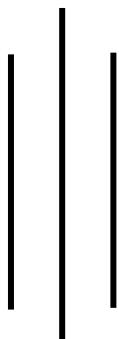


**ONLINE FOOD ORDERING SYSTEM  
FOR  
BAGLUNG NEWARI RESTARURANT**



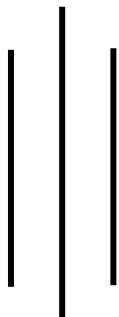
**BY**

**Hari Rijal**

**Exam Roll No.:**

**T.U. Registration No.:**

**Asian School of Management and Technology**



*A Summer Project Report Submitted to*

**Faculty of Management, Tribhuvan University**

in partial fulfillment of the requirements for the degree of

**Bachelor of Information Management**

Gongabu, Kathmandu

September, 2021



## CERTIFICATE FROM THE SUPERVISOR

This is to certify that the summer project entitled “**Online Food Ordering System**” is an academic work done by “**Mr. Hari Rijal**” submitted in the partial fulfillment of the requirement for the degree of Bachelor of Information Management at Faculty of management, Tribhuvan University under my guidance and supervision. To the best of my knowledge, the information presented by him in the summer project report has not been submitted earlier.

---

Signature of the Supervisor  
Mr. Chakra Narayan Rawal  
Date: September 29, 2021



Date: September 29, 2021

## LETTER OF APPROVAL

We, the evaluation committee of the Summer Project report have approved that Summer Project entitled "**Online Food Ordering System**" Submitted by "**Hari Rijal**" is fully adequate and satisfactory in scope and quality for the partial fulfillment of Bachelor of Information Management (BIM), Faculty of Management.

### Evaluation Committee

---

Mr. Chakra Narayan Rawal  
Supervisor

---

Mr. Chakra Narayan Rawal  
Coordinator

---

External External

---

Internal External

---

Er. Anil Amatya  
Principal

## **STUDENT DECLARATION**

This is to certify that I have completed Summer Project entitled "Online Food Ordering System" under the guidance of "Mr. Chakra Narayan Rawal" in partial fulfillment of the requirements for the degree of Bachelor of Information Management at Faculty of Management, Tribhuvan University. This is my original work and I have not submitted earlier elsewhere.

.....

Hari Rijal

11 September 2021

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## **ACKNOWLEDGEMENT**

This report has been prepared for the partial fulfilment of the requirements for the degree of Bachelor of Information Management, prescribed by faculty of Management, Tribhuvan University. This is an individual project assigned to us during our academic study in BIM Sixth semester, I should remain thankful to many people for the successful completion of this summer project.

I would like to express sincere gratitude to my supervisor, Mr. Chakra Narayan Rawal, for providing necessary guidelines for completion of this report. I am thankful to him for his continuous reinforcement and motivation for completing the project successfully. I thank for his regular feedback and suggestion to improve the report further.

We are very thankful to respected Associate Lecturer, Mr. Surya Bam for helping and encouraging us in every aspect of my academic study. Also, I would like to thank all the respondents who filled the questionnaire and helped me with the continuation of the project.

Finally, I would like to thank my friends for uplifting my spirit to complete the report in time.

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## **LIST OF ABBREVIATION**

|       |  |
|-------|--|
| BIM   | Bachelor of Information Management             |
| CRUD  | Create Read Update and Delete                  |
| CSS   | Cascading Style Sheet                          |
| ERD   | Entity Relationship Diagram                    |
| HTML  | Hypertext Markup Language                      |
| HTTP  | Hypertext Transfer Protocol                    |
| IT    | Information Technology                         |
| OOP   | Object-Oriented Programming                    |
| TU    | Tribhuvan University                           |
| UI    | User Interface                                 |
| UML   | Unified Modeling Language                      |
| XAMPP | Apache Http Server MySQL Database PHP and Perl |

## EXECUTIVE SUMMARY

Online Food Ordering System is web-based application, online service especially designed for restaurant, and aim at providing innovation marketing solution to restaurant.

This system focuses mainly on dealing with customer's food order lists as users can brose available food items and add them to the cart for checkout procedure. Also, the system displays both veg and non-veg restaurants with their menus on the client-side with their respective food images. In addition, the system lists out all the available store's descriptions with their opening hours.

This project is divided into two categories: Admin Panel and Client-side. In an overview of this website, the users need an account in order to place the order. Taking more about the project, the user can simply select food items, and add them to their respective cart. Under the customer's cart section, the system displays the total amount and allows the user to proceed towards checkout. For purchase checkout, customer can also change the shipping details too.

Similarly, in this project, an admin has all the access to the system. Admin can view the total number of customers with their details, restaurants, categories, food menus, orders and manage them accordingly. The admin dashboard represents all the information in figures with extra information like pending orders, completed orders, and rejected orders.

The system displays all the orders list under the orders sections where the admin can handle them with ease. Each section contains customer's username with respective food item name, quantity, price, order status. The admin can take action by selecting any and changing their current order status to processing, delivered or rejected. The system also calculates the total numbers of orders from various food items and total sales from the available restaurant. The information is shown in the admin dashboard in the form of a table.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

The writing of a Summer Project report is an essential requirement for graduation from the Faculty of Management, Tribhuvan University. This assignment is an off-the classroom and field-based study project which allows students to reflect and integrate their learning over their five semesters of study. Tribhuvan University is to prepare IT professionals proficient in the use of computers and computational techniques use in order to develop effective information system to solve real life problems in the organizational areas.

Project helps to know about the real-life working scenario. It helps to understand about the qualitative data and information used in the organization. This summer project helps students to increase the efficiency in changing technological world. It helps me to know about the operational and functional mechanism of such organization. The candidate can be well prepared for internship program. With the help of this summer project, students can reflect and integrate their learning over their overall semester of study and create an innovative in an area of their interest related to any area of business administration and Information Technology. The main goal of Summer Project is that through the assignment students can gain the new ideas, innovation into the real world.

It is an opportunity to grow network and public relation. It helps to develop critical thinking to solve any problem. Therefore, it is most important for the students to work on this project for the self-development of communication skill and experiencing the working environment.

This report is based on the organization visit made to Baglung Newari Restaurant, Tokha-11, Kathmandu. It has been developed based on the inside learnt and observed during the visits to the organization. The problem related to the organization is solved with the help of IT. A website development is made to overcome problem. This project is implemented using database and PHP. Its main aim is to provide the online food delivery of restaurant through the online. With the help of this project the restaurant can deliver the food to their customer around the Kathmandu valley.

## **1.2 Introduction of the Organization**

Baglung Newari Restaurant is located at Tokha-11, Kathmandu, established in 2018 A.D.

Baglung Newari Restaurant is owned by Mr. Birat Rajbhandari, with the objective of serving good, fresh and quality food. Restaurant offers various breakfast sets and a large choice for lunch or dinner items. Restaurant known for cheap eats, friendly faces, and our galactic menu of options for all. The restaurant opens at early morning 6 AM and closed at late 10 PM. The main motive of the organization is to provide the quality foods and services to their customers.

Baglung Newari Restaurant is a growing organization which is very famous for Newari foods and local organic product. This organization is dedicated to deliver quality and fresh foods and services.

### **1.2.1 Vision**

- To be the most trusted and largest family restaurant by making satisfactory to the customer.

### **1.2.2 Mission**

- To be the preferred original family restaurant, offering fast, fresh and tasty food in clean, safe and hygienic surroundings at convenient locations and achieve highest standards of guest delight.

### **1.2.3 Objectives**

- To build the restaurant brand.
- To achieve organizational goal.
- To achieve customer satisfaction.
- To provide high quality and hygienic food to the customer.

### **1.2.4 Current Situation of the Organization**

The Organization is been continuously providing quality of foods to their customers. Ordering staff has record customer's orders by manually into their register. The Organization has recently established another Veg Restaurant under the same platform to target Vegetarian customers. Customers are satisfied with their quality and fresh food but table are not available at restaurant at a peak hour. The restaurant uses pen and paper to

take down customers orders and the orders subsequent processing. They do not provide any delivery services.

#### **1.2.4.1 Service Provided**

This organization is dedicated to deliver quality, healthy and tasty food items at reasonable price in local area of Kathmandu. Restaurant provides food and drink services to customers, showing attentiveness, and understanding of their needs and expectations. Provide the facility for office delivery and home delivery. The organization always try to meet the expectations of their customer by providing their desired quality food items.

#### **1.2.4.2 Business Process**

In every organization, there is own structure according to their nature to achieve of organization. The organization has its two restaurants with full veg and non-veg food items separately. Each restaurants have the following business process model.

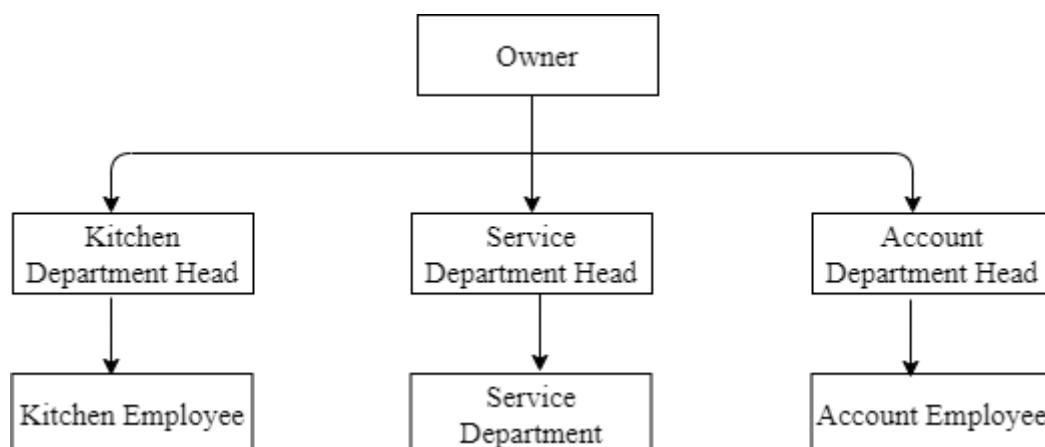


Figure: 1.1: Business Structure

#### **1.2.4.3 Technology Adapted**

There is no any use of the existing technology for online food ordering. The restaurant uses pen and paper to take down customer orders.

#### **1.2.4.4 Target Customer**

It was established with motive to provide high quality, fresh and clean food to the customers. This organization target to all age people, students, family, offices as a customer. Mainly focus on Tokha area of Kathmandu.

### **1.3 Problem Definition**

Baglung Newari Restaurant uses pen and paper to take down customer orders and there is no online delivery service for online food ordering. The waiters are responsible for physically taking the note that has the customer orders to the kitchen as well as the account for payment receipt. Tables are not easily available especially during peak hours. Customers have to wait in a queue for their payment.

### **1.4 Objectives of the Project**

The objective of this project is to develop a web application that allows the customers to order their desired food item from their working location. The following points simplify the objectives of this project more clearly:

- To increase efficiency and improve services provided to the customers through better application of technology in daily operations.
- To enable customers to order their desired food through internet.
- To make all the work easier and computerized.
- To improve efficiency of restaurant's staff.
- To increase speed of service, sales volume and customer satisfaction.

### **1.5 Methodology**

It is necessary to include a consideration of the concepts and theories which underlie the methods. Methodology is the systematic, theoretical analysis of the methods applied to the study. It compromises the theoretical analysis of the body of the methods and principles associated with a brand of knowledge. There are various methods which can be used to obtain the required information about a particular research topic. Research methodology includes research design, approach, sample size, sampling techniques, sampling criteria, description of tools, etc. which are then used to analyses and generate findings on research topic. Here, based on the objectives, set of questions were designed for interview and careful observation was conducted which is an important part of software development.

#### **1.5.1 Project Framework**

Project framework is a combination of processes, tasks, and tools used to transition a project from start to finish. This chapter reveals the proposed method of implementing the project. The important on this is systematic planning and implementation in order to complete system on time.

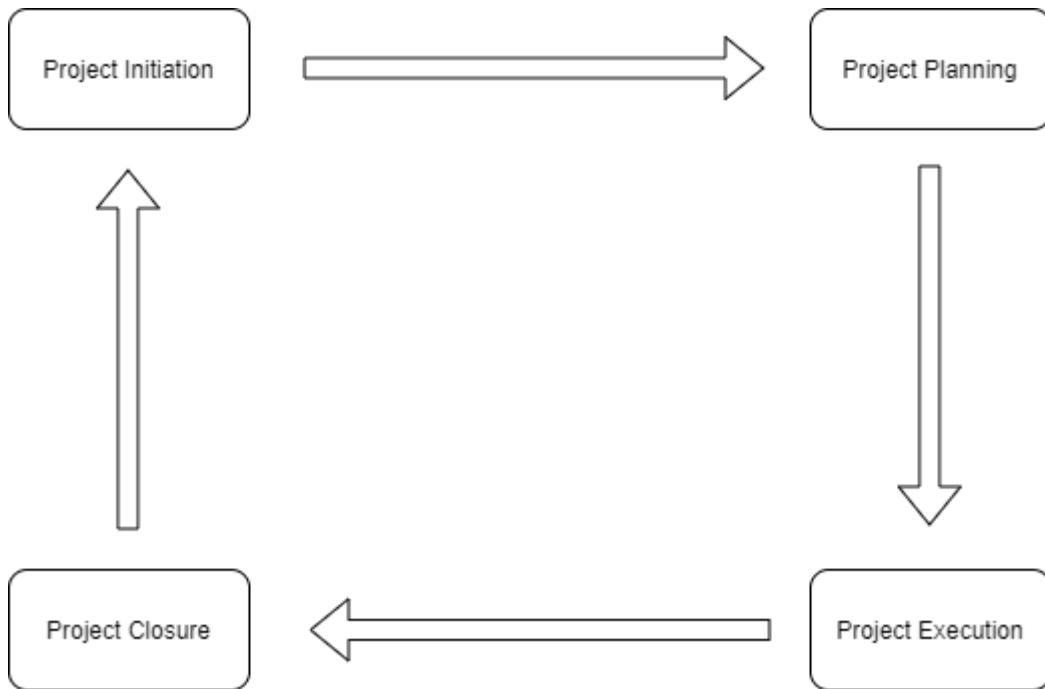


Figure 1.2: Project Framework

- **Project Initiation:** The Project Initiation is the first phase of Project Life Cycle, as it involves starting up a new project. In this phase, I identified the issues and problems of the organization, and providing recommendation based on the analysis of collected data for the problems. Project is started with by defining its objectives, scope, purpose of the report and proposal was submitted to with the clear information.
- **Project Planning:** In the Project Planning phase, various planning activities has been be conducted, which includes the planning of work, schedule, budget, gathering resources, and etc. Those proper planning activities helps me to complete the project on time and within the budget.
- **Project Execution:** The execution phase turns all the plan into action. I have completed the development activities identified in the planning phase to produce the project requirement. This phase ends by having the project complete after testing process.
- **Project Closure:** Project Closure is the last phase of Project Life Cycle. In this phase I formally closed my project and then report the overall level of success and findings, lesson learned from the project, as well as plan and conduct transferal activities. In this phase I have done analyzing of project, documenting project closure and conducting post-implementation reviews.

### **1.5.2 Data and Information**

Data are collected through interview, observation and internet. It is collected for the purpose of analysis. Information consists of facts that defines the relationship between pieces of data. Data becomes information after being processed, information gives off facts when data supports it and facts are what data reveals.

The data and information are collected from two major sources:

#### **a. Primary Data**

In this project, data have been collected directly through interview and observation.

Direct interview was held in owner of organization Mr. Birat Rajbhandari and directly observation in organization.

#### **b. Secondary Data**

In this project, the data and information are also collected through the secondary sources like internet, newspaper, magazines, books, reports, etc.

#### **c. Work Process Observation**

The working mechanism of the organization was observed closely. It gives the idea about the working system of organization.

### **1.5.3 Tools used for Data Collection**

It is the most important part of the development process. It provides the information about the requirement that the users want in the system or expecting from it. Requirement has been gathered by using various techniques. Some of the techniques are as follow:

- **Interview:** It is the most commonly used requirement gathering technique where we interviewed with Mr. Birat Rajbhandari owner of an organization and gather the information that he wants in the system.

The information is collected based on questionnaire to gather information.

#### **Questionnaire:**

- Does the restaurant use any kind of web application?
- What does the waiter use to take the orders from customer?
- What tools was used to record information about the food order, and product sales report before implementing software?
- What are the drawbacks of manual food ordering system?
- How is lockdown affecting the business?

- **Observation:** Observation is another technique for gathering information. The activities on the organization were observed and analyzed accordingly. I have visited the organization to observe and find out the reliable information that will be useful for the project.
- **Internet Research:** The internet is a compelling tool for research. It enables efficient, cost-efficient data collection and facilitates access to large sample of data. Internet play a vital role during this project.

## **CHAPTER TWO**

### **TASK AND ACTIVITIES**

#### **2.1 Literature Review**

Online Food Ordering System is the system where we can order the food item and reserve table through internet with just one click, which can make our daily life easy and faster. Presently, the customers spend an average of 1 hour per day going to the restaurant, selecting their food and paying. Restaurants have the provision of customers making a call to the restaurant in advance to order an item to be ready for them for pick or to be delivered to them. some of the customers don't always get the selection they want because the restaurants run out of certain items or because there is no provision of ordering custom foods. (Regmi, 2017)

In an automated food ordering system is proposed which will keep track of user orders smartly. Basically, they implemented a food ordering system for different type of restaurants in which user will make order or make custom food by one click only. The list of selected preordered items shall be shown on the kitchen screen, and when confirmed, order slip shall be printed for further order processing. By means of web application this system was implemented. The front end was developed using html, CSS, bootstrap and at the backend java programming and MySQL database was used. (Tafar, 2013)

#### **2.2 Analysis of Task and Activities**

Many tasks and activities had performed which had helped to fulfil the main objective of our project. Major objectives of the project were to get the information about the use of technology in one the organization in the country. Some of the tasks that is performed is given below:

##### **i. Organization Selection**

Selection of an organization is an important decision for the project, as the type of organization dictates the majority of the requirement for a system. After some research and visiting different local organizations, "Baglung Newari Restaurant" was selected for the project.

## **ii. Getting the Information about the Organization**

After the selection of the organization, the other task was to gather relevant information about the restaurant. The main techniques that were used for this purpose was direct observation of the procedures carried out by each of the staff members of the organization. Further information was collected through the direct interviewing with the owner and staff members of organization with relevant questions.

## **2.3 Analysis of Problem**

The organization is facing certain problems. The main problem of this organization is that there is no any digital system for online food ordering. The organization's staff uses pen and paper to take down customers' orders. Restaurant's tables are not easily available especially during peak hours. Customers have to wait in a queue for their payment.

## **2.4 Analysis of Possible Solutions**

The most important solution for the analyzed problem could be an Online Food Ordering System in the form of web application. The organization doesn't have implemented for online food delivery, so it was considered for the better management of restaurant. The system is considered for the most useful tools to increase the sales of the organization. The system also eliminates the traditional approach of taking down order from customer by using pen and paper.

## **2.5 Feasibility Analysis**

A feasibility study is an analysis of how successfully a project can be completed, accounting for factors that affect it such as economic, technological, legal and scheduling factors. It shows how the business is associated with the business strategy. The categories within the feasibility study that need to be discussed are technical, economical and operational feasibility.

### **2.5.1 Technical Feasibility**

The technical issue usually rises during the feasibility stage of the investigation. Online Food Ordering System is a system that effectively and efficiently manage the mass numbers of food order at a same time.

The current system developed is technically feasible. So, cost of maintenance will reduce. It provides an easy access to the users and it provides the technical guarantee of accuracy and

reliability. As all the hardware and software tools required for implementation of the system is under the budget of the organization.

The software and hardware requirements for the development of this project are not many and are already available as free as open source. Also, software can be easily upgraded to accomplish specific user requirements. The programming language and database are open source. The system is based on a real-time database that provides real-time updates to the information change in the database. They all are easily available to the public.

This system allows for the feasible work operation of the restaurant, where the data may change constantly and assures for the availability of real-time updated data. Hence technically there is no limitation for the development of the software.

### **2.5.2 Operational Feasibility**

As the software was developed to solve the problem of the organization according to the requirements and the organization is also satisfying with the solution suggested. So, they are ready to operate software once it is developed and operative once it is installed. It is easier to use and there is no need of skilled manpower to use this system. That will meet the organization's operating requirement. This system will provide all the information to customer without having any direct contact to organization.

This requirement-based system would ensure the optimal utilization of organizational resources and would also help in the elimination of redundant operations and improve upon organizational performance. The system is extremely flexible since it provides large number of validations on all the entered and avoid error in the calculation.

### **2.5.3 Economic Feasibility**

The organization has evaluated the cost of software and hardware required for the system including storage of data. Once the software is installed and operated, it will definitely save time of the organization and it does not need additional hardware or software. This would insure nominal expenditure for the organization. Also, since the software is easy to use and do not need skilled manpower to use it. The benefits expected from the system are studied to access the cost due to new system.

## 2.6 Requirement Analysis

Requirement analysis focuses on the tasks that determine the needs or conditions to meet the new or altered product or project, taking account of the possibly conflicting requirement of the various stakeholders, analyzing, documenting, validating and managing software or system requirements. The requirements can be classified as functional and non-functional requirements.

### 2.6.1 Functional Requirement

Functional Requirement are the state of services the system should provide how the system should react to the particular input and how the system should behave in particular situation. A typical functional requirement will contain a unique name and number, a brief summary, and a rational. This information is used to help the reader understanding why the requirement is needed, and to track the requirement through the development of the system. Some of the functional requirements of "Online Food Ordering System" includes:

- Customer should be able to view menu.
- Customer should be able to add menu item into the cart.
- Customer should be able to place order.
- Customer should be able to track their order.
- Customer should be able to view invoice.
- Admin should be able to update menu.
- Admin should be able to manage order.
- Admin should be able to view sells report and dish report.

#### 2.6.1.1 Use Case Diagram

Use-case Diagram is the interaction between system and actors. In the given use-case diagram it shows the interaction between Online Food Ordering System and actors i.e., Admin and Customer. Use-case diagram shows which actors can perform which functions of the system and the relationship between them as well.

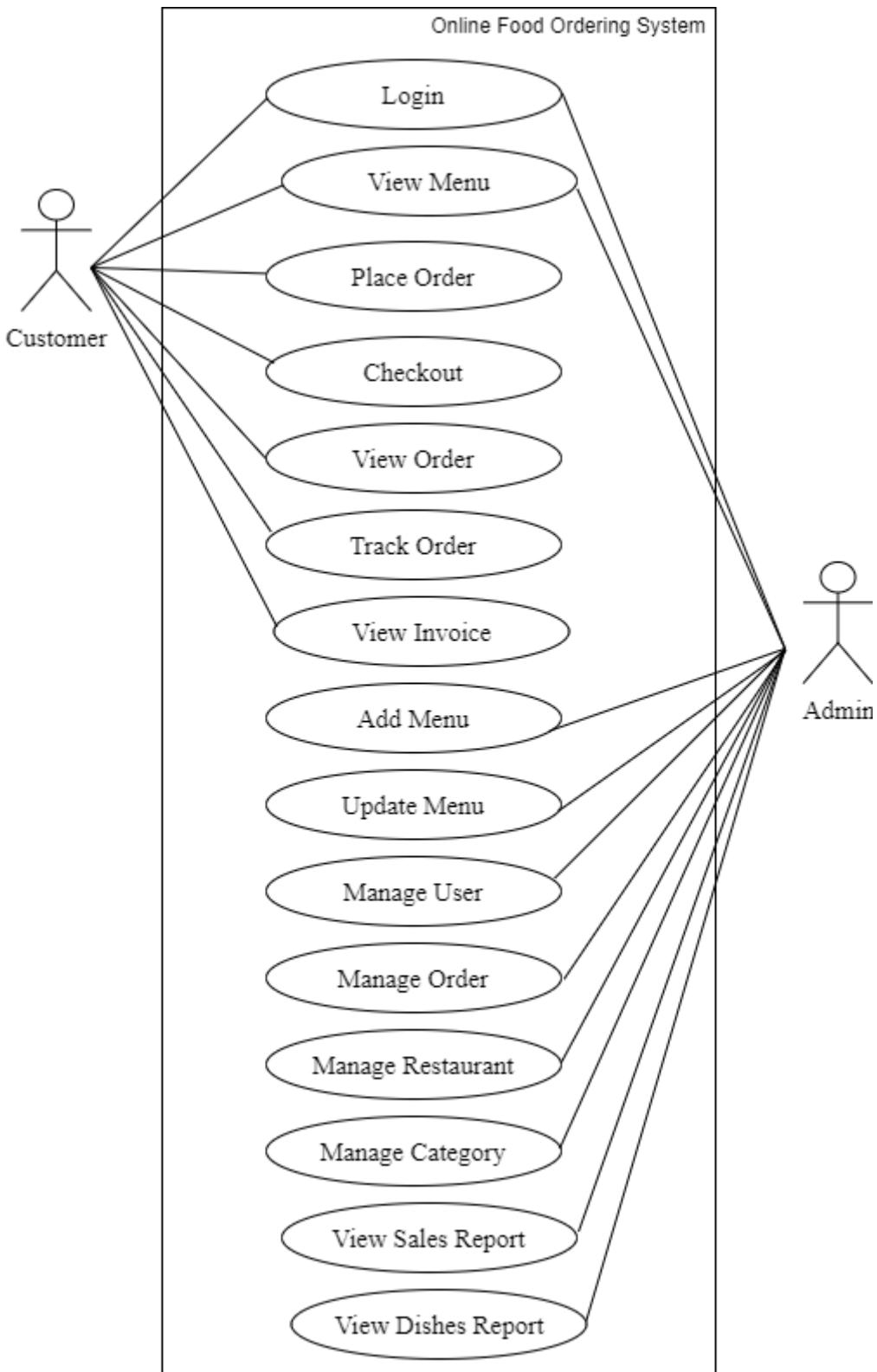


Figure 2.1: Use-case Diagram

### 2.6.2 Non - Functional Requirement

Non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system rather than specific behaviors. It defines system property and

constraints. It is contrasted with functional requirements that defines specific behavior or functions. The plan for implementing non-functional requirements is detailed in the system architecture as they are usually architecturally significant requirements.

The non-functional requirements of Online Food Ordering System are as follow:

- **Usability**

The system is easy to operate and understand. It has intuitive and responsive design.

- **Reliability and Compatibility**

The system can operate reliable while performing CRUD operation and other functionality. The system is compatible on all the web browsers.

- **Performance**

The system can maintain security of user credentials and data. There is no any lag while performing different operations.

## **2.7 System Design**

System design is the process of defining the elements of a system such as the architecture, modules and components, the different interfaces of those components and the data that goes through that system. It is meant to satisfy specific needs and requirements of a business or organization through the engineering of a coherent and well-running system. One of the main components of software design is the software requirement analysis. In this project there is one database used for store the information of customer who have register their account in system.

### 2.7.1 Class Diagram

A class diagram is an illustration of the relationships and source code dependencies among classes in the Unified Modeling Language (UML). In this context, a class defines the methods and variables in an object, which is a specific entity in a program or the unit of code representing that entity. Class diagrams are useful in all forms of object-oriented programming (OOP).

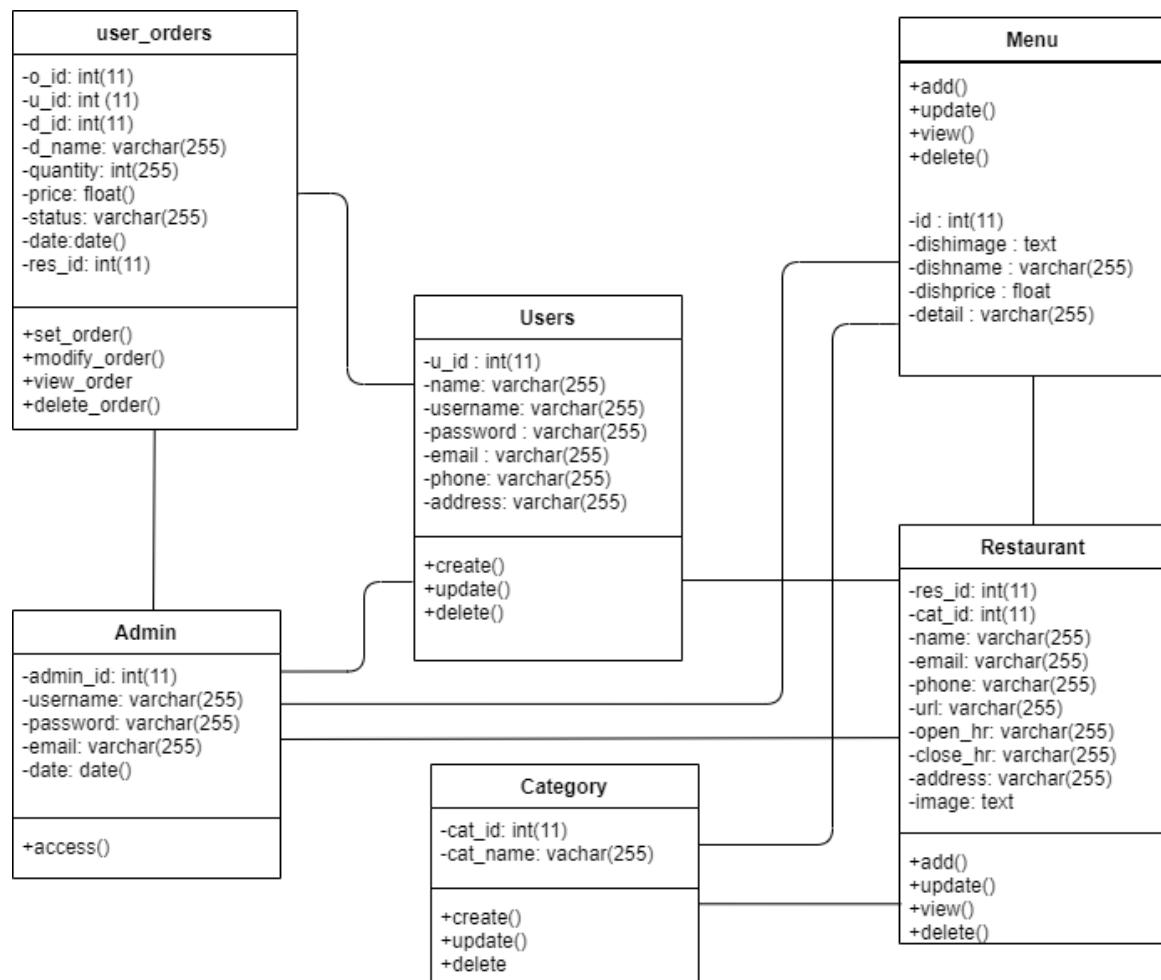


Figure 2.2: Class Diagram

### 2.7.2 Activity Diagram

An activity diagram visually presents a series of actions or flow of control in a system similar to a flowchart or a data flow diagram. Activity diagrams are often used in business process modeling. They can also describe the steps in a use case diagram. Activities model can be sequential and concurrent. In both cases an activity diagram will have a beginning and an end.

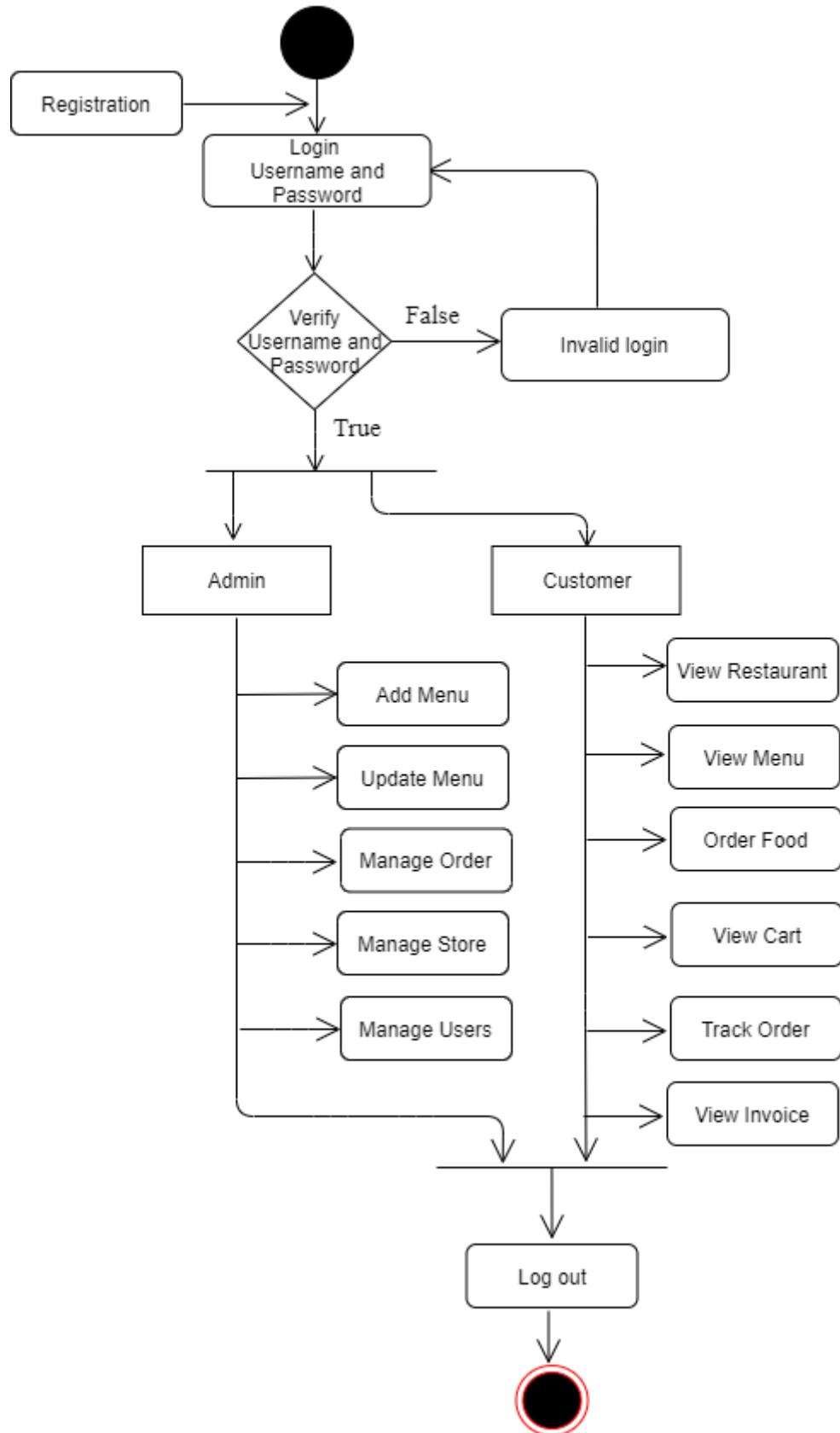


Figure 2.3: Activity Diagram

### 2.7.3 Sequence Diagram

UML Sequence Diagrams are interaction diagram that detail how operations are carried out. They capture the interaction between objects in the context of a collaboration. Sequence diagrams are time focus and they show the order of the interaction visually by sing the vertical axis of the diagram to represent time what messages are sent and when.

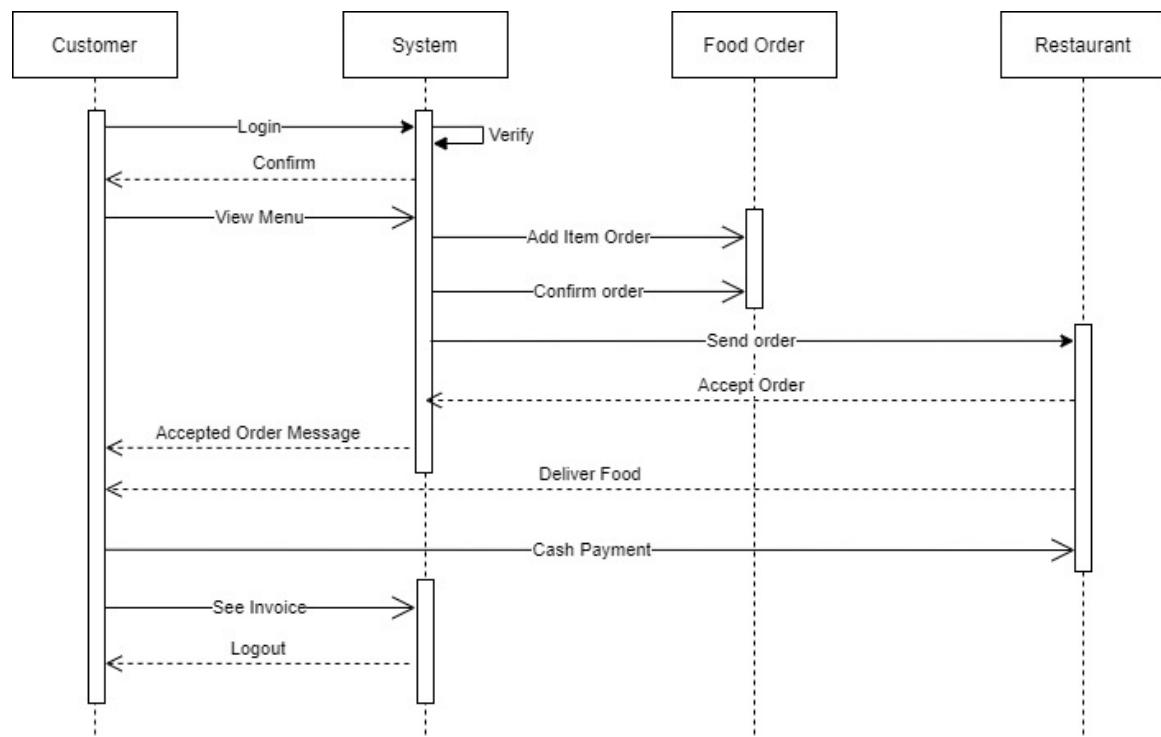


Figure 2.4: Sequence Diagram

## 2.7.4 ER-Diagram

An Entity-Relationship Diagram (ERD) is a data modeling technique that graphically illustrates an information system's entities and the relationships between those entities. An ERD is a conceptual and representational model of data used to represent the entity framework infrastructure.

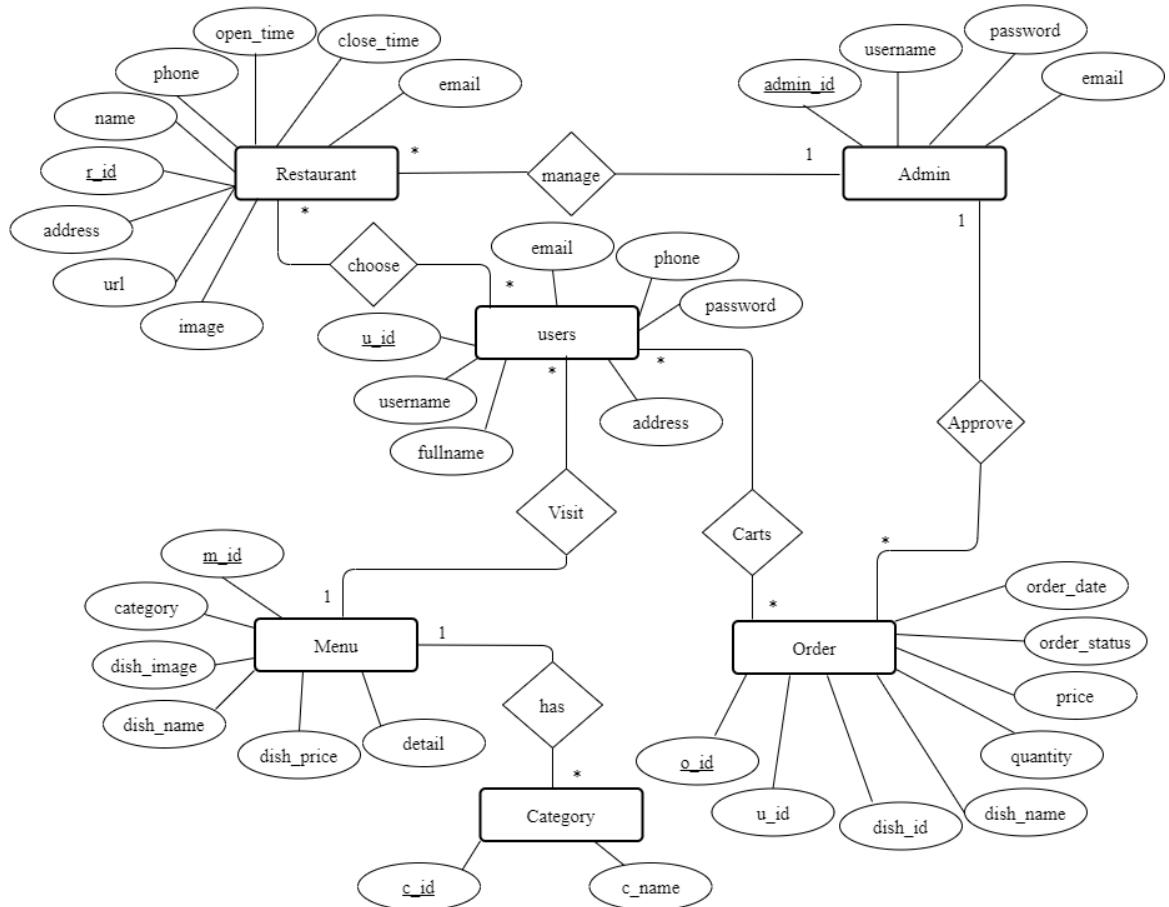


Figure 2.5: ER-Diagram

## 2.8 System Implementation

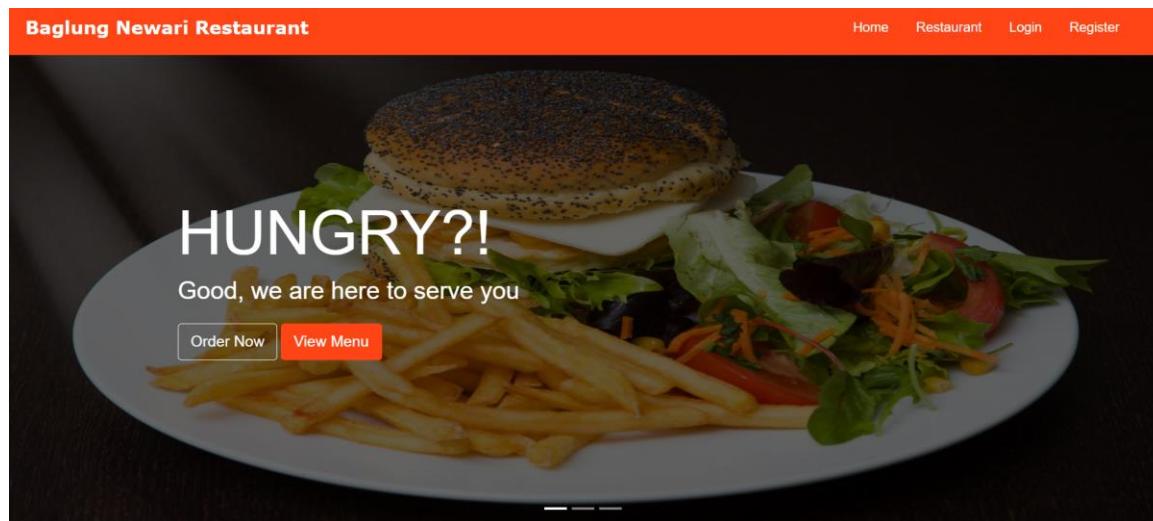
In this part, it actually constructing a new system from the scratch with the help of the system design. This part will look at the implementation of the system including the database and the main application. It including coding, testing and integrate system to meet its requirements. The section highlights the main feature if the system and they were implemented.

### 2.8.1 Module Description

Modules Description shows the different page of the system and following are different module of these system.

## Home Page

Home page shows all the menu items existing in the system. It includes ordering procedure, attractive food menu and contact details of organization.



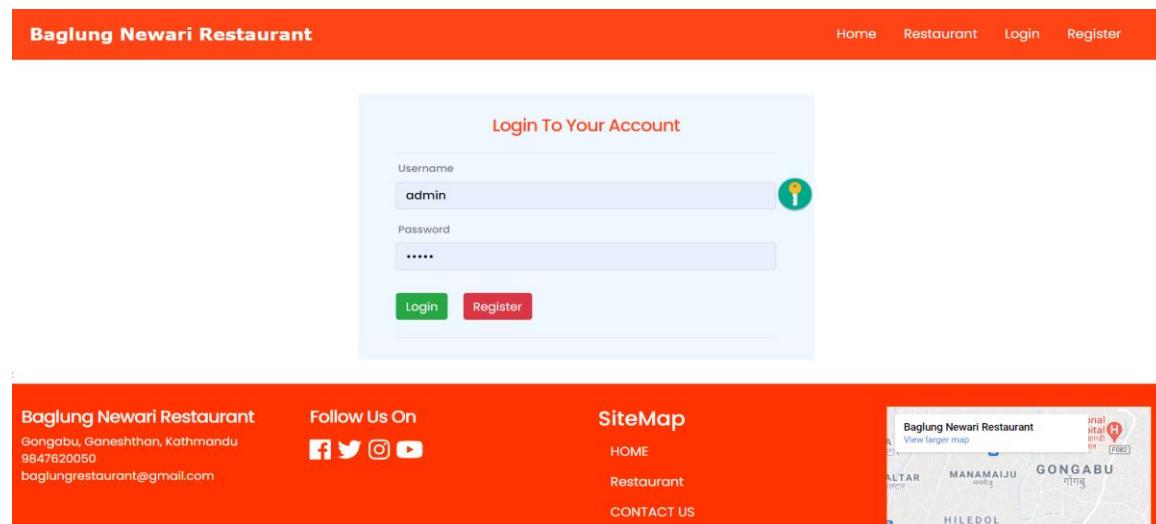
## Signup Page

In this signup screen, customer can create their login account by providing all the details information required in the form. All the information provided by the user will validate by the system and if entered information beyond the required information then system will show the error message immediately. When they submit their information, all the information will be inserted into the database.

The screenshot shows the 'Create Your Account' form. The top navigation bar has links for Home, Restaurant, Login, and Register. The form itself has several input fields: 'Enter Username' (with 'admin' typed in), 'Enter First Name' (with a placeholder icon and 'Enter First Name'), 'Enter Last Name' (with a placeholder 'Enter Last Name'), 'Email' (with a placeholder 'Email'), 'Password' (with a placeholder '.....'), 'Contact' (with a placeholder 'Contact'), and 'Address' (with a large text area). At the bottom of the form is a large orange 'Create Account' button. Below the button, a small note says 'Already registered? [Login Now!](#)'.

## Login Page

Customer should before register their account into the system to login into the system. When they submit the login form with valid username and password the session will be created with the username. Validation will be performed by checking if the username and password occurred together. If they match with the data into the database then the user would be directed to the internal pages. If the username and password does not match, then the user will be directed to the login form with error message.



## Dashboard

Dashboard is admin side control panel which shows the customers orders, registered users detail information, etc. Admin can update menu items, restaurants and its categories. All the dishes reports and restaurants sells report is shown in dashboard page separately of each restaurant. In this dashboard page, admin can view total numbers of registered users, total numbers of orders, total numbers of pending, delivered and rejected orders.

The screenshot shows the Admin Panel interface. At the top, there's a navigation bar with links for User, Store, Category, Menu, Orders, and Logout. Below the navigation is a row of four cards showing statistics: 4 Users/s, 2 Restaurants, 11 Dishes, and 33 Total Order/s. Another row of four cards shows: 2 Categories, 25 Pending Order/s, 8 Delivered Order/s, and 0 Rejected Order/s. Below these are two reports: "Restaurants Report" and "Dishes Report". The "Restaurants Report" table shows two entries: Baglung Veg Restaurant (Total Sales 4125) and Baglung Newari Restaurant (Total Sales 4680). A "Download Report" button is located below this table. The "Dishes Report" table lists various dishes with their ordered counts: Veg Burger (15), Finger Chips (7), Chicken Burger (6), Chicken Biryani (6), and Chicken Momo (3).

### 2.8.2 Tools used

- **HTML:** It is basically used to format text as titles and headings, to arrange graphics on this system and also used to link different pages within a system.
- **CSS:** In this system CSS is used for development sites structure by creating design or outline the html element and describing the presentation to different pages, including colors, layout and fonts.
- **Bootstrap:** In this project, Bootstrap is used for designing and making the website screen responsive. Different components and models are used for attractive user interface. In this project Bootstrap version 4.0.0 is used.
- **PHP:** PHP code is embedded into HTML for making website dynamic and used for connecting website to database. In this system PHP version 7.3.11 is used.
- **MySQL:** In this project, MySQL is used for the database management of the system. Different data is stored in the server to make the website dynamic.
- **XAMPP:** It is used for creating and configuring with database which is written in MySQL without internet. In this project XAMPP version 3.2.4 is used.
- **Microsoft Office:** The Microsoft office word document is used for softcopy documentation of the project. All the document design and numeration are done by using Microsoft Office Word 2019
- **JavaScript:** In this project JavaScript is used for creating some animation in page content.
- **CodeIgniter:** CodeIgniter is one the PHP framework offering an open-source development platform. In this project it is used for the simplest way to use modular methods and get explicit function. CodeIgniter version 4.1.4 is used in this project.
- **Web Browser:** Google Chrome browser is used to run the localhost system of a project.
- **Sublime Text:** Sublime Text version 3.2 is used to write down all the HTML, CSS and PHP code in this project.

### 2.9 System Testing

System testing is a level of software testing where a complete and integrated software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements. System testing look after the testing of the system that has been developed to ensure it has meet its specified requirements. As a fairly flexible methodology was

adopted for the development, the testing of the application started during its development with bugs being fixed as they were discovered. After each section of the application was completed, it was tested so that errors could be corrected.

### **2.9.1 Unit Testing**

Unit testing was undertaken during the actual implementation of the system. Each time some code was written it was run and monitored for the bug. As bugs were discovered they were corrected by adding code or modifying the existing code. Several bugs were corrected by analyzing the error messages and correcting them by chaining in code. After development of the system has been completed testing was also performed. Functionality testing and interface testing combined to ensure the system functionality as requirement.

#### **2.9.1.1 Test Case**

**Title:** Online Food Ordering and Table Reservation System

**Description:** The system should be able to have the characteristics of Login functionality.

**Precondition:** The system's database has username="admin" and password="admin"

**Assumption:** The login U/I has text field to enter username and password.

**Test Steps:** a) Open login file

- b) Enter username and password
- c) Press Login button

**Expected Result:** The entered username and password must validate with database's username and password and after validation success, it is expected to locate for homepage.

**Post Condition:** System should able to store the activity done by the user after he/she successfully login into the system.

Table 1: Test Case

| <b>Test Case</b> | <b>Test Scenario</b>   | <b>Test Data</b>                         | <b>Expected Result</b>  | <b>Status</b> |
|------------------|--|--|---|---------------|
| 1                | Check response when invalid username and password is entered.          | Username= username<br>Password= password | Message Display<br>"Either username or password is incorrect" | Pass          |
| 2                | Check response with blank username and blank password is submitted     | Username=<br>Password=                   | Message display<br>"Username and Password cannot be blank"    | Pass          |
| 3                | Check response when correct username and incorrect password is entered | Username= Admin<br>Password= HariRijal   | Message Display<br>"Either username or password is incorrect" | Pass          |
| 4                | Check Response when incorrect username and correct password is entered | Username= user<br>Password= Admin        | Message Display<br>"Either username or password is incorrect" | Pass          |
| 5                | Check response when valid username and password is entered.            | Username = admin<br>Password = admin     | Redirect to Admin Panel                                       | Pass          |

### **2.9.2 Validation Testing**

In this requirement established as part of software requirements analysis are validated against the software that has been constructed. Validation testing provides final assurance that software meets all functional, behavioral and performance requirement. Validation can be defined in many ways, but a simple definition is that validation succeeds when software functions in a manner which it intends to achieve.

### **2.10 Findings**

Through the completion of this project various different information could be found out. This has also helped in understanding the problems faced by this type of organization and their possible solutions. There is a lot difference at classroom and real-life scenario. I have analyzed problems in detail and possible solutions were also analyzed and few ideas were even implemented. As a solution to the problems, this software is designed and developed. I also found out many other ways to use the programming language used while developing the system. This project has allowed for a project-based learning approach to learn about new methods to solve the problem.

## **CHAPTER THREE**

### **DISCUSSION AND CONCLUSION**

#### **3.1 Discussion**

The main aim of this project was to design web application of Online Food Ordering System for Baglung Newari Restaurant. Being through the different difficulties and overcoming those difficulties with the help from different sources this project has been successfully completed. Great effort and time were spent on completing the project as per the requirement specified by the organization.

Despite the challenges and problems, the project was completed in specified duration. The system was tested by the owner of the organization and other people who are indirectly involved in this project.

#### **3.2 Conclusion**

During this summer project I have learned a lot of things about web application development. I have tried my best to make this project best. I have gone through many websites, books and also consulted with the teacher. I have tried to implement my views, ideas and logic into this project. I have been able to update myself about the current demand and trends of the IT market which has gradually built professional knowledge and networks with the various IT personalities which would be very beneficial for my professional career. I was exposed to professional working scenario where time management was the most.

This project helped me to get a practical exposure to working environment. It taught the importance of the communication skills and technological matter. It was a great learning experience for me.

I realized this project has huge benefits for every student. Some of the advantages are:

- It increases problem solving skills.
- It increases exploration and idea generation skills.
- It helps to understand how tasks are performed in real working environment.
- It helps to work as team member and time sensibility in job.

### **3.3 Future Enhancements**

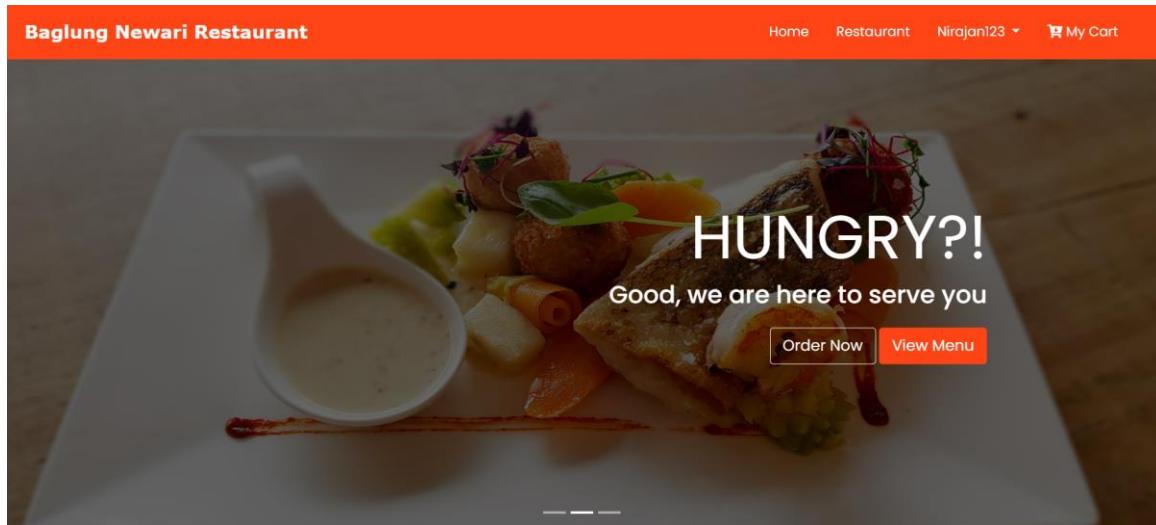
Although the project has been completed and able to overcome the problem of the study, even if some problems are solved by this project and still problems and requirement are not implemented by this project which can be solved in upcoming future days. Some of the future enhancements of this project are:

- More interactive user interface can be added.
- Module that allows for the printing of sales report, dishes report can be added.
- Module that allows to tracking the customer location for delivery of foods can be added.
- Online Payment System like E-sewa, Khalti, mobile banking can be added.
- Others necessary module can be added

## **REFERENCES**

- Mundo, C. (n.d.). An online food ordering system requirements specification. Retrieved March 03, 2021, from  
[https://www.academia.edu/27192023/An\\_Online\\_Food\\_Ordering\\_System\\_Requirements\\_Specification](https://www.academia.edu/27192023/An_Online_Food_Ordering_System_Requirements_Specification)
- Regmi, D. (n.d.). Food order proposal. Retrieved March 03, 2021, from  
[https://www.academia.edu/34223147/Food\\_order\\_proposal](https://www.academia.edu/34223147/Food_order_proposal)
- Tafar, S. (2013, September 29). Customer ordering system. Retrieved March 03, 2021, from <https://www.slideshare.net/SurieyTafar/customer-ordering-system>
- Literature review on food delivery services. (n.d.). Retrieved March 04, 2021, from  
<https://www.scribd.com/presentation/408144487/Literature-Review-on-Food-Delivery-Services>
- Sommerville, I. (1982). “Software Engineering”. 9<sup>th</sup> Edition. Pearson publisher. San Francisco, New York.

## APPENDICES



### Easy 3 Steps To Follow

The easiest way to your food. Food Ordering System provides fresh delivery with in the 30 minutes. So don't wait and start ordering right now!



#### Choose A Restaurant

First thing you can do is choose from our restaurants easily!



#### Choose your Dish

We've got you covered with menus from our restaurants online!



#### Pick Up or Delivery

After all, the food gets delivered or you can pick it up as per your choices!

### Popular Dishes



Chicken Burger

Bulldog Burger was created with the goal of bringing the world's best burger to Starkville.

[Add to Cart](#)



Veg Burger

Bulldog Burger was created with the goal of bringing the world's best burger to Starkville.

[Add to Cart](#)



Fish Fry

A fish fry is a meal containing battered or breaded fried fish.

[Add to Cart](#)



**Baglung Newari Restaurant**

Home Restaurant Nirajan123 My Cart

### Shopping Cart

| Dish | Price  | Quantity | SubTotal | Action |
|------|--------|----------|----------|--------|
|      | Rs.180 | 1        | Rs.180   |        |
|      | Rs.300 | 1        | Rs.300   |        |
|      | Rs.350 | 1        | Rs.350   |        |

< Continue Ordering Grand Total: Rs.830 Checkout >

Baglung Newari Restaurant  
Gongabu, Ganeshthan, Kathmandu  
9847820050  
baglungrestaurant@gmail.com

Follow Us On

**SiteMap**  
HOME  
Restaurant  
CONTACT US

**Baglung Newari Restaurant**

Home Restaurant Nirajan123 My Cart

### Order Preview

| Dish | Price  | Quantity | SubTotal |
|------|--------|----------|----------|
|      | Rs.180 | 1        | Rs.180   |
|      | Rs.300 | 1        | Rs.300   |
|      | Rs.350 | 1        | Rs.350   |

Total: Rs.830

### Shipping Details

Address: Shiva Mandir Kathmandu

Cash On Delivery  
Pay with Cash on Delivery

Baglung Newari Restaurant  
Gongabu, Ganeshthan, Kathmandu  
9847820050  
baglungrestaurant@gmail.com

Follow Us On

**SiteMap**  
HOME  
Restaurant

**Baglung Newari Restaurant**

Home Restaurant Nirajan123 My Cart

Thank You! Your order has been placed successfully!

### Recent Orders

| Item          | Quantity | Price  | Status | Order Date          | Action |
|---------------|----------|--------|--------|---------------------|--------|
| Chicken Pizza | 1        | Rs.350 |        | 2021-09-27 19:10:59 |        |
| Fish Fry      | 1        | Rs.300 |        | 2021-09-27 19:10:59 |        |
| Veg Burger    | 1        | Rs.180 |        | 2021-09-27 19:10:59 |        |
| Finger Chips  | 1        | Rs.125 |        | 2021-09-21 16:35:30 |        |
| Veg Burger    | 1        | Rs.180 |        | 2021-09-21 16:35:30 |        |

### All Orders

| Date        | Item            | Quantity | Price  | Status | Invoice |
|-------------|-----------------|----------|--------|--------|---------|
| 21-Sep-2021 | Chicken Biryani | 1        | Rs.320 |        |         |

All Orders

Search ..

| Username   | Item            | Qty | Price  | Address                | Status                 | Order-Date          | Actions                                     |
|------------|-----------------|-----|--------|------------------------|------------------------|---------------------|---|
| nirajan123 | Chicken Pizza   | 1   | Rs.350 | Shiva Mandir Kathmandu | <span>Dispatch</span>  | 2021-09-27 19:10:59 | <span>Process</span><br><span>Delete</span> |
| nirajan123 | Fish Fry        | 1   | Rs.300 | Shiva Mandir Kathmandu | <span>Dispatch</span>  | 2021-09-27 19:10:59 | <span>Process</span><br><span>Delete</span> |
| nirajan123 | Veg Burger      | 1   | Rs.180 | Shiva Mandir Kathmandu | <span>Dispatch</span>  | 2021-09-27 19:10:59 | <span>Process</span><br><span>Delete</span> |
| karan123   | Finger Chips    | 1   | Rs.125 | pokhara, newroad       | <span>Delivered</span> | 2021-09-23 22:29:48 | <span>Process</span><br><span>Delete</span> |
| karan123   | Chicken Biryani | 2   | Rs.640 | pokhara, newroad       | <span>Dispatch</span>  | 2021-09-23 22:29:48 | <span>Process</span><br><span>Delete</span> |

View User's Order

|                      |   |
|----------------------|---|
| Ordered By:          | nirajan123  |
| Food Item:           | Chicken Pizza   |
| Quantity:            | 1   |
| Price:               | Rs.350  |
| Address:             | Shiva Mandir Kathmandu  |
| Order Date:          | 2021-09-27 19:10:59   |
| Select Order Status: | <div style="border: 1px solid #ccc; padding: 2px;"> <span>Select Status</span> <br/> <span>In Process</span> <span>Closed/Delivered</span> <span>Rejected</span> </div> |

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INVOICE:

Nirajan Khadka  
Shiva Mandir Kathmandu  
nirajan@gmail.com  
9865741230

Baglung Newari Restaurant

baglungnewari@gmail.com  
Ganeshthan-11, Tokha, Kathmandu

Order Number: #83  
Order Date: 27-Sep-2021  
Payment Mode: Cash On Delivery

| Restaurant                | Dish          | Quantity | Price  |
|---------------------------|---------------|----------|--------|
| Baglung Newari Restaurant | Chicken Pizza | 1        | Rs.350 |
|                           |               | Total    | Rs.350 |

Thank You For Your Orders and Choosing Us!  
We Hope To See You Again

For terms & conditions Please visit [www.baglungrestaurant.com](http://www.baglungrestaurant.com)

Back to Orders