An Undergraduate Internship/Project on

Online Food Ordering and Restaurant Management System

By

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Spring 2021

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June 17, 2021

Dissertation submitted in partial fulfillment for the degree of Bachelor of Science in Computer Science

Department of Computer Science & Engineering

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Attestation

I, Abid Hossain Novel, hereby declare that no work in this report has been plagiarized or copied from any other source. Any resources used are listed in the report's reference section. No help was asked for during the completion of the report from a third party organization except the one that I have worked for in the last 3 months as an intern.

For any information, my internship supervisor, Kazi Zahidul Alam, at my company, StarHOST IT Limited, can be contacted on +8801678277638.

Sincerely

17/06/2021

Signature

Date

Abid Hossain Novel

Name

Acknowledgement

I would like to express my gratitude to my honorable supervisor Mohammad Noor Nabi, Internship Supervisor & Senior Lecturer, Independent University, Bangladesh, who has given me suggestions regarding the research that I conducted and writing this report. He has helped me go through the whole process of making this report.

I am also thankful to StarHOST IT for providing me the opportunity to work in the real world and helping me with important materials and supporting materials, which were vital for my internship. I am also thankful to my friends and family for supporting me not only during this crucial period but also throughout my B.Sc. Degree. I take this opportunity to express my profound gratitude and deep regards to the head of Solution and Proposal Content as well as my External Supervisor, Kazi Zahidul Alam, and the head of our team for his exemplary guidance, monitoring, and constant encouragement throughout the course of this internship. I am obliged to all my Team members, for the valuable information provided by them in their respective fields. I am thankful for their cooperation and help during the period of my internship. Their continual constructive criticism and invaluable suggestions benefited me a lot as my intern. Last but not the least, I would like to thank my parents and other family members for their eternal support given to me.

My sincere gratitude goes to Independent University, Bangladesh for having an internship program for students which really shapes and prepares us to enter the corporate world.

Letter of Transmittal

17th June, 2021

Mohammad Noor Nabi

Internship Supervisor & Senior Lecturer

Department of Computer Science and Engineering

School of Engineering, Technology and Sciences

Independent University, Bangladesh

Subject: Internship report on ‘Online Food Ordering and Restaurant Management System’ for StarHOST IT Limited.

Dear Sir,

It is my pleasure to submit to you my internship report on ‘Online Food Ordering and Restaurant Management System’ for StarHOST IT Limited. The purpose of this report was to fulfill the requirements of the Bachelor’s degree in Computer Science and Engineering and also to gain an insight into how the organizations are dealing with the ongoing COVID-19 pandemic.

I tried to give my best effort to make this report successful. It has been an instructive and knowledgeable experience for me to work along with the development team in StarHOST IT Limited. I would be really happy if the report that I have created is able to serve its purpose. I have tried my best to complete the report appropriately as much as possible.

Thank you.

Yours sincerely,

Abid Hossain Novel

ID: 1730507

Evaluation Committee

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Convener

Abstract

This is an internship report on the project that has been provided by StarHOST IT Limited, as required by the Bachelor of Science (BSc) program in Independent University, Bangladesh. The objectives of the study are to analyze the different aspects of my internship at StarHOST IT Limited, to distinguish and resolve problems that are associated with the given project of "Online Food Ordering and Restaurant Management System".

We are all aware of the current global situation. Because of Covid 19 virus people are unable to go to restaurants. With the beginning of the pandemic, the majority of local businesses have been in trouble. The owner of the "1000 Calories" restaurant was unable to operate due to the lockdown. Then he made the decision to take his restaurant business online, and he came to StarHOST IT Limited to design his restaurant website. The primary goal of this application is to deliver food to the customer's doorstep. This is a web based application where the users can access the website using the internet. Users can select their preferred foods and place online orders using this web application. This is an extremely useful application in this pandemic situation because it can help a wide range of people while simultaneously saving a significant amount of time and money. This report describes all of the processes involved in designing an up-to-date website, including planning, requirement analysis, development, physical and logical designs, and so on. A well-organized website is a must-have for any company.

Keywords: Customer, Food, Order, Delivery, Payment

Contents

List of Figures

List of Tables

Chapter 1: Introduction

Bangladesh is a country of population over 150 million with a literacy rate of more than 50 percent. In the last two decades, the country has fetched remarkable economic progress with a GDP growth rate of more than 5 percent. It is argued that there is a tremendous prospect for the country to leapfrog into an industrialized economy through the development of the IT sector. Because Bangladesh has high potential to become a huge source of skilled human resources with its cultural adoption capability, English language skills, analytical capability, and a large number of educated and energetic youths with bright aptitude, good quality, and natural ability in software development. The economy of Bangladesh has also seen the effects of the rise of the IT sector during the last five years. The government expects the IT sector to add 7.28 percent to GDP growth by 2021 **[1]**.

The software and IT service industry in Bangladesh have crossed a long road over the last few decades. It has matured. The industry no more remains at the sideline. It joined the mainstream. Not only the industry is contributing significantly to the national income, but also it has been playing a very crucial role in creating high-quality employment for a sizable portion of young graduates of the country.

1.1 Overview/Background of the Work

The project is about designing a website for a restaurant named **'1000 Calories'**. The main purpose of this website is to manage the food item and maintain the online order. This includes managing admin panels, managing food categories, managing food items, maintaining online orders, etc. Before this, the restaurant was operated in pen and paper. With the analog system, they were facing so many problems. Nowadays the world is more digitalized day by day. Almost every person loves to taste different types of food but at that time people are so busy

so they can't go to restaurants physically. Nowadays women also work in different job sectors so they don't have enough time to cook food for their family. So a maximum of the people interested to order online food that's why online food delivery system is more popular day by day. People can order their favorite food anytime anywhere using this website. Every system has a good side and also bad sides. There are many facilities and some lacking too. After facing so many problems, they have decided to make a website. They approached StarHOST IT for a complete solution. StarHOST IT decided to make this process online base. I was appointed by the StarHOST IT team to work on this project.

1.2 Objectives

The primary objective of any website-based business is to make sure a steady revenue is generated. The website needs to be regularly updated with data, keep the site bug-free, control the traffic to the site and give a great user experience to the users. Ultimately the users are the ones who will grow the site as well as the company. The main focus of this project is simplicity which is the automation process. This restaurant is managing their information about food items, customer address or contact number, order manually. This project aims to manage all types of information by an automated system.

The objectives of this projects are:

1. Develop a web-based application that can reduce manual work.
2. To reduce the cost of printing paper, pen, etc.
3. Develop a system that can satisfy the user.
4. Compute the customer's bill automatically.
5. Develop a user-friendly application.
6. Develop a system that can manage a huge amount of food orders.

7. Improve the communication between the customer and the server.
8. Manage the customer information.
9. To provide online menu information for customers.

1.3 Scopes

This section consists of three components which are target user, target area, and project deliverables.

1.3.1 Target User

The groups of users that had been identified to use the system are customers and administrators.

- **Customer:** Anyone can order food using this web-based application. Customers can view the restaurant food menu and they can order food online very easily.
- **Administrator:** The administrator is the person who will manage the entire system. This type of user will also do maintenance and control the application of this system. The administrator takes responsibility to register the new menu into the database, register new categories, etc.

1.3.2 Target Area

This system will be placed at the restaurant.

1.3.3 Project Deliverables

- **Customer Online Ordering:** Customer online ordering provides a form that needs to be fulfilling in terms of ordering food online.

- **Menu Module:** The menu module is food that the restaurant prepared for customers. In this module, customers can view the menu and make decisions for orders.

1.4 Internship Roles and Responsibilities

1.4.1 About StarHOST IT

StarHOST IT is a web development company in Bangladesh concentrating on Customized ERP applications and Web-Based Solutions. StarHOST Offers Elevated Business Automation with Professional service of outstanding quality.

StarHOST IT offers all kinds of commercial corporate and personal web-based services include web development solutions, software development, and so on. StarHost IT provide the most comprehensive product portfolio, and the portfolio includes a wide range of web services- Domain Registration, Linux and Windows Hosting, Attractive Website Designing, Dynamic Web Application, etc.

1.4.2 Company Profile of StarHOST IT

StarHOST IT is one of the TOP web Hosting service provider in Bangladesh since 2005. They are growing up a web design company in Mirpur 10, Dhaka, Bangladesh. They provide an end to - end service, including customized software, business automation, website appraisal, project management, website development, website update. StarHOST IT's mission is to provide reliable website Design, E-Commerce Solution as well as all IT support to the clients at a very affordable price that people can do their business in the IT sector as well as for helping people to make Digital Bangladesh. StarHOST IT practices development transparency, making work logs, work in progress previews, schedules, and other development information available in

real-time via our client portal. They always try to fulfill their client's requirements. StarHOST IT always trust its quality and deadline and never lose our client and brand quality.

Figure 1. 1: StarHOST IT Home Page

1.4.3 Mission

StarHOST IT is fully focused on their missions and they tend to work for their mission fulfillment. Their missions are given below:

1. To maintain the leading software solution provider ensuring the benefit of customers, shareholders, and employees.
2. Developing, and exploiting the remarkable experience, expertise, and knowledge of all of our people.
3. Developing a distinctive competence in process development and project management.

1.4.4 StarHOST IT Services

- **Dedicated Support Team:** Your business is important to them and they want to make sure that you are satisfied with the application or product.

- **Hosting and Domain Services:** They are the top Web Hosting service provider in Bangladesh. They provide multi-type web hosting such as Linux Hosting, Windows Hosting, Cloud Hosting, Specialized Hosting. They provide domain registration in Bangladesh. Top-level Domains are .com, .net, .org, .info. In Bangladesh we also provide .BD Domain such as .com.bd, .net.bd, .edu.bd.

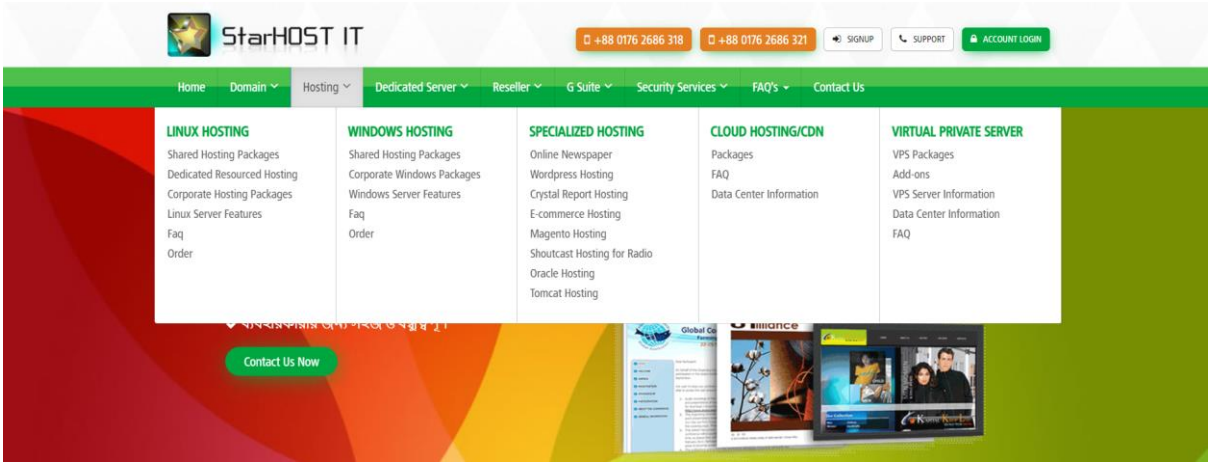

Figure 1. 2: StarHOST IT Hosting Page

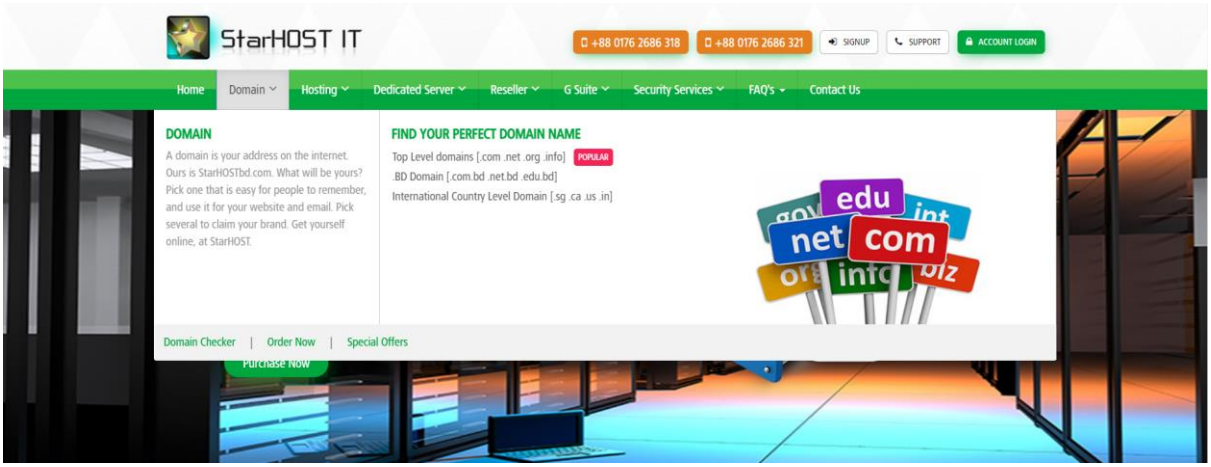

Figure 1. 3: StarHOST IT Domain Page

- **Dedicated Servers:** They provide reliable and affordable dedicated servers. They provide:

    1. World-class service in Bangladesh.
    2. Flexible and customizable server.
    3. High-quality branded hardware.

1.4.5 Work Environment

The job environment is professional and friendly in general. Staff are positive and dedicated to their employment. They were very supportive to me and always encouraged me to put in more effort. They always helped me with a smile while I was disappointed and needed assistance. Because of their assistance, I was able to complete my project. I was never made to feel like an outcast.

In StarHOST IT the web developers are divided into two categories. They are:

- **Front End Developer**: The front end developer generally works on the client-side dealing with the web page design, graphics that is accessible to the user.
- **Back End Developer:** A back-end developer is a person who is responsible for the back-end development that interacts with the server. This type of web developer specializes in the languages like PHP, CSS, WordPress.

The job profiles for the web developer include:

- Front-end web developer.
- Back-end web developer.
- Web application developer
- Design and layout analyst.
- Senior web analyst.
- Web marketing analyst.

Chapter 2: Literature Review

2.1 Background

The literature review of the report is based on the ideas, theories, and methodologies used to make the application. In this literature review, different aspects of the application such as the market analysis both for local and global markets, similarities, and new functionalities included in this application will be thoroughly discussed.

The major part of this portion of the research is to demonstrate how the application compares to global brands around the world, as well as what additional features have been included.

2.2 Relationship with Undergraduate Studies

Throughout the undergraduate studies, from 'Hello World' to solving complex mathematical equations, were the basics of understanding how real-world applications work in general. Having the ability to do so and link the project to some of the courses offered during the four-year undergraduate program at IUB was truly exceptional.

CSE-307 System Analysis and Design: This course helped in the design of the project's overall structure before starting to deal with codes. All the required analyses that were necessary to be considered such as requirement analysis, flow diagrams, UMLs, Rich picture, Functional and Nonfunctional requirements, methodology, WBS, etc. were taught in this course. This course has helped in the design of the whole project from start to finish.

CSE-213 Object-Oriented Programming: This course helped in working with objects, classes, inheritance, function chaining, etc. This course introduced me to Java which helped me throughout the project.

CSE-211 Algorithms: Algorithms were the building blocks of understanding how a project data can be handled.

CSE-303 Database Management: The back-end is responsible for a large portion of the project. This course has provided me with a broad understanding of SQL. From connecting to phpMyAdmin to writing queries, this course provided me with database knowledge that I used throughout the project.

CSE309-Web Application and Internet: This course proved useful while working on the frontend design. From this course, I have learned basic HTML, CSS, Bootstrap, PHP, JavaScript. This course was a huge help throughout the project as I have also learned the use of colors and features.

2.3 Related Works

2.3.1 Global Market

The global restaurant management software market is projected to reach USD 6.94 billion by 2025, according to a new report by Grand View Research, Inc., expanding at a CAGR of 14.6% during the forecast period **[2]**. The market is likely to witness substantial growth over the forecast period. Technology disruption in the restaurant industry and the soaring need for restaurant-specific software such as billing and payment processing, inventory management, table management, and menu management are among the key trends stimulating market growth. The next portion of the report will discuss some of the global restaurants.

- **McDonald's -** McDonald's Corporation is an American fast-food company, founded in 1940 as a restaurant operated by Richard and Maurice McDonald, in San Bernardino, California, United States. Since the late 1990s, McDonald's has attempted to replace employees with electronic kiosks which would perform actions such as taking orders

and accepting money. In September 2019, McDonald's purchased an AI-based start-up Apprentice for replacing human servers with voice-based technology in its US drive-throughs **[3]**.

- **Domino's Pizza -** Domino's, is an American multinational pizza restaurant chain founded in 1960. The first mainland China store was located in Shenzhen. In China, over 90% of orders are placed online. Orders can be made in the stores and on the company website, via an app, and through the messaging app. Beginning in 1973, Domino's Pizza offered a guarantee to customers their pizzas would be delivered within 30 minutes of placing an order or they would receive the pizzas free. This guarantee was changed to $3 off in 1987 **[4]**.

2.3.2 Local Market

Online food delivery and restaurant management systems are bringing tremendous change and convenience to the Bangladeshi food scene. People who enjoy fast food from the comfort of their homes; foregoing worries about table etiquettes or about the jumbo burger falling apart and staining their satin shirt; for them, online food delivery is a godsend. With just a few scrolls and clicks the craved cuisine can now be delivered to an individual's doorstep.

- **Pizza Lab -** It is a Bangladeshi pizza restaurant which is located in Bashundhara residential area. When they started their restaurant they didn't take online orders. But nowadays they are interested in taking online orders because everybody prefers online orders and every customer likes to know about the food items from their home.

Chapter 3: Project Management & Financing

To start a project, each organization must establish a timeline within which every element of the project must be calculated, prepared, and executed in keeping with this timeframe. A guideline with diagrams is shown in the next figures mainly through the Work Breakdown Structure, Gantt chart, and Database design.

3.1 Work Breakdown Structure (WBS)

Work breakdown structure (WBS) is a method that breaks a project down into a hierarchy of deliverables, tasks, and subtasks. Breaking work into smaller tasks is a common productivity technique used to make the work more manageable and approachable. For projects, the Work Breakdown Structure (WBS) is the tool that utilizes this technique and is one of the most important project management documents **[5]**. A good WBS is simply one that makes the project more manageable.

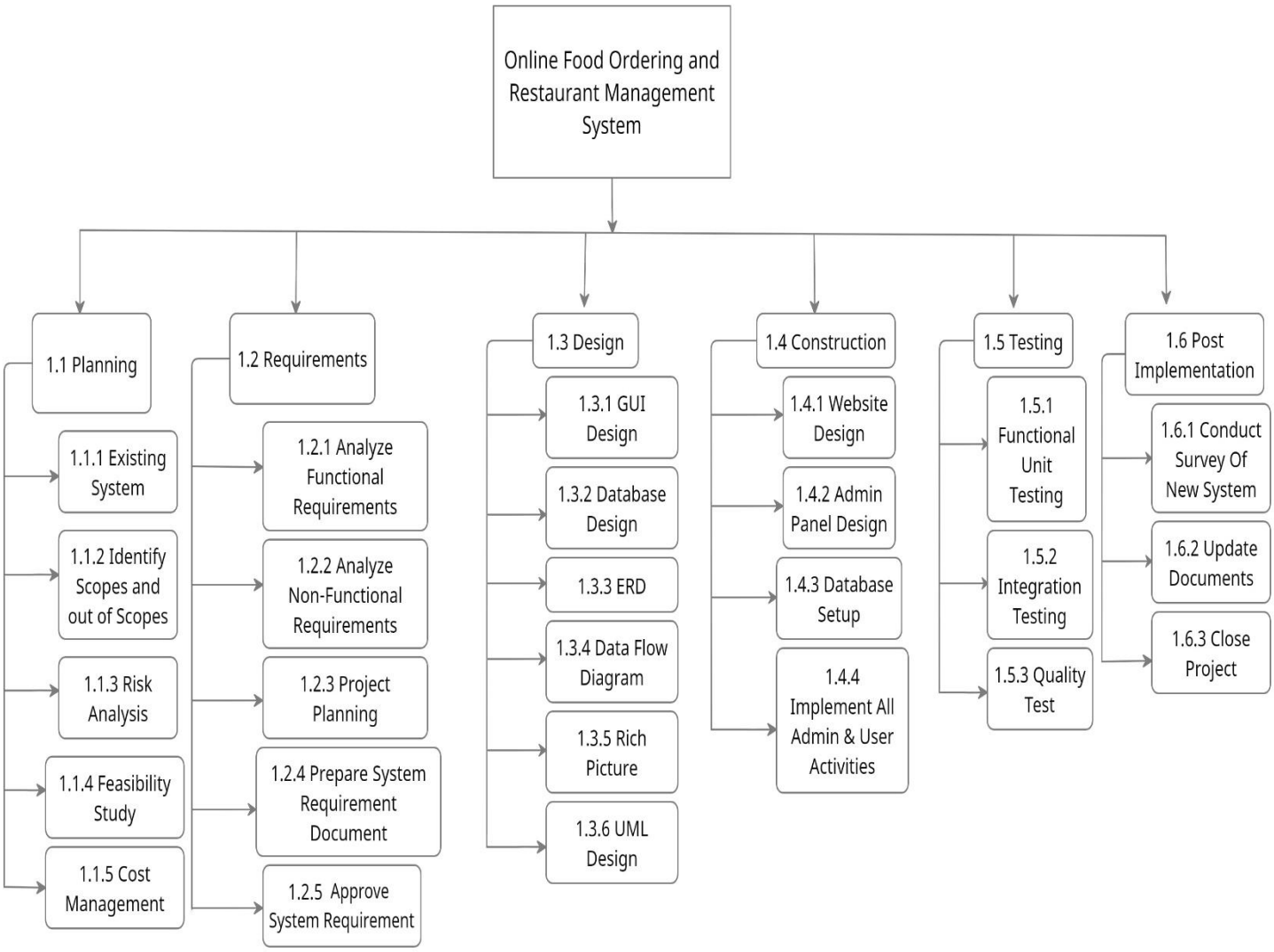

Figure 3. 1: Work Breakdown Structure

3.2 Process/Activity wise Time Distribution

The estimated time required to end a project successfully defines process-wise time distribution. This helps the developers create a mind map as to how efficiently they need to work in order to meet the deadlines. Time distribution is greatly needed to complete any kind of project. The time allocation for the 3 months project is shown below on a chart using the critical path method.

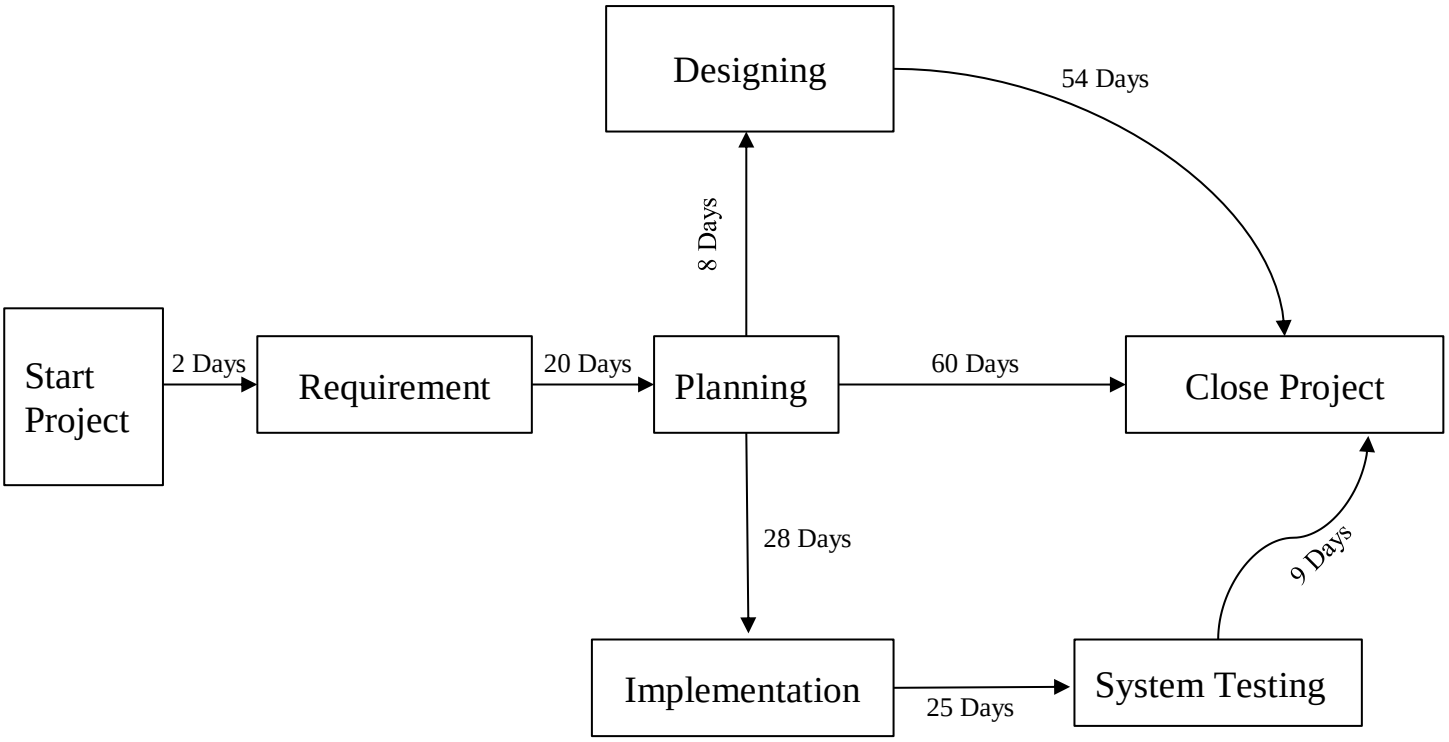

Figure 3. 2: Critical Path

3.3 Gantt Chart

For this project, a Gantt chart was used in the planning phase of the application. A Gantt chart is a project management tool assisting in the planning and scheduling of projects of all sizes, although they are particularly useful for simplifying complex projects. Project management timelines and tasks are converted into a horizontal bar chart, showing start and end dates, as well as dependencies, scheduling, and deadlines, including how much of the task is completed per stage. This is useful to keep tasks on track when there is a large team and multiple stakeholders when the scope changes. As it's in a bar chart format it is possible to check on progress with a quick glance **[6]**.

Task Name	1 Mar	5 Mar	22 Mar	4 Apr	14 Apr	7 May	8 May	14 May	22 May	26 May
Initializing										
Collecting Requirements										
Planning										
Designing										
Implementation										
Bug Fixing										
System Testing										
Deployment										

Figure 3. 3: Gantt chart

3.4 Process/Activity Wise Resource Allocation:

A project is usually divided into several units and assigned to programmers, designers, and testers. My project manager assisted me in planning, designing, and implementing the project. In addition, we constructed our project using computers, tablets, browsers, and some supporting documents. Following are the details of every step of the project.

1. **Initializing:** This is the first phase of the project, during which the CEO of the company introduced the project's concept.
2. **Requirements Analysis:** During the first few weeks, the CEO and the developers went through all of the conditions for the project's completion. Computer specs, software/tech to be used to develop the application, functionality, and the number of developers needed, for example.

3. **Planning:** The developers and the CEO spent hours discussing how this project should be designed from top to bottom, the steps to be followed, and setting deadlines for them at this stage of the development process.
4. **Designing:** During this process, a few graphic designers were needed to construct the application's web pages, and the management team began working on the project's high-level and low-level diagrams.
5. **Implementation:** The web page templates were finished at this stage, and the developers began writing the code for the frontend and backend of the program, while the management team monitored when any of the deadlines were met.
6. **Bug Fixing:** A bug fix is a change to a system or product designed to handle a programming bug/glitch. Many different types of programming bugs that create errors with system implementation may require specific bug fixes that are successfully resolved by developers.
7. **System Testing:** As soon as a new element was introduced to the site, testing began. As a result, the developers were doing testing at the same time.
8. **Deployment:** The team found it's behind schedule after the work was truly done. To deploy the program on a live server, a Virtual Private Server and a domain were purchased.

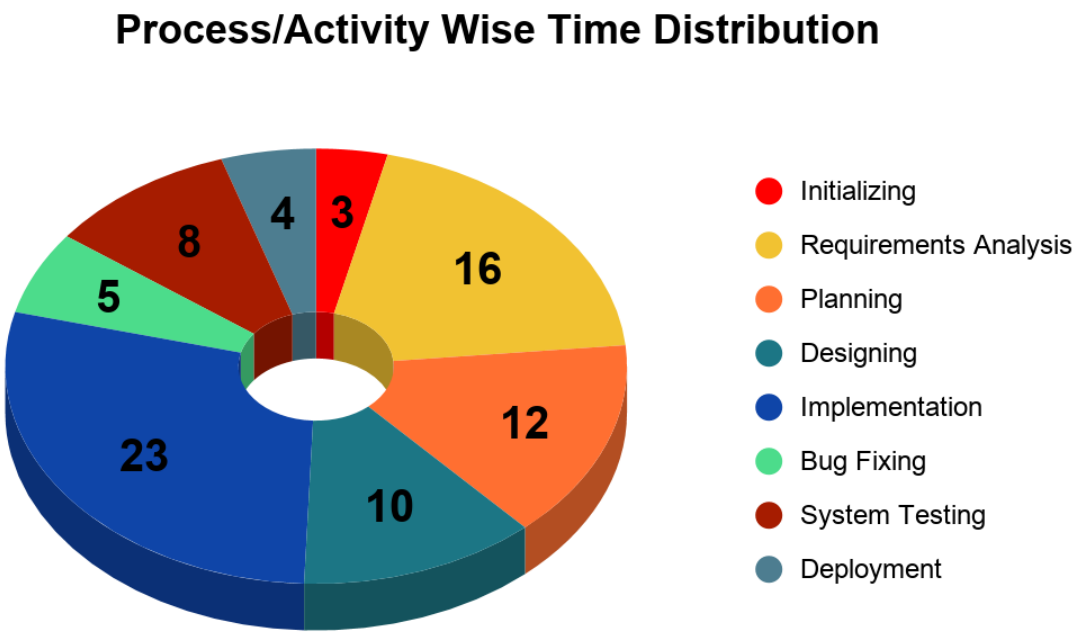

Figure 3. 4: Time Distribution

3.5 Estimated Costing

There are some costs associated with developing a project. Sometimes it is less and sometimes it is huge. Since we are just developers, we make a list of all we'll need to finish this project. We also provide them a time estimate. Any project's budget is a big concern. This costing portion includes everything specific to the project and required for the project.

Requirements	Quantity	Total Amount (BDT)
Electricity bill (3 Months)	1	4500
Computers (desktop)	3	60000
Printer	1	3500
Desk	3	3000
Rent (3 Months)	1	50000
M2 SSD	1	2800
Internet Bill (3 Months)	1	3000
Mobile Bill	1	1000
Salary (3 Months)	3	45000
Domain/Server/Hosting	1	1500
Total	**-**	**174300**

Table 3. 1: Cost Estimation Table

Chapter 4: Methodology

Successful projects are managed well. To manage a project efficiently, the manager or development team must choose the software development methodology that will work best for the project at hand. All methodologies have different strengths and weaknesses and exist for different reasons **[7]**. For this project, the StarHOST IT development team has used, like most modern applications, the agile software development life cycle. Several software development approaches have been used since the origin of information technology. These are listed below:

1. Waterfall
2. Prototyping
3. Iterative and Incremental Development
4. Spiral Development
5. Rapid Application Development
6. Extreme Programming

4.1 Agile Development

In software development, agile practices approach discovering requirements and developing solutions through the collaborative effort of self-organizing and cross-functional teams and their customers or the users of the program **[8]**. The developer team used the agile development methodology to minimize risk (such as bugs, cost overruns, and changing requirements) when adding new functionality. In all agile methods, teams develop the software in iterations that contain mini-increments of the new functionality. There are many different forms of the agile development method, including scrum, crystal, extreme programming (XP), and feature-driven development (FDD). Agile development methods are similar to rapid application development and can be inefficient in large organizations **[7]**.

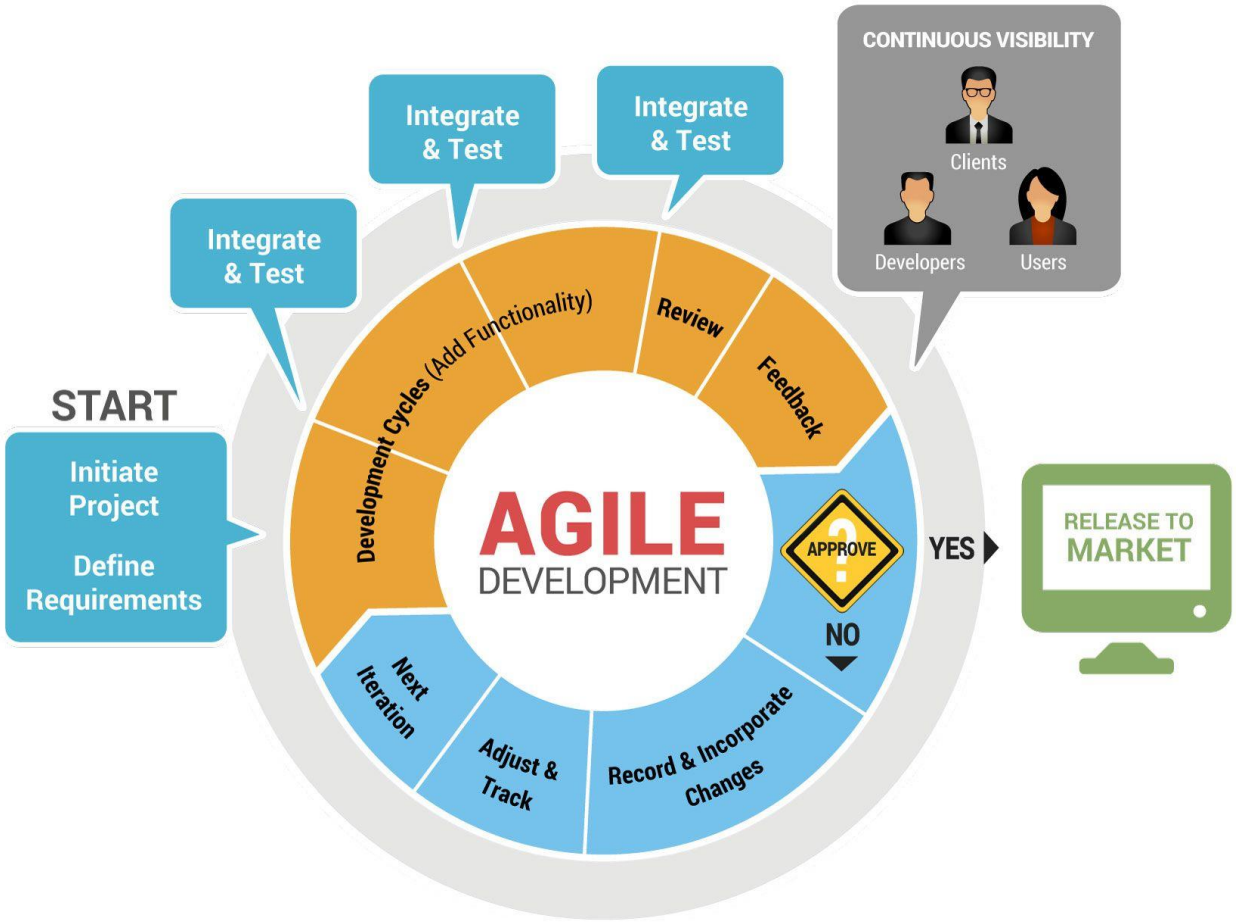

Figure 4. 1: Agile Methodology

4.2 Why Agile?

The primary benefit of agile software development is that it allows the software to be released in iterations. Iterative releases improve efficiency by allowing teams to find and fix defects and align expectations early on. They also allow users to realize software benefits earlier, with frequent incremental improvements. The iteration may not add enough functionality to warrant releasing the product, but an agile software project intends to be capable of releasing new software at the end of every iteration. After this iteration, the team reevaluates project priorities. Agile methods emphasize working product as the primary measure of progress. Relative to the other methods Agile produces very little written documentation – the "real-time" is the

preferable type of communication. Main principles of Agile software development methodology: face-to-face meetings, constant cooperation, early and continuous delivery of the working software, transparency. Whenever there are unexpected or frequent changes either from the client's side or internal, this model becomes the perfect choice for managers and team leaders **[9]**.

4.3 Agile Implementation

The whole strategy was decided when the criteria were determined during the planning phase, and the development team ensured that all work was divided on a regular basis. At the end of the day, a consultation with the development team and the management committee would be held to ensure that all of the functionalities that had been implemented during the day were correct and up to the requirements as well as the criteria and that any proposed modifications could be implemented accordingly.

Chapter 5: Body of the Project

5.1 Work Description

This is a web-based application for a restaurant. As a member of the development for the project, I had contributed to both the front end and the backend of the application. In this web-based application, the front end was built with HTML, CSS, Bootstrap and for the backend, we used PHP and MySQL. Every day, a target of activities to be accomplished during the day was assigned to me, and those deadlines had to be met and explained properly at the end of the workday.

5.2 Client Requirement Analysis

5.2.1 Introduction

From the start of every project, it's important to understand who the application's audience is, as well as the application's users, administrators, and managers. With this in mind, the developers had to consider how to make the program as user-friendly as possible, as well as how to make it responsive. We need to gather information for a successful project. There are various methods to gather information. The methods we have used in this project are listed below:

- Questionnaire Method
- Interviewing Method
- Prototyping Method

5.2.2 Questionnaire Method

This method is quite popular, particularly in case of big inquiries. Questionnaires are useful as responses can be analyzed with quantitative methods by assigning numerical values to Liker's type scales (1 ± strong disagreement, 7 ± strong agreement), results are generally easier (than qualitative techniques) to analyze, pretest/posttest can be compared and analyzed.

We created an online survey and requested employees and customers of different restaurants to answer about the current system. It is just like our interviews, our question types, we used pyramid structure also here. The questionnaire was a mix of multiple-choice questions, short questions, and options to add comments to certain questions.

5.2.3 Interviewing Method

We know that an interview is a key qualitative data collection method. For social research, it is a very important method. The objective of this method is to figure out the problems the users are facing with the current system and find out if the users are willing to support the proposed system. We asked different types of questions to the different interviewees. We kept a mixture of closed-ended questions and open-ended questions. So we followed the pyramid structure which starts with the specific question and ends with general questions.

- **Close-ended questions:** These are question types that ask respondents to choose from a distinct set of predefined responses, such as "yes/no" or among multiple-choice questions. In a typical scenario, closed-ended questions are used to gather quantitative data from respondents.
- **Open-ended questions:** This type of question helped users to give valuable information about the subject at hand. In this case, many users can share their personal experiences they had with the current manual system and they can give useful information in the comment section for the proposed system. Their valuable comments

are very useful for the proposed system. In a typical scenario, open-ended questions are used to gather qualitative data from respondents.

5.2.4 Prototyping Method

Prototyping is another form of a contemporary requirement gathering method. Prototyping is an iterative process that heavily involves the users to complete. The user provides the requirements, in which the analyst can plug in directly and show users the outcome. The analyst must interview or perform some other form of requirement gathering to perform before they begin prototyping. However, prototyping is very effective in specifying requirements, because of how heavily involved the user is. On approval from the client, using this prototypes software developer can then begin to work on the whole application. Since an agile methodology was being followed, any design or UI changes can be adjusted accordingly.

5.3 System Analysis

A system is "an orderly grouping of interdependent components linked together according to a plan to achieve a specific goal." The word System is derived from the Greek word Systema, which means an organized relationship between any set of components to achieve some common cause or objective. To identify the objectives of a system, system analysis is conducted for the purpose of studying it and its parts. It is a process of collecting and interpreting facts, identifying the problems, and decomposition of a system into its components. System analysis is conducted for the purpose of studying a system or its parts in order to identify its objectives. It is a problem-solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose **[10]**.

5.3.1 Six Element Analysis

Process	Human	Non-Computing Hardware	Computing Hardware	Software	Database	Network & Communication
Login	Users enter username & password	N/A	Keyboard, Mouse, Computer & Smartphones	All Browser	MySQL	Internet
Visit Website	All Users	N/A	Keyboard, Mouse, Computer & Smartphones	All Browser	MySQL	Internet
Order Food	Users fill up respective Order forms	N/A	Keyboard, Mouse, Computer & Smartphones	All Browser	Stores food order data in the database	Internet
Admin Panel	Users who have access	N/A	Keyboard, Mouse, Computer & Smartphones	All Browser	MySQL	Internet
Payment	The user goes through to the checkout process and gateway	Card Information	Keyboard, Mouse, Computer & Smartphones	All Browser & Payment gateway	Stores data if payment successful	Internet

Table 5. 1: Six Element Analysis

5.3.2 Feasibility Analysis

The analysis of a proposed project to determine whether it is feasible and should go ahead is called feasibility analysis. Confirmation of design, plan, and strategy makes sense or not is the

main priority of this analysis. This can be used to validate assumptions, constraints, decisions, and approaches. There are different types of feasibility studies that are conducted such as:

- **Technical Feasibility:** In technical feasibility, evaluation of the software, hardware, and the other technical requirements of the proposed system are performed. This evaluates the details of how we intend to deliver a product or service to customers. Labor, think materials, transportation, where our business will be located, and the technology that will be necessary to bring all this together. A technical feasibility study is an excellent tool for both troubleshooting and long-term planning. It can serve as a flowchart of how your products and services evolve and move through your business to physically reach your market **[11]**.
- **Economic Feasibility:** This assessment typically involves a cost/ benefits analysis of the project, helping organizations determine the viability, cost, and benefits associated with a project before financial resources are allocated. It also serves as an independent project assessment and enhances project credibility—helping decision-makers determine the positive economic benefits to the organization that the proposed project will provide **[12]**.

  This system has nothing but if this system can reach the users it will definitely bring benefits. On one hand, it will reduce the costs of wasting pens and papers. On the other hand, benefits will come depending on the uses.
- **Operational Feasibility:** Operational feasibility is a measure of how well a proposed system solves the problems and satisfies the system requirements identified during the scope definition and problem analysis phase. It is dependent on human resources available for the project and involves projecting whether the system will be used if it is developed and implemented.

Our web application has been developed in such a way that it can be conducted very easily. Users will accept it without any doubt. It is a well-planned system. Users do not need to have a lot of technical knowledge to run this system. Every instruction is very clear to the users. We hope this system will be able to fulfill the requirements of the users.

5.3.3 Problem Solution Analysis

Problem analysis is the process of understanding and defining the problem to be solved. Problem-solving identifies solutions that conform to the needs and constraints of the problem.

Problem 1: No defined process for testing

Definition: Although the development team's excellent skills, there was no testing or SQA team, so testing had to be performed by the development team. As a result of the lack of training, no proper testing process was defined.

Solution: At the project's development phase, a skilled SQA expert was recruited. His expertise led to the development of a testing process which is defined in the next chapter.

Problem 2: Load shedding.

Definition: If anyone uses desktop and Wi-Fi-routers then load shedding may create problems while using this system.

Solution: As this system can be run from laptop and mobile that do not require continuous electricity connection so users can use them very easily.

Problem 3: Less number of requirements.

Definition: The questionnaire did not have too many participants for the project at the beginning, where the conditions for the project were set.

Solution: A larger number of people needed to respond to the survey that was performed.

5.3.4 Effect and Constraints Analysis

A constraint is a restriction on the degree of freedom a company can have in providing a solution. Constraints are essentially global constraints, such as insufficient development funding or a determination from central management that limits the development team's ability to implement a system. Constraints can be economic, political, technical, or environmental. Quality is one of the major constraints of every project, as depicted in the classic triple constraint triangle, which also includes scope, time, and cost. These constraints and their effects are described below:

Figure 5. 1: Triple Constraint Triangle

Constraint 1: Cost

Effect: This constraint has a significant impact on how many project workers are recruited and how long the project will be built before it must be completed by the deadline.

Constraint 2: Time

Effect: Both the cost and the time limit are interconnected. The duration of a project is determined entirely by the company's budget for the project. The project was assigned a four-month deadline and the 15th of June was chosen as the deadline.

Constraint 3: Scope

Effect: The scope of a project determines whether or not the project's specifications have been fulfilled. During the development process, developers must keep a close eye on the project's requirements; if a timetable is approaching too quickly, the project's scope should be stretched and delivered at a later date.

5.4 System Designs

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 the specific needs and requirements of a business or organization through the engineering of a coherent and well-running system.

5.4.1 Rich Picture

A rich picture is a drawing of a situation that illustrates the main elements and relationships that need to be considered in trying to intervene in order to create some improvement. It consists of pictures, text, symbols, and icons, which are all used to illustrate the situation graphically. It is called a rich picture because it illustrates the richness and complexity of a situation. It is a way to explore, acknowledge and define a situation and express it through diagrams to create a preliminary mental model. A rich picture helps to open discussion and come to a broad, shared understanding of a situation **[13]**. The whole system is described in the rich picture below:

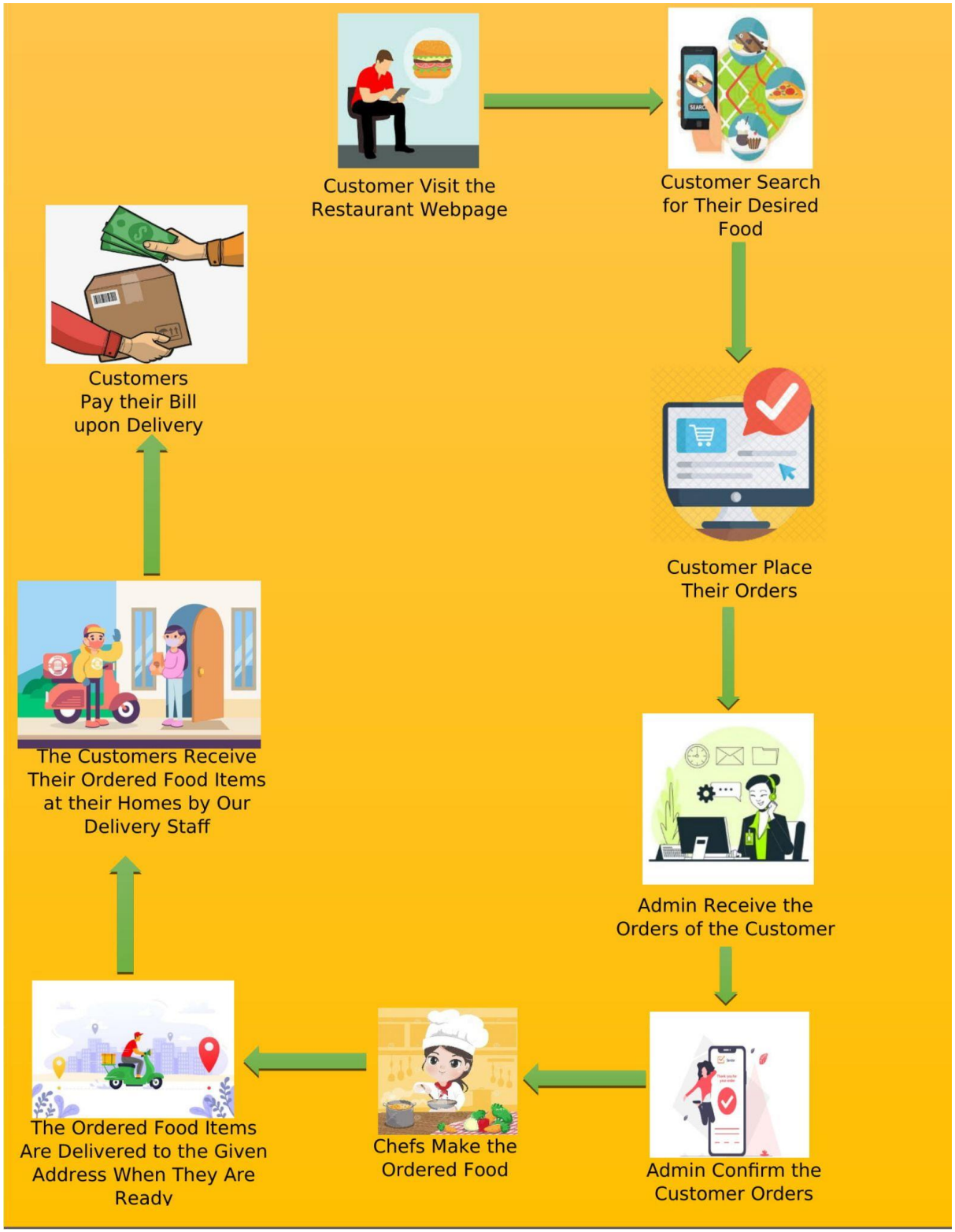

Figure 5. 2: Rich Picture

5.4.2 Entity Relationship Diagram

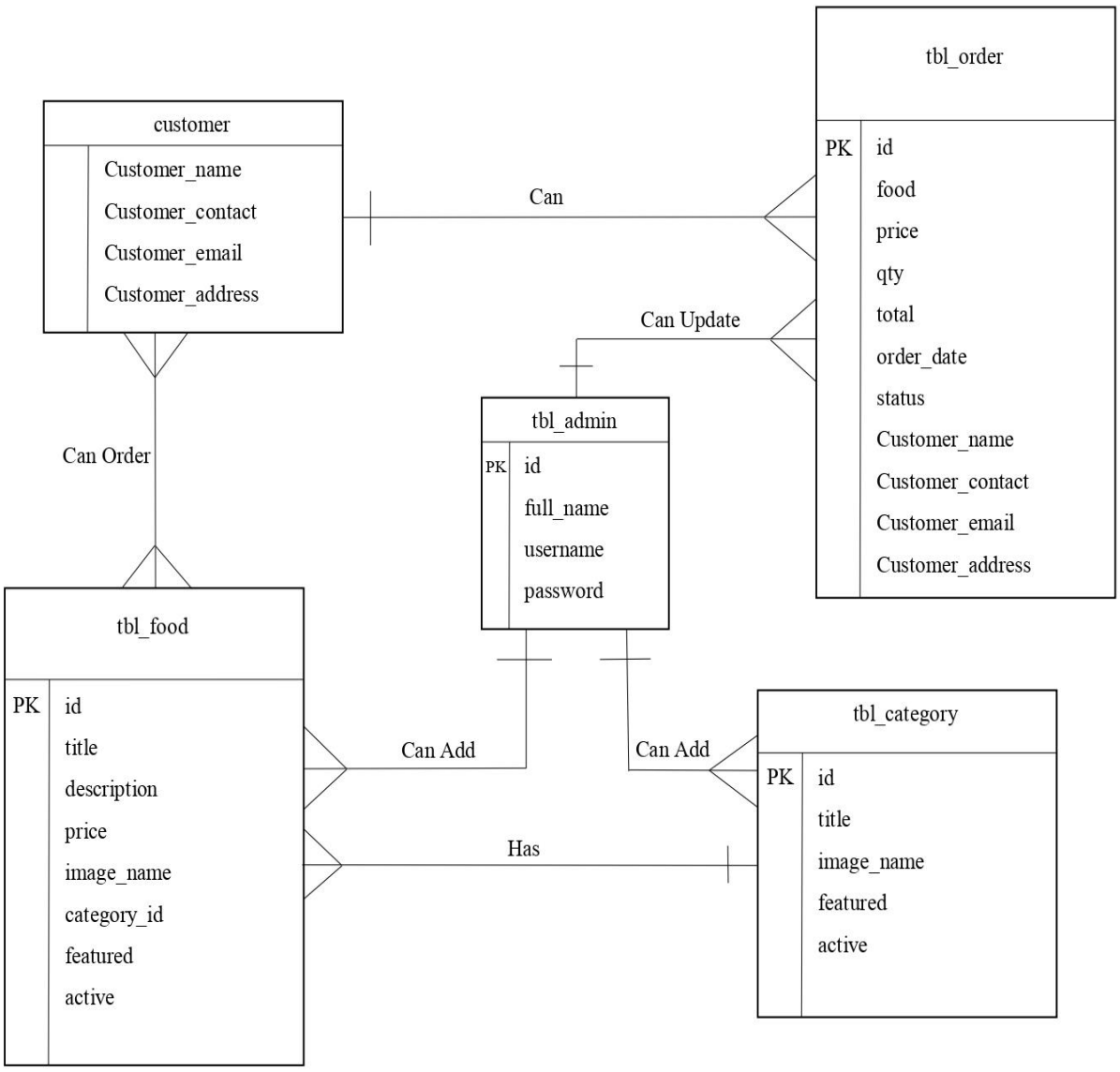

Figure 5. 3: Entity Relationship Diagram

5.4.3 UML Diagrams

A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system **[14]**.

In this section, the activity diagram for the admin and user groups is shown, Activity diagram is essentially an advanced version of the flow chart that modeling the flow from one activity to another activity.

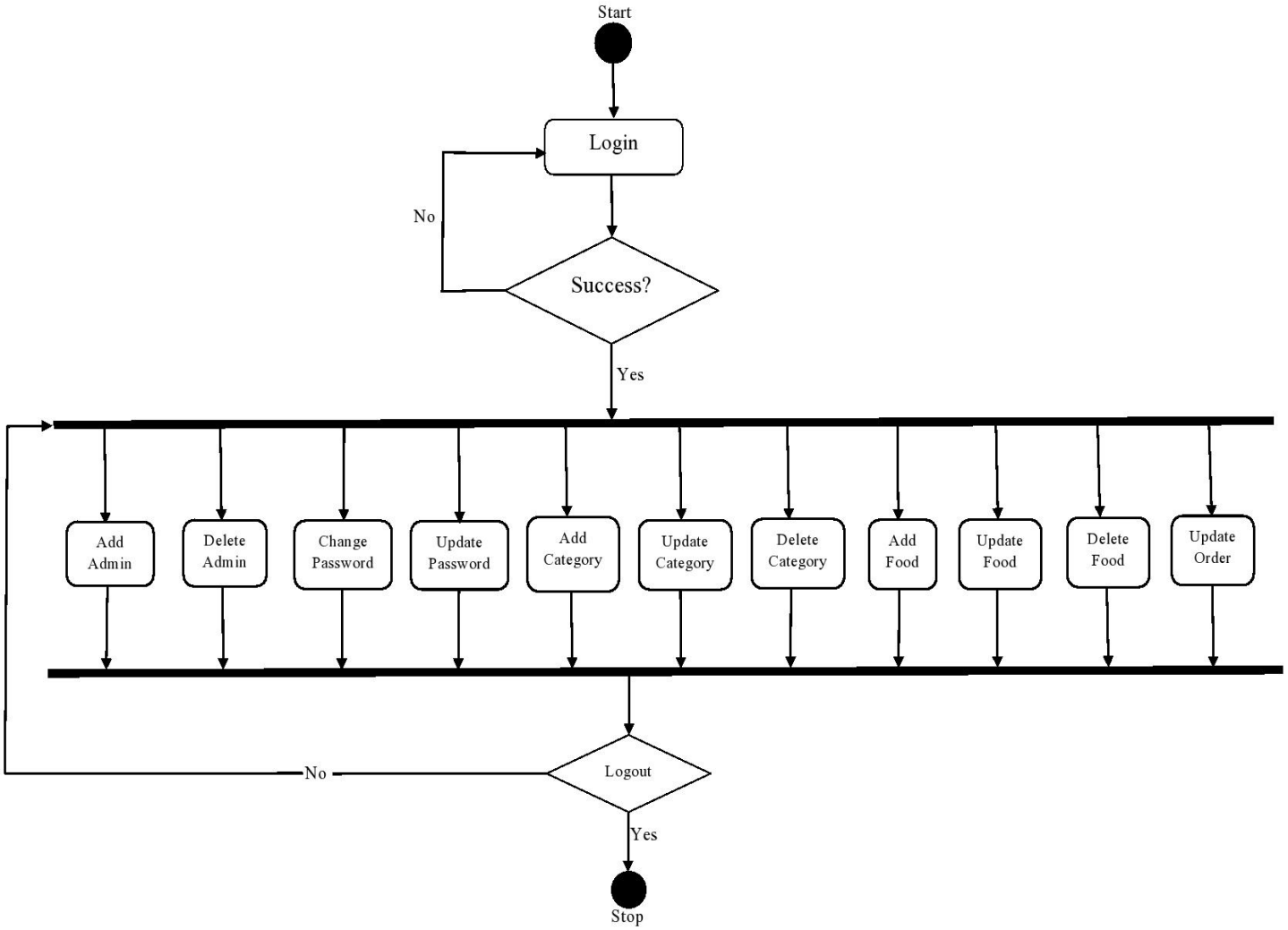

Figure 5. 4: Activity Diagram for Admin

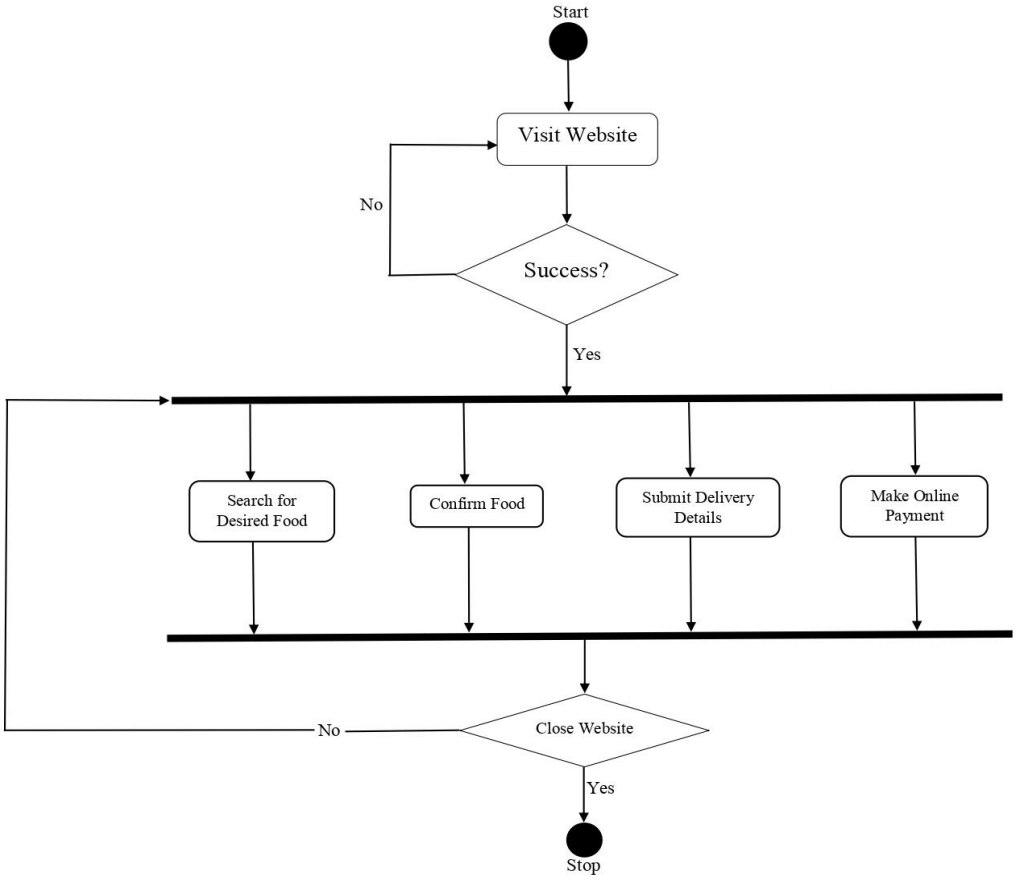

Figure 5. 5: Activity Diagram for User

A Use Case Diagram for this system is shown below:

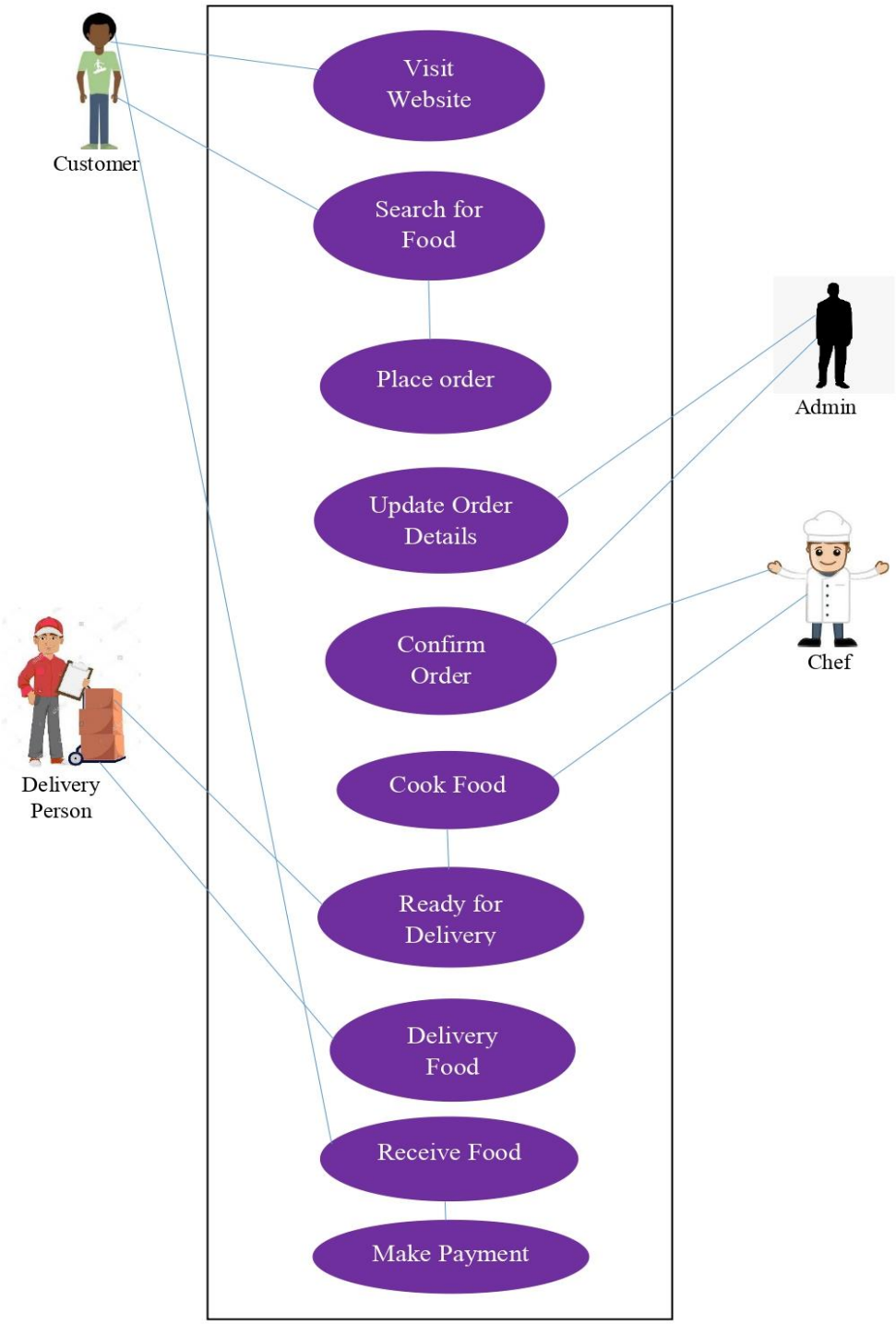

Figure 5. 6: Use Case Diagram for this System

5.4.4 Data Flow Diagram

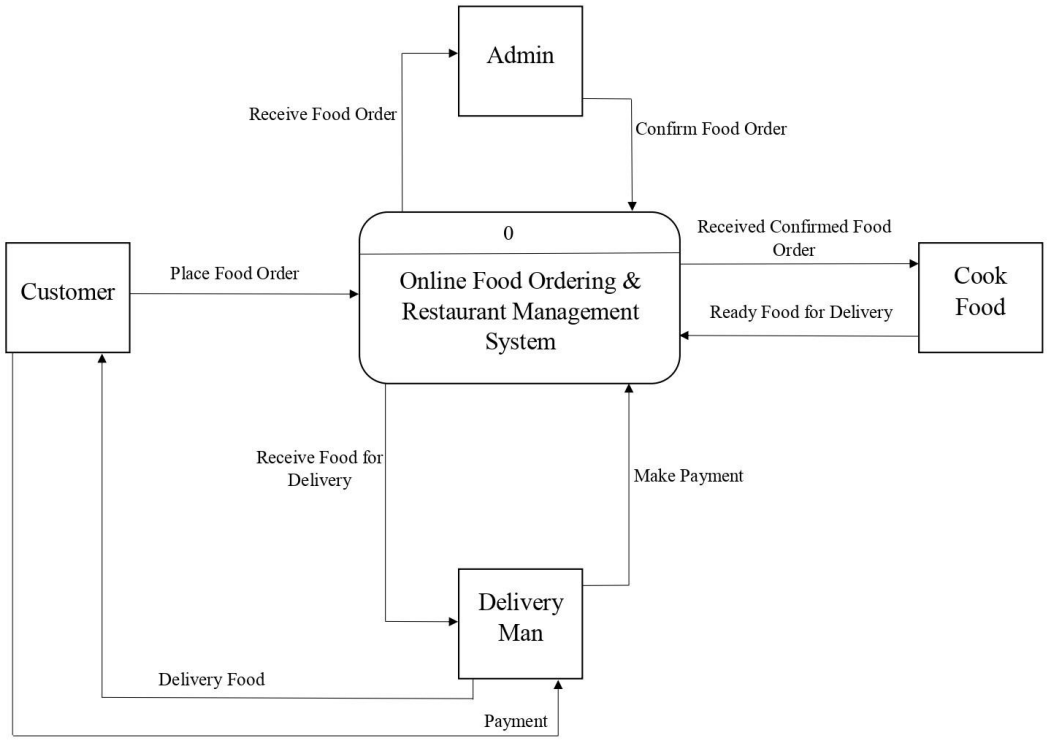

Figure 5. 7: Data Flow Diagram

5.4.5 Functional and Non-Functional Requirements

Functional requirements are those which are related to the technical functionality of the system. A Functional Requirement (FR) is a description of the service that the software must offer. It describes a software system or its component. A function is nothing but inputs to the software system, its behavior, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality which defines what function a system is likely to perform. Functional Requirements are also called Functional Specification.

Non-Functional requirements are an extension of the functional requirements. Non-functional requirements are not the ones that a user demands, but is implicitly expected from the

application developed so far. It can be thought of as the “efficiency” of the application in terms of its performance.

For example, when we order food online, the food has to be the one that is selected, but beyond that many companies offer delivery within 30 minutes, else free delivery. This free delivery can be thought of as a nonfunctional requirement that extends beyond providing the basic functionality that is food delivery.

Functional Requirements:

Two main logical components of this system are:

- Web-ordering system allows the customer to place their order and supply necessary details.
- Through the help of the menu, management allows us to control what can be ordered by the customers.

Web Ordering System:

- Visit the website.
- Customers search for desired food items.
- Navigate the restaurant’s menu.
- Select an item from the menu.
- Customize options for a selected item.
- Add an item to their current order.
- Review their current order.
- Remove an item/ remove all items from the current order.

- Provide delivery and payment details.
- Place an order.
- Receive confirmation in the form of an order number.

Non-Functional Requirements:

Performance: This determines how well the Web application performs as a result, as well as how well the device performs under higher workloads. For the high-speed load, we used Tiny jpg for image optimization. For better results, we will conduct additional testing.

Security: How is the data in the web application protected from cyber-attacks? Since our data contains sensitive knowledge about our customers, it is extremely valuable. We have checked everything about this.

Usability: Usability is how easy the system is for the user. Our application is already user-friendly. So, there is no problem running the application for any user.

Compatibility: The Web application's operation is very simple and clear; what we try to do is make it as user-friendly as possible. However, there are a few conditions that must be met in order for the application to run. The prerequisites are common.

Hardware requirements:

- ❑ Pentium 5,1.4GHZ or above
- ❑ 512MB RAM or more
- ❑ LAN/WIFI Network
- ❑ Any smartphone/Laptop/Desktop
- ❑ Keyboard & Mouse

5.5 Product Features

5.5.1 Input

The following table shows the processes and the fields required for the inputs of the corresponding process.

Process	Fields (Type)
Admin Login	Username - Varchar Password - Varchar
Add Admin	ID - Integer Full Name - Varchar Username - Varchar Password - Varchar
Change Password	Current Password - Varchar New Password - Varchar Confirm Password - Varchar
Update Admin	Full Name - Varchar Username - Varchar
Add Category	ID - Integer Title - Varchar Select Image - File Featured - Radio Button Active - Radio Button
Update Category	ID - Integer

	Title - Varchar New Image - File Featured - Radio Button Active - Radio Button
Add Food	ID - Integer Title - Varchar Description - Text Price - Decimal Select Image - File Category - Dropdown Featured - Radio Button Active - Radio Button
Update Food	ID - Integer Title - Varchar Description - Text Price - Decimal Select New Image - File Category - Dropdown Featured - Radio Button Active - Radio Button
Update Order	Quantity - Integer Status - Dropdown Customer Name - Varchar

	Customer Contact - Varchar Customer Email - Varchar Customer Address - Varchar
Customer Search Food	Search - Varchar
Order Food	Quantity - Integer Customer Name - Varchar Customer Contact - Varchar Customer Email - Varchar Customer Address - Varchar

Table 5. 2: Input table with their fields

5.5.2 Output

The outputs of the process are listed in the table below:

Process	**Output**
Admin login	On Success - Message shown “Login Successful”. On Error - Message shown on the login page “Username or password did not match”.
Add Admin	On Success - Message shown “Admin Added Successfully” and Redirect to ‘Manage Admin’ page.

	On Error - Message shown “Failed to Add Admin” and Redirect to ‘Add Admin’ page.
Change Password	On Success - Message shown “Successfully Changed Password” and Redirect to ‘Manage Admin’ page On Error - Message shown “Failed to Change Password” and Redirect to ‘Manage Admin’ page.
Update Admin	On Success - Message shown “Admin Updated Successfully” and Redirect to ‘Manage Admin’ page On Error - Message shown “Failed to Update Admin” and Redirect to ‘Manage Admin’ page.
Add Category	On Success - Message shown “Category Added Successfully” and Redirect to ‘Manage Category’ page On Error - Message shown “Failed to Add Category” and Redirect to ‘Add Category’

	page.
Update Category	On Success - Message shown “Category Updated Successfully” and Redirect to ‘Manage Category’ page On Error - Message shown “Failed to Update Category” and Redirect to ‘Manage Category’ page.
Add Food	On Success - Message shown “Food Added Successfully” and Redirect to ‘Manage Food’ page On Error - Message shown “Failed to Add Food” and Redirect to ‘Manage Food’ page.
Update Food	On Success - Message shown “Food Updated Successfully” and Redirect to ‘Manage Food’ page. On Error - Message shown “Failed to update Food” and Redirect to ‘Manage Food’ page.
Update Order	On Success - Message shown “Order Updated Successfully” and Redirect to

	‘Manage Order’ page. On Error - Message shown “Failed to update Order” and Redirect to ‘Manage Order’ page.
Customer Search Food	On Success - Shown the desired food item. On Error - Message shown “Food Not Found”.
Order Food	On Success - Message shown “Food ordered successfully” and go to ‘Home’ page. On Error - Message shown “Failed To Ordered Food” and go to ‘Home’ page.

Table 5. 3: Output table with process

5.5.3 Architecture

Front-end:

For developing this application we used HTML, CSS & Bootstrap for the front-end part. Hypertext Markup Language (HTML) is the backbone of any website development process, without which a web page does not exist. HTML is the first layer of any website and creates

the code version of a wireframe on a webpage. The letters in HTML stand for Hypertext Markup Language. The markup piece of the name is the most important to remember, as markups are the proper name for HTML elements, which are also called HTML tags. HTML as a whole is the markup that creates the basic elements we view on a website. However, it's important to remember that HTML isn't particularly intelligent. It doesn't make decisions or capture information on its own. It simply renders the scaffolding of the web pages.

Cascading Style Sheets (CSS) controls the presentation aspect of the site and allows your site to have its own unique look. It does this by maintaining style sheets that sit on top of other style rules and are triggered based on other inputs, such as device screen size and resolution.

Back-end:

For the back-end we used PHP. PHP is a scripting language that helps people make web pages more interactive by allowing them to do more intelligent, complex things. Nowadays the PHP coding language is ranked among the best and most popular programming tools for web development due to its many virtues. It is considered a very effective technology that offers a convenient development process with many additional tools to aid it. In fact, according to the Popularity of Programming Language Index (PYPL), PHP is the fifth most popular coding language in the world **[15]**.

Below is the shortlist of reasons why PHP is a great choice for your web application:

- A large base of reference and educational materials.
- The better loading speed of websites.
- More options for database connectivity.
- Inexpensive website hosting.
- Great synergy with HTML.

- Excellent flexibility and combinability.
- Various benefits are provided by cloud solutions.

Database:

For the database part, we used MySQL. MySQL is a relational database management system based on SQL. PHP & MySQL are a great combination of programming languages (PHP) & SQL databases (MySQL) which together enable websites to be created. The combination of PHP and MySQL allows you to create just about any kind of website. They can be used to build simple or complex and high traffic websites. They are also both free and open source.

Top Reasons to Use MySQL:

- Scalability and Flexibility.
- High Performance.
- High Availability.
- Robust Transactional Support.
- Strong Data Protection.

5.6 Testing

5.6.1 Introduction

Software testing is a process, to evaluate the functionality of a software application with an intent to find whether the developed software met the specified requirements or not and to identify the defects to ensure that the product is defect-free in order to produce a quality product **[16]**.

The testing phase for this application started right in between the implementation phase. The StarHOST team worked to make sure every time a functionality was implemented it was tested thoroughly, following a testing pattern called test-driven development or TDD. Since an agile development lifecycle was being followed any new addition was repeatedly tested.

5.6.2 Testing Analysis

Below functionalities of the application needs to be tested:

- Login (Admin)
- Add Admin
- Update Admin
- Delete Admin
- Add Category (Admin)
- Update Category (Admin)
- Delete Category (Admin)
- Add Food (Admin)
- Update Food (Admin)
- Delete Food (Admin)
- Update Order (Admin)
- Search Food (User)
- Order Now (User)
- Confirm Order (Admin)
- Logout (Admin)

SN	Test Case	Purpose	Precondition	Test Steps	Expected Results	Actual Results	Status	Remark
1	Login	Check if admin login is working or not	a. Need to have a stable internet connection. b. Must enter credentials	a. Enter credentials in the fields provided. b. Enter the login button.	Success message shown "Login Successful" and redirect to the admin dashboard.	Message shown "Login Successful" and redirect to the admin dashboard.	Pass	None
2	Add Admin	Check if one admin can add another admin or not	a. Must be logged in as an admin. b. Must be on the 'Manage Admin' page.	a. Click the 'Add Admin' button. b. Enter the admin details in the form. C. Lastly confirm the 'Add Admin' button.	Success message shown "Admin Added Successfully" and redirect to the 'Manage Admin' page.	Message shown "Admin Added Successfully" and redirect to the 'Manage Admin' page.	Pass	None
3	Update Admin	Check if the admin information is updating or not	a. Must be logged in as an admin. b. Must be on the 'Manage Admin' page.	a. Click the 'Update Admin' button. b. Enter the updated admin details in the form. C. Lastly confirm the 'Update Admin' button.	Success message shown "Admin Updated Successfully" and redirected to the 'Manage Admin' page.	Message shown "Admin Updated Successfully" and redirected to the 'Manage Admin' page.	Pass	None
4	Delete Admin	Check if 'Delete Admin' button is working or not	a. Must be logged in as an admin. b. Must be on the 'Manage Admin' page.	Clicked the 'Delete Admin' button.	Success message shown "Admin Deleted Successfully" and	Message shown "Admin Deleted Successfully" and redirected to	Pass	None

					redirected to the 'Manage Admin' page.	the 'Manage Admin' page.		
5	Add Category	Check if the system can add category or not	a. Must be logged in as an admin. b. Must be on the 'Manage Category' page.	a. Click the 'Add Category' button. b. Enter the category details in the form. C. Lastly confirm the 'Add Category' button.	Success message shown "Category Added Successfully" and redirected to the 'Manage Category' page.	Message shown "Category Added Successfully" and redirected to the 'Manage Category' page.	Pass	None
6	Update Category	Check if the category information is updating or not.	a. Must be logged in as an admin. b. Must be on the 'Manage Category' page.	a. Click the 'Update Category' button. b. Enter the updated category details in the form. C. Lastly confirm the 'Update Category' button.	Success message shown "Category Updated Successfully" and redirected to the 'Manage Category' page.	Message shown "Category Updated Successfully" and redirected to the 'Manage Category' page.	Pass	None

7	Delete Category	Check if 'Delete Admin' button is working or not	a. Must be logged in as an admin. b. Must be on the 'Manage Category' page.	Clicked the 'Delete Category' button.	Success message shown "Category Deleted Successfully" and redirected to the 'Manage Category' page.	Message shown "Category Deleted Successfully" and redirected to the 'Manage Category' page.	Pass	None
8	Add Food	Check if the system can add food or not	a. Must be logged in as an admin. b. Must be on the 'Manage Food' page.	a. Click the 'Add Food' button. b. Enter the food details in the form. C. Lastly confirm the 'Add Food' button.	Success message shown "Food Added Successfully" and redirected to the 'Manage Food' page.	Message shown "Food Added Successfully" and redirected to the 'Manage Food' page.	Pass	None
9	Update Food	Check if the food information is updating or not.	a. Must be logged in as an admin. b. Must be on the 'Manage Food' page.	a. Click the 'Update Food' button. b. Enter the updated food details in the form. C. Lastly confirm the 'Update Food' button.	Success message shown "Food Updated Successfully" and redirected to the 'Manage Food' page.	Message shown "Food Updated Successfully" and redirected to the 'Manage Food' page.	Pass	None
10	Delete Food	Check if 'Delete Food' button is	a. Must be logged in as an admin.	Clicked the 'Delete Food' button.	Success message shown "Food	Message shown "Food Deleted	Pass	None

		working or not	b. Must be on the 'Manage Food' page.		Deleted Successfully" and redirected to the 'Manage Food' page.	Successfully" and redirected to the 'Manage Food' page.		
11	Update Order	Check if the food order information is updating or not.	a. Must be logged in as an admin. b. Must be on the 'Manage Order' page.	a. Click the 'Update Order' button. b. Enter the updated food order details in the form. C. Lastly confirm the 'Update Order' button.	Success message shown "Order Updated Successfully" and redirected to the 'Manage Order' page.	Message shown "Order Updated Successfully" and redirected to the 'Manage Order' page.	Pass	None
12	Search Food	Check if the search result is correct or not	a. Users need to have a stable internet connection. b. Users must enter the restaurant website domain.	Simply users search their desired food item on the search bar.	Shown all the food items which are searched by the users	Shown the desired food items.	Pass	None
13	Order Now	Check if the 'Order Now' button is working or not.	a. Users need to have a stable internet connection. b. Users must enter the restaurant website domain.	The user clicked the 'Order Now' button.	When the user clicked the 'Order Now' button it should go to the order confirmation page.	It goes to the order confirmation page.	Pass	None
14	Confirm Order	Check if the 'Confirm Order ' button is working or not.	a. Users need to have a stable internet connection. b. Users must enter the restaurant	Users should click the 'Order Now' button and fill the form of the order confirmation	Order details should be saved to the database and shown the success message	Message shown "Food Ordered Successfully" and saved in the database.	Pass	None

			website domain.	and click the ‘Confirm Order’ button.	“Food Ordered Successfully” to the users.			
15	Logout	Check if the admin can successfully log out.	a. Must be logged in as an Admin. b. Must click on log out in navbar.	Click on logout button in the navbar.	Success - Admin logs out. Failure - No activity on logout click	Admin logs out.	Pass	None

Table 5. 4: Test Table

Chapter 6: Results & Analysis

6.1 Overview

When we are working on any project, we always do our best for a good result. In this pandemic, our web application is going to play a big role. Our ‘Online food ordering and restaurant management system’ will save the cost of pens, paper, and many other things. This system will definitely save the users valuable time. This system is very user-friendly for the user.

6.2 Results from surveys and interviews

It was clear from the start of the interview what the company wanted to build as an enterprise and how this application would generate sales. There were several sources of revenue created, as well as a business model. The application's functionalities were founded as a result of the surveys. This survey addressed simple questions like what the customer actually wants and how to make the program more user-friendly. According to the survey, the majority of customers are very interested in this web application. Particularly for those who do not have time to physically eat in a restaurant. They always like to order food online.

6.3 Testing Results

Not all of the application's features have been added yet; they will be added when the specifications are met. As a result, further test cases for this application are likely in the near future. Any issues that occur during the test are fixed as soon as possible by the developers.

From the test table, we can show that all the test cases were passed. Following the testing process, the team will ensure that user manuals, test case notes, and fault documentation are

prepared in order to clarify difficult processes in plain English to non-technical staff and future developers who might join the development team.

6.4 Conclusion

We all know that in the restaurant industry, the management of time is extremely important. As we live in a very modern world, the use of software and technology is essential to helping us streamline and shorten the time it takes us to carry out tasks. One of the countless benefits that come with implementing an online restaurant management software in your business is the ability to access your critical business data from anywhere with access to the internet. This gives you the freedom to spend time away from your restaurant while still making informed, critical decisions about the well-being of your business. This web application would be very useful for the people, particularly in this pandemic situation, so they will not have to go to a restaurant to eat.

Chapter 7: Project as Engineering Problem Analysis

7.1 Sustainability of the Project/Work

Software sustainability is one part of software engineering. In most cases, sustainability should be considered at the very beginning of the software development process. Since it is difficult to adjust how developers act, this process is not necessarily practicable.

Thinking about the future, the company has made huge plans to make sure enough revenue is generated. The software's initial goal was to provide online food delivery to people who couldn't go to the restaurant because of the pandemic. Initially, the company intends to deliver food only to a limited area of Dhaka. Their long-term goal is to deliver food throughout Dhaka. As a result, this business plan should increase the number of people who have used the application. This application will produce more sales as there are more customers. New technologies are being implemented as per the future plan of the software as well. The software is designed in such a way that any additional functionalities added by the developers can be quickly implemented into the application. Since this system is entirely online, we expect that if it is well maintained, it will be able to operate for a longer period of time.

7.2 Social and Environmental Effects and Analysis

There is no doubt that online food delivery can save time. For those who need to eat late due to work or lifestyle decisions, online food delivery offers a broad variety of meal options. Online food delivery has provided employment opportunities for many food workers. Online food and delivery people provided a critical lifeline during the COVID-19 pandemic. Online food not only provided meals but also employment for the people who prepared or delivered

the food. Most major online food platforms adapted their food delivery apps so delivery people and consumers did not have to come into face-to-face contact during this time.

When it comes to the environment, online food delivery has a very good effect. Less going out to eat meals means less traveling as a result carbon released from vehicles is reduced. Nowadays food delivery operators use cargo bikes because they are quiet, emission-free, and less disturbing for citizens. Overall online food ordering has a positive impact on the environment all over the world.

7.3 Addressing Ethics and Ethical Issues

Ethics is the study of what is right and wrong, as well as moral responsibility and obligation. Ethics, in reality, shapes the characters. Projects that are useful to consumers include all of the elements that are ethically sound. Our system is completely secure. Any of the user's data is saved in a way where no one else will use it. We have tried to provide the maximum amount of security possible from the hacking of our application. Overall, we can say that our system will work for all the users maintaining all ethical issues properly.

Chapter 8: Lesson learned

8.1 Problems Faced During this Period

There are a lot of problems in web development because it contains more types of markup language, methods, objects, modifiers, and many ways to create a project.

When I started working with PHP, I had more challenges to solve. It doesn't always fit my expectations and isn't always positioned in the correct position. To come up with a beautiful site design needs a lot of creativity, uniqueness, and brainstorming sessions. The majority of web designs that target markets and clients enjoy and respect are the outcomes of continuous improvement and regressive critical thinking. The capacity of the website to sync with multiple apps, as well as its responsiveness, are just a few of the criteria that the web designer considers. As a result, web design is a difficult job. I worked from home due to the COVID 19 scenario. Because I live in a rural place, access to the internet was a huge difficulty. I had to constantly contact my boss, and I had to brief the clients frequently. Remotely doing these tasks brought several problems that may have been avoided. Network drop was a typical issue with Zoom meetings. I believe that if I worked on a person, I would be able to do more.

8.2 Solution of those Problems

Web development is an interesting and interactive field, but I found it difficult to learn at first. With the internship training, I was able to study and understand a variety of objectives. I had several difficulties with the practical work at first. However, after some time, I am able to solve PHP code and other difficulties on my own during my training session. I learned the hard way that clean code avoids unexpected mistakes. By getting a broadband connection, I was able to solve my internet issues. I concentrated on my job and prioritized it over other things.

Chapter 9: Future Work & Conclusion

9.1 Future Works

As previously said, this current application is only for the web. In the future, the company wants to develop a smartphone interface for both iOS and Android. They also want to add a graph analysis system for monthly or daily sales. They have a huge plan to update the application such as add a payment gateway, the daily or monthly sale generated, monthly revenue generated, etc.

9.2 Conclusion

This report is based on the project of “Online Food Ordering and Restaurant Management System”. With the help of the internet, the customers can get access to the restaurant website and order their desired food online. This will save a lot of time for the customers.

It has been a great opportunity for me to work in StarHOST IT Limited as a web application developer. Working on this project has taught me a few lessons over the internship time. It has shown me how complex and dynamic the modern business world is. This program gave me a good picture of what it's like to work as a web developer, what challenges I'll face, and how to deal with them. Hopefully, it will be the start of my journey into the corporate world as a developer.

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Appendix

User Part:

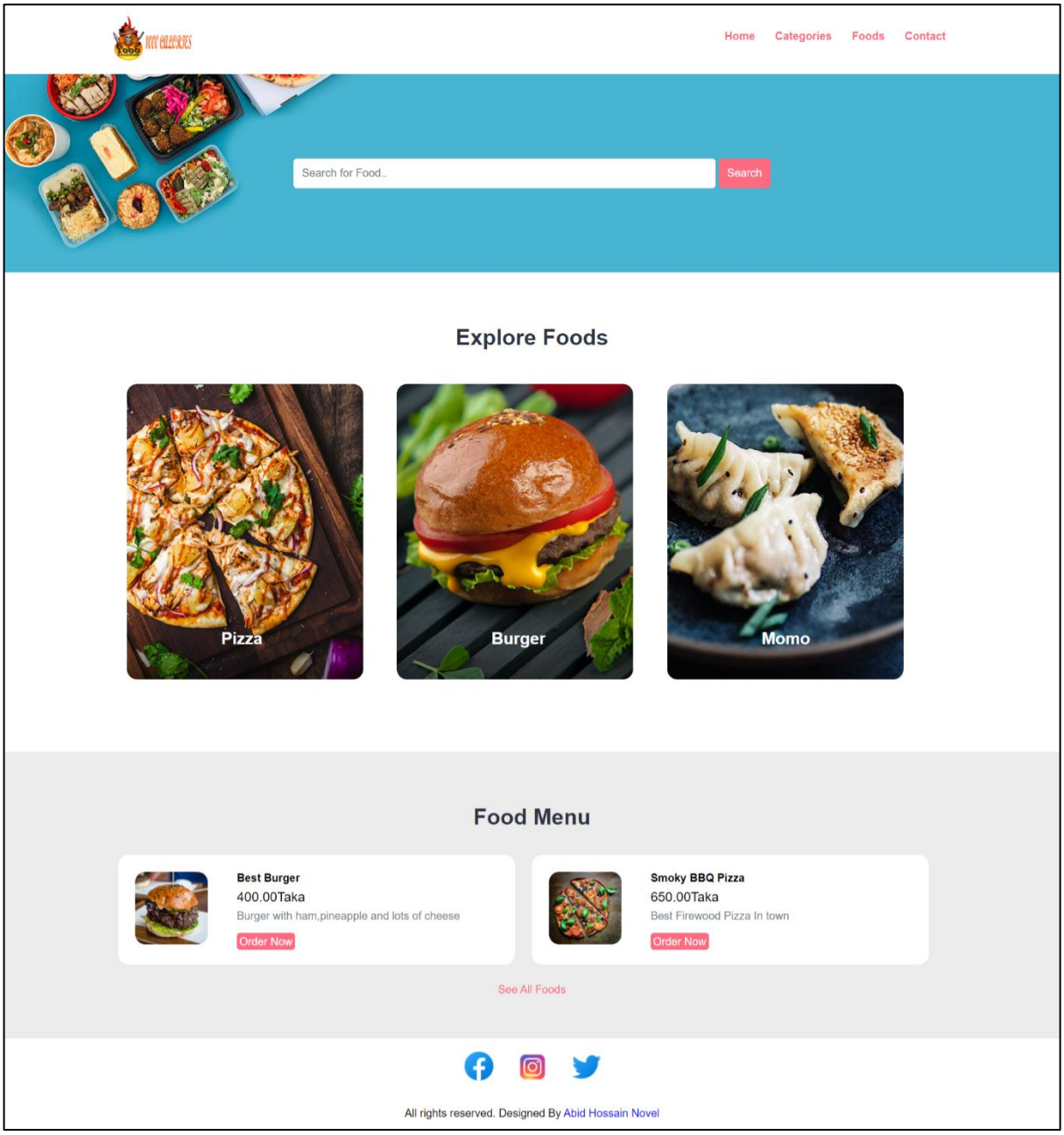

Fig: Restaurant Home Page

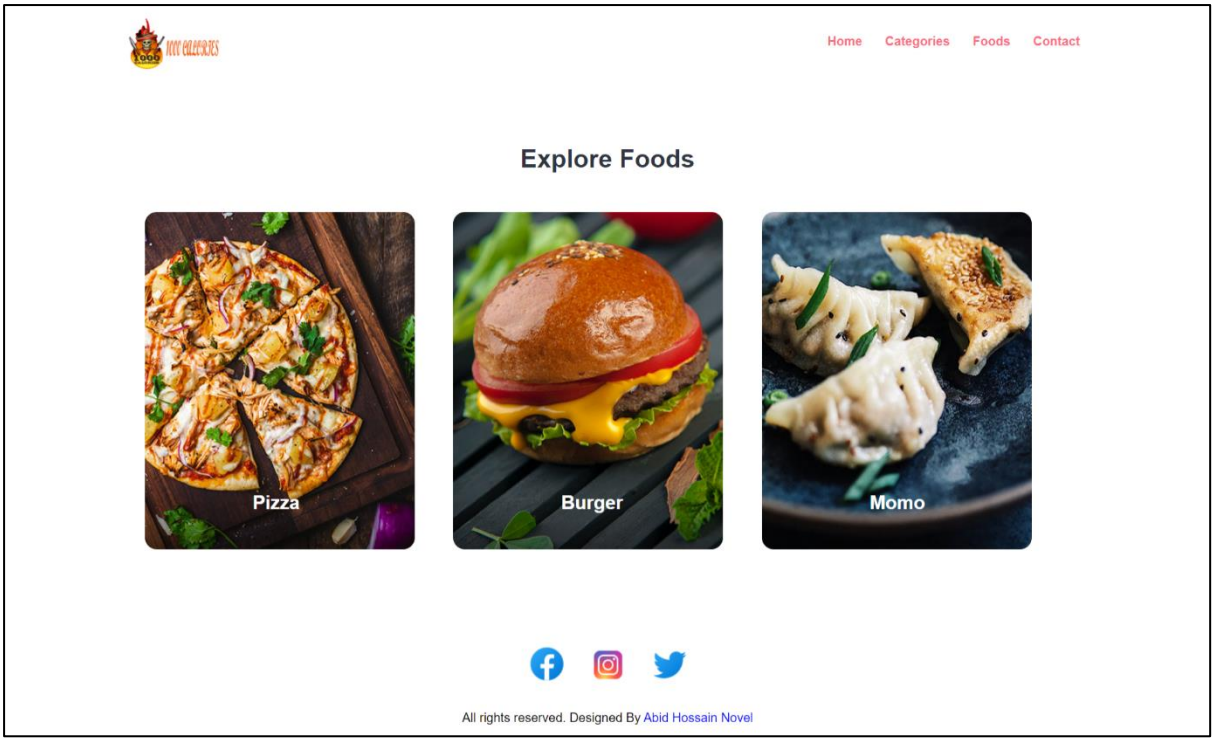

Fig: Category Page

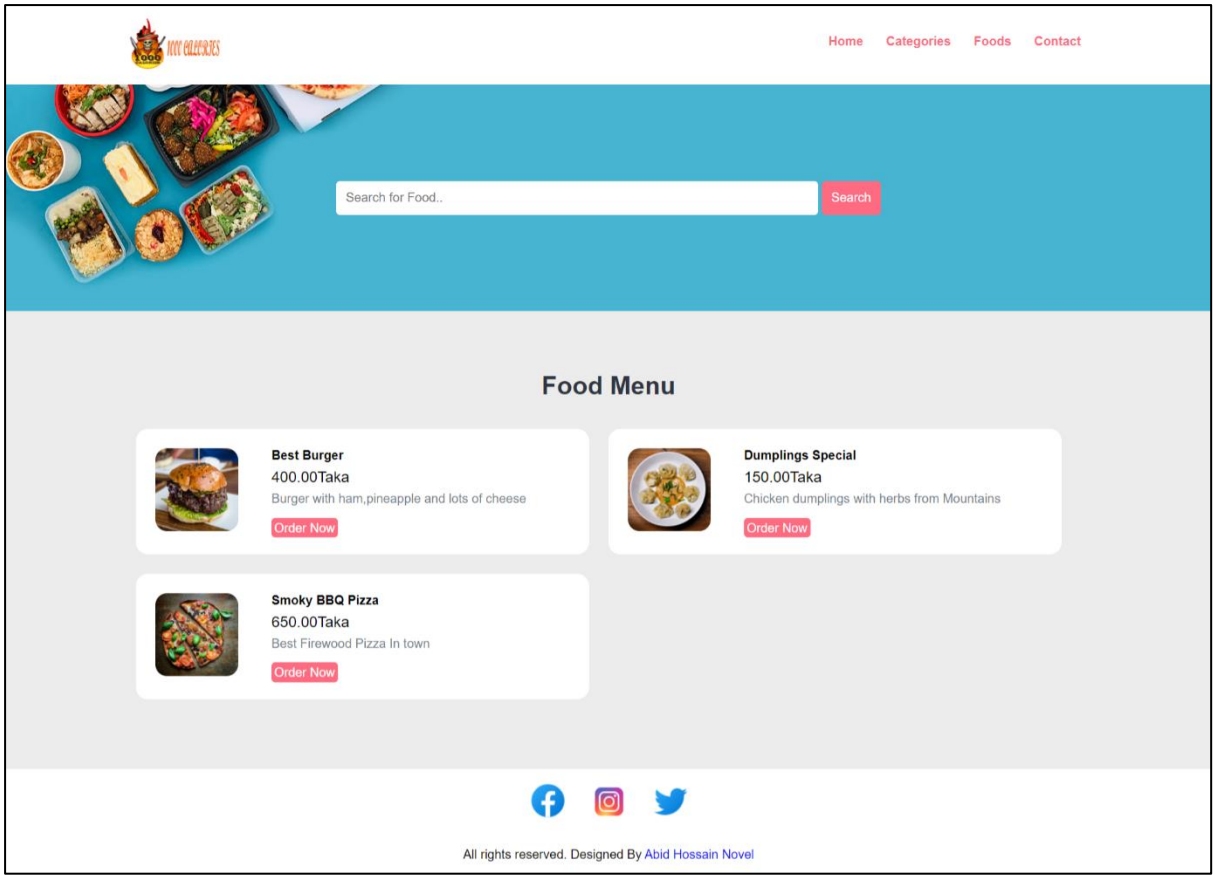

Fig: Food Menu Page

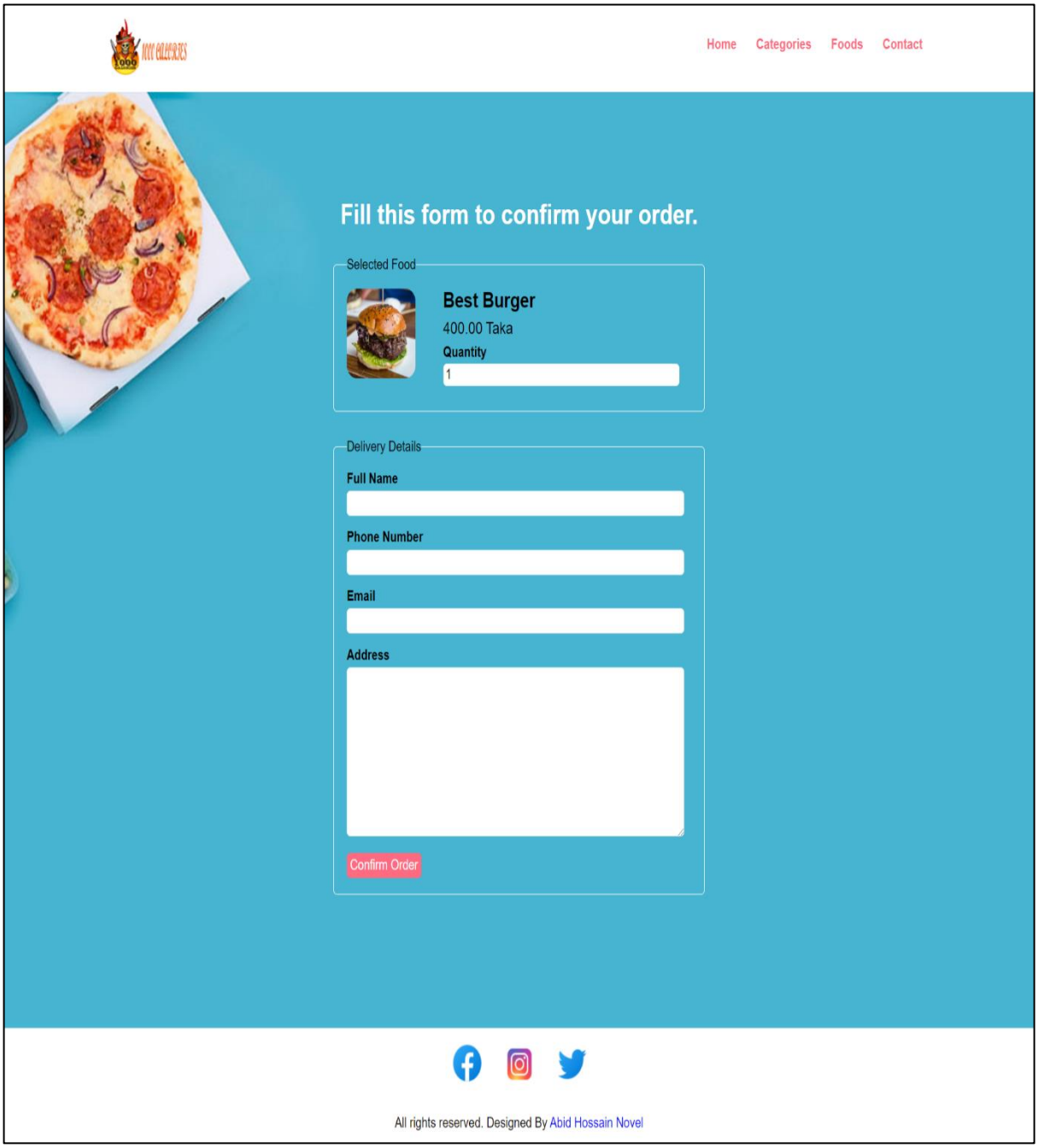

Fig: Food Order Confirmation Page

Admin Part:

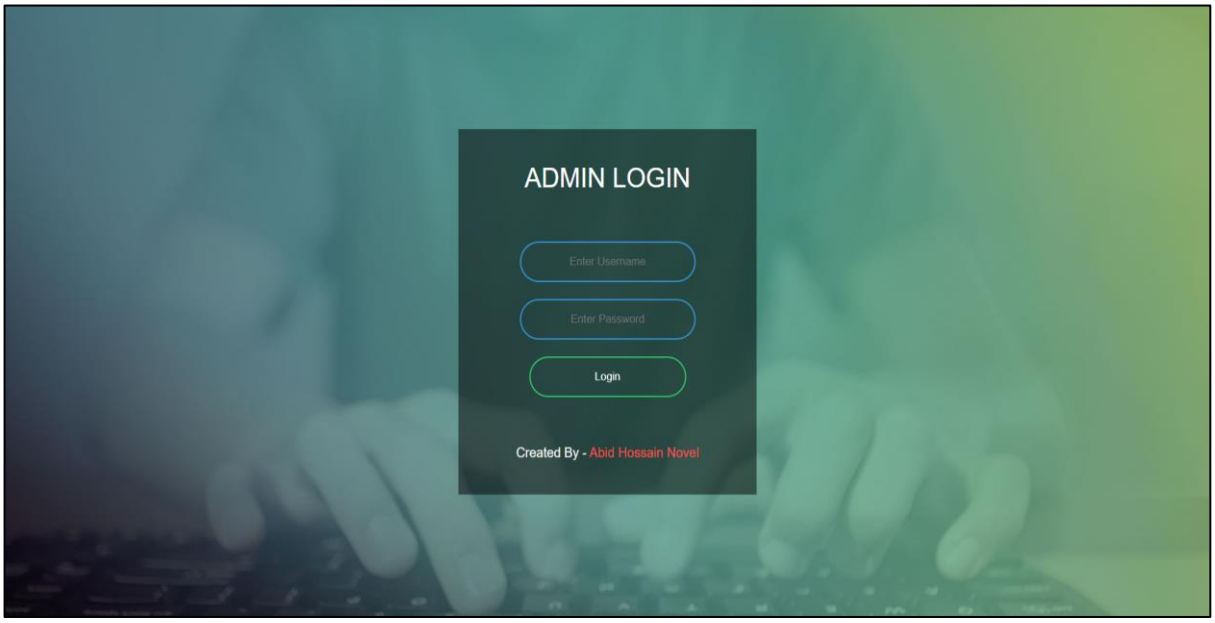

Fig: Admin Login Page

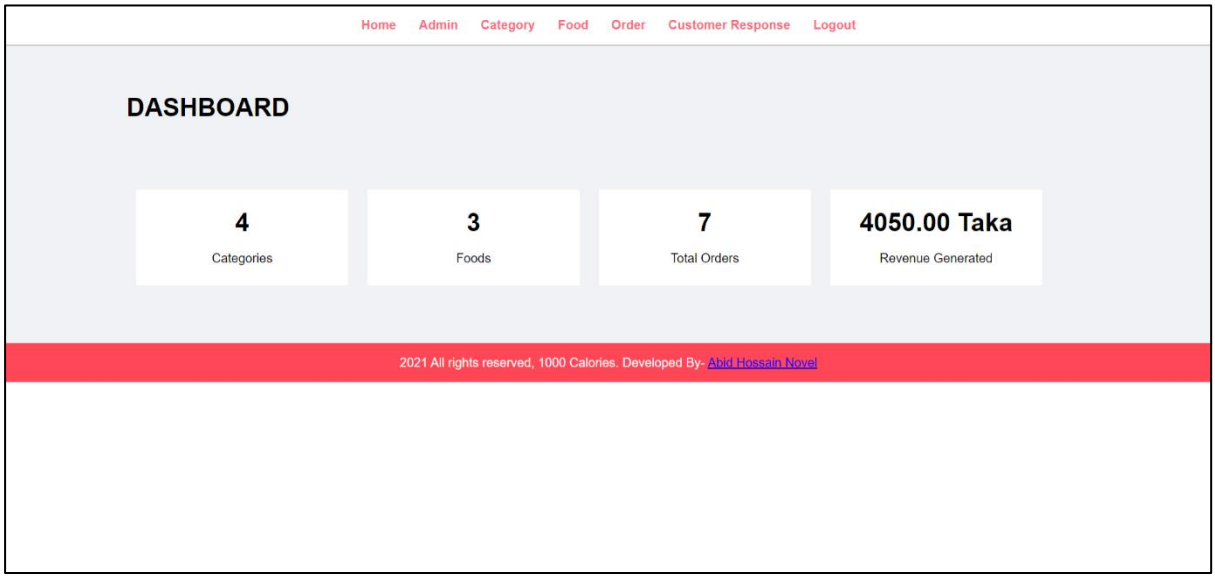

Fig: Admin Dashboard

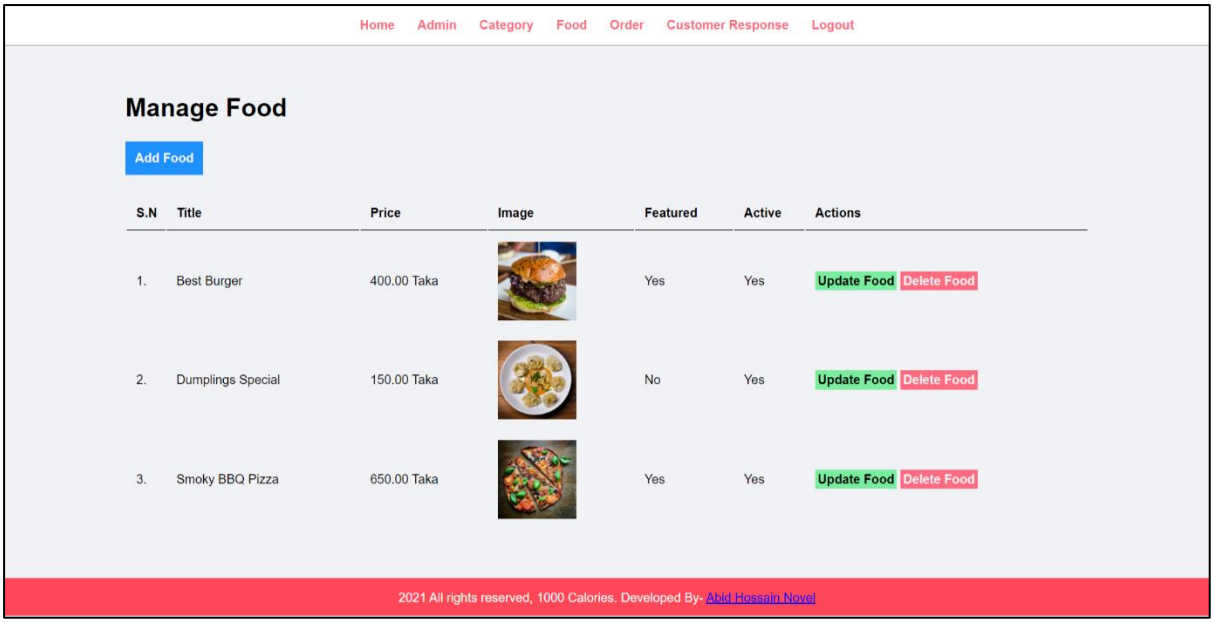

Fig: Manage Food Page

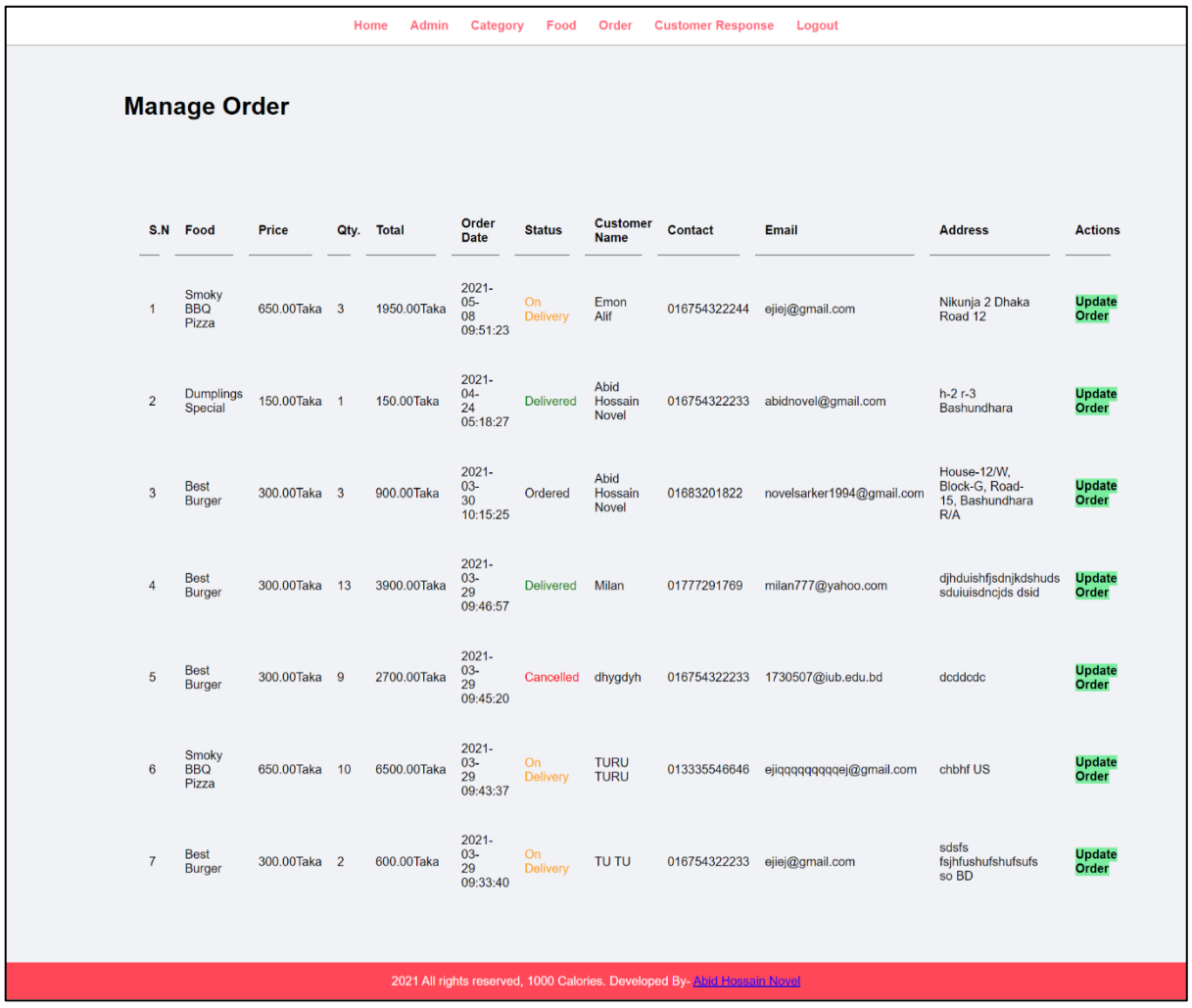

Fig: Manage Order Page

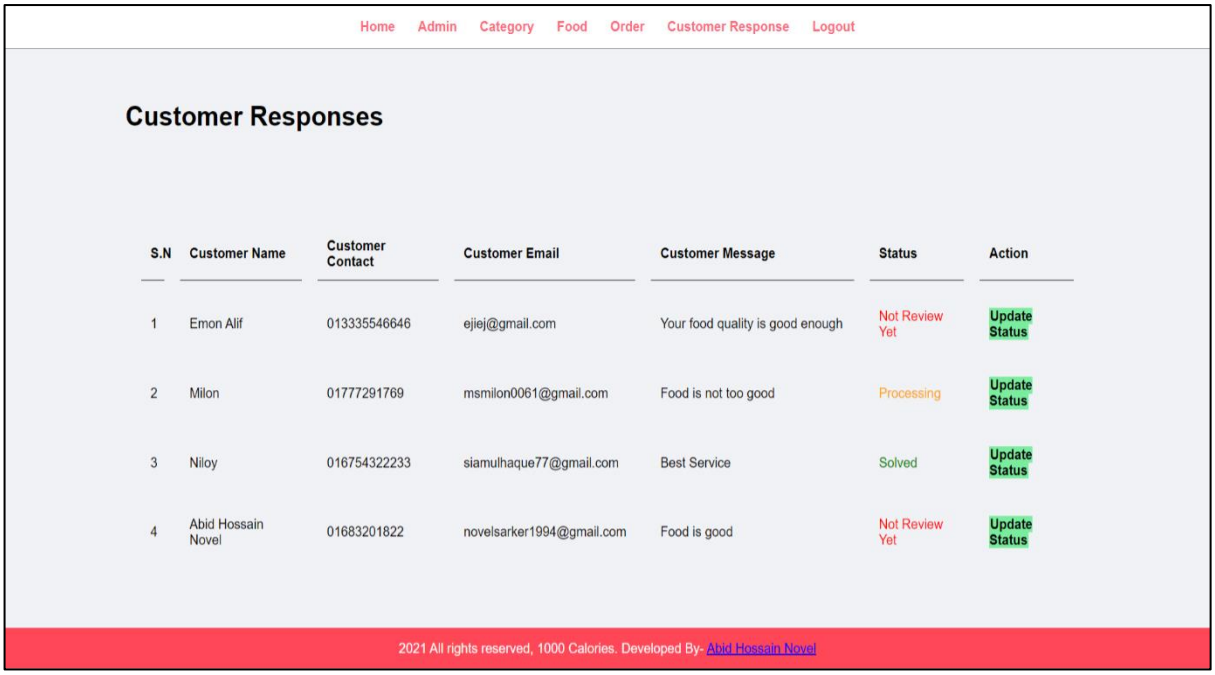

Fig: Customer Responses