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Online Catering Service

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DECLARATION

We hereby declare that we have taken this thesis under the supervision of **Lamisha Rawshan, Senior Lecturer, Department of Software Engineering, Daffodil International University.**

We also declare that neither this thesis/project nor any part of this has been submitted elsewhere for award of any degree.



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I would like to thank them who were helped in my project by their very important suggestions without their passionate participation and input; the project could not be successfully conducted. I take this opportunity to record my sincere thanks to all the faculty members of the Department of Software Engineering for their help and encouragement.

Last but not least, I would like to thank our parents, for their unconditional support, love and without this we would not have come this far.

ABSTRACT

The experience to working with project is very important for corporate persons, Online Catering System is appropriate for these purposes. In addition, system will help user to get their lunch or dinner on time. User will be motivated for making new order and they actually save their time by using this system.

Every Software development follows some rules and method, I also following some method to develop this project. My whole project work will follow the Agile Methodology. Which is the best software development process to develop a software. I choose it because my whole project needs to implement some part then test it and agile methodology will help me to reduce the project risk.

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CHAPTER 01: INTRODUCTION

1.1. Project Overview

Online Catering System is a web based application. Catering system allows the admin to manage service provider and the system allow the Service Provider to confirm order, manage food item and also view order. The Registered user can order food. The user also can update and cancel their order.

The application is basically for the catering service provider and for those people who want to take catering service from online. The application provides a full web based sites where people or user can order food and catering service provider can show their services. People can easily order food from their desired catering service provider.

The objectives of this project are to make more efficient to admin, flexible for all members & usability is user friendly. Here the customer also can custom order.

1.2. Project Purpose

1.2.1. Background

Online Catering System is not available in Bangladesh and it's a trend to be dynamic through online catering system. At present, we ordered a catering service provider manually to provide our food for our program or event. At this situation, we are facing a lot problems. These are time wasting, harassment etc. As a result, I think that it will be positive if I develop it in online.

1.2.2. Benefits & Beneficiaries

Benefits:

- Admin can maintain this sites easily.
- Admin can manage Service Provider.
- This system give you proper used your valuable time.
- Every user can order normally and custom.
- Oder miss possibility is quite low.

Beneficiaries:

- Admin / Service Provider
- User.

1.2.3. Goals:

- Easily know about their order details.
- Time savings.
- Order delivery miss possibility will be low.

The main purpose of this project is to reduce these problems and make online catering system more reliable and increase customer's satisfactions.

1.3. Proposed System Model

A software process model is a simplified representation of a software process. Each model represents a process from a specific perspective.

1.3.1. Agile-Model

Our proposed system model is agile model which is an incremental process of software development. Engineering actions are carried out by functional teams. In

software development the term agile means the ability to respond to changes- changes from requirements, technology and people.

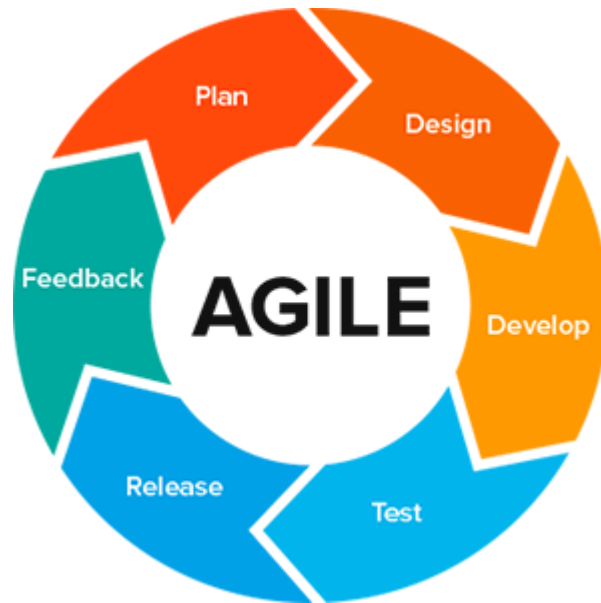


Figure 1: Agile-Model

1.4. Proposal System Model (Block Diagram)

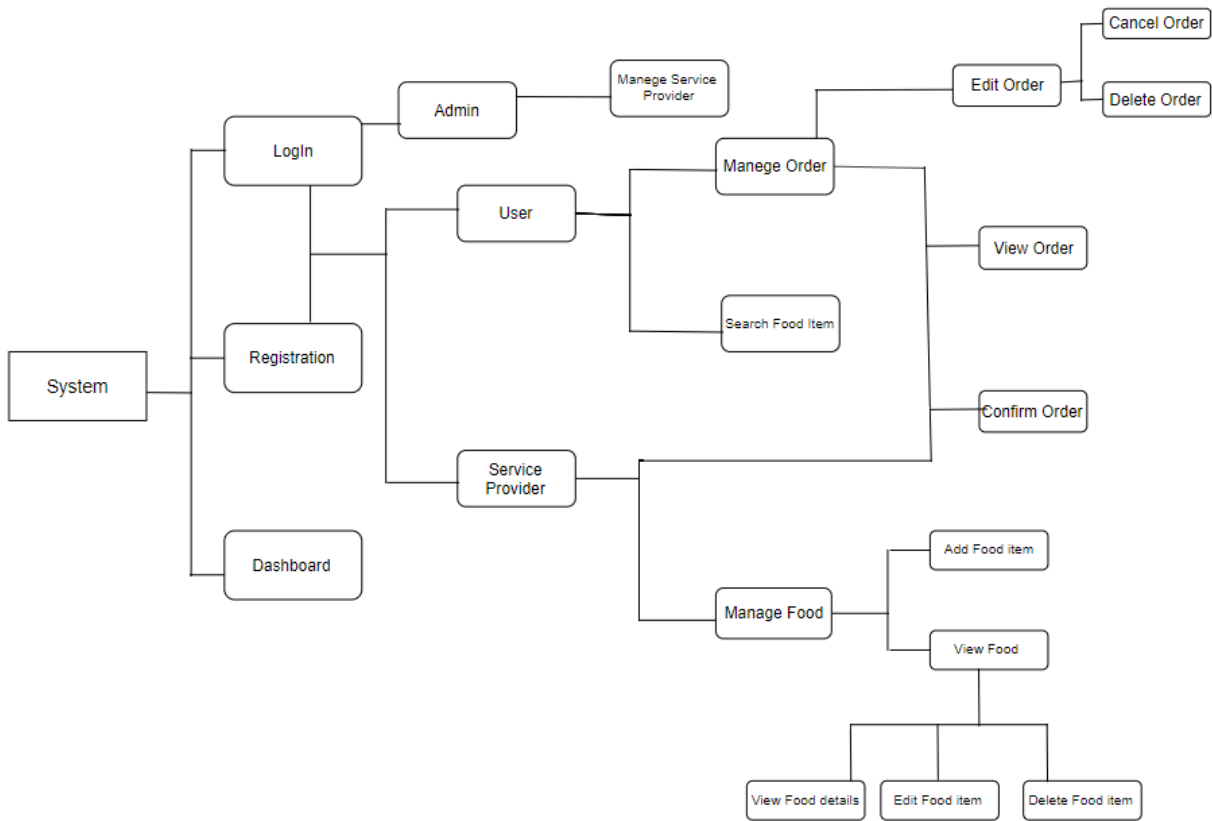


Figure: Block Diagram (Online Catering System)

1.5. Project Schedule

In project management, a schedule is a listing of project’s milestones, activities, and deliverables, usually with intended start and finish dates. A schedule is commonly used in the project planning and project portfolio management parts of project management.

1.5.1. Gantt chart

Weeks	1	2	3	4	5	6	7	8	9	10	11	12
Works												
Analysis Phase												
Feasibility Study												
Project proposal												
Project UI												
Mid-term defense												
Implementation of the project												
Testing												
Document of the project												
Final defense												

Figure 2: Gantt chart

1.5.2. HR Planning for Development Phase

- Project plan
- Analysis
- Requirement gathering
- Brainstorming
- Interview
- Observation
- Analysis
- Design

- Database design
- System user interface
- Development
- User Module
- Event Module
- Others
- Testing
- Test plan
- Test Case
- Test Execution

1.5.3. Release Plan

- Release 1: beta version 1.0.0 on 25/08/2019
- Release 2: beta version 2.0.0 on 30/09/2019
- Release 3: version 3.0.0 on 25/10/2019
- Release 4: version 4.0.0 on 15/12/2019

CHAPTER 2: SOFTWARE REQUIREMENT SPECIFICATION

2.1. Functional Requirements

RQ ID	RQ Name	Description	RQ Type	Priority
RQ 01	Login	The System has three type of users, customer, service provider and admin. Everyone can login the system.	Functional	High
RQ 02	Registration	Unregistered user and service provider can create an account by using their email.	Functional	High
RQ 03	Manage Food Item	Service provider can post their food item and they can view, edit and delete their own food item.	Functional	High
RQ 04	Purchase Food Item	Register users (customer) can view all the food item and they can easily purchase food item by using add to cart option.	Functional	High
RQ 05	Manage Profile	Registered users can manage their profile; they can update their contact info.	Functional	Low

RQ 06	Search Food Item	Customer can search their food by food name.	Functional	Medium
RQ 07	Manage Order	User can view, edit, cancel and confirm their order. Service provider also can cancel and confirm the order after confirm or cancelling the order an user will notify that.	Functional	High
RQ 08	Manage Service Provider	When a service provider complete the registration then admin will approve her registration .Before registration approve, service provider can't do anything.	Functional	Medium
RQ 09	Logout	Registered users (customer, service provider) and admin can logout from the system.	Functional	High

2.2. Performance Requirements

2.2.1. Speed and Latency Requirements

- Data would be insert in MySQL database within few second.
- Query would be response on time and bring the result within few second.
- UI should load within 10 second. However, it depends on user machine and internet speed.

2.2.2 Precisions or Accuracy Requirements

- After successful login user should show the accurate result.
- All the forms data should store accurate and valid information to the database.
- Only register user can update their own profile information.
- Only register users can make an order by using their information

2.2.3 Capacity Requirements

- Total 100 user would login parallel at a time.
- There is no limit for the users.

2.3. Dependability Requirements

2.3.1 Reliability Requirements

- The user registration should register as a new user and update database with given information.
- After selecting the user type, user must be providing information for address.
- Only accurate information can give access on the system.
- Every service provider and customer can update their profile information.
- This system should run on a web browser.
- This system should perform activities immediately upon user request.

2.4. Maintainability and Supportability Requirements

2.4.1 Maintenance Requirements

- Modify the system when the application environment changes.
- Fix bug when the system is corrupted.
- Fix accidental data mistakes by user.

2.4.2 Supportability Requirements

- Provide user guidance.
- For user better experience, provide FAQ.

2.5. Security Requirements

2.5.1 Access Requirements

- Only registered user can login to the system.
- Only Admin can approve service provider registration

2.6. Usability and Human-Interactions Requirement

2.6.1 Ease of Use Requirements

- System user interface should be user friendly.
- New user should learn about the system.
- Profile maintain and documentation maintain is not complex.

2.6.2 Understandability and Politeness Requirements

- Any kind of user should understand the system.
- Non-technical user can also operate the system.

2.6.3. Accessibility Requirements

- The system should be accessible from any kind of devices. Like computer, laptop, Tab, Mobile.
- User should access their account within a second.

2.7. Look and Feel Requirements

2.7.1 Style Requirements

The “The Online Catering System” is look like food panda, pathao foods, where people can order their lunch item, dinner item.

2.8. Legal Requirements

2.8.1 Standards Requirements

- The admin should login their system with given ID and password.
- The customer and service provider should register their account with their own email address.

CHAPTER 3: SYSTEM ANALYSIS

3.1. Use Case Diagram

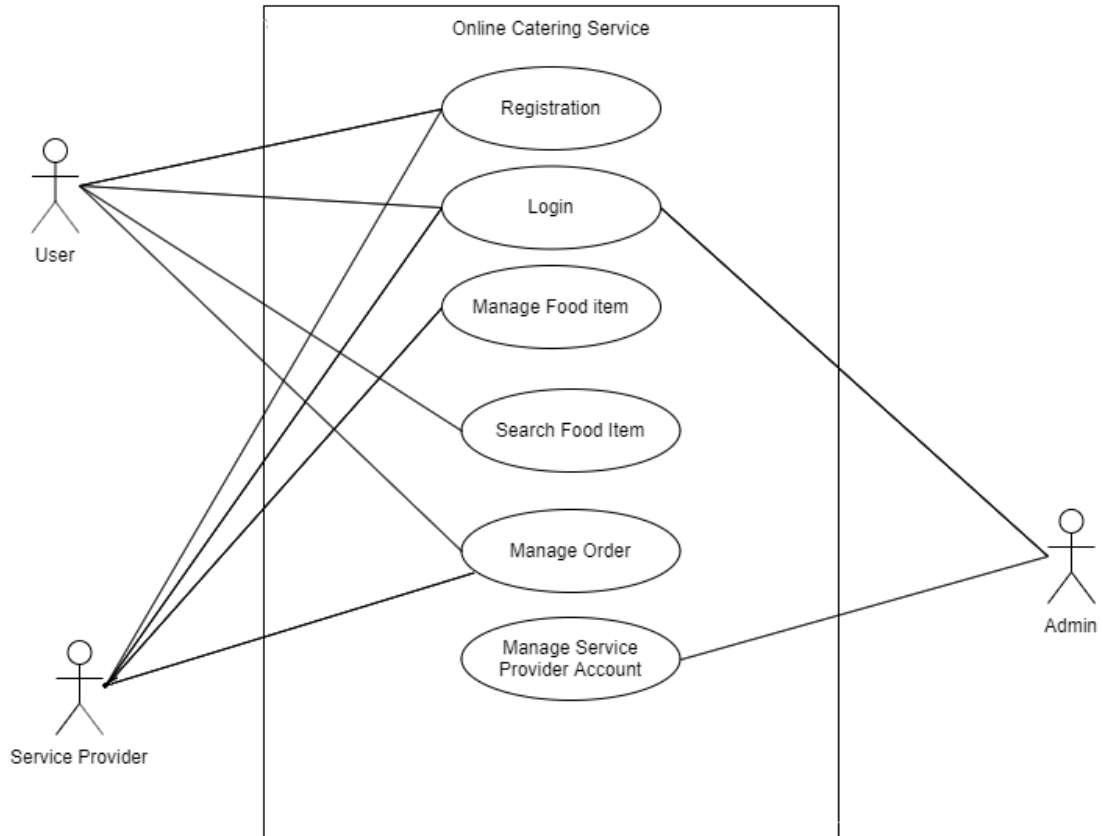


Figure: Use Case Diagram (Online Catering System)

3.2. Use Case Diagram Description

Table 3.1: User Registration

Use Case Name:	Registration	
Scenario:	User (service provider, customer) Registration to the system.	
Brief Description	Service provider, customer should registration their own email address.	
Actor:	User (service provider, customer)	
Pre-Condition:	Must be valid email and registration type.	
Post-Condition:	User Must be confirm registration with activation key or check mail.	
Flow of events:	User (service provider, customer)	System
	<ul style="list-style-type: none"> • Must provide Valid email. • Must fill up all required filed. 	<ul style="list-style-type: none"> • Confirm valid email address. • Confirm unique email address.
Exception Condition:	Cannot get permission for create an account.	

Table 3.2: User and Admin Login

Use Case Name:	Login	
Scenario:	User (service provider, customer) and Admin Login to the system.	
Brief Description	Service provider, Customer and Admin should login with valid email address.	
Actor:	User (Service Provider, Customer) and Admin.	
Pre-Condition:	Must be organization's email and password.	
Post-Condition:	After successfully login to the system, every user can access their accessible data.	
Flow of events:	User (Service provider, Customer) , Admin	System
	<input type="checkbox"/> Must provide Valid email and Password	<ul style="list-style-type: none"> • Confirm valid email address. • Confirm valid password. • Give access to the system.
Exception Condition:	Give permission for access the account.	

Table 3.3: Food Item Search

Use Case Name:	Food Item Search	
Scenario:	User (customer) search food item.	
Brief Description	Customer can search food for add to cart	
Actor:	User (Customer)	
Pre-Condition:	Must be a fixed food are given and user must be login.	
Post-Condition:	User Must be search one type food at a time and provide info.	
Flow of events:	User (customer)	System
	<input type="checkbox"/> Must provide information in search box.	<input type="checkbox"/> Provide a food list based on user search
Exception Condition:	User can give information for finding the food item.	

Table 3.4: Manage Service Provider

Use Case Name:	Manage Service Provider	
Scenario:	Admin will confirm or block service provider registration.	
Brief Description	After registration service provider will get a message page like your account is pending .After active the account by admin service provider can see user dashboard.	
Actor:	User (Service provider)	
Pre-Condition:	Must wait for admin activation.	
Post-Condition:	Service provider should give the valid information.	
Flow of events:	User (Service Provider)	System
	<ul style="list-style-type: none"> • Show pending page • Provide valid registration information. 	<input type="checkbox"/> Provide requested dashboard.
Exception Condition:	User should provide valid information and proper information.	

Table 3.5: Manage Food Order

Use Case Name:	Manage Food Order	
Scenario:	User (Customer) can edit update and cancel the order.	
Brief Description	User can view, edit, cancel and confirm their order. Service provider also can cancel and confirm the order after confirm or cancelling the order an user will notify that.	
Actor:	User (Customer, Service Provider)	
Pre-Condition:	Add a food item in cart list.	
Flow of events:	User (Customer, Service Provider)	System
	<ul style="list-style-type: none"> • Select a food item. . 	<input type="checkbox"/> Provide selected add to cart food item list.
Exception Condition:	User can update item, and send this on checkout page.	

Table 3.6: Manage Food Item

Use Case Name:	Manage Food Item	
Scenario:	User (Service Provider) can maintain their food item.	
Brief Description	Service provider can post their food item and they can view, edit and delete their own food item.	
Actor:	User (Service Provider)	
Pre-Condition:	Must be login.	
Post-Condition:	Require update information.	
Flow of events:	User (Service Provider)	System
	<ul style="list-style-type: none"> • Update food information. • View food item. 	<ul style="list-style-type: none"> • Provide food item information • Update information.
Exception Condition:	User can maintain food item and update food using this system.	

3.3. Activity Diagram

3.3.1. Login Activity Diagram

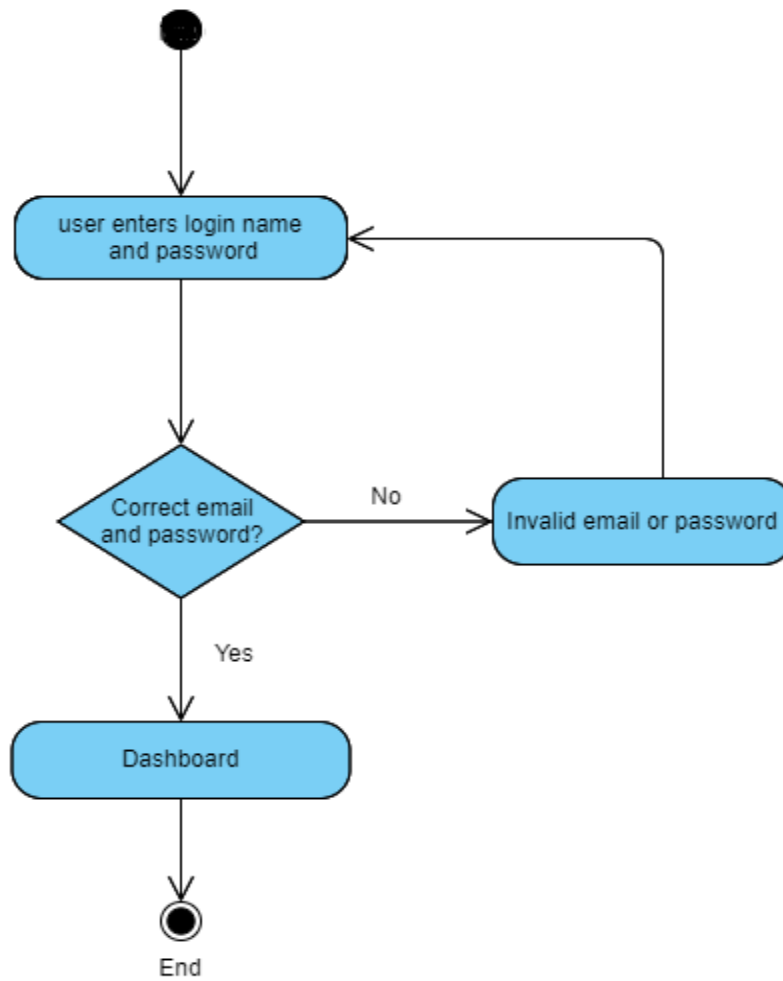


Figure: Login Activity Diagram (Online Catering System)

3.3.2. Registration Activity Diagram

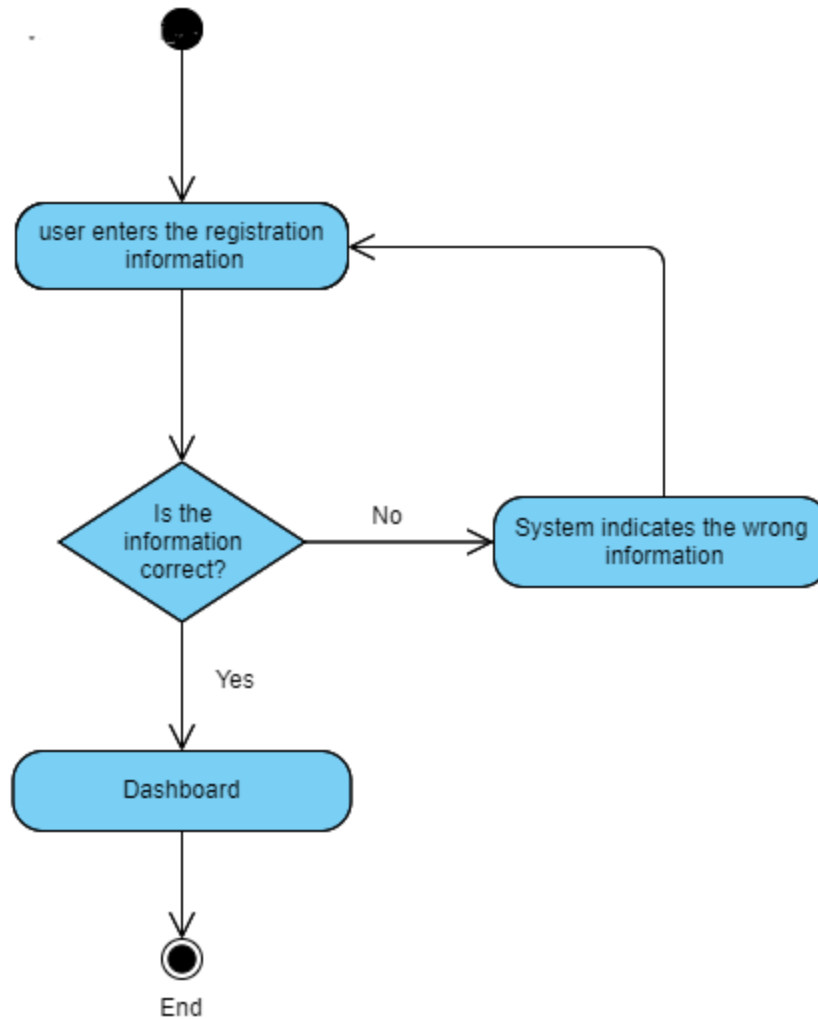


Figure: Registration Activity Diagram (Online Catering System)

3.3.3. Search Food Activity Diagram

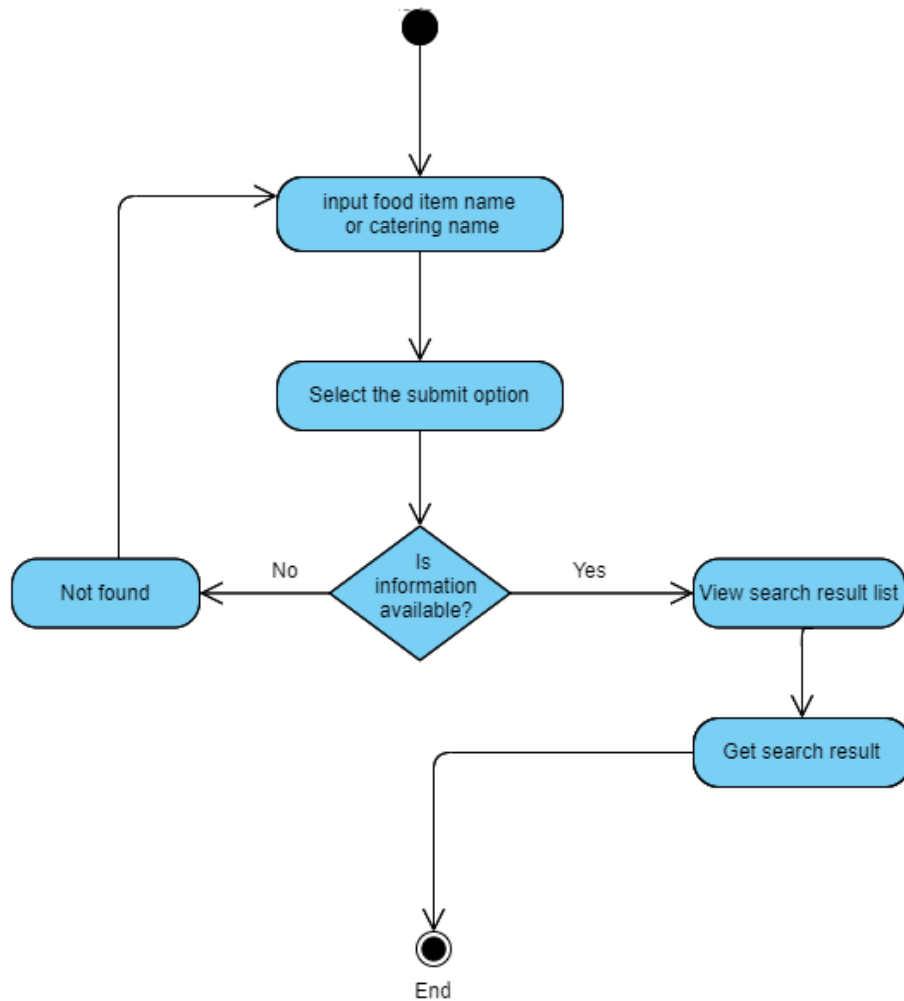


Figure: Search Food Activity Diagram (Online Catering System)

3.3.4. Manage Service Provider Activity Diagram

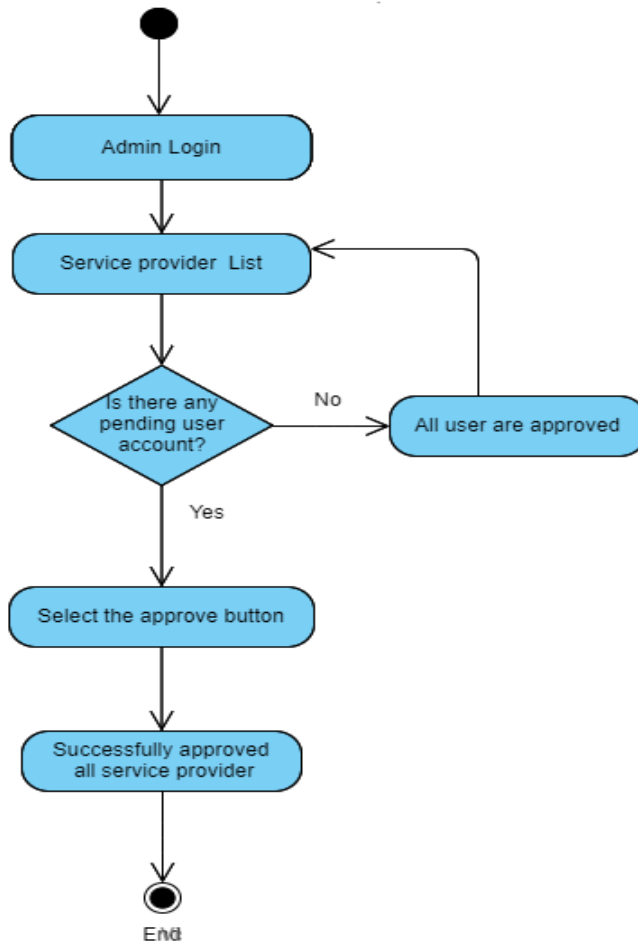


Figure: Manage Service Provider Activity Diagram (Online Catering System)

3.3.5. Manage Food Activity Diagram

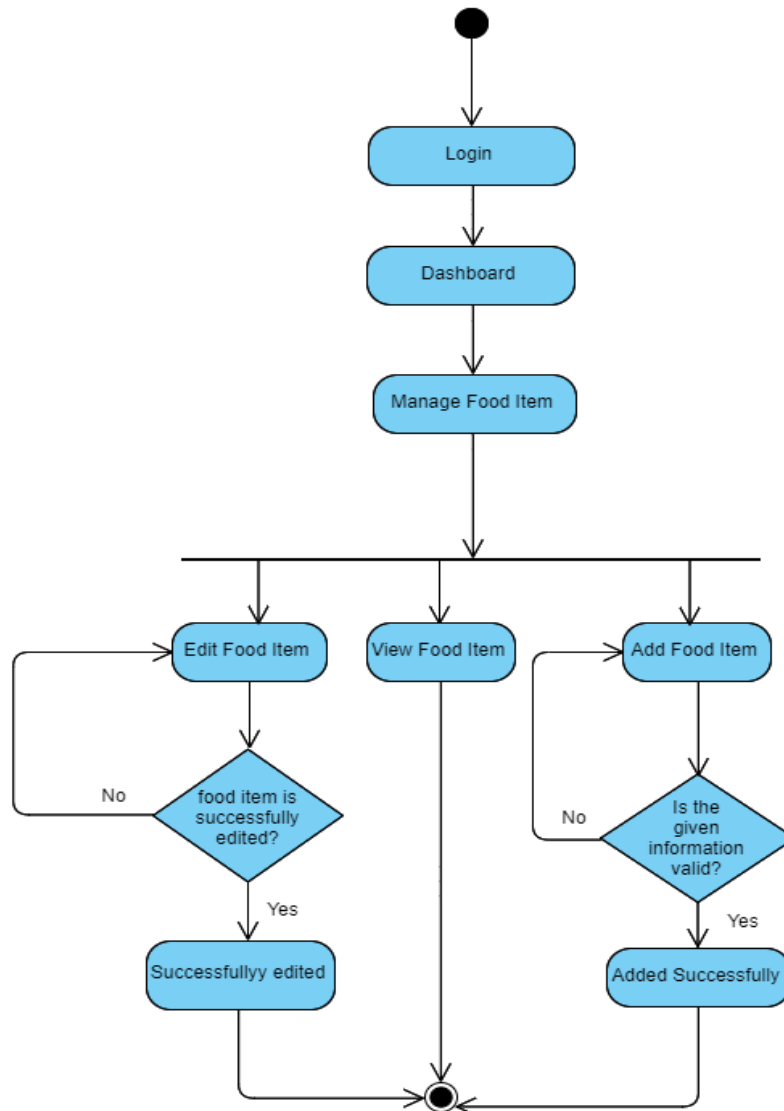


Figure: Manage Food Activity Diagram (Online Catering System)

3.3.6. Manage Order Activity Diagram

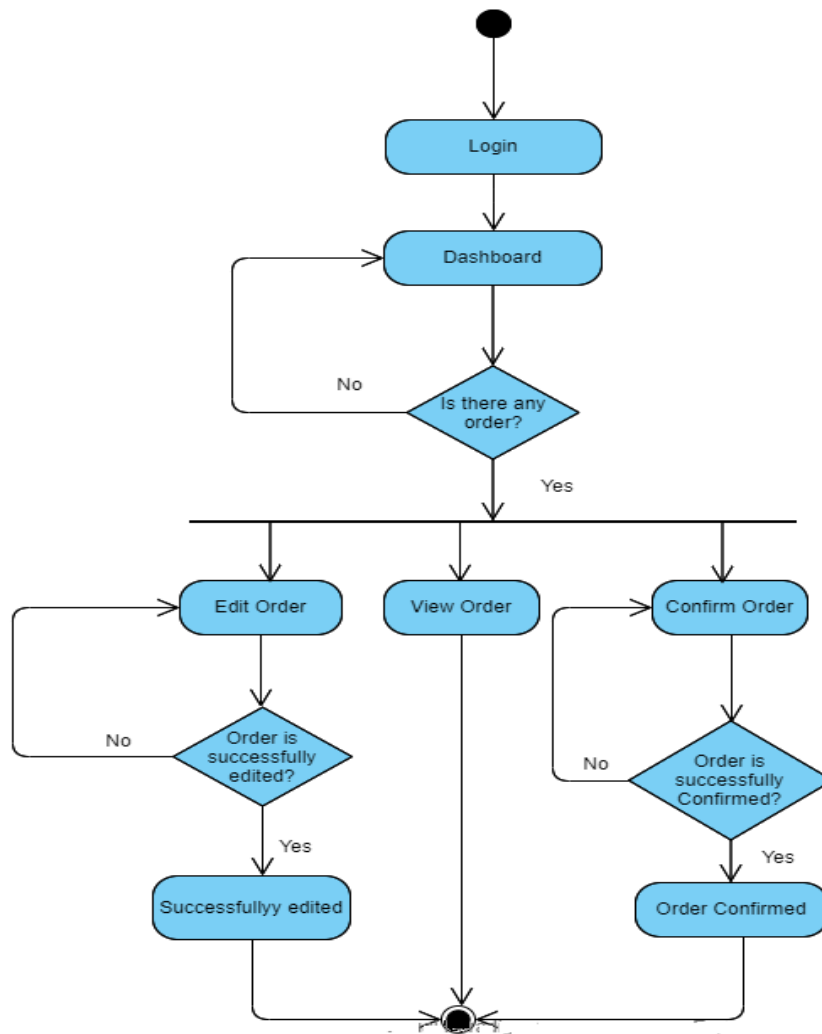


Figure: Login Activity Diagram (Online Catering System)

3.4. System Sequence Diagram

3.4.1. Registration Sequence Diagram

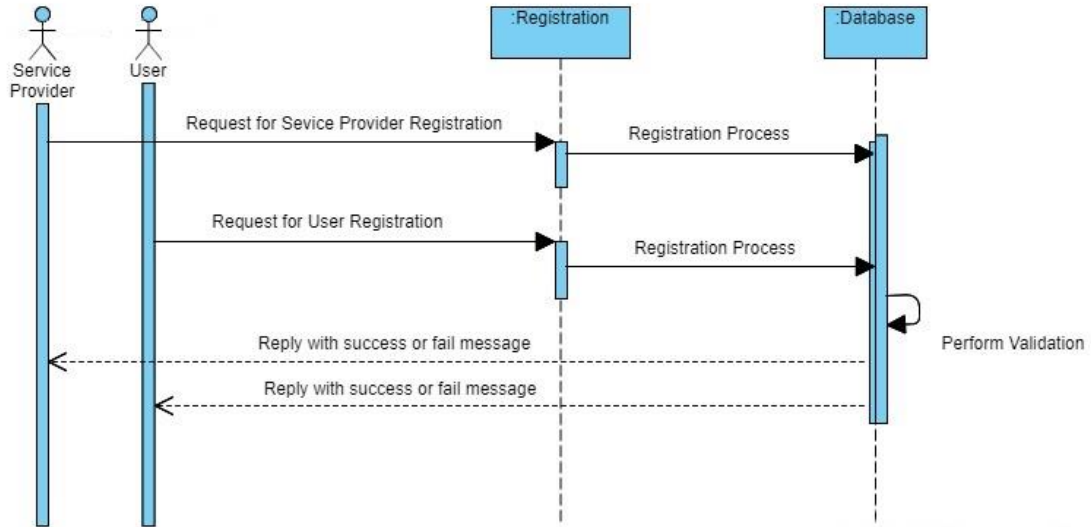


Figure: Registration Sequence Diagram (Online Catering System)

3.4.2. Login Sequence Diagram

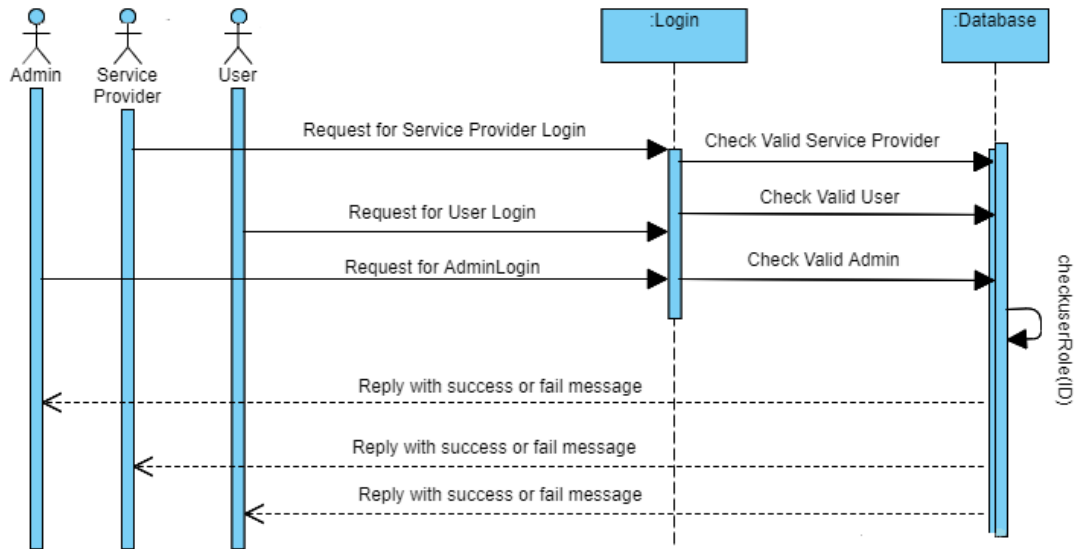


Figure: Login Sequence Diagram (Online Catering System)

3.4.3. Manage Food Item Sequence Diagram

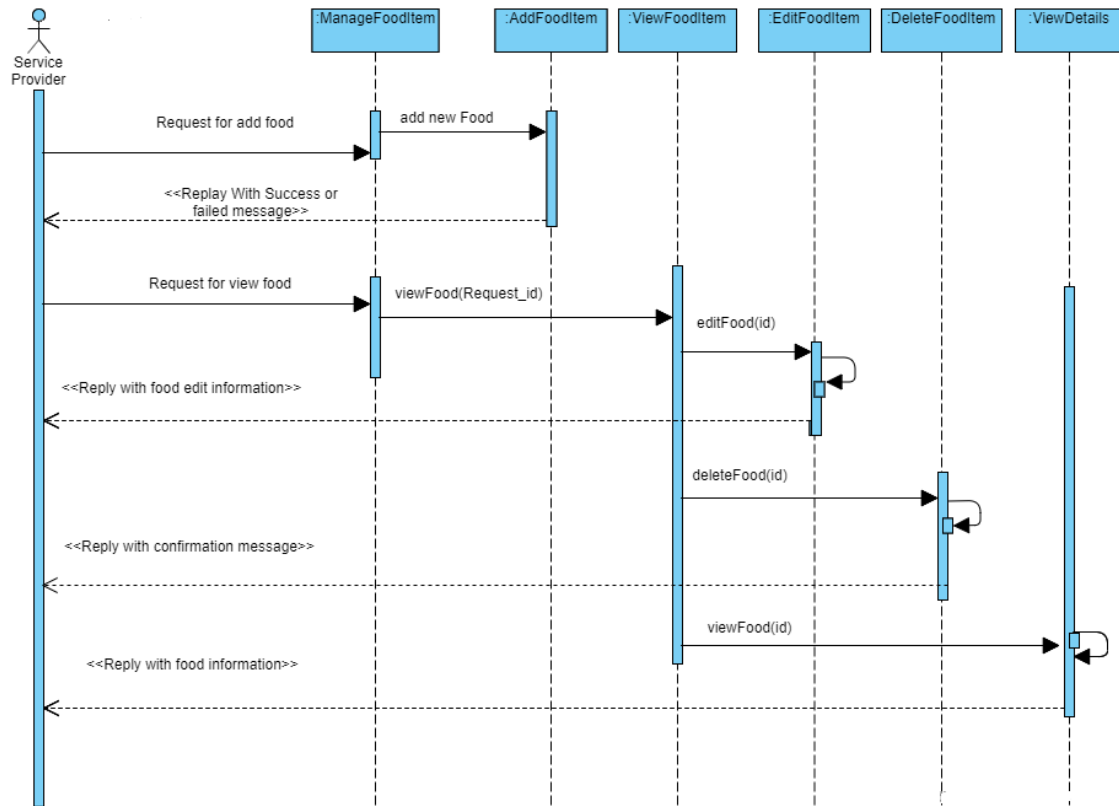


Figure: Manage Food Item Sequence Diagram (Online Catering System)

3.4.4. Manage Order Sequence Diagram

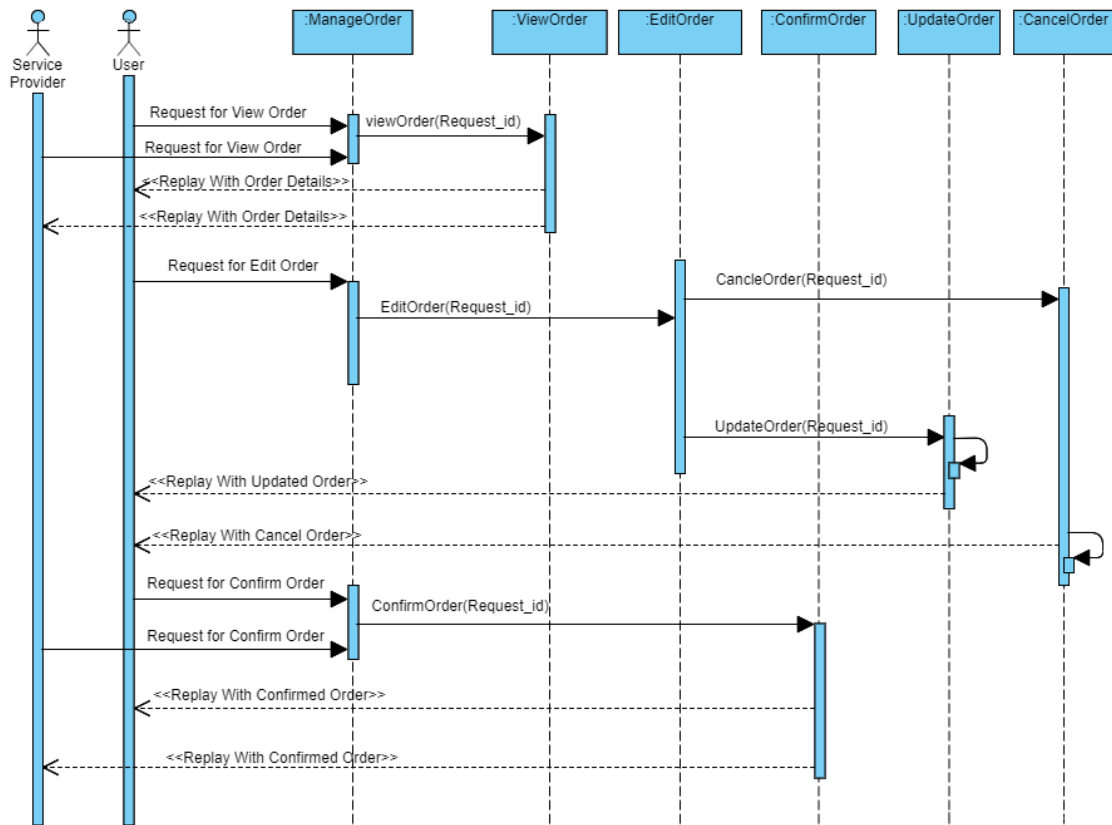


Figure: Manage Order Sequence Diagram (Online Catering System)

3.4.5. Manage Service Provider Sequence Diagram

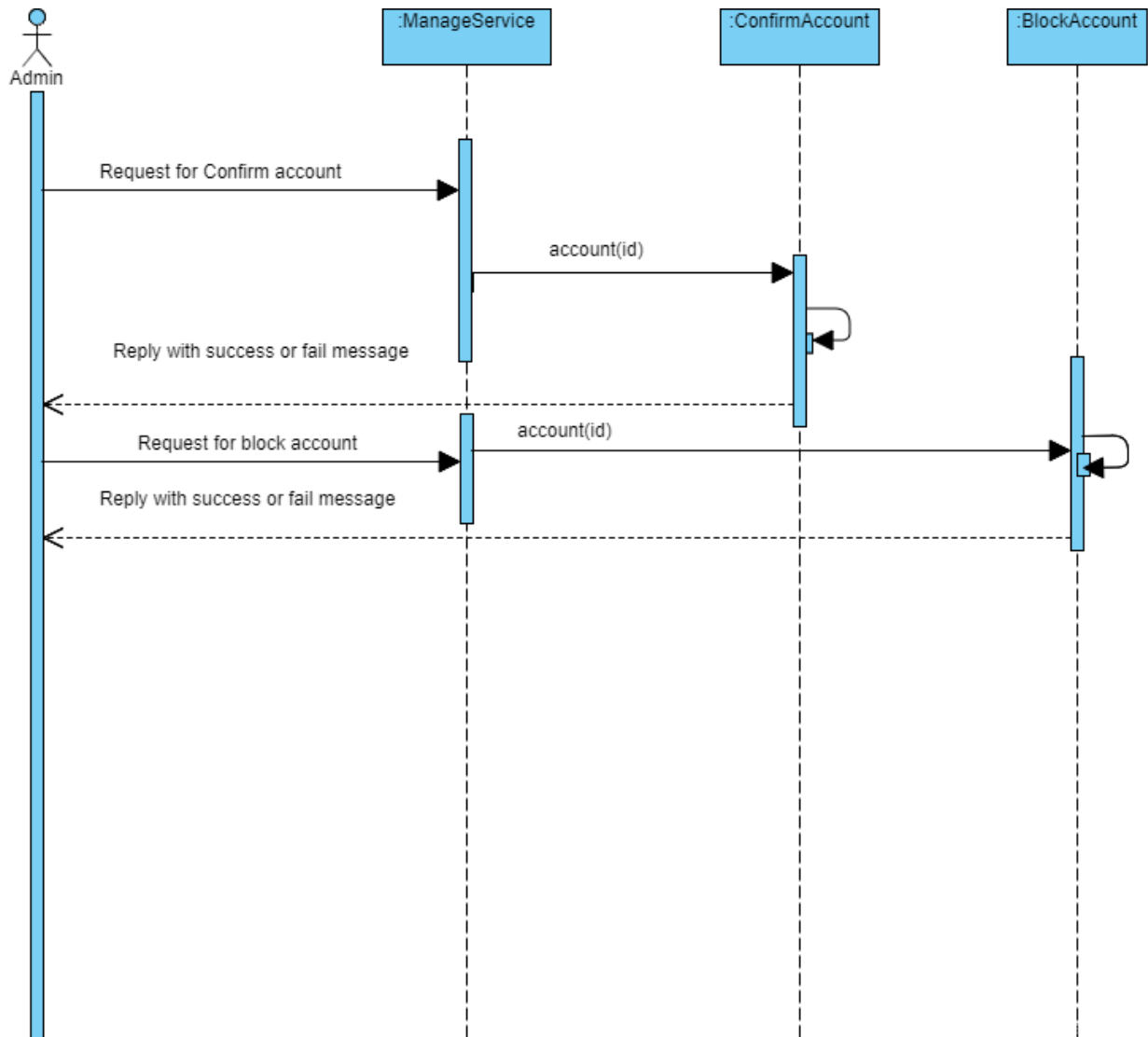


Figure: Manage Service Provider Sequence Diagram (Online Catering System)

3.4.6. Search Food Item Sequence Diagram

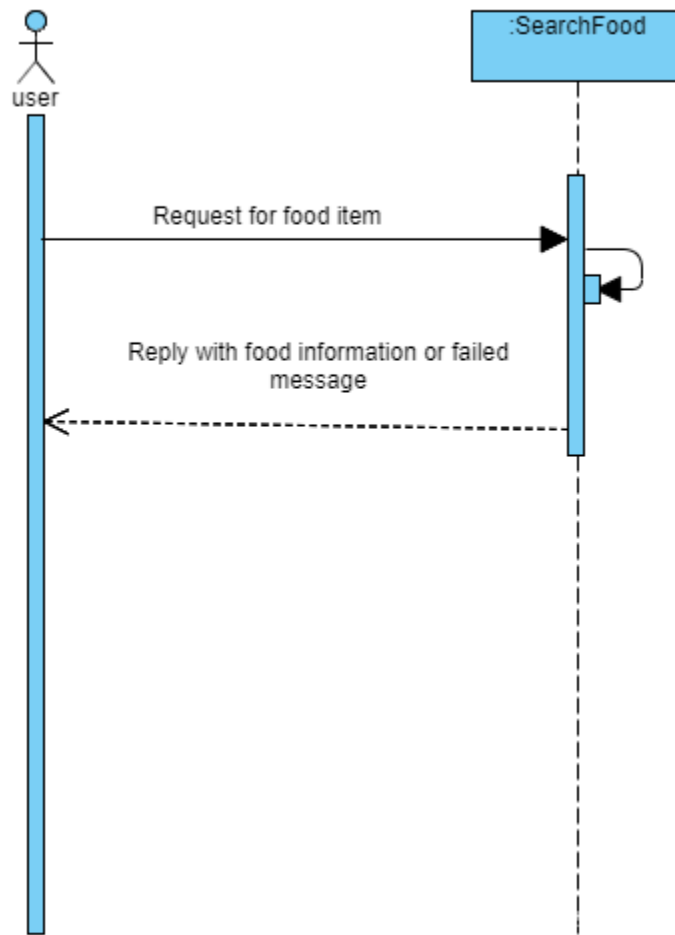


Figure: Search Food Item Sequence Diagram (Online Catering System)

CHAPTER 04: SYSTEM DESIGN SPECIFICATION

4.1. Class Diagram

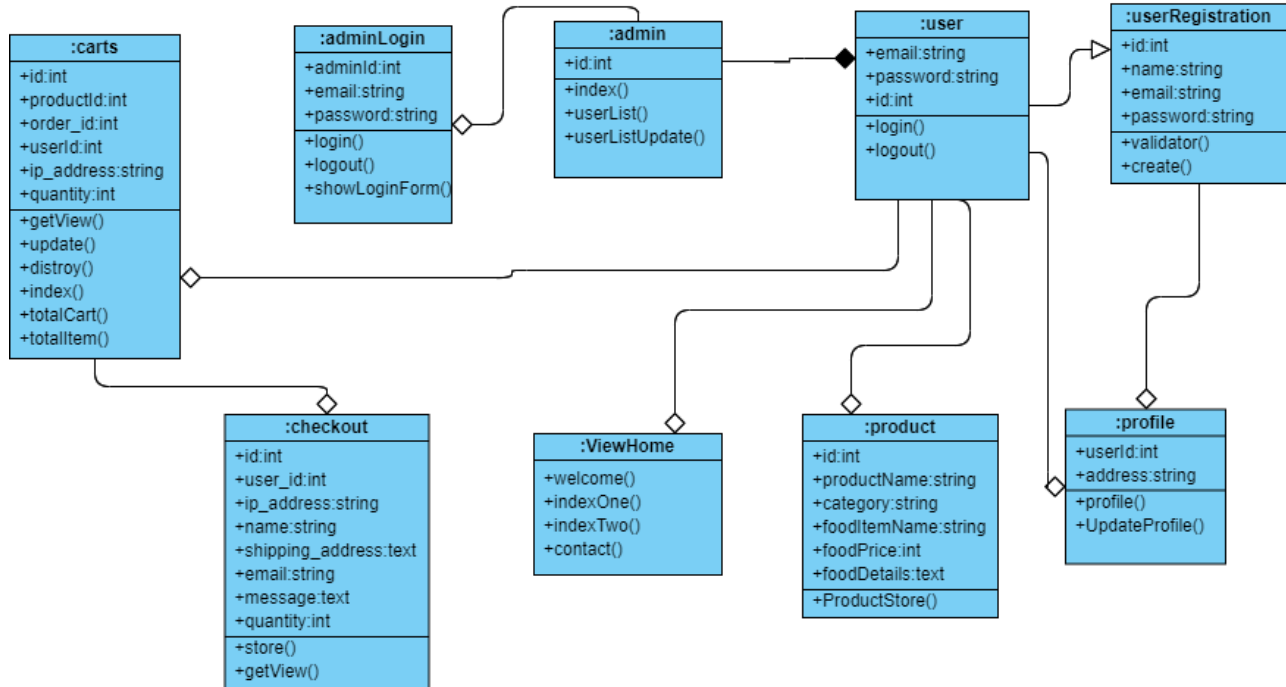


Figure: Class Diagram (Online Catering System)

4.2 Entity Relationship Diagram

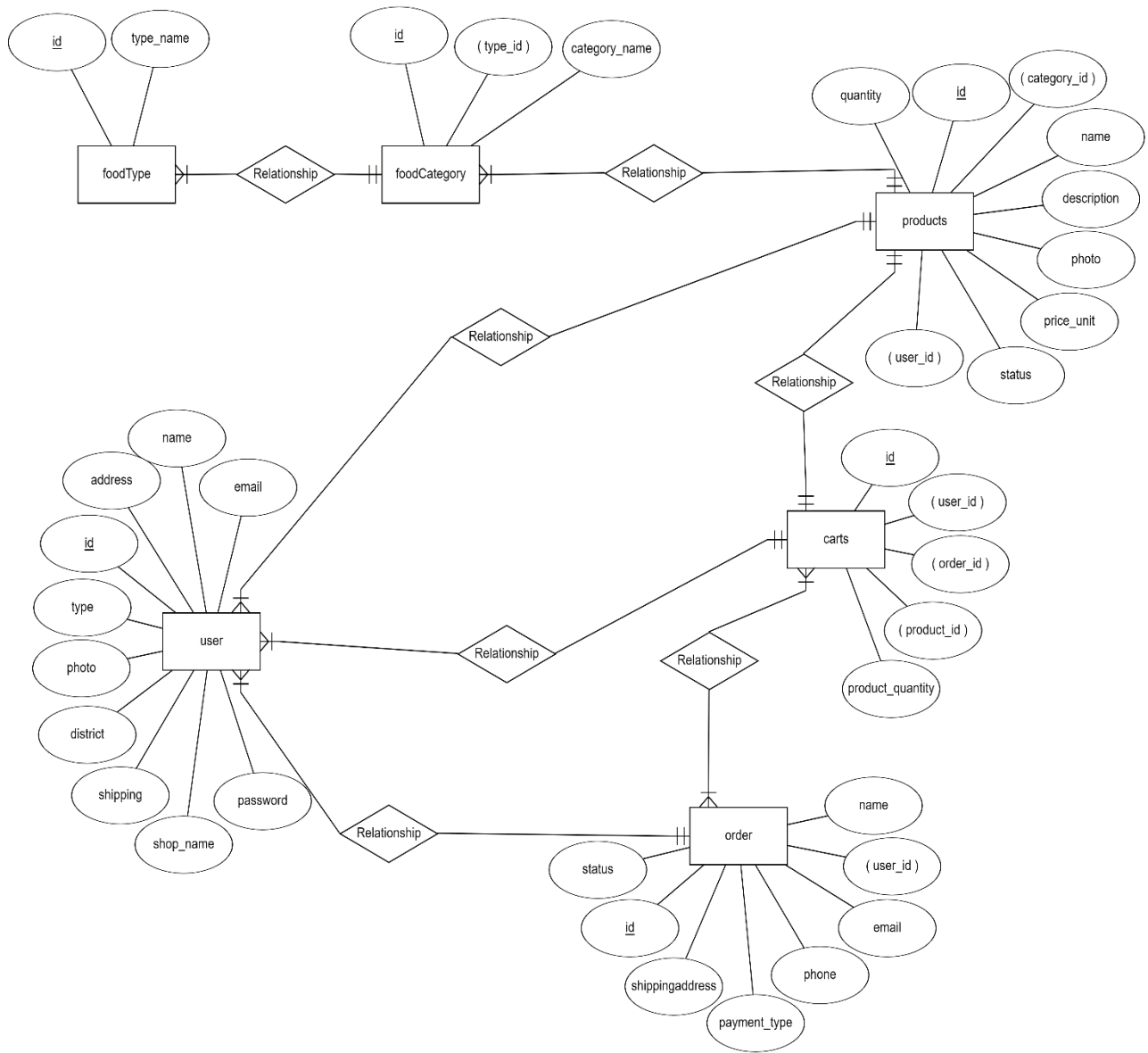


Figure: ER Diagram (Online Catering System)

CHAPTER 06: DEVELOPMENT TOOLS & TECHNOLOGIES

6.1. User Interface Technologies

- PHP, HTML5, CSS3, JavaScript, Laravel(Framework)
- JQuery 3.2.1
- Bootstrap
- Font Awesome, Flat Icons

6.2. Implementation Technologies

6.2.1. Xampp (7.3.11)

Xampp is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages.

6.2.2. NPM (5.7.1)

NPM is the package manager for JavaScript and the world's largest software registry. Discover packages of reusable code and assemble them in powerful new ways.

6.2.3. PHP (7.3.1)

PHP is Hypertext Preprocessor is a general-purpose programming language originally designed for web development.

6.3. Platform & Environment

6.3.1 Hardware

- Processor: Intel Core i5.
- RAM: 4GB.
- Hard drive: 1TB.
- Ubuntu 14.04./ Windows 8.1/Windows 10

6.3.2 Tools

- IDE/Editor: Visual Studio Code, Notepad++, Sublime Text3
- Cmd Terminal
- Robo 3T MySQL client
- Server: Localhost:8000

6.3.3 Version Control

- Git

CHAPTER 07: SYSTEM TESTING

7.1. Introduction

This is aimed at identifying and correcting error. The major objectives of this activity are to ensure that the process done by the application is correct and meets the objectives of the organization. Test plan aids in effective and systematic testing of the system and it aims at checking the errors of omission and commission that hinders the realization of the objectives.

7.2. Test Plan Strategy

The importance of the test plan is to show how the system is to be tested and also gives precise procedure to be followed during test plan. The test data is identified, what is being tested and the expected outcome as well as actual input. Test plan is one of the standard documents that should be produced in most software engineering projects. If the project does not have any test plan this means that the system produced is low quality. This may not be acceptable to the user it will not satisfy their needs. The test plan should be written as soon as requirements have been identified. The system will be tested with sample data to see how it would handle input and output functions as well as extreme data or conditions to determine the system behavior in overloaded situation which will directly slow the system that behaves in failure or extreme situation.

7.3. Test Case

A test case is a set of conditions or variables under which a tester will determine whether a system under test satisfies requirements or works properly. The process of developing

test case can help find problems in the requirements or design of an application.

- Ensure that logical decisions on their true and false side.
- Practice all the logical decisions on their true and false side.
- Check equivalent partitions and boundary value within their operations bounds.
- Exercise internal data structure to assure their validity.

7.3.1. Test Case of Login

Test Case #01	Test Case Name: Testing the login panel.
System: OCS	Subsystem: Login
Designed By: Md. Foysal	Design date: 20.11.19
Executed By: Md. Foysal	Execute Date:20.11.19
Short Description: This field handle's the login functionality of the website.	
Precondition: Go to http://localhost:/login .	

Table : Test case of login

Steps	Action	Action Result	Expected System Response	Pass/Fail
01	Enter valid email and valid password	Get logged in.	Logged in into the system.	Pass
02	Valid email and invalid password	Not logged in and error Message.	Not logged in and error message.	Pass
03	Click login without any Data	Required message	Required message	Fail

7.3.2. Test Case of Sign Up

Test Case #01	Test Case Name: Testing the signup panel.
System: OCS	Subsystem: Login
Designed By: Md. Foysal	Design date: 22.11.19
Executed By: Md. Foysal	Execute Date:22.11.19
Short Description: This field handle's the login functionality of the website.	
Precondition: Go to http://localhost:/register .	

Table : Test case of signup

Steps	Action	Action Result	Expected System Response	Pass/Fail
01	Click sign up without any data	Required message	Required message	Pass
02	Click sign up partially filling with data	Not signed up and required messages.	Not signed up and required messages.	Pass
03	Click sign up with valid data and password less Than 6 characters.	Signed up in and error message.	No Required message	Fail
04	Click sign up with valid data and password not matching with confirm Password.	Not signed up in and error message.	Not signed up in and error message.	Pass
05	Click sign up with valid data and password.	Signed up and redirected to main landing Page.	Signed up and redirected to main landing page.	Pass

7.3.3. Test Case of Manage Food Item

Test Case #01	Test Case Name: Testing the manage food item.
System: OCS	Subsystem: Login
Designed By: Md. Foysal	Design date: 24.11.19
Executed By: Md. Foysal	Execute Date:24.11.19
Short Description: This field handle's the login functionality of the website.	
Precondition: Go to http://localhost:/managefooditem	

Table : Test Case Add Food Item

Steps	Action	Action Result	Expected System Response	Pass/Fail
01	Add Food item without login	Required message	Required message	Fail
02	Add Food item with login	Add successfully	Add successfully	Pass
03	Edit food item without login	Required message	Required message	Fail
04	Edit food item with login	Edit successfully.	Edit successfully.	Pass

7.3.4. Test Case of Food Ordering

Test Case #01	Test Case Name: Testing the Cancel Order.
System: OCS	Subsystem: Login
Designed By: Md. Foysal	Design date: 25.11.19
Executed By: Md. Foysal	Execute Date: 25.11.19
Short Description: This field handle's the login functionality of the website.	
Precondition: Go to http://localhost:8000/ food order.	

7.3.5. Test Case of Cancel Order

Test Case #01	Test Case Name: Testing the Food Ordering
System: OCS	Subsystem: Login
Designed By: Md. Foysal	Design date: 25.11.19
Executed By: Md. Foysal	Execute Date:25.11.19
Short Description: This field handle's the login functionality of the website.	
Precondition: Go to http://localhost:8000/ foodorder	

CHAPTER 08: PROJECT SUMMARY

8.1. Limitations

- The system is for catering service provider and the customer.
- The system does not able to unauthorized sign in by other people.
- The system needs high speed internet.

8.2. Obstacle & Achievements

Obstacle:

- Learning new technology and new environment
- Limited time and budget

Achievements

- Learnt new technology
- Successfully build a project for corporate level

8.3. Conclusion

Despite the hardship encountered in the entire development process the system has been developed for online management system thus enabling it improves its efficiency and effectiveness. Maintenance and usage of the system will be easy as the document and user manual of the system will be available to all users. Also there will be room for enhancement as this was considered during development.

8.4. Future Work

Though the system was developed as fine but the future work will include some more major changes. Payment gateway will be integrated real time communication media like chat, email notification will be introduced.

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