

Design Document

Commerce Website Developer – Grocery Shopping

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UML

1. AccountController

The UserAccountController class will be the first part of the application. The users are able to record the personal information and shopping information after they register accounts for this application. In this class, the main method is the register method and login method. In detail, it should be able to check if the user name is unique in the database, check email address format and its unique in the database, check password format, check the correction of the confirm password, encrypt the password and store it to the database, send email, bind email to the user account, set cookie, set password, load account information, modify password and sign out.

The AdminAccountController class will be able to manage the user account operated by administrator.

UserAccountController

checkUserName
checkEmail
checkPassword
checkConfirmPassword
encryptPassword
sendEmail
bindEmailToAccount
register
login
checkUserAccount
setCookie
setPassword
loadAccount
modifyPassword
signout

AdminAccountController

add
delete
modify
search

2. SaleController

The UserSaleController is the most significant and largest class in this application. This class will provide all the basic functions of shopping here and will record in the database clearly. It includes adding products or dishes to the shopping cart, removing products from the shopping cart, changing product information, recommend dishes or product, modify shopping cart information and place order. After this a series of processes, the user will be able to find products and buy products well.

For the AdminOrderController, it will be able to manage the order that user created. AdminProductController, AdminDishController, AdminTagController will be able to manage the both new and old products, dishes and tags. These methods above will also modify the database information to achieve the goal.

UserSaleController

addProductToShoppingCart
changeProductInfo
recommendDish
addDishToShoppingCart
recommendProduct
removeProductFromShoppingCart
placeOrder
modifyShoppingCart

AdminTagController

add
remove
modify
search

AdminOrderController

add
remove
modify
search

AdminProductController

add
remove
modify
search

AdminDishController

add
remove
modify
search

3. ShippingController

The UserShippingController will be a class that is responsible for providing 3 different shipping way to choose. It is delivery(), carryout() and carpooling(). There are two extra methods are used to help having the ideal group and the ideal meeting location in the carpooling service.

The AdminShippingController class will be able to modify shipping way, modify shipping information and manage the group of carpooling.

UserShippingController

delivery
carryout
carpooling
createGroup
setMeetingLocation

AdminShippingController

modifyShippingWay
modifyShippingInfo
modifyGroup
addGroup
removeGroup
searchGroup

4. CheckoutController

The UserCheckoutController class will be able to calculate the total amount of the order and shipping fee and record it in the database binding with the order and shipping information.

The AdminCheckoutController class will be able to modify the total amount of the order and shipping fee and modify it in the database as well.

UserCheckOutController

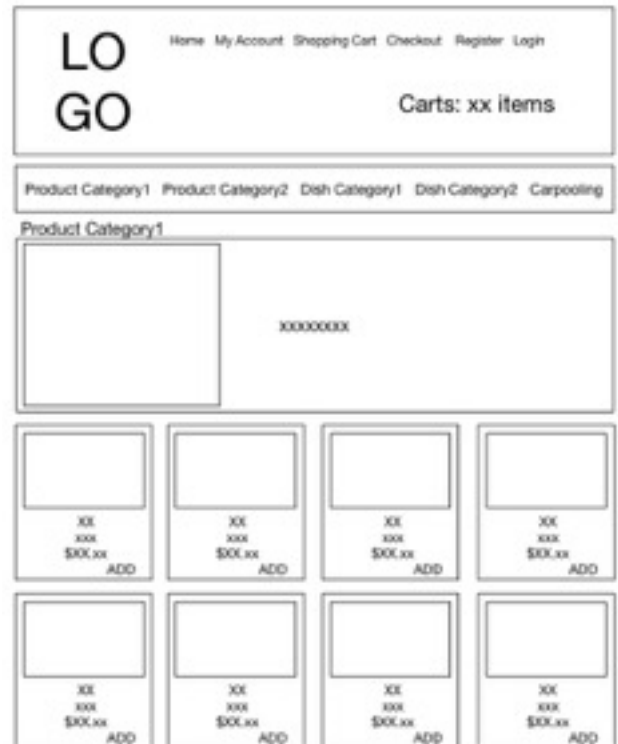
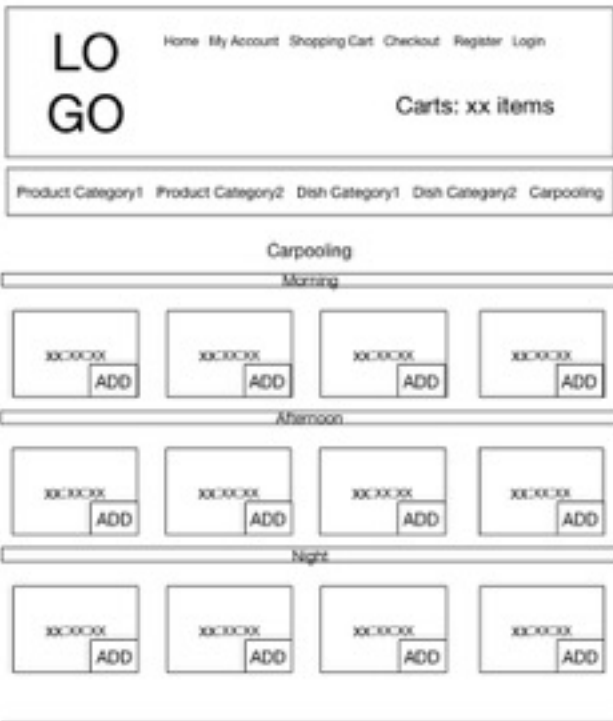
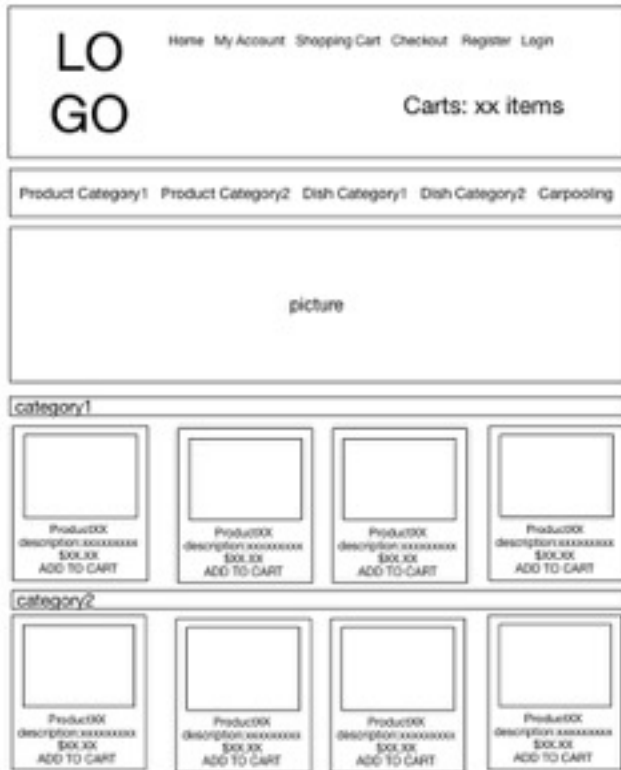
getTotal

AdminCheckOutController

modifyTotal

UI Layout Sketch

These six pictures are the main sketch in my mind. These include index page, register page, carpooling page, category page, product page and dish page. The index page will show all the user information, dish information, production information, shopping car information and category information. The Register page will ask the basic input from the user and create a new account. Carpooling page will provide each time selection and will be able to add them to the shopping cart as well as other products. The Category page will show all the product in this category.



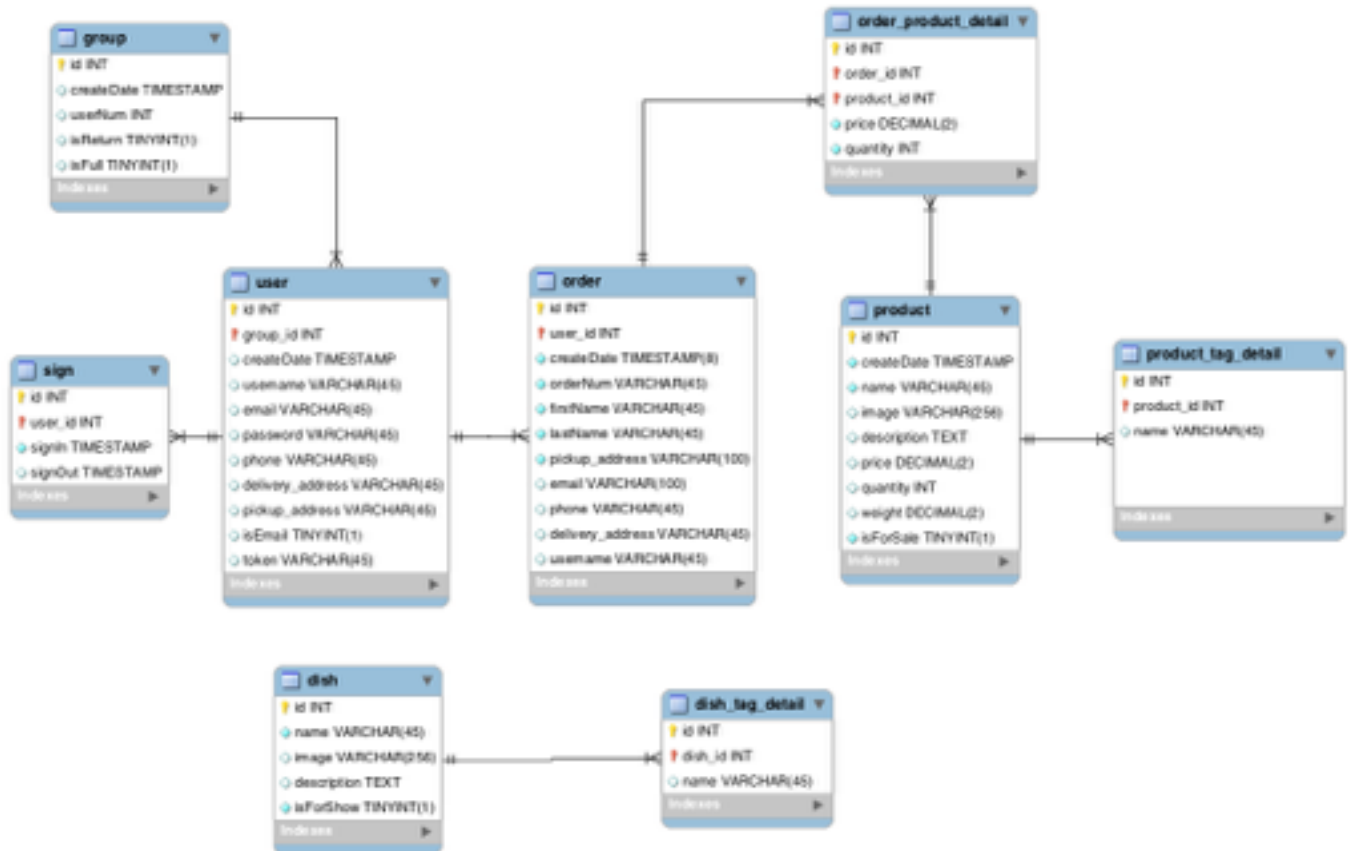
The Product page will be able to describe the product clearly and add them to the shopping cart. Also it will provide option, quantity to choose, provide description and picture to help user to know the product clearly and dish recommendation related to the product. The Dish page will be able to describe the dish clearly as well and add part of the ingredients to the shopping cart also

LO GO		Home My Account Shopping Cart Checkout Register Login	
		Carts: xx items	
Product Category1 Product Category2 Dish Category1 Dish Category2 Carpooling			
	Product Name informationXX informationXX informationXX		
	Price:XX.xx		
	Option: 1.xx 2.xx		
	Quantity: XX		
	<input type="button" value="ADD"/>		
Description1 Description2 Description3 Description4			
Text			
Dish Recommendation			

LO GO		Home My Account Shopping Cart Checkout Register Login
		Carts: xx items
Product Category1 Product Category2 Dish Category1 Dish Category2 Carpooling		
	Dish Name productXX productXX productXX	
	Price:XX.xx	
	Option: 1.xx 2.xx	
	Quantity: XX	
	<input type="button" value="ADD"/>	
Description1 Description2 Description3 Description4		
Text		
Product Recommendation		

Database design E-R diagram

The E-R diagram design the relationship among user, order, product, product detail,tag and group. The variables are shown as below.



Function flow chart

This flow chart describe the main functions of the project. The index page can be access to register page, login page, carpooling page and provide shopping and searching here to navigate to the next action. Then the users can decide to buy the product or not and add them to the shopping cart. Also If they select the expected products, they will decide to place the order or shopping again. At last, once they place the order, they will chose the shipping way and checkout.

