

Online-Street Food Delivery

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1-INTRODUCTION

- Program of delivery of applications from home or vehicle beneficiary
- The website industry allows the seller or beneficiary to easily request and delivers the use and dealing.

- **2- Problem Statement :**

- Due to the changes in life style in Saudi Arabia and because people being busy and not able to wait for collecting their meals directly from the restaurants, the idea of this project comes to stage to ease food ordering and save customers time and effort. The proposed web application will handle food ordering process through multiple sellers by letting them upload their products to the system which in turn allows customers to select meals from different menus.

- **Project components :**

- 1- Street-food Truck Delivery System
- 2- Sellers
- 3-Delivery
- 4- Customers

- **Project Objectives of the :**

- Provide job opportunities through delivery of applications
- To provide a new delivery service
- To facilitate the sale of food products

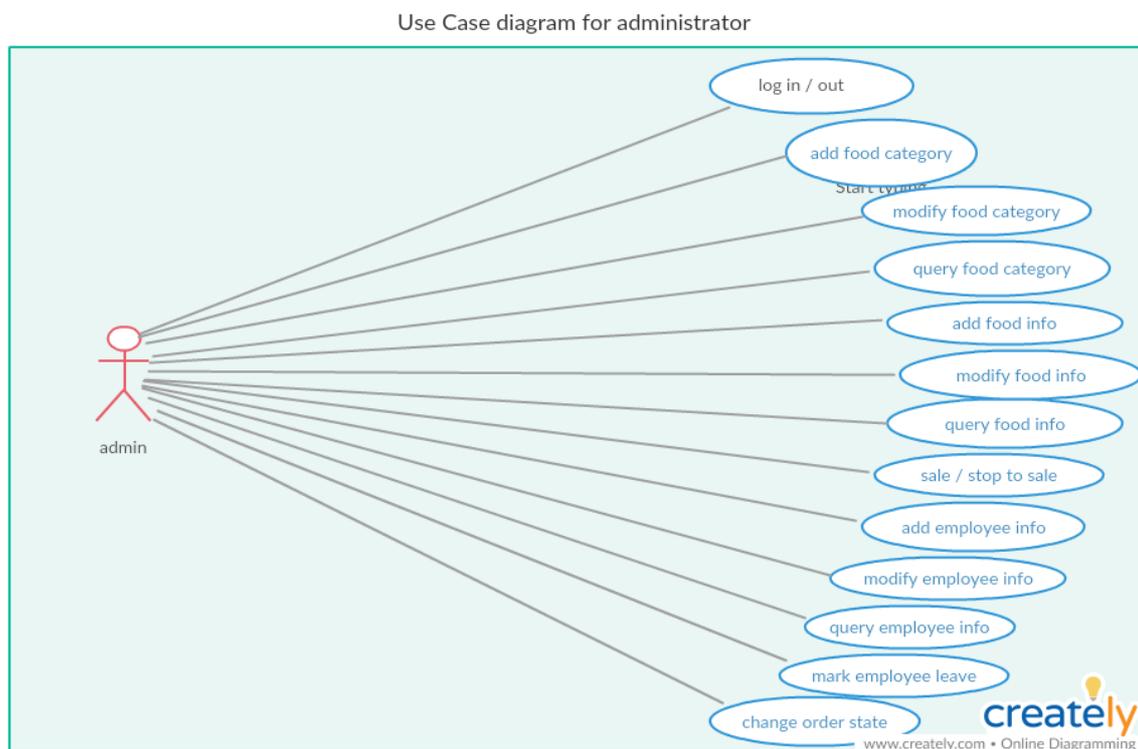
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UML diagram :

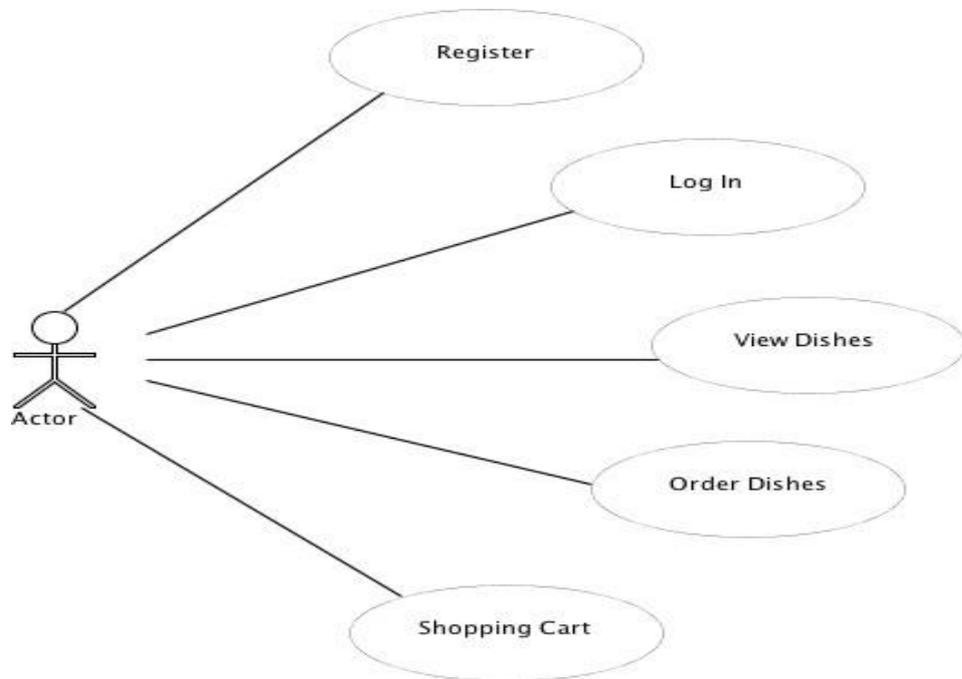
- Food Ordering Application is the key to solve this problem. Using this application, the customers need not go to the restaurant by themselves, but they can order the dishes through computers or smart phones.

4- USE Case

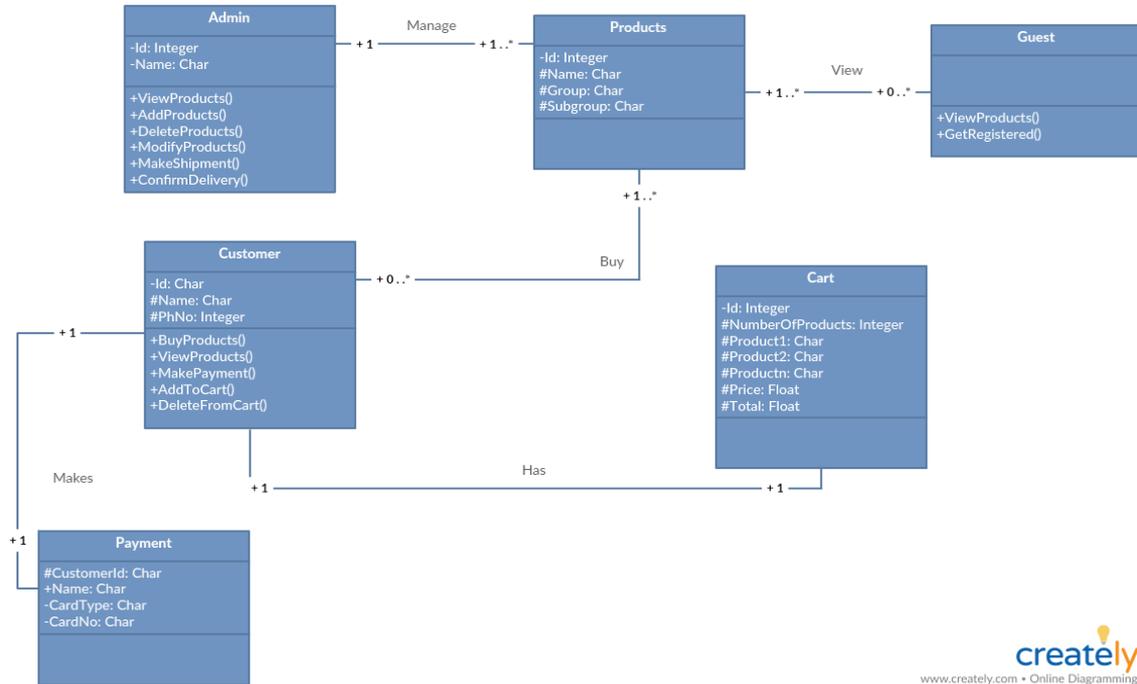
is a use case diagram to illustrate the main functions in the background for the administrator. The detailed description of functions is as follows:



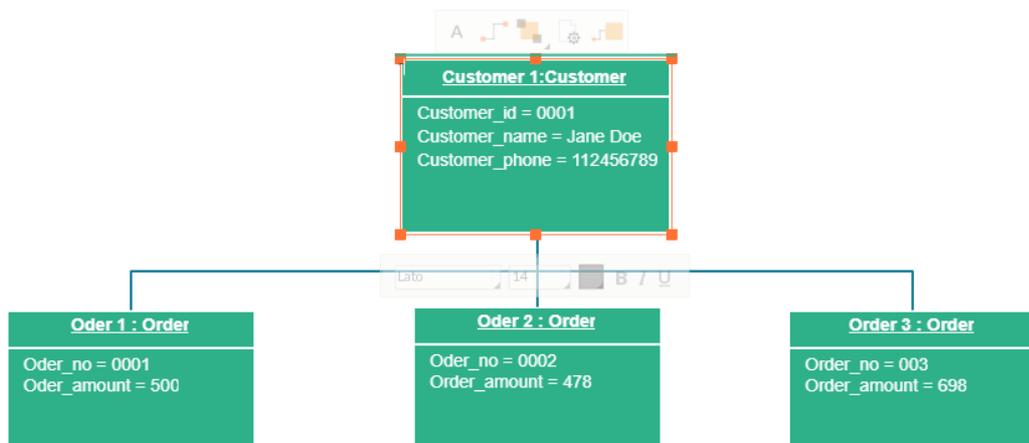
shows the core functions provided for customers in this application.



5-Class Diagram



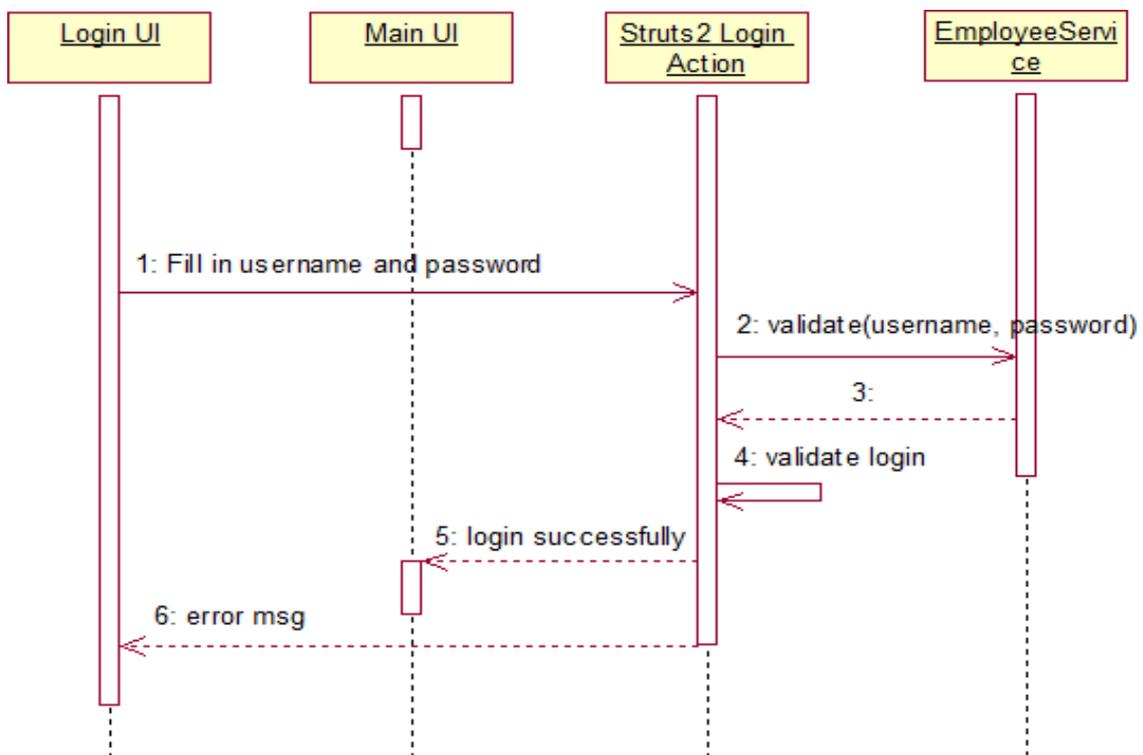
6-Object Diagram:



7- Sequence Diagram

The sequence diagram of main modules in Background Management Platform shows here. Since Website Foreground Public Page and Android Application have the same purchase sequence logic, so the purchase sequence in these both platforms will be analysed in this chapter as well.

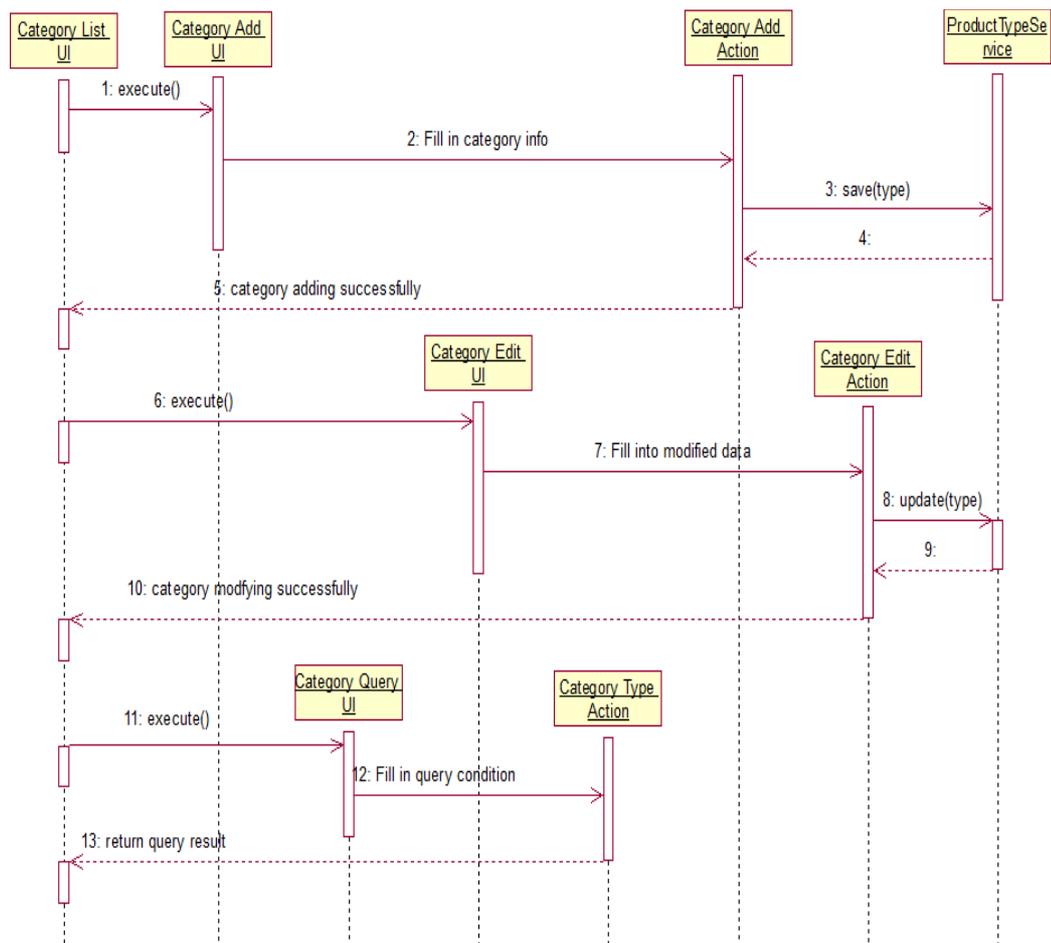
The administrator needs to login first before using the Background Management Platform. An account username and password for the owner of company will be pre-setted when the project is initialized.



Background Management Platform Login

The administrator fills in the username and password in the related fields and presses the login button. If the login is successful, the url will direct to the Background Management Platform main UI, otherwise, the user will be notified with an error message.

Application provides function to allow customers to view dishes according to different categories. Therefore, administrator needs to add to categories first.



Product Category Management

To add dish to display on the website or Android, the administrator should add dish categories first, in order that display dishes according to different categories.

1. Add Category:

In the Product Management, by clicking “Category Manage”, a list view page of current existing dishes will be shown. By clicking “Add Category” button, the right frame will jump to the category adding UI. Required data is filled in, then it is confirmed, and a dish will be added successfully. At the same time, the right frame will jump back to the category list view page, the new added dish will be displayed on this page.

Modify Category:

On the category list view page, every category item provides a “Modify” button, by using this button, the administrator can modify the existing dish information.

2. Query Category:

In addition, there is a “Query” button. This button can help the administrator to query some dish category among lots of categories.

3.2.2.3 Product Info Management

After adding categories, administrator can add dishes belong to different categories in Product Management module.

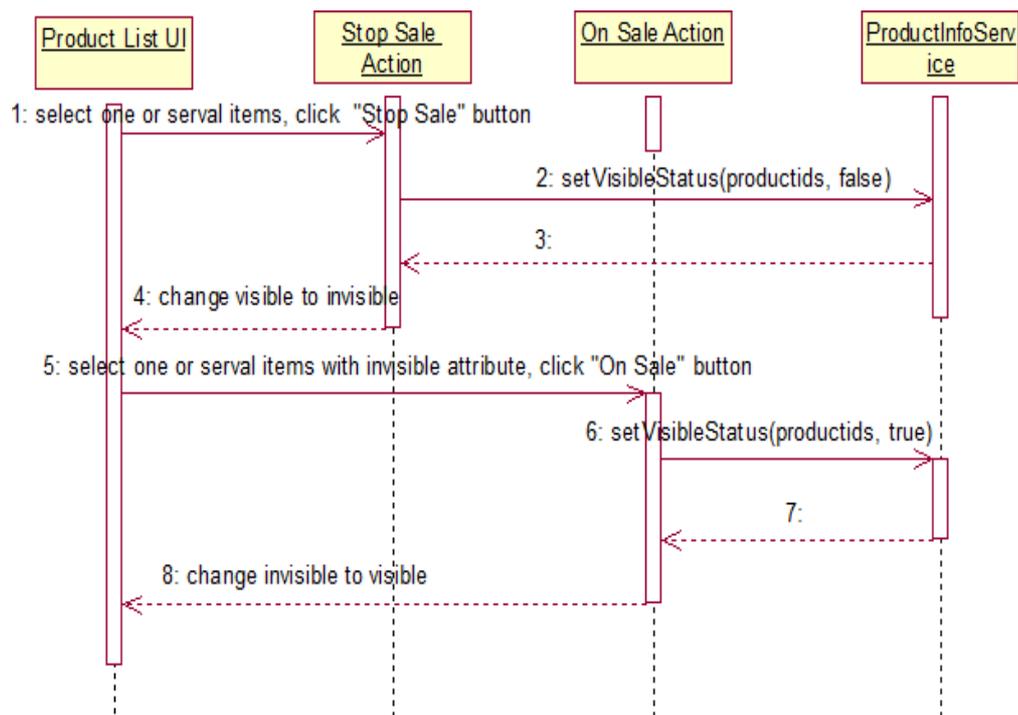


Figure 18. Product Information Management

In the Product Management, there is a similar logic to that in Product Category Management, such as adding, modifying and querying. Therefore, no detailed description is given here.

Stop or start selling

On the product list view page, there are two buttons: On Sale and Stop Sale. By using these two button, the administrator can control the sale state of food dish in order to display or remove a food dish on the website foreground public page or the Android application.

3.2.2.4 Employee Management

The Employee Management also has a similar logic to that referred above. The Mark Leave logic is also the same with the change sale state of food dishes. The employee accounts added by the administrator are used to log in and make use of the background management platform. Once the administrator marks an employee's leave, the employee account will not log in and use this platform any more.

3.2.2.5 Order Management

As mentioned in use case diagram for order flow, figure 19 demonstrates the entire ordering progress.

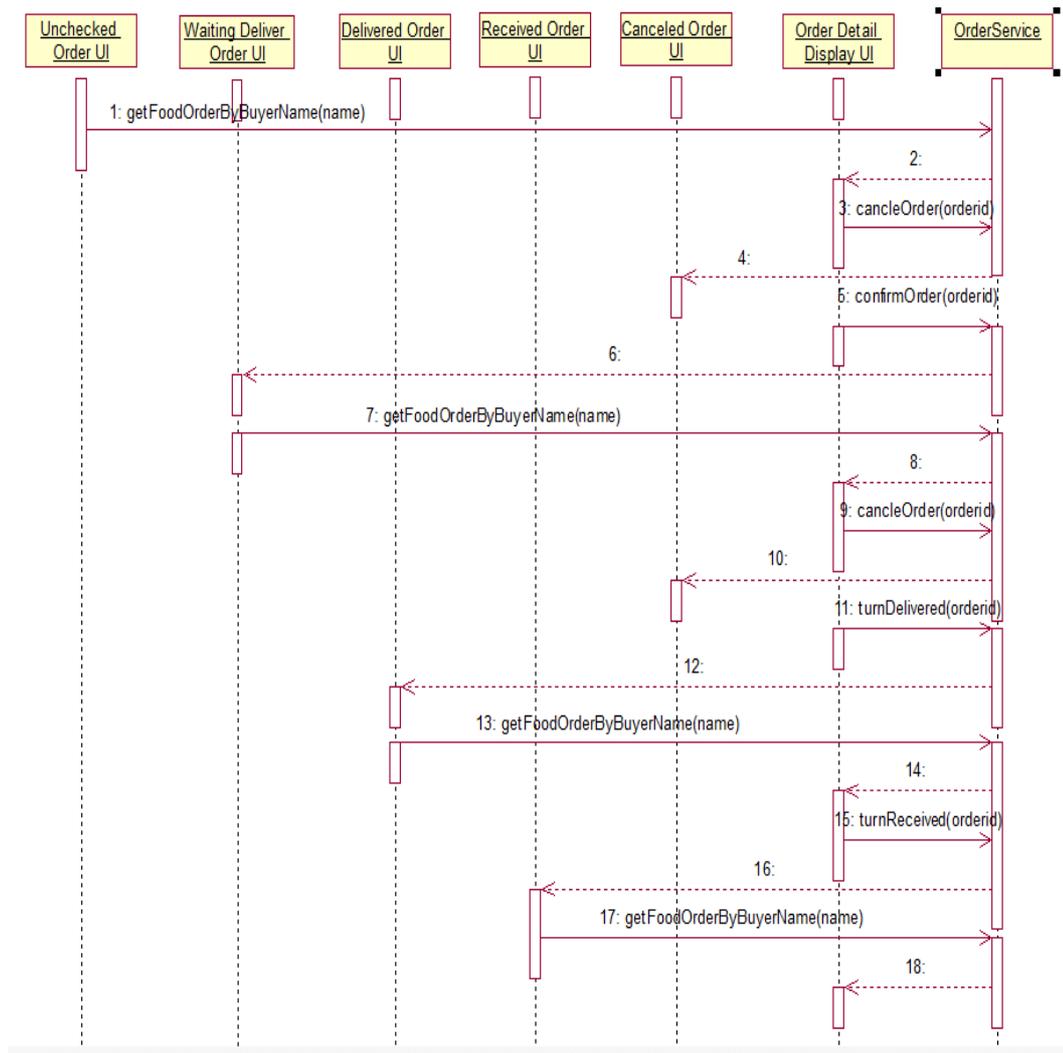
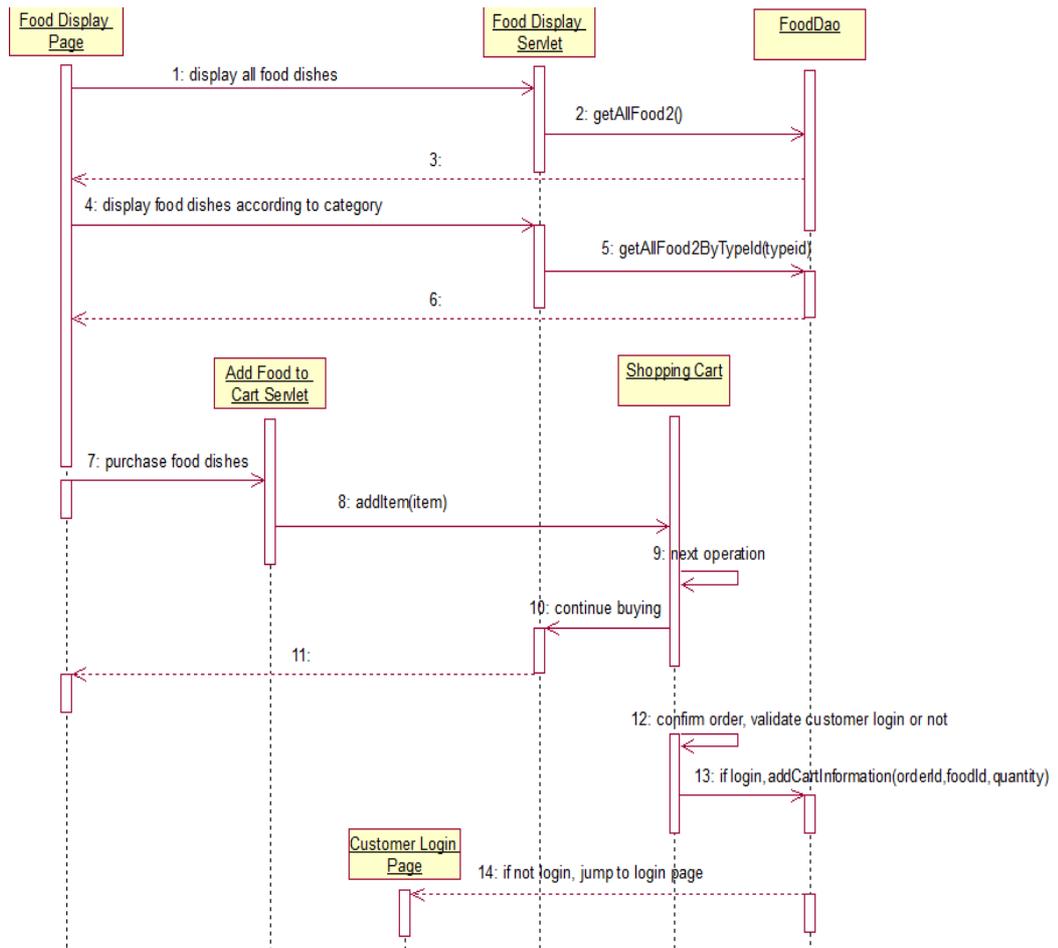


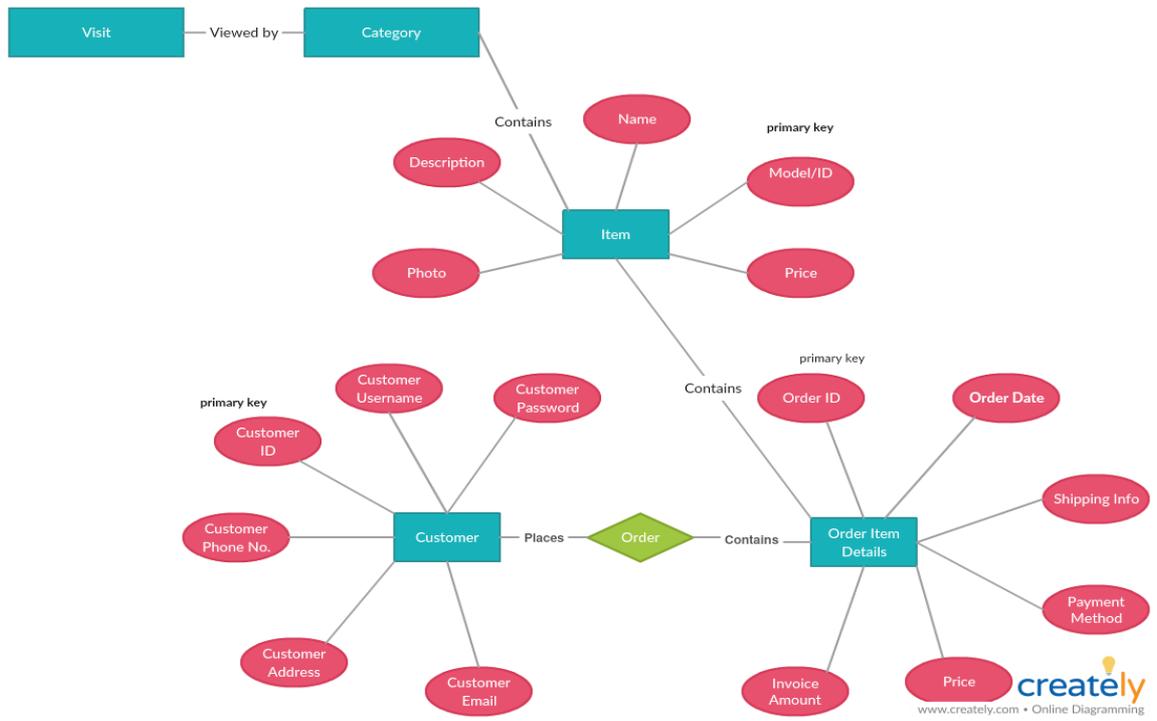
Figure 19. Order Management

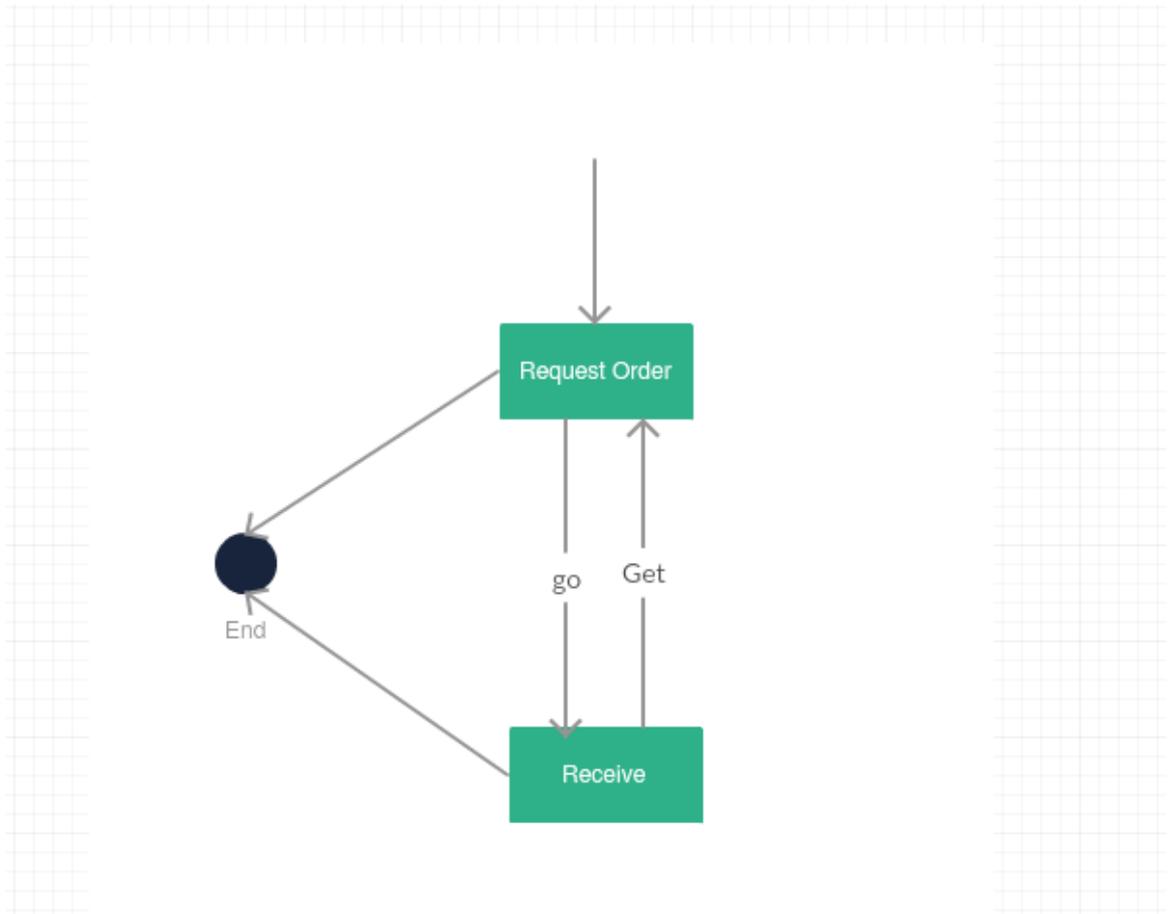
The default state of produced order is unchecked, and the administrator can decide to change the state to waiting deliver or cancel. For waiting deliver state order, the administrator can change state to delivered or cancel. But for delivered order, the state cannot be changed any more.

Purchasing function is the core function in this application. So the purchase sequence diagram will be analysed as follow.



8-ERD :



9-State Diagram :

10 - Interface :

The user interface design was one of the core tasks in this project. The aim of UI design is to make the application to be accepted and used easily by users. The main UI will be shown next.

This section will describe the main GUI design in Background Management Platform

 Administrator Login page



Figure 22. Login page

The administrator need fill in a valid username and password to log in to the Background Management Platform. Here a validation function will check whether the username and password provided by the administrator are valid or invalid, if the username and password are valid, the administrator will log in successfully and enter the Background Management Main page, and otherwise a warning message will show.

4.2.2 Website Foreground Public Page

Dishes Display page

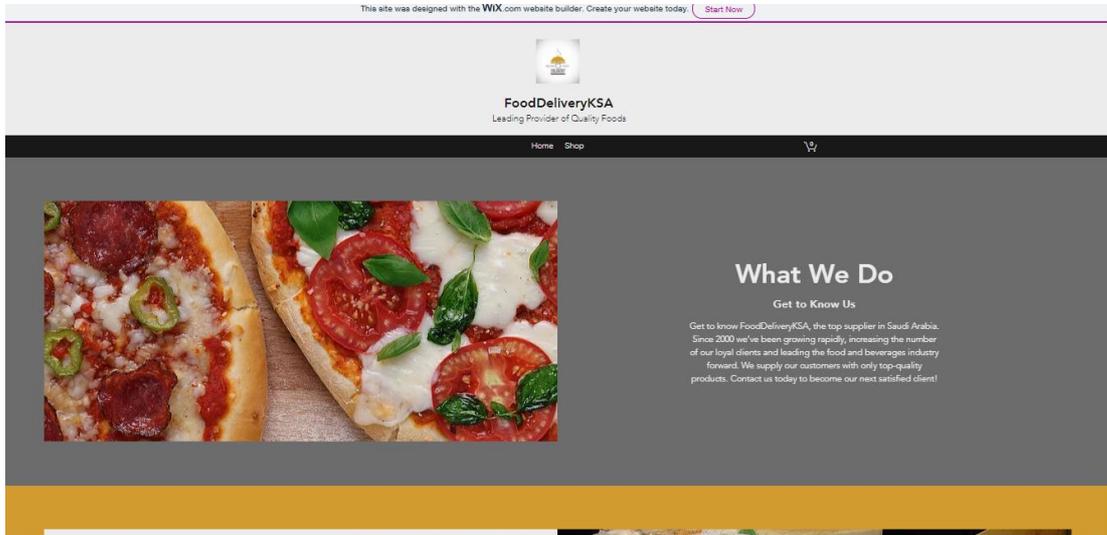


Figure 31. Dishes Display page

The food information, such as image, name and price and so on is shown on the Dishes Display page.

Customer Login page

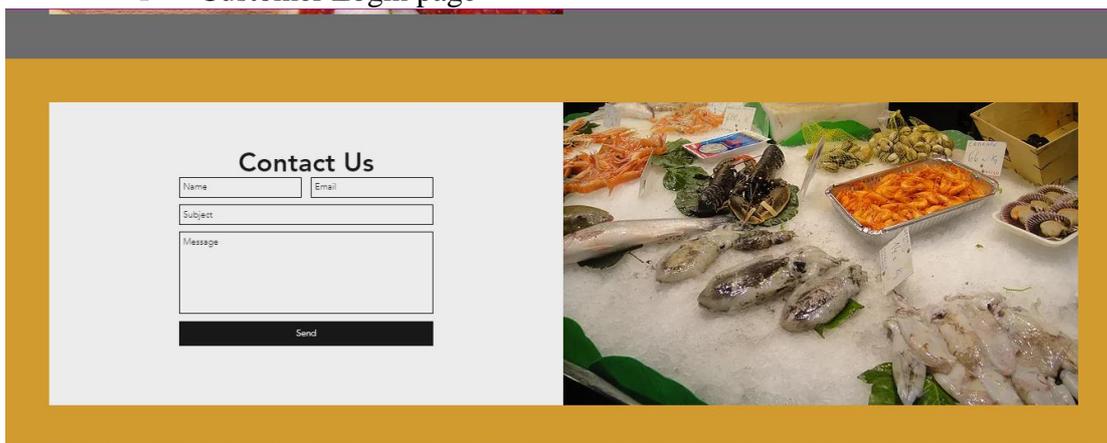


Figure 32. Customer Login page

On the Customer Login page, the customer needs customer to fill in a valid username and password to log into the application.

Shopping Cart page

The Products You Purchased As Follow :

No.	Product Name	Unit Price(€)	Amount	
2	Chilli Beef	14.0	<input type="text" value="2"/>	<input type="button" value="Delete"/>
1	Chilli Chicken	11.0	<input type="text" value="1"/>	<input type="button" value="Delete"/>
6	Bean Curd Soap	8.0	<input type="text" value="5"/>	<input type="button" value="Delete"/>
			<input type="button" value="Update"/>	Total Price(€): 79.0

Figure 33. Shopping Cart page

The dishes ordered by the customer will be added into the Shopping Cart temporarily. The customer can delete dish items, modify dish amount and make other related operations here.

4.2.3 Android Application

 Launch Window

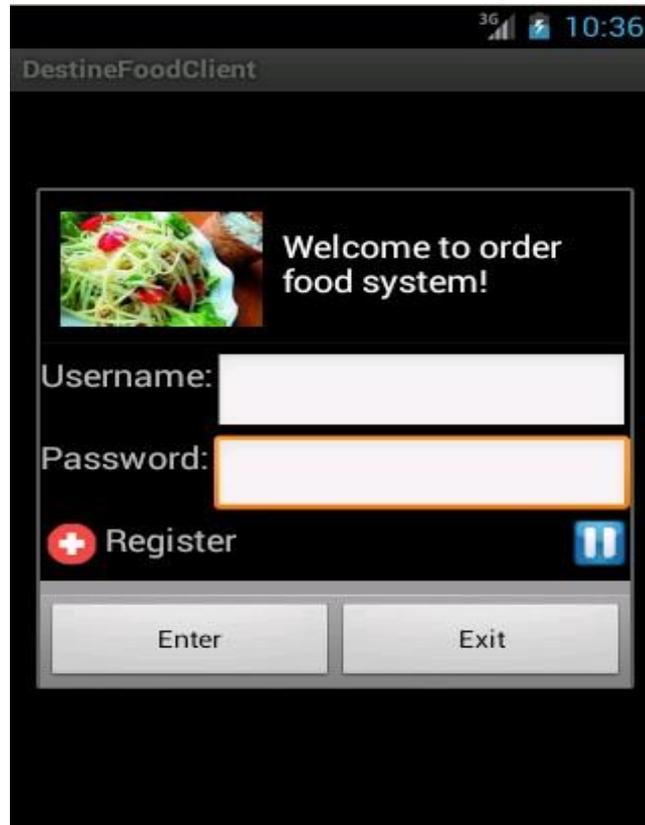


Figure 34. Launch Window

The customer needs a valid username and password to use the Android food ordering application.

 Register Window

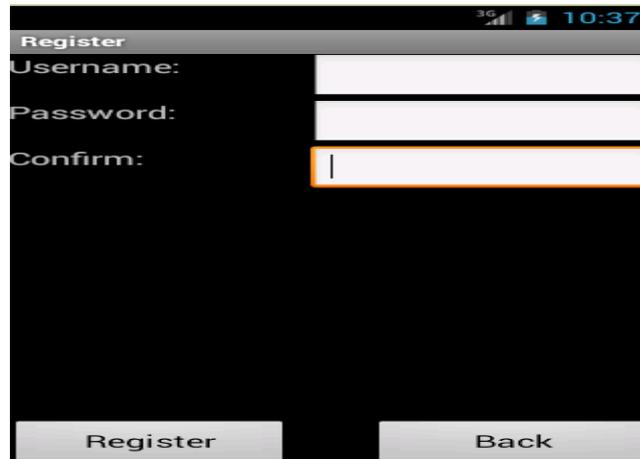


Figure 35. Register Window

If the customer has no account, he can go to the Register Window to register an account.

 Dishes Display Main Window

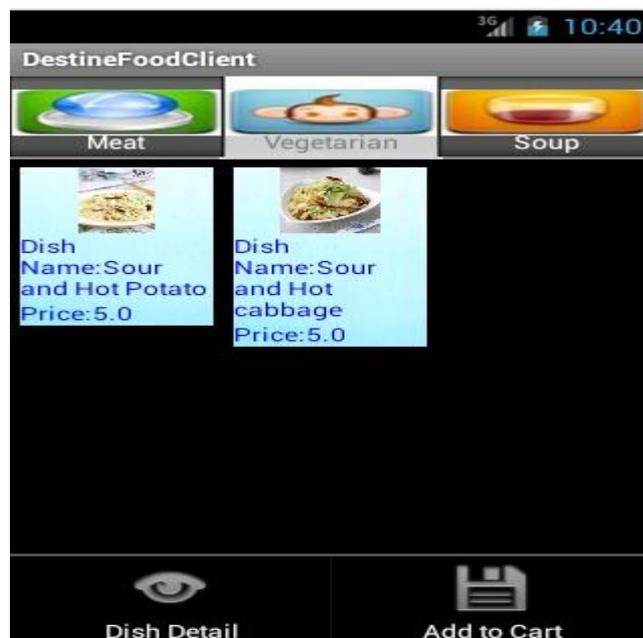


Figure 36. Dishes Display Main Window

The customer can view dishes information according to different food categories.

 Dish Detail Information Window

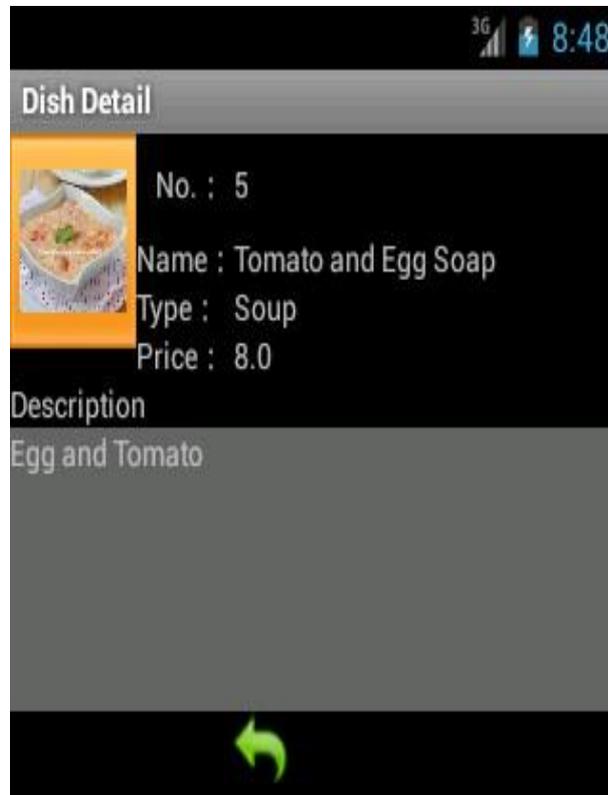


Figure 37. Dish Detail Information Window

The customer can view dish detailed information by touching “Dish Detail” button in the Dishes Display Main Window.

 Shopping Cart Window



Shopping Cart				
	Dish Name	Unit Price	Amount	Sub Price
	Chilli Beef	14.0	2	28.0
	Sour and Hot cabbage	5.0	2	10.0
	Bean Curd Soap	8.0	1	8.0
Total Price			46.0	
Clear cart		Continue buying		Confirm order

Figure 38. Shopping Cart Window

The dishes ordered by the customer will be stored in the Shopping Cart in **Figure 38**.

 Dish Modify Window



Shopping Cart

Dish Name	Unit	Amount	Sub
modify amount or delete item			
			
Amount	<input type="text" value="1"/>		
Update		Delete	Cancel

Figure 39. Dish Modify Window

To touch some dish item, a pop-up window will show. In this window, the customer can modify the number of dishes or delete this dish item.

Order Confirmation Window



Figure 40. Order Confirmation Window

REFERENCES

/1/Strut2 Framework Overview-Struts 2 Framework Overview (2014). Accessed 26.3.2014.

<http://struts.apache.org/development/2.x/>

/2/Strut2 Framework Architecture Overview-Struts 2 Framework Architecture (2014).

Accessed 26.3.2014.

<http://www.roseindia.net/struts/struts2/struts-2-architecture.shtml>

/3/ Spring Framework Architecture Overview-Spring Framework Architecture(2013). Accessed 26.3.2014.

http://www.tutorialspoint.com/spring/spring_architecture.htm

/4/ JPA Framework Overview-JPA Framework Overview (2013). Accessed 26.3.2014.

http://en.wikipedia.org/wiki/Java_Persistence_API

/5/ Wikipedia Foundation. Android (operating system). Accessed 26.3.2014.

http://en.wikipedia.org/wiki/Android_%28operating_system%29#cite_note-google_code-6

/6/ <https://naift170.wixsite.com/website>