariable: cart id, product id RequestBody: cartDto	Delete product in cart	
22	Connect database and auto generate table		

Official project (Food Service V1)

No.	API	Chức năng	Người làm
1	GET /api/admin	Admin homepage	
2	GET /api/admin/admins	Manage admins' account page	
3	GET /api/admin/customers	Manage customers' account page	
4	GET /api/admin/restaurants	Manage restaurants' account page	Nhân
5	GET /api/admin/create-admin	Create admin page	INIIdii
6	GET /api/admin/update-admin/{email}	Admin information page	
7	GET /api/admin/create-customer	Create customer page	
8	GET /api/admin/update-customer/{email}	Customer information page	
9	GET /api/admin/create-restaurant	Create restaurant page	
10	GET /api/admin/update-restaurant/{username}	Restaurant information page	
11	GET /api/admin/login	Admin login page	Bách
12	POST /api/admin/admin	Create new admin	
13	POST /api/admin/customer	Create new customer	
14	POST /api/admin/restaurant	Create new restaurant	Hà
15	PUT /api/admin/admin	Update admin information	Bách
16	PUT /api/admin/customer	Update customer	Hà

		information		
17	PUT /api/admin/restaurant	Update restaurant information		
18	DELETE /api/admin/admin/{email}	Delete admin	Bách	
19	DELETE /api/admin/customer/{email}	Delete customer		
20	DELETE /api/admin/restaurant/{username}	Delete restaurant	Hà	
21	POST api/admin/login	Admin login		
22	GET /api/admin/logout	Admin logout	Bách	
23	GET /api/customer	Customer homepage		
24	GET /api/customer/login	Customer login page		
25	GET /api/customer/restaurant/{username}	Menu of restaurant for customer page		
26	GET /api/customer/register	Customer register page		
27	GET /api/customer/profile	Customer profile page		
28	GET /api/customer/orders	Page for manage order for customer	Lộc	
30	GET /api/customer/order-confirm/{orderId}	Page for order approval for customer		
31	GET /api/customer/order/{orderId}	Page for order detail for customer		
32	GET /api/customer/chat	Page for AI chat for customer		
33	POST /api/customer/customer	Create new customer	1112	
34	POST /api/customer/order	Create new order	Hà	
35	POST /api/customer/chat/request	Send message to AI chat	Linh	
36	PUT /api/customer/customer	Update customer information	Bách	
37	PUT /api/customer/customer/{email}	Delete customer		

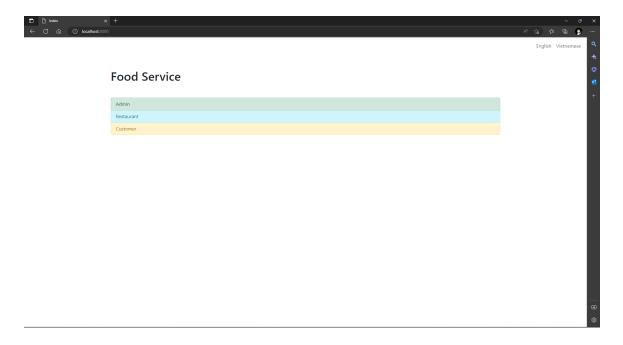
38	POST /api/customer/login	Login for customer	Hà
39	GET /api/customer/logout	Logout for customer	
40	GET /api/restaurant	Restaurant homepage	
41	GET /api/restaurant/login	Restaurant login page	
42	GET /api/restaurant/register	Restaurant register page	
43	GET /api/restaurant/profile	Restaurant profile page	Khoa
44	GET /api/restaurant/create-food	Page to add new dish for restaurant	
45	GET /api/restaurant/update-food/{id}	Page for update dish for restaurant	
46	GET /api/restaurant/orders	Page for manage orders for restaurant	
47	GET /api/restaurant/order/{orderId}	Page for order detail for restaurant	
48	GET /api/restaurant/chat	Page for AI chat for restaurant	
49	POST /api/restaurant/restaurant	Create new restaurant	
50	POST /api/restaurant/food	Create new dish for restaurant	
51	POST /api/restaurant/chat/request	Restaurant send message to Al	
52	PUT /api/restaurant/restaurant	Update restaurant information	Linh
53	PUT /api/restaurant/food	Update dish detail for restaurant	
54	DELETE api/restaurant/restaurant/{username}	Delete restaurant	
55	POST api/restaurant/login	Login for restaurant	
56	GET /api/restaurant/logout	Logout for restaurant	
		•	

III. Result

Home page

- First, we see the home page. The home page includes 3 roles: Admin, Restaurant,

Customer.



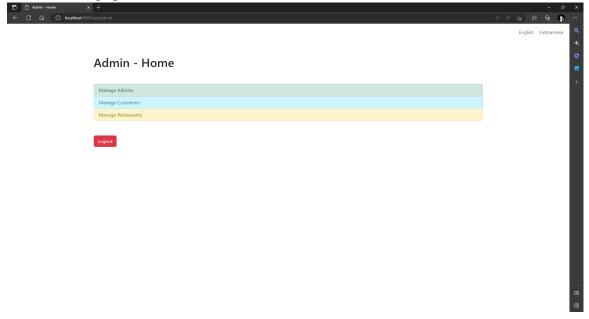
- We will click the button corresponding to our role.

Admin site

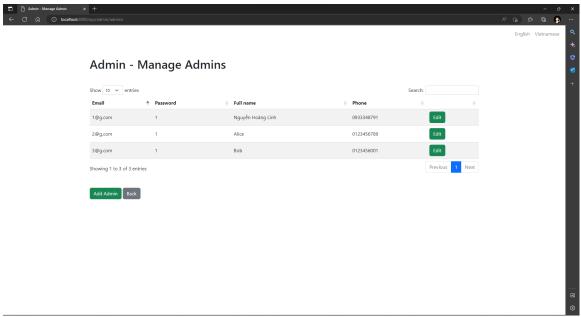
In this project, we assume that the admin role has permission to manage all accounts (view accounts registered, update information, and create or delete an account).

When users sign in successfully as the admin role, the Admin - Home page will be displayed with three types of accounts that the system has: Admin, Customer, and Restaurant.

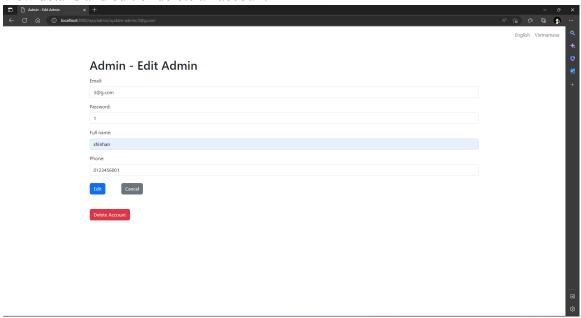
Admin Home page



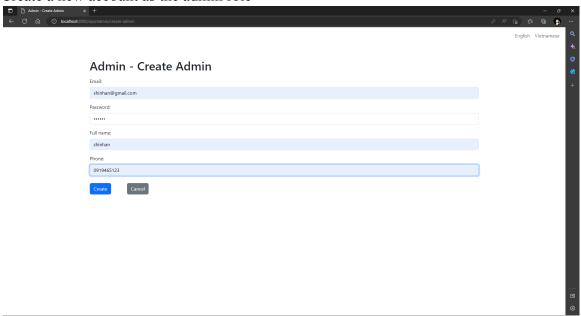
View all Admin accounts



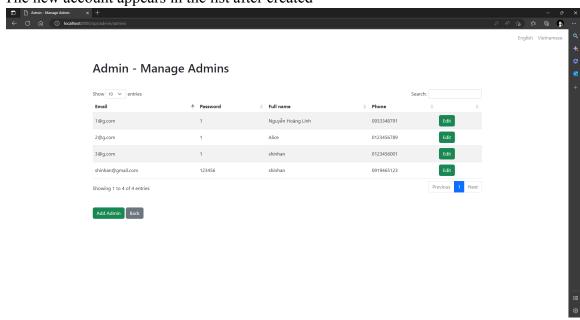
View details and edit or delete an account



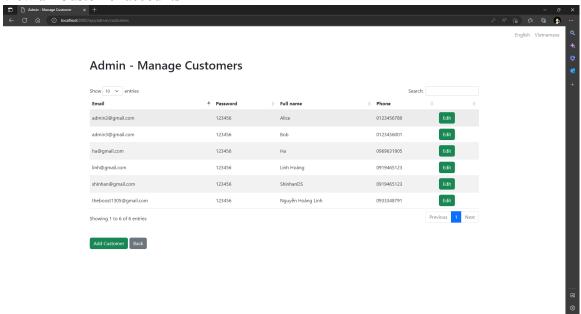
Create a new account as the admin role



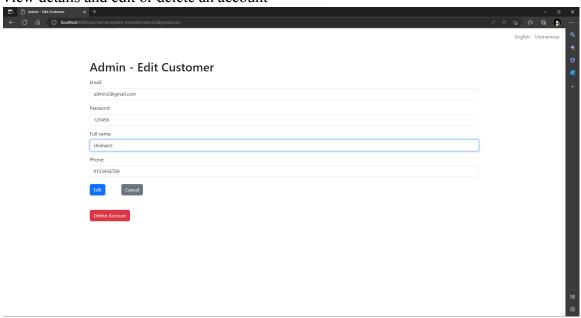
The new account appears in the list after created



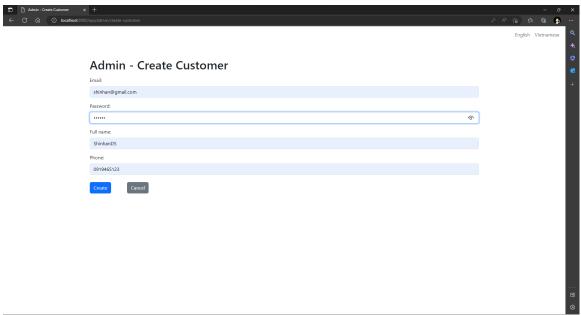
View all Customer accounts



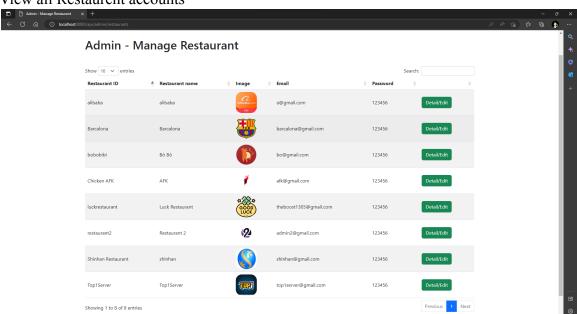
View details and edit or delete an account



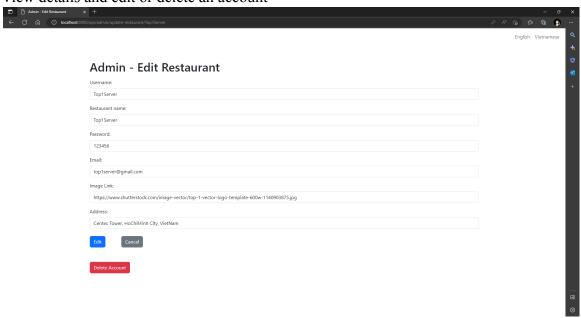
Create a new account as the customer role



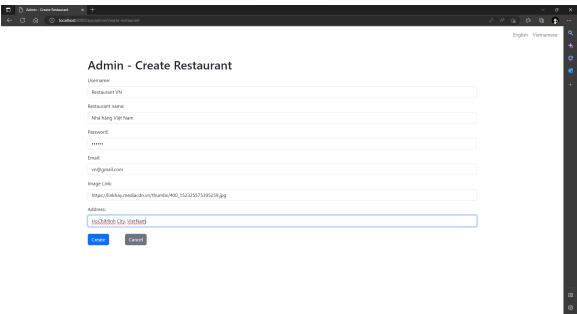
View all Restaurent accounts



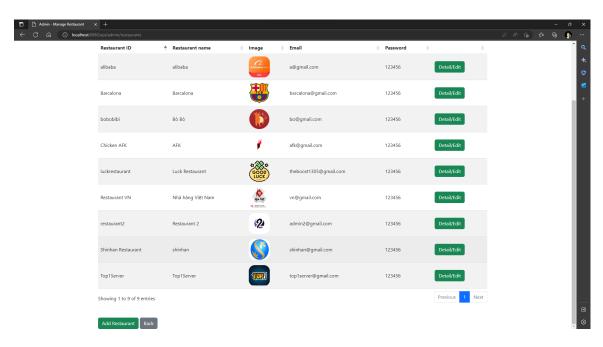
View details and edit or delete an account



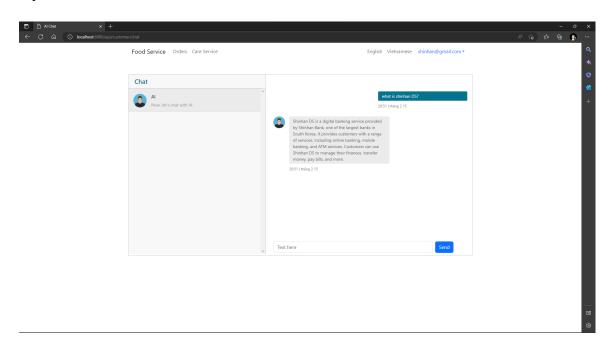
Create a new account as the restaurant role

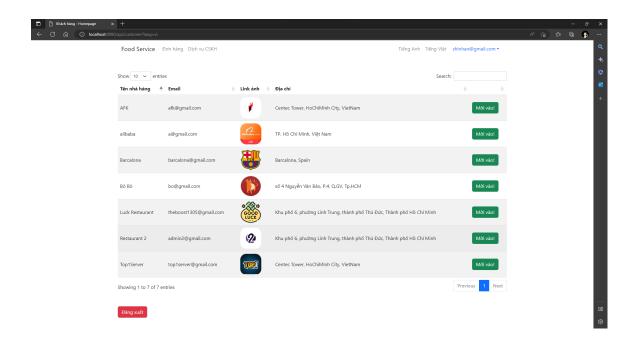


The new restaurant appears on the list after created



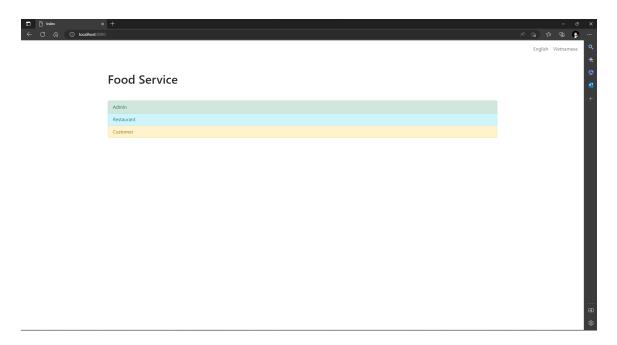
The admin site also included AI chat bot and multi language services to help better the experience of the admin



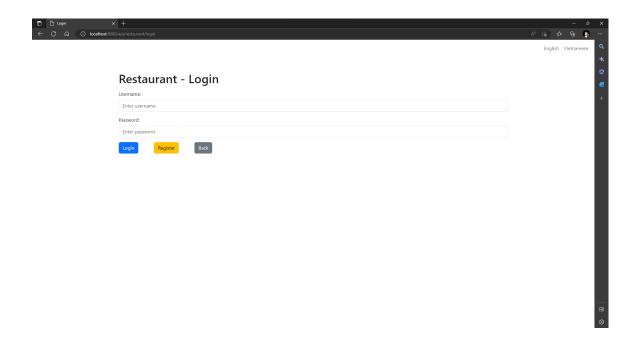


Restaurant site

- First, we see the home page. We'll click the "Restaurant" button.



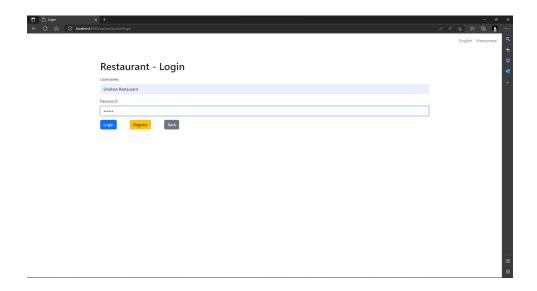
- Clicking on Restaurant will display Restaurant's Login page.



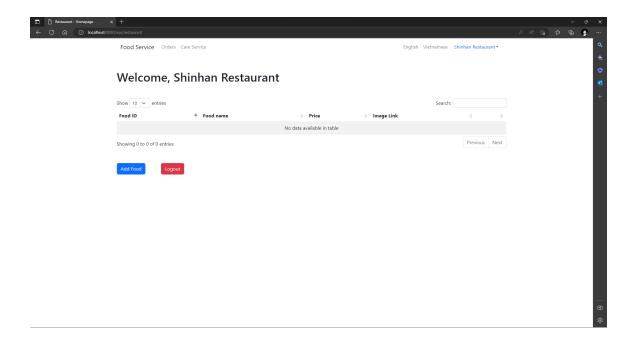
- Next, we choose "Register" to create Restaurant's account. Fill in the fields according to the correct title and click "Register" or "Cancel" to return to the Restaurant's Login page.

□ 🖰 Pestavani-Pagister x +	- a x
← → ♂ ♠ ⊙ localhost 0000/ap/hestsurant/register	2 A G 😉 📵 🚱
	English Vietnamese Q
	+
	•
Restaurant - Register	<u> </u>
Username:	+
Shinhan Restaurant	
Restaurant name:	
shinhan	
Password:	
Enter password	
Email:	
shinhan@gmail.com	
Image Link:	
https://inkythuatso.com/uploads/images/2021/12/logo-shinhan-finance-inkythuatso-01-15-14-43-05.jpg	
Address:	
Centec Tower, HoChiMinh City, VietNam	
Register Cancel	
Negotia Canca	
	a

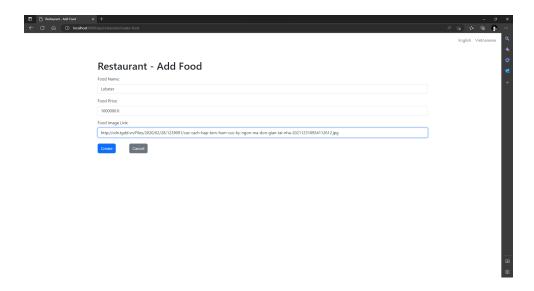
- Back to the Restaurant's Login page, we enter the account we created earlier and click "Login" or "Back" to return to the home page.



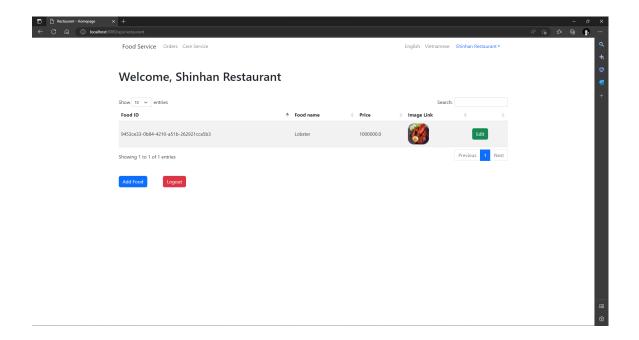
- Then, the Website shows us the food list of Restaurant in the data.



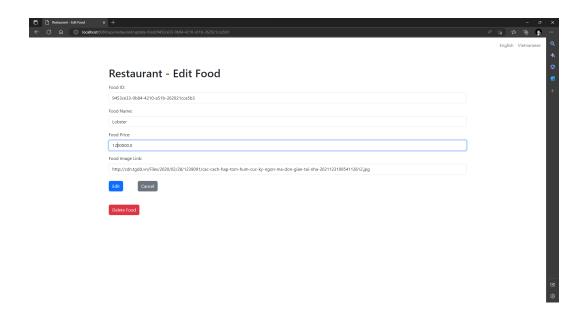
- We can add food with the button "Add Food" or log out to return to the Restaurant's Login page with the button "Logout". If you click the button to add food, fill in the fields according to the correct title and click "Create" or "Cancel" to return to the food list or restaurant.



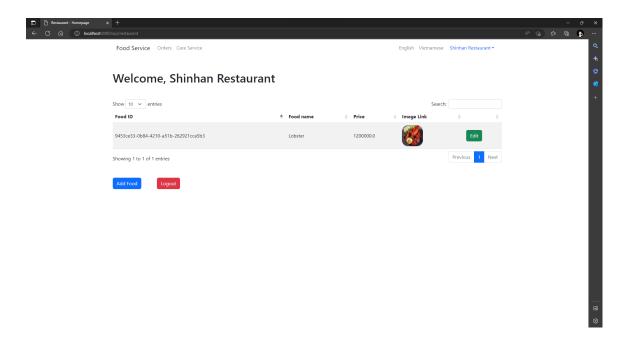
- Here is the interface screen of the Restaurant's food list when food has been added.



- We can edit food with the button "Edit Food". Here, we can Edit or Delete Food. We need to fill in the formation if we want to edit food. Click the button "Cancel" to return to the restaurant's food list.

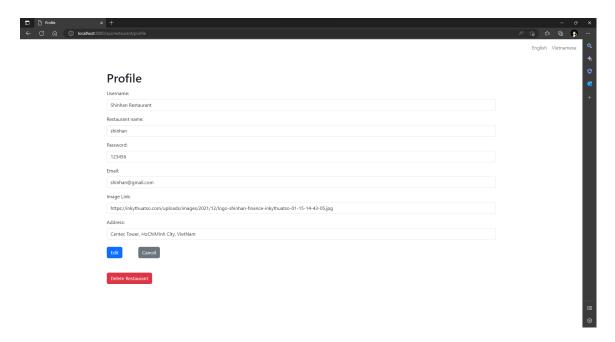


- This is what it looks like after editing the lobster food price from 1.000.000 to 1.200.000. We can search by food name with Search bar or show the number of entries you want to see or move between pages corresponding to the buttons displayed on the interface screen.

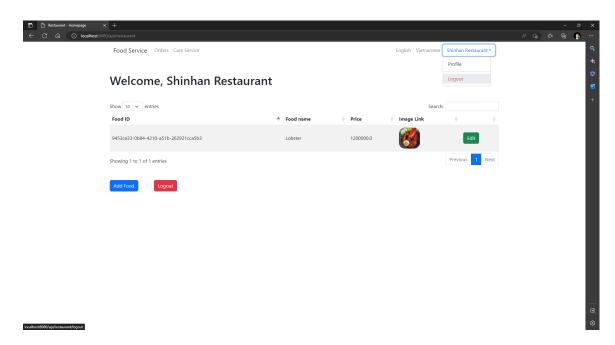


- In the top right corner, we click on the Restaurant's profile, it will show the Profile page.

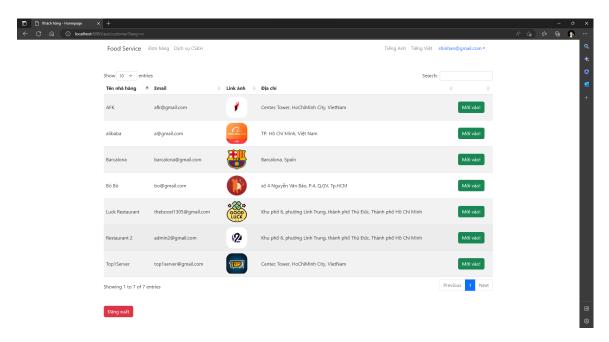
Here, we can "Edit" or "Delete Restaurant". We need to fill in the form if we want to edit our profile. Click the button "Cancel" to return to the food list of Restaurant.



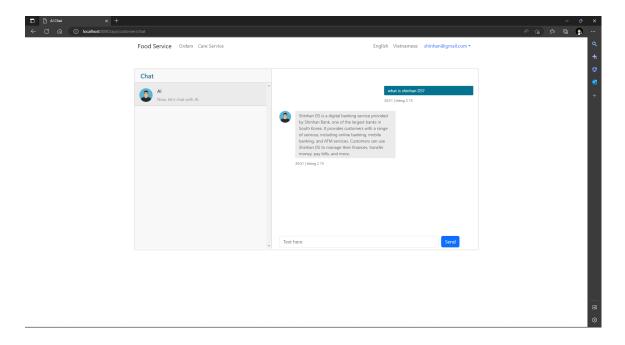
- Still in the top right corner, we can click "Logout" to return to the Restaurant's Login page.



- We can change language between English or Vietnamese in the top right corner. We can check the order of the restaurant's food list in the top left corner.

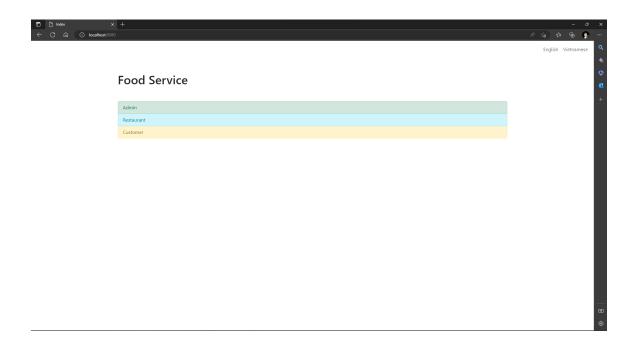


- Select the "Care Service" for chatting with AI Chatbot. Here, we can ask anything in the chat bar.

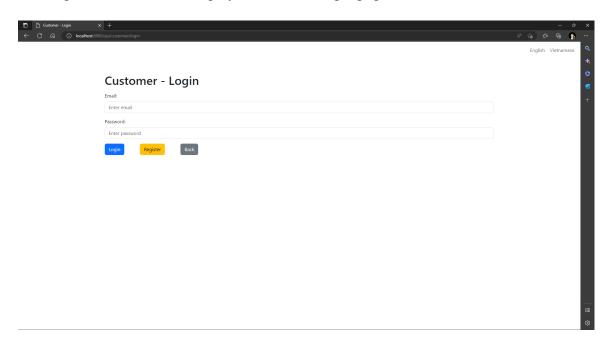


Customer site

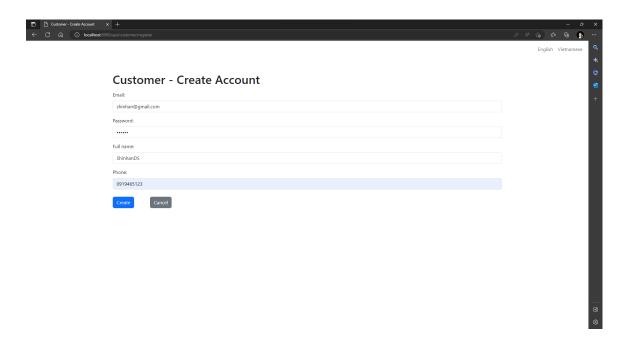
First, we see the home page. The home page includes 3 roles: Admin, Restaurant, Customer.



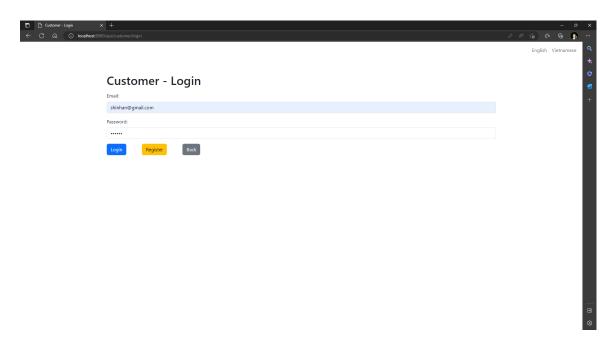
Clicking on Customer will display Customer's Login page.



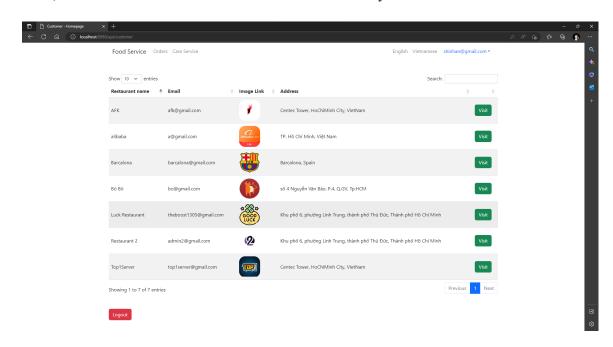
Next, we choose "Register" to create an account. Fill in the fields according to the correct title and click "Create".



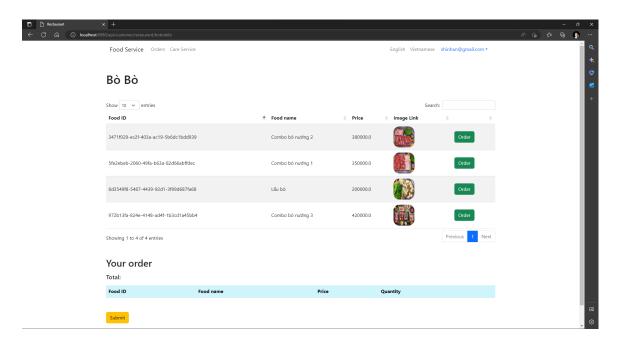
Back to the Customer's Login page, we enter the account we created earlier and click "Login".



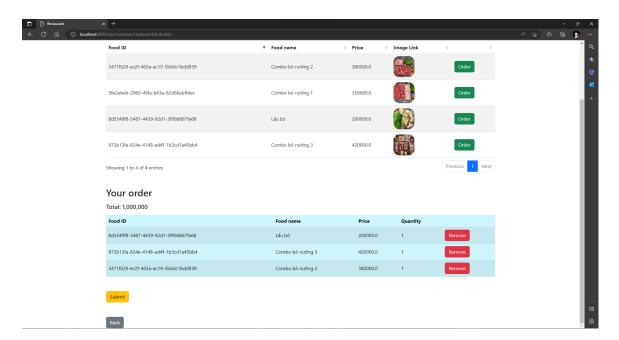
Then, the Website shows us the list of restaurants already in the data.



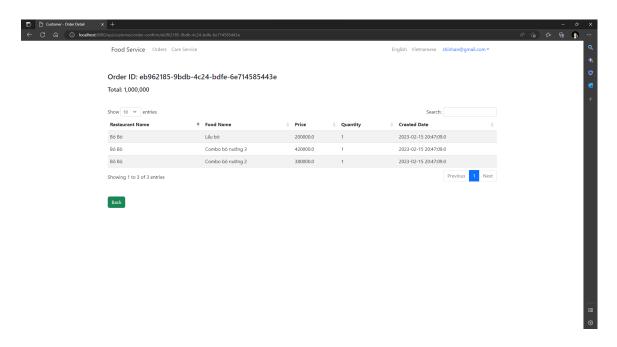
Click "Visit" to see the restaurant's dishes.



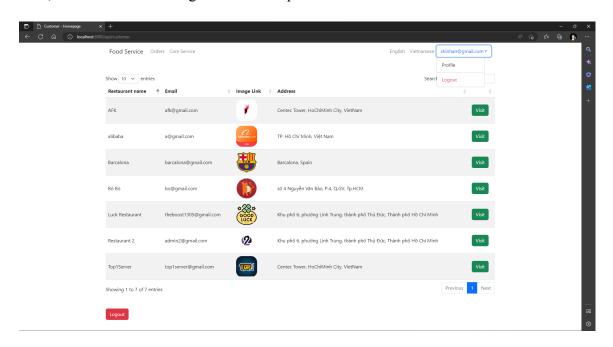
Then, we click "Order" to order the food, it will be put into Your Order.



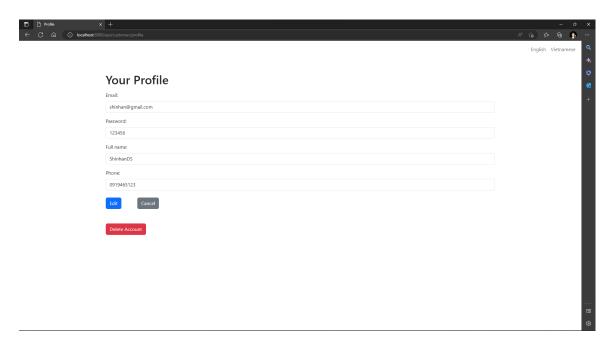
After clicking "Submit", the Website will display the Order Detail page, the dishes that you have ordered.



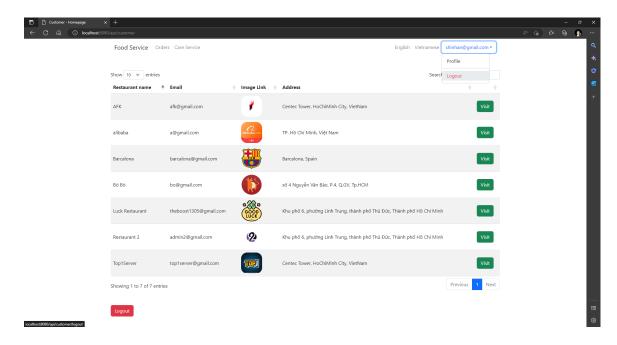
Next, the feature of viewing a Customer's profile.



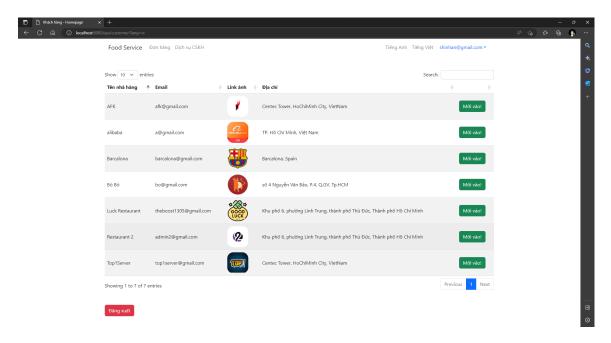
After clicking "Profile", Website displays Customer's profile page. Includes Customer information. You can edit those fields by clicking "Edit".



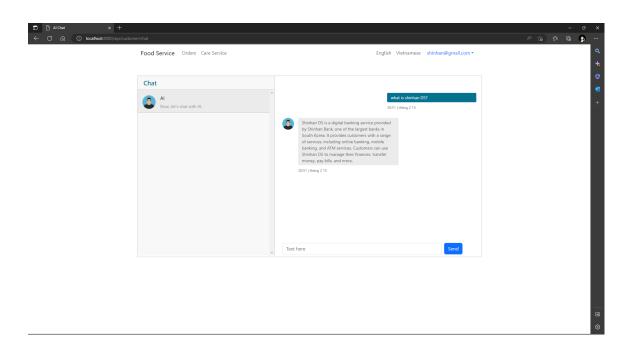
Finally, the Customer's Logout feature, when clicking "Logout". The Account will be logged out and the Website will return to the Login page.



In addition, other features such as multi-language



And AI Chatbot.



IV. Skills and Experiences

Clean code: We put a lot of time and attention into learning how to write clean code and how to utilize code. Although the process initially took a lengthy time, it was tremendously beneficial for the project's upkeep and future expansion.

Communication: We had the chance to speak with mentors and other teammates face-to-face about issues when tasks were assigned during working on the project. We've learned a lot from listening to people describe how to process and identify information. We've also improved our communication and discussion skills.

Teamwork: Working successfully as a team is essential in the workplace. Although school projects have helped us strengthen our collaborative skills, the course still affords us more opportunity to do so. We particularly know how to listen and communicate with coworkers. Additionally, it is in charge of finishing the assignment on time in order to avoid interfering with the team's work. This will serve as a solid foundation for our future success.

Note Taking: It is challenging to recall all the details of a meeting that lasts for at least 30 minutes while working. As a result, taking good notes can help you retain the information and concentrate more throughout the meeting.

Task Estimation: While some jobs appear to be straightforward, they are not. In order for tasks to be approximated as accurately as possible, workers must have a

thorough understanding of their duties through working on numerous other tasks. We've completed a moderate number of activities while working on the project, so we can anticipate that our estimation of the tasks will be more accurate than it was previously.

v. Conclusion

We had the chance to learn and use our skills in a joyful and studyful environment throughout our training at ShinhanDS with Likelion Vietnam. Likelion Vietnam has given us a wealth of support and practical knowledge that is hard to acquire while still in school. We've learned how to arrange our work professionally and carefully as a result of working on the project with the mentor of Likelion Vietnam. It was also a chance for us to get to know the team members and work with each other. The training program was not only a chance for us to learn new skills and complete requirements for our academic programs; it also provided us with time to hang out and enjoy ourselves.