Systems Analysis and Design

Instructor : Huang, Chuen-Min

Teamwork ver.1

Group 9

ID	Name
B10523001	Carol
B10523018	Jenny
B10423028	Tony
B10523019	Jason
B10423036	Anne
B10323037	Lulu
B10523023	Ken
B10523039	Jess
B10523051	Grace

Date 2018/ 05 /09

Content

1. Describe The Project

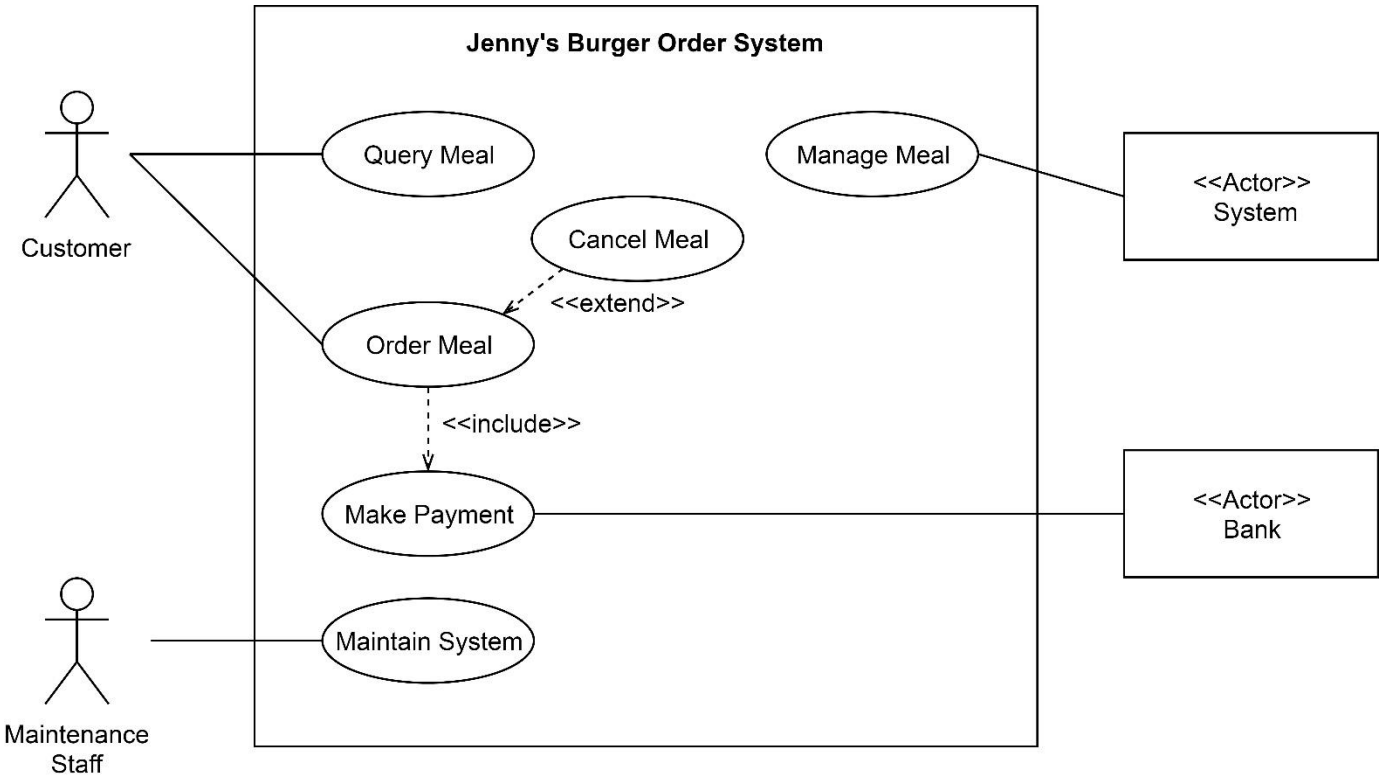
Jenny's Burger is a new burger restaurant. The owner of the restaurant wants to make a meal ordering system in order to let the customer have a brand new customer experience.

The purpose of this system is to make customer ordering the meal more convenient. When the customer wants to order, they can look at the menu, select the meal, and search the meal. The best thing about this system is, it allows the customer to reserve the time they wanted to pick up.

When the customer uses this order system, the customer sees the menu, and add the meal to the cart. If they want to query the meal they already know, Customers click the search bar. Customers can repeat the step above until they want to check out. If they're ready for check out, they have to field in their information. After that, the customer has to pay the bill either in cash or by credit card. If the customer wants to pay in cash, they just simply pay the bill when they pick up. On the other hand, the customer has to provide their credit card info, and our system will verify the credit with the bank. Finally, the system will display the result of the order.

By the way, the Maintenance staff of Jenny's burger will maintain the system irregularly.

2. Use Case Diagram



The primary functions are Query Meal, Order Meal, Make Payment, Cancel Meal, Manage Meal, and Maintain System.

The customer can query the meal and order the meal.

Before customer confirming the order, they can cancel it. After customers order the meal they have to pay for the order.

They can pay either in cash or by credit card. If customer choose credit card, bank will verify credit card number.

The actor called System can manage the meal.

The Maintenance staff of Jenny's burger will maintain the system irregularly.

3. Use Case Description

Use Case Name: Order Meal	ID: 1	Importance Level: High
Primary Actor: Customer	Use Case Type: Detail, Essential	
Stakeholders and Interests: Customer – Want to order meal online Maintain Staff – Keep this system operating normally and maintaining this system		
Brief Description: This use case describes how the meal ordering system works. We can search the meal, add the meal to cart, check the meal out and pay the bill with credit card or cash.		
Trigger: Customer wants to order meal online Type: External		
Relationships: Association: Customers Include: Make Payment Extend: Cancel Order Generalization:		

Normal Flow of Events:

1. The Customer enters the website.
2. The System shows the menu.
   If the customer clicks on the search bar,
   The S-1 will be performed.
   If the customer doesn't click on the search bar,
   The flow goes to normal flow, step 3(Select Meal).
3. The Customer select the meal they want to add.
4. The System add the meal to cart.
   If the customer not yet to check out,
   The flow goes to normal flow, step 2(Show Meal).
   If the customer ready for check out,
   The flow goes to normal flow, step 5(Input user information)
5. The Customer input their information.
6. The Customer have to choose the payment method.
   If the Customer wants to pay with credit card,
   The S-2 will be performed.
   If the Customer wants to pay in cash,
   The flow goes to normal flow, step 7(Display Order Result).
7. The System display the order result, then goes to the end.

Sub Flows:

S-1：The Customer wants to query the meal,

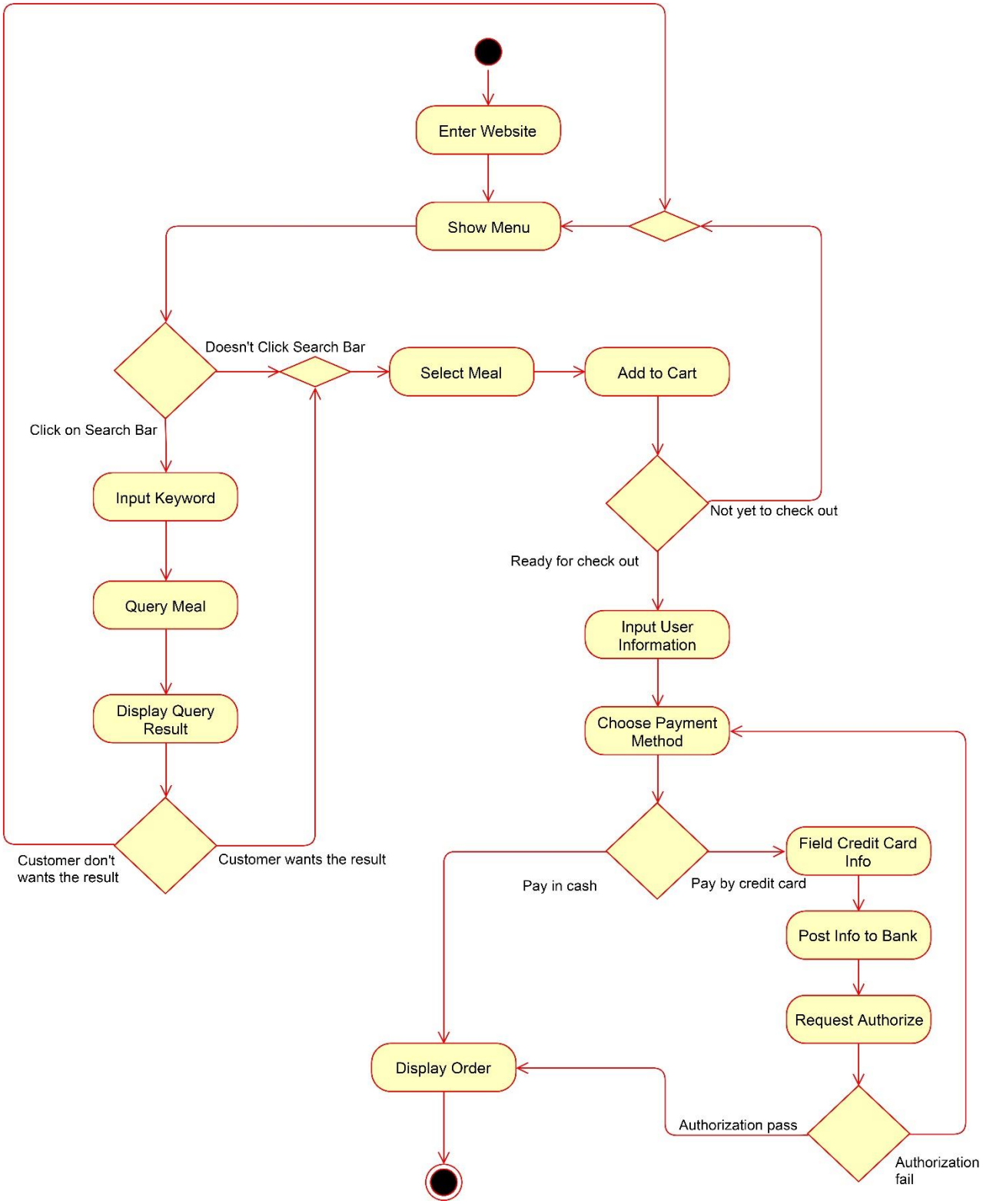
1. The Customer need to input the key word, name or the type of the meal.
2. The System Query the meal.
3. The System displays the result of query.
   If the Customer wants the result of query,
   The flow goes to normal flow, step 3(Select Meal).
   If the Customer doesn't want the result of query,
   The flow goes to normal flow, step 2(Show Meal).

S-2：The Customer wants to pay with credit card,

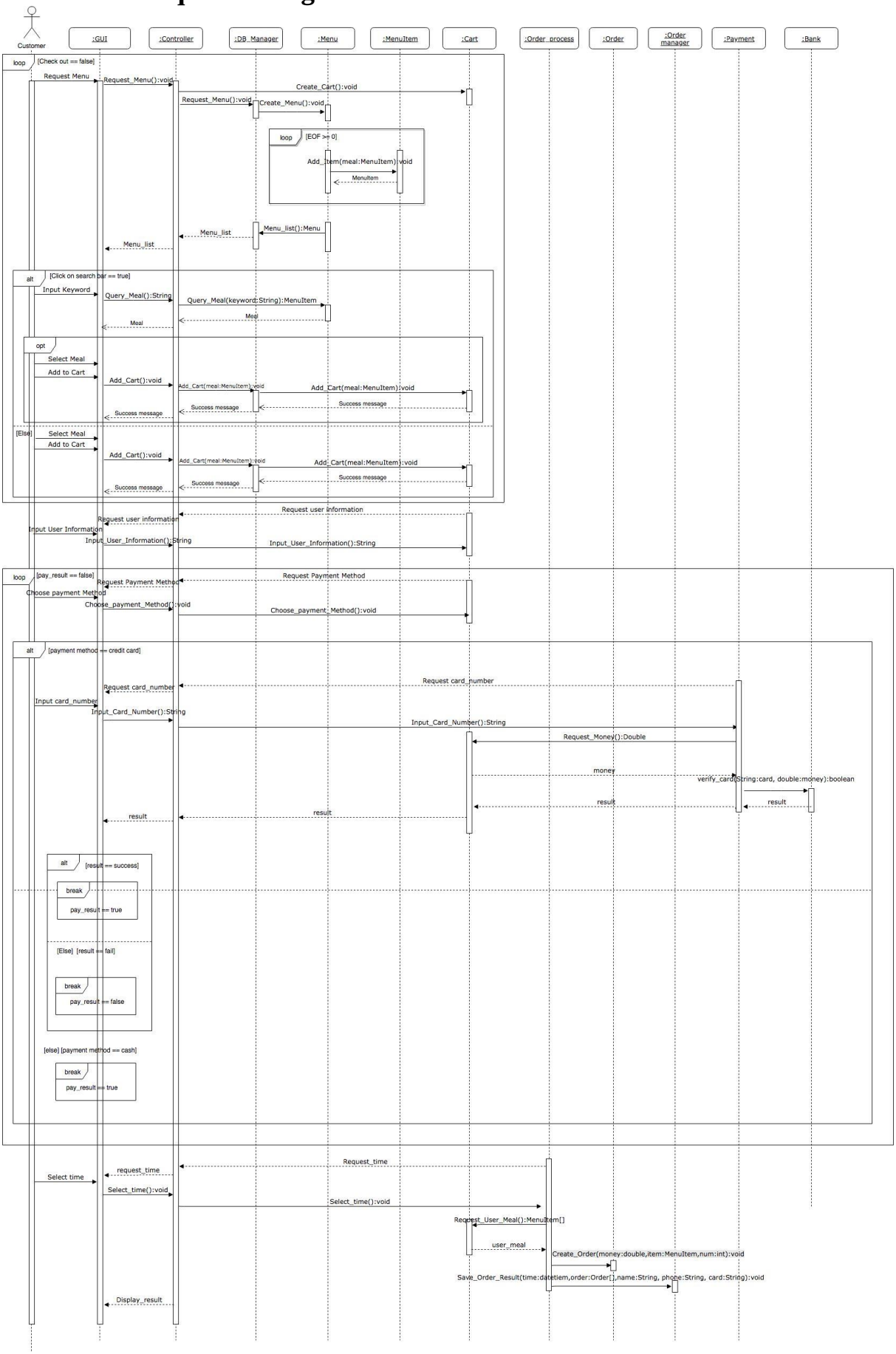
1. The Customer has to field in the credit card information.
2. The System will post the credit card information to the Bank.
3. The System will depend on the authorization which Bank return.
   If the authorization pass,
   The flow goes to normal flow, step 7(Display Order Result).
   If the authorization fail,
   The flow goes to normal flow, step 6(Choose Payment Method).

Alternative/Exceptional Flows:
1. If the website crashes, call the Maintenance Staff and they will repair it.

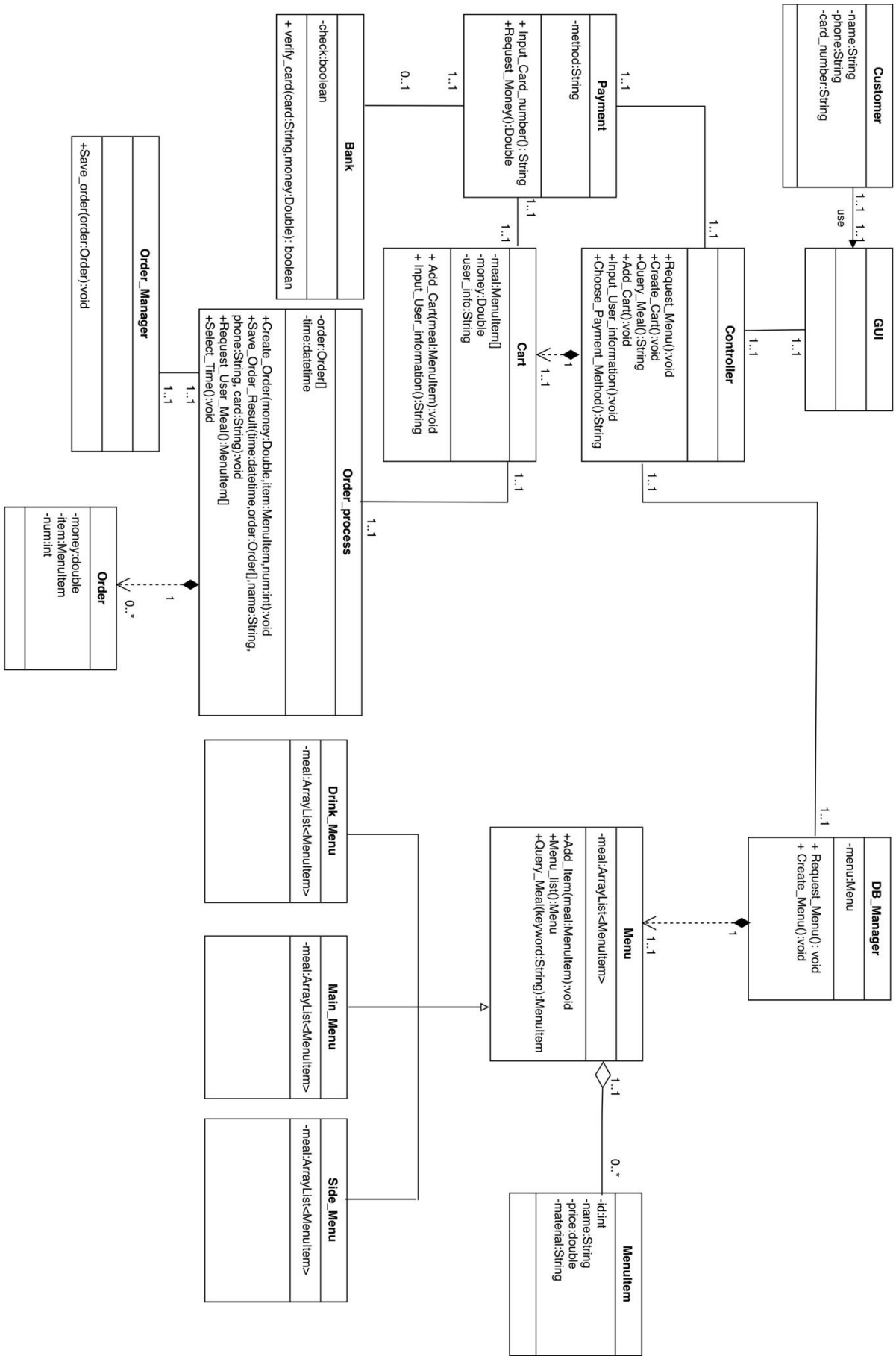
4. Activity Diagram



5. Detailed Sequence Diagram

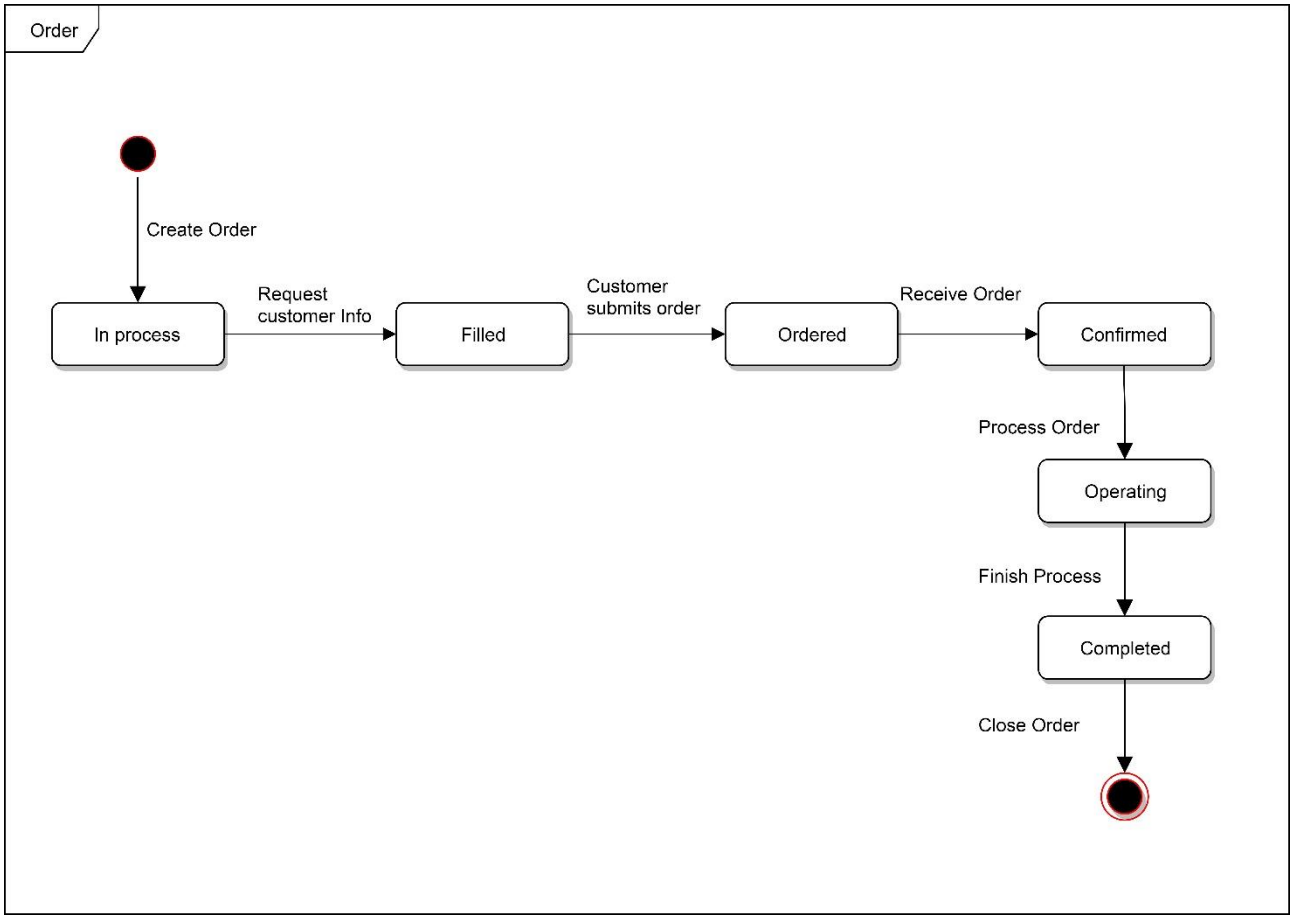


6. Class Diagram



Class Name	Description
Cart	Cart will store what the customer order. Cart will calculate the total price of all the meal every time the meal are added. Cart will store customer's information.
Payment	Payment will store what method the customer choose.
Order_process	Order_process is use to process the order.
Order	Order will store the price of the meal. Order will store the information of the meal. Order will store the quantity of the meal.
MenuItem	MenuItem will store the material(ingredient) of the meal. MenuItem will store the name of the meal. MenuItem will store the price of the meal.
Menu	Menu is a array store all the information of the meal in this restaurant.

7. Behavior State Machine



8. Participate

Score chart

ID	NAME	SCORE	Description
B10523001	Carol	100%	All Diagram, Create use case description, PPT, Create sequence diagram, Integration
B10523018	Jenny	100%	All Diagram, Draw behavior state machine, Integration
B10423028	Tony	100%	All Diagram, Create Use Case Diagram, Create sequence diagram, Create behavior state machine, Integration
B10523019	Jason	100%	All Diagram, Describe the project in text, Keynote, Create class diagram, Integration
B10423036	Anne	100%	All Diagram, Draw activity diagram, Integration
B10323037	Lulu	100%	All Diagram, Create use case description, Create sequence diagram, Create class diagram
B10523023	Ken	100%	All Diagram, Draw use case diagram, Draw class diagram, Word
B10523039	Jess	100%	All Diagram, Create use case description, Keynote, Activity Diagram
B10523051	Grace	100%	All Diagram, Draw use case diagram, Draw class diagram

Because everyone had done their best in this teamwork, so everyone should get his and her participation score.