UML Project On

"Restaurant Management System"

Submitted to

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INDEX

Restaurant Management System an Activity Diagram

This the activity UML diagram of Restaurant Management system which shows the flows between the activity of sells, restaurant, items, orders, payments. The main activity involved in this UML Activity Diagram pf Restaurant Management System are as follows:

- ✓ Sells Activity
- ✓ Restaurant Activity
- ✓ Items Activity
- ✓ Orders Activity
- ✓ Payments Activity

Features of the Activity Diagram of restaurant management system:

- ✓ Admin user can search sells, view description of the selected sells, add sells, update sells and delete sells.
- ✓ Its shows the activity flow of editing, adding, and updating of Restaurant
- ✓ User will be able to search and generate report of items, Orders, Payments
- ✓ All object such as (sells, restaurant, payments) are interlinked
- ✓ its shows the full description and flow of Sells, Orders, Payments, Items, Restaurant.

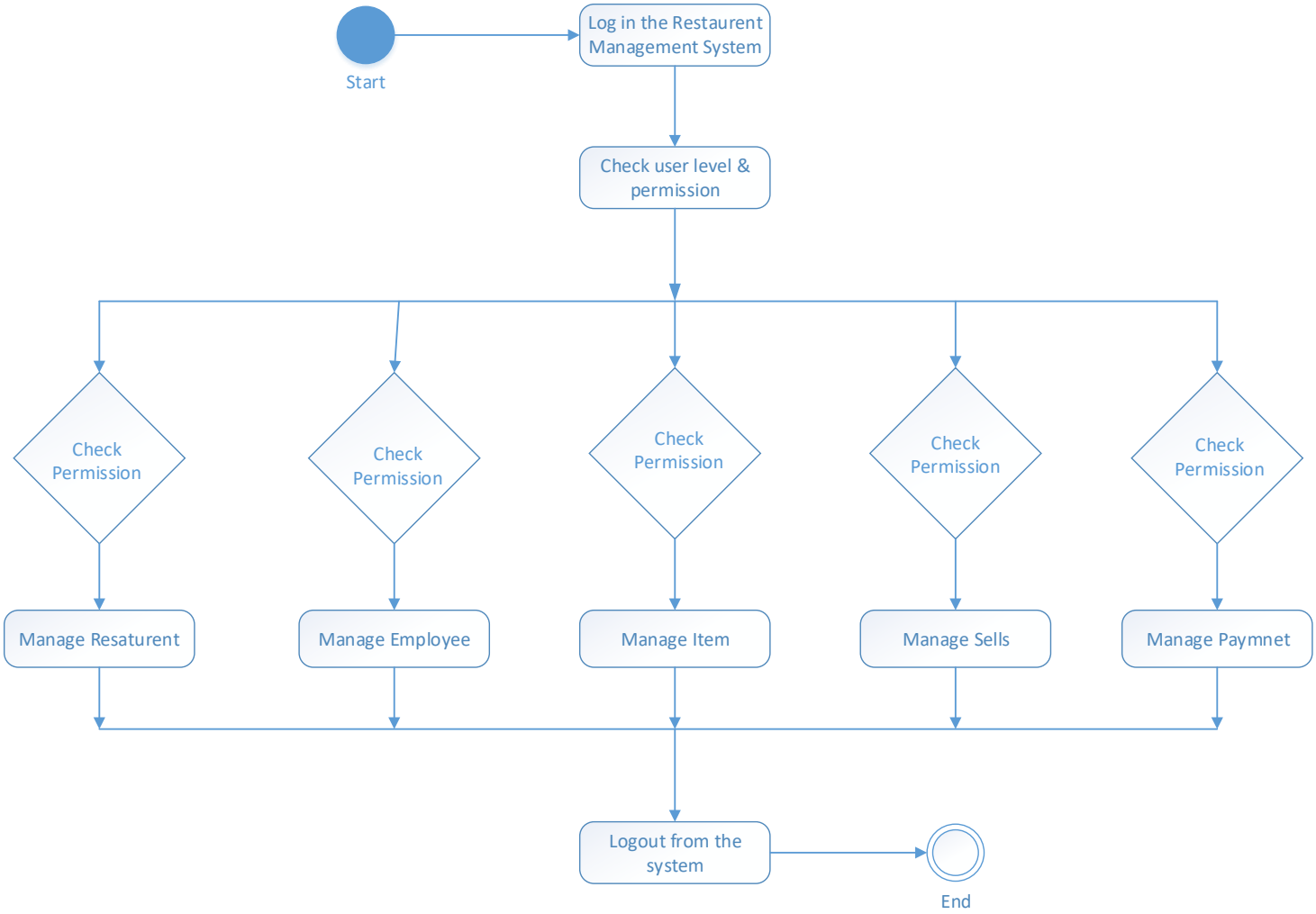

Figure 1: Activity Diagram

Restaurant Management System Class Diagram

Restaurant Management System Class Diagram describes the structure of a Restaurant Management System classes, their attributes, operations and the relationships among objects. The main classes of the Restaurant Management System are Restaurant, Employees, Items, Sells, Payments, Orders.

Classes of Restaurant Management System Class Diagram:

- ✓ Restaurant Class : Manage all the operations of Restaurant
- ✓ Employees Class : Manage all the operations of Employees
- ✓ Items Class : Manage all tile operations of Items
- ✓ Sells Class : Manage all the operations of Sells
- ✓ Payments Class : Manage all the operations of Payments
- ✓ Orders Class : Manage all the operations of Orders

Attributes of Restaurant Management System Class Diagram:

- ✓ Restaurant Attributes: restaurent_id, restaurent_name, restaurent_type, restaurent_address
- ✓ Employees Attributes: employee_id, employee_name, employee_mobile, employee_email, employee_username, employee_Password
- ✓ items Attributes: payment_id, payment_customer_id, payment_amount
- ✓ Sells Attributes: sellsl_id, sell_name, sell_type, selss_descriptions
- ✓ Payments Attributes: payment_id, payment_customer_id, payment_amount
- ✓ Orders Attributes: order_id, order_customer_id, order_type.

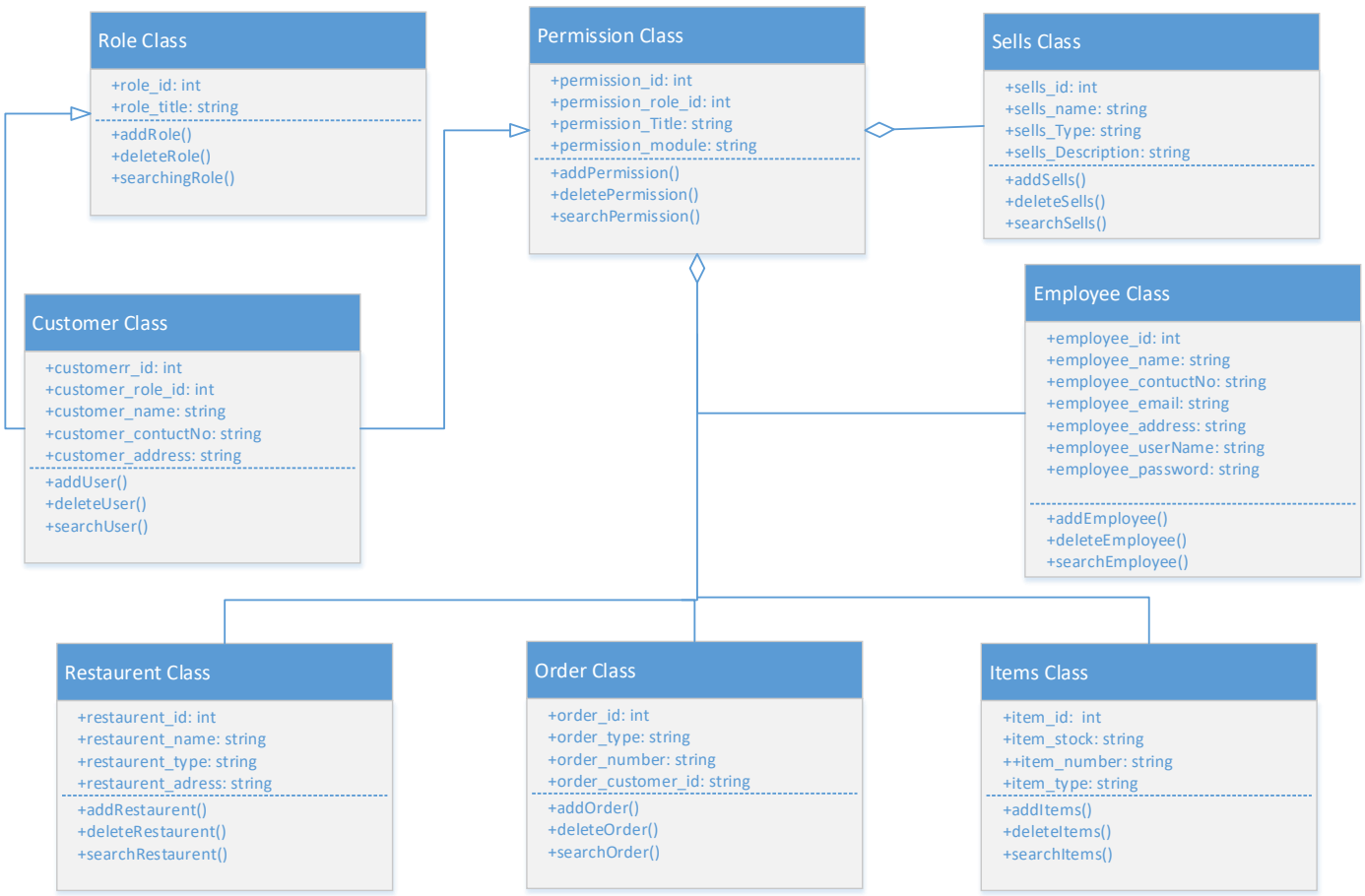

Figure 2: Class Diagram

Restaurant Management System CRC Card Diagram

A Class Responsibility Collaborator (CRC) model is a collection of standard index cards that have been divided into three sections .A class represents a collection of similar objects, a responsibility is something that a class knows or does, and a collaborator is another class that a class interacts with to full fill its responsibilities. Figure 3 presents an Restaurant management system CRC.

Features of the CRC Card Diagram of restaurant management system

- ✓ Customer class responsible for their activities and collaborate with Employee class
- ✓ Employee class responsible for their activities and collaborate with Employee class and also Administration class
- ✓ Administration class responsible for their activities and collaborate with Employee class

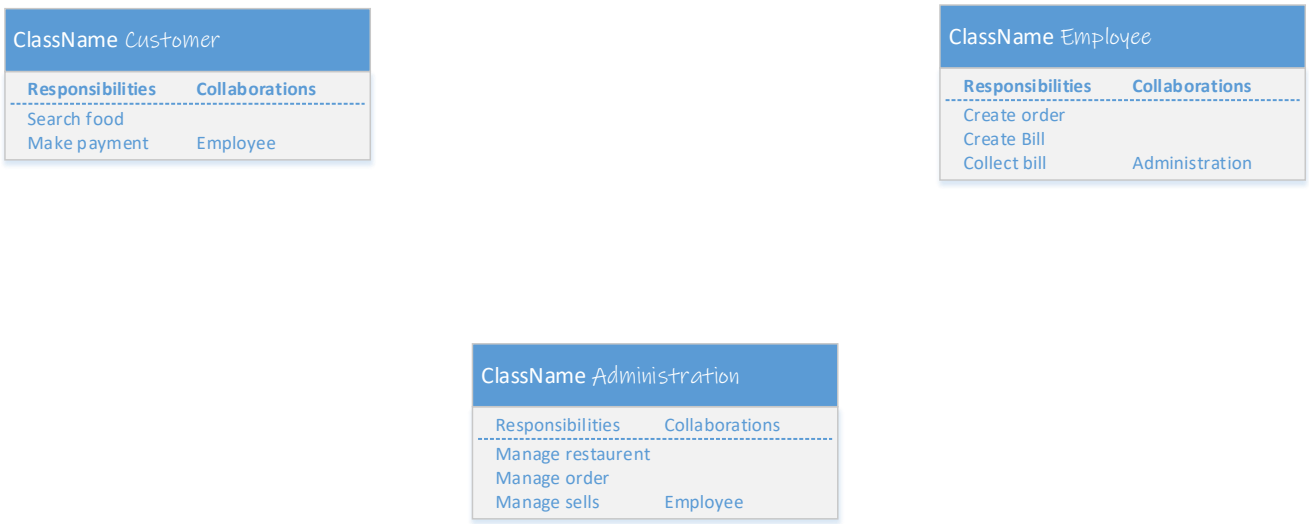

Figure 3: CRC Card Diagram

Restaurant Management System Use Case Diagram

This Use Case Diagram is a graphic depiction of the interactions among the elements of Restaurant Management System. Its represents the methodology used in system analysis to identify, clarify, and organize system requirements of Restaurant Management System. The main actors of Restaurant Management System in this Use Case Diagram are: Administration, cashier, Waiters, Customers, who perform the different type of use cases such as Manage Restaurant, Manage Employees, Manage Items, Manage Sells, Manage Payments, Manage Orders, Manage Item Category and Full Restaurant Management System Operations. Major elements of the UML use case diagram of Restaurant Management System are shown on me picture below.

The relationships between and among the actors and the use cases of Restaurant Management System:

- ✓ Administration: Use cases of Administration are Manage Restaurant, Manage Employees, Manage Items, Manage Sells , Manage Orders, Manage Item ,Manage Users and Full Restaurant Management System Operations
- ✓ Cashier Entity : Use cases of System User are Manage Restaurant, Collect Payment .
- ✓ Waiters Entity : Use cases of Waiters are Create Orders, Create Bills, Make Payment and Manage Items.
- ✓ Customers Entity : Use cases of Customers are Order request, Make Payments.

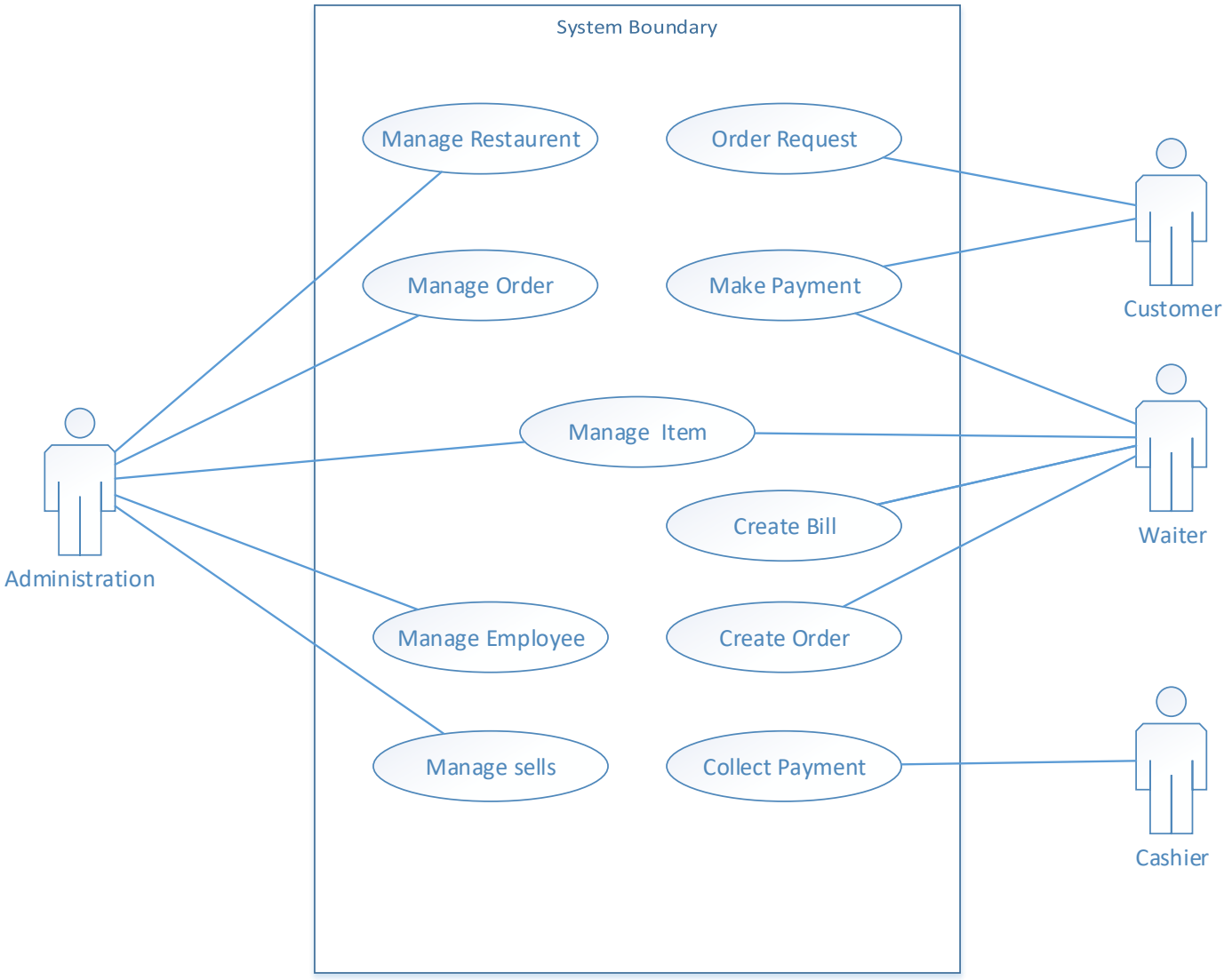

Figure 4: Use Case Diagram

Restaurant Management System Sequence Diagram

This is the UML sequence diagram of Restaurant Management System which shows the interaction between the objects of Sells, Orders, Restaurant, Employees, Items. The instance of class objects involved in this UML Sequence Diagram of Restaurant Management System are as follows:

- ✓ Sells Object
- ✓ Orders Object
- ✓ Restaurant Object
- ✓ Employees Object
- ✓ Items Object

Login Sequence Diagram Of Restaurant Management System:

This is the Login Sequence Diagram of Restaurant Management System, where admin will be able to login in their account using their credentials.

After login user can manage all the operations on Restaurant, Sells, Orders, Items, Employees. All the pages such as Orders, Items and Employees are secure and user can access these page after login. The diagram below helps demonstrate how the login page works in a Restaurant Management System. The various objects in the Items, Restaurant, Sells, Orders, and Employees page-interact over the course of the sequence, and user will not be able to access this page without verifying their identity.

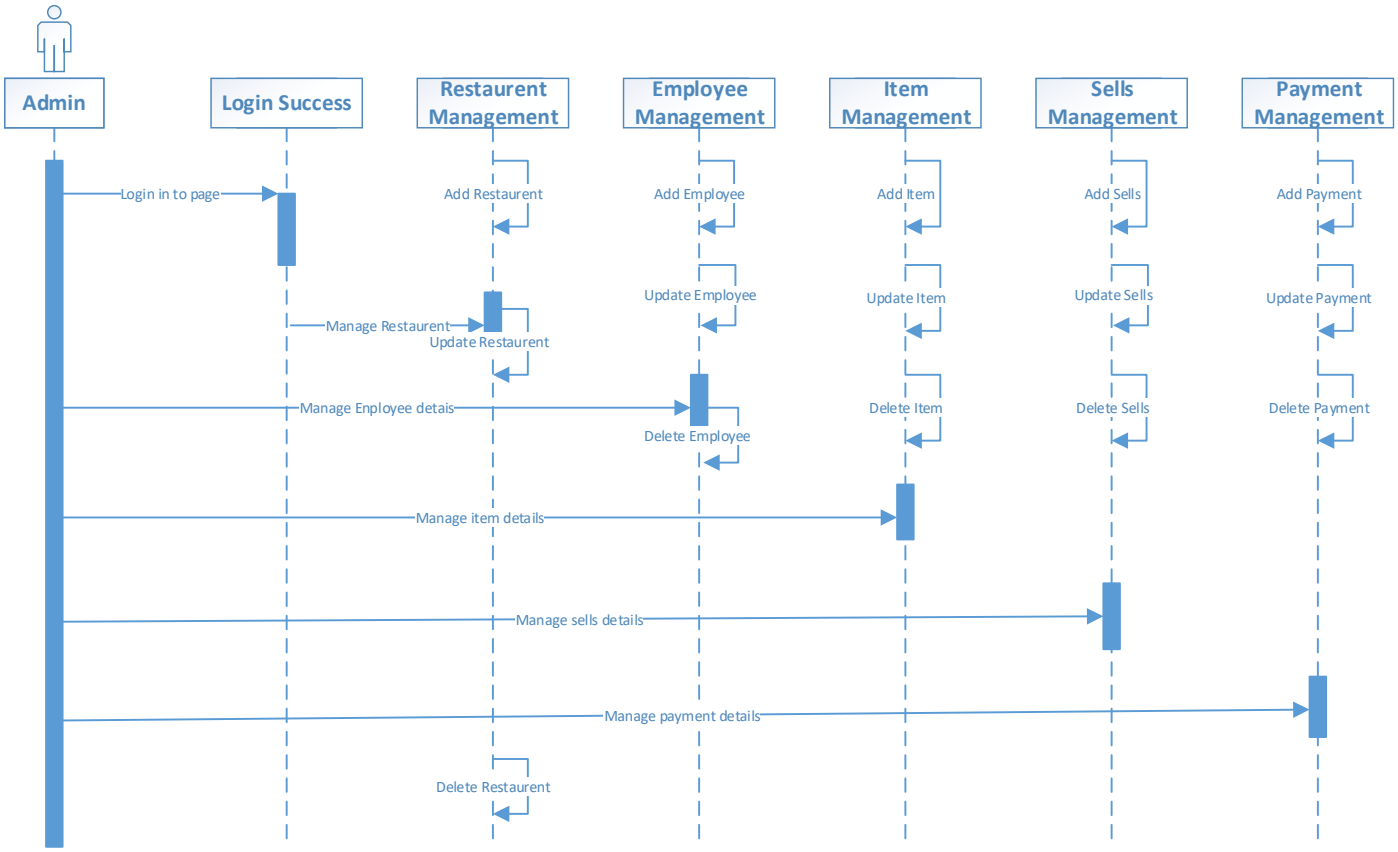

Figure 5: Sequence Diagram

Restaurant Management System State Chart Diagram

A State chart diagram describes a state machine. State machine can be defined as a machine which defines different states of an object and these states are controlled by external or internal events.

Activity diagram explained in the next chapter, is a special kind of a State chart diagram. As State chart diagram defines the states, it is used to model the lifetime of an object.

Features of the State Chart Diagram of restaurant management system:

- ✓ Customer enter the restaurant request order to waiter
- ✓ When Create the order by waiter then processing Foods
- ✓ If all this activities are okay then delivery the food on the other hand its if have specific reason then cancel this order
- ✓ Finally customer make payment to cashier and exit.

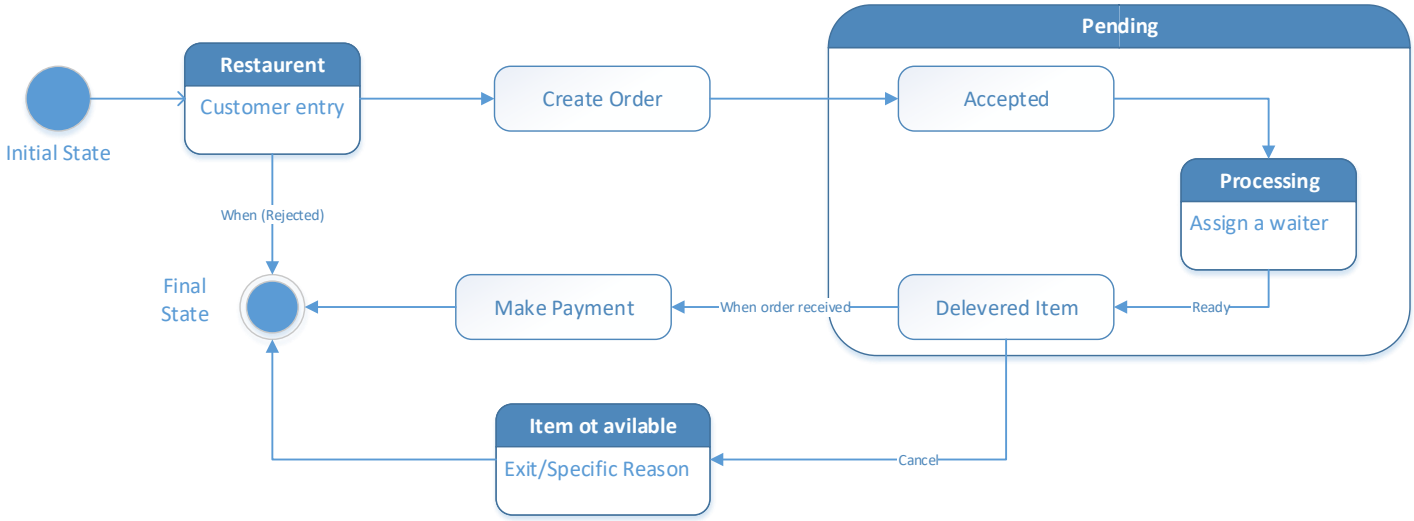

Figure 6: State Chart Diagram