

**DESIGN AND DEVELOPMENT OF AN E-COMMERCE SYSTEM BASED ON  
SUBSCRIPTION**

**BY**

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This Report Presented in Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science in Computer Science and Engineering

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

**JANUARY 2023**

## APPROVAL

This Project titled “**Design and Development of an E-Commerce System based on Subscription**”, submitted by Mirza Istiaq Islam, ID No: 172-15-9603 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 24 January 2023.

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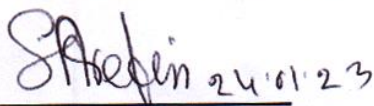
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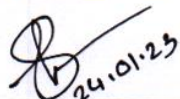
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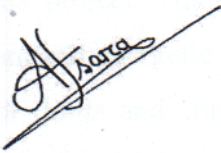
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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of Ms. Afsara Tasneem Misha, Lecturer, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.


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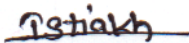
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## **ABSTRACT**

The whole world is going through a major transformation of the retail industry, and Bangladesh is no different from the global trend. E-commerce in Bangladesh is still a young and emerging industry. In this paper, I have presented a subscription-based food e-commerce website. A subscription-based system is a very common platform for users. By using this system users can easily get their products. In this era of the internet, subscription-based e-commerce is the most effective platform to make easy interaction for the buyer and the sellers where the buyer can easily buy their daily life needed items by using this system without any hesitation and sellers also continue their business reducing the extra cost of rent, maintenance, etc. As a result, users can easily get their daily life needed products or packages for the long term. Additionally, users can get some special packages and birthday packages based on their need. If users want some special kind of gift box foods in their daily life like diabetes people, daily eating food is different from the normal people or some people who are on a diet they can also get their food items and continuously maintain their food calorie by using this system.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

Internet has given rise to a new type of commerce known as electronic commerce. Internet advertising, identification, payment, and delivery of products and services are all part of e-commerce. As new competitors, business models, and technological advancements eliminate the restrictions that have prevented every industry from competing with one another, it creates opportunities for people to relocate across borders. In developing countries, large enterprises, as well as small or medium enterprises, have adopted the business process of e-commerce. In this paper, I introduce a subscription-based e-commerce system. Nowadays in Bangladesh subscription-based business is very popular. This project work is a special kind of subscription system business model-based website.

### 1.2 Motivation

The main inspiration regarding this project came from when I knew about the subscription box business model. As part of a marketing strategy and product distribution approach, a subscription box is a recurrent distribution of niche products. They target a wide range of customers and cater to many specific needs and interests [1]. It sends customers' products into a surprise box. According to my knowledge in Bangladesh, any kind of e-commerce site like "Chaldal", "Mina Bazar" doesn't have this subscription system. This subscription box system is very popular in the USA, Canada, Australia, etc countries. Some companies like "Dollar Shave Club", "LM Beauty" in the USA are very popular subscription-based e-commerce sites. Dollar shave club sells boys grooming products and LM Beauty sells girls' beauty products [3] [4]. According to this point of view, most of the companies who followed subscription-based e-commerce business models sell mostly those types of products they don't sell daily life needed products like grocery items or food items. So my developing website added more value to this type of business. If users want to continue his/her daily products, users can continue his/her subscription without changing.

### **1.3 Objectives**

This subscription-based system is helpful for those working people in Bangladesh who are busy in their daily life. By using this system they can easily get monthly food that they need from this site. This is also useful for children or other people who want to taste the same types of food, but sometimes around the stores those items are not available. So using this subscription system people can continue their subscription and also continue their choice. This system is also useful for the bachelors in Bangladesh. They can buy their monthly products easily from here without any hassle. This system is mostly useful for middle class families in Bangladesh because middle class families in Bangladesh love to make a budget for everything for a month. So this system is helpful to them for calculating easily how much money costs to them using this system. This subscription system in food is additionally helpful for those people who have diabetes and who are on a diet or more health conscious because those people need to maintain their calorie of food for health reasons. So using this system they can easily maintain their food calories, and they can also easily maintain the track of their health.

### **1.4 Expected Outcomes**

Subscription based e-commerce websites provide easy to use user interfaces and also people can easily get various favorite items they need by using this system. People also can get some special items for those who have diabetes and who are on a diet and people also get different budget subscription packages for their daily life products.

### **1.5 Project Management and Finance**

When I knew about the subscription box business model, I started work for this project on 7 October, 2021. I learned about this system, how it works and also I learned based on the project about some programming languages for implementation from 12 October to 22 October. After that, I started to find some resources for related works on it and I researched the background about this system. Then I took a plan on how to complete and then I started my project implementation on 27 November. After that, the implementation was completed on 16 December. I managed to complete my project in a short time because of good planning and parallel working.

## **1.6 Report Layout**

**Chapter 1: Introduction** (1.1 Introduction, 1.2 Motivation, 1.3 Objectives, 1.4 Expected Outcomes, 1.5 Project Management and Finance)

**Chapter 2: Background** (2.1 Terminologies, 2.2 Related Works, 2.3 Comparative Analysis, 2.4 Scope of the Problem, 2.5 Challenges)

**Chapter 3: Requirement Specification** (3.1 Business Process Model, 3.2 Requirement Collection and Analysis, 3.3 Use Case Modeling and Description, 3.4 Logical Data Model, 3.5 Design Requirement)

**Chapter 4: Design Specification** (4.1 Front-end Design, 4.2 Back-end Design, 4.3 Interaction Design and User Experience, 4.4 Implementation Requirements)

**Chapter 5: Implementation and Testing** (5.1 Implementation of Database, 5.2 Implementation of Front-end Design, 5.3 Testing Implementation, 5.4 Test Results and Reports)

**Chapter 6: Impact on Society, Environment and Sustainability** (6.1 Impact on Society, 6.2 Impact on Environment, 6.3 Ethical Aspects, 6.4 Sustainability Plan)

**Chapter 7: Conclusion and Future Scope** (7.1 Discussion and Conclusion, 7.2 Scope for further developments)

# CHAPTER 2

## BACKGROUND

### 2.1 Terminologies

Package box is an online-based website where all kinds of food packages are available into some budget ranges. I need to design this website for all classes of people in Bangladesh. I also wish to give the best quality of food and fresh food will be delivered with maintaining proper hygiene. For this, I need a proper planning. Also need a FAQ questionnaire will be set by me to get feedback from my customers so that I can connect with them. Interacting with customers will help me to grow my website day by day.

### 2.2 Related Works

Subscription boxes are popular abroad. Some subscription-based e-commerce companies are Dollar Shave Club, LM Beauty, Netflix, Birch box, etc. Those subscription-based companies mostly sell personal grooming products or pet care products, etc. For example:

#### 2.2.1 Birch Box

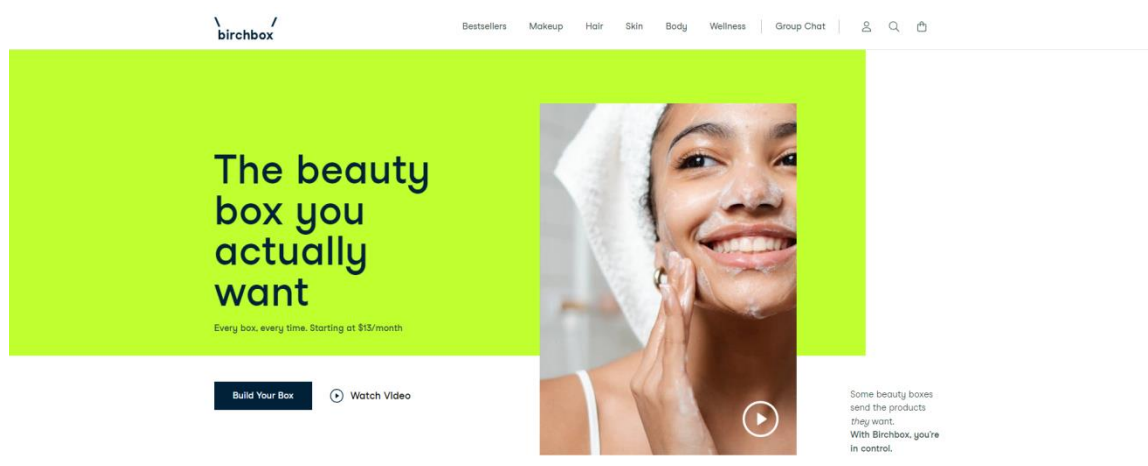


Figure 2.2.1: Birch Box

This is a subscription-based website in the US. Birch box is an online monthly subscription service based in New York that sends subscribers a box of four to five select makeup or

other beauty products [3]. Products include skincare items, fragrances, organic products, and many other cosmetic products.

### 2.2.2 LM Beauty Obsessed

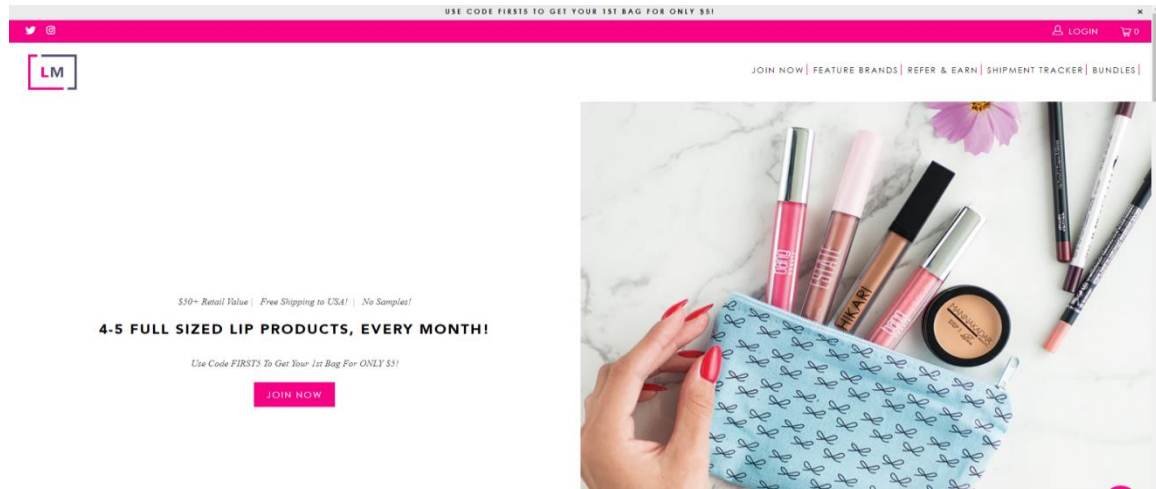


Figure 2.2.2: LM Beauty Obsessed

This is also a subscription-based website in the USA. LM Beauty Obsessed is an online monthly subscription service based in the US that sends subscribers a box of four to five select lipsticks or other beauty products. This is sold lip care products or lip beauty products. In 2021, almost 1, 00,000 people already are members of this website [3].

### 2.2.3 Chaldal

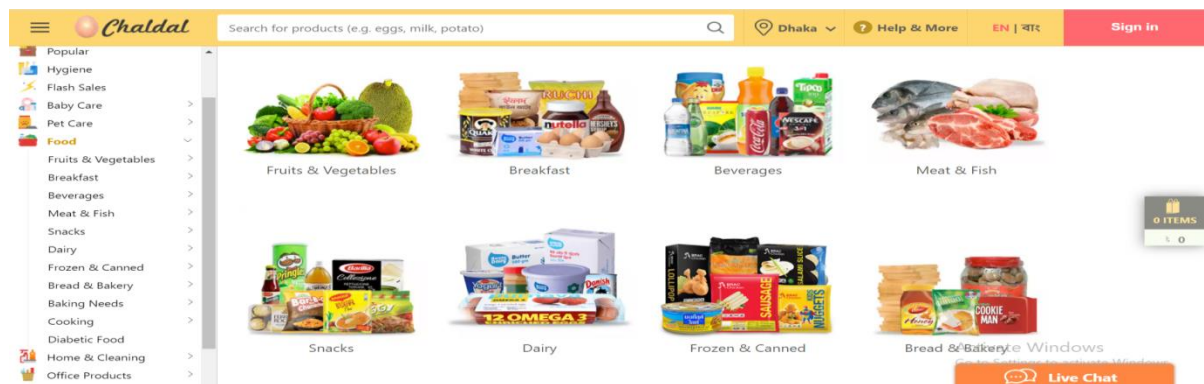


Figure 2.2.3: Chaldal

Chaldal.com is a Bangladeshi online food and food supplier, established in 2013. It sells fresh fruits and vegetables, meat and dairy products, groceries, personal care, and household goods via the website. The business started with a single warehouse/office in Gulshan, Dhaka which also offered their flow delivery. Over the years, the company has been expanded to 25 locations, and can now offer 1-hour delivery for more than 6,000 products. Now, they deliver more than 10,000 orders a day and serve more than 20,000 households across Bangladesh [4].

Apart from those most of the e-commerce websites in Bangladesh they don't have any subscription system. But I tried to make my website unique. So, I added some unique features that I didn't find in any known sites.

### **2.3 Comparative Studies**

My website for buyers is unique than other existing sites. I borrowed the idea for various features from some websites that influenced me. I compared my site to others. I have my own unique features those are completely different from others. Such as, there are some sites which provides only monthly or weekly package system. But in my website, I add some new features. Here, customers don't need to choose only monthly or weekly package system. Buyer can create his/her own subscription time and date. I know, everyone has his/her own needs. Keeping these things in mind, I have developed this system. They can customize their subscription time and date according to their needs. So, I believe that my site will be unique than others.

### **2.4 Scope of the Problem**

In Bangladesh, there are numerous e-commerce platforms for ordering food, but they don't have any manually handling subscription option. Sometimes people want to shop for a month or yearly or for a few days for their needy products. They have to purchase daily. So, this is very much problematic for those working people who are busy in their daily life. So if they have any subscription-based system then they subscribe once and the service gets how long they want.

## **2.6 Challenges**

Biggest challenge of this project is familiarizing Bangladeshi people with this subscription system. Most of the people in Bangladesh don't know about the subscription-based Package Box business model and also challenging for this system is the pay first process. Also, challenging of this project is maintaining the subscription system and order system and tracking system maintenance is the most challenging part of this project.



# CHAPTER 3

## REQUIREMENT SPECIFICATON

### 3.1 Business Process Modeling

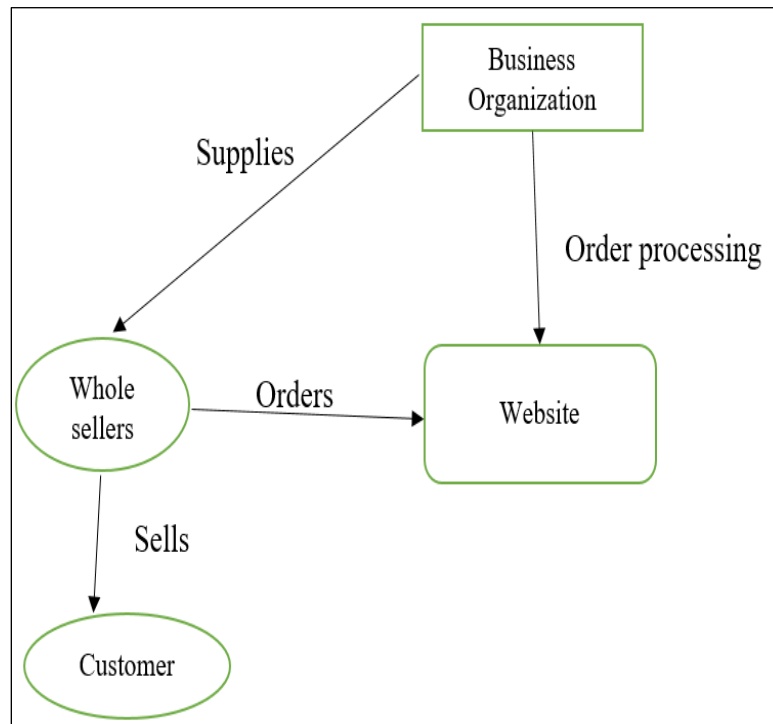


Figure 3.1: Business Process Model

Depending on the destination of the product and its address, the business model will change. To begin with, I must identify myself as a manufacturer, distributor, or retailer of a product, service or content.

### 3.2 Requirement collection and analysis

For the collection of requirements, I collect some reviews from the users who use e-commerce websites most of the time. The data collection of 50 people and analysis are given below:

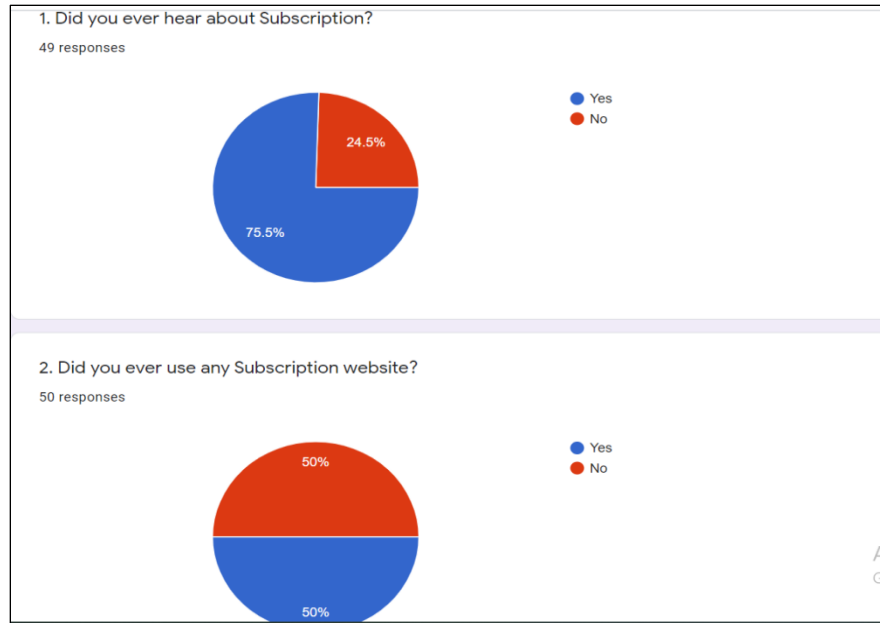


Figure 3.2.1: Data Analysis

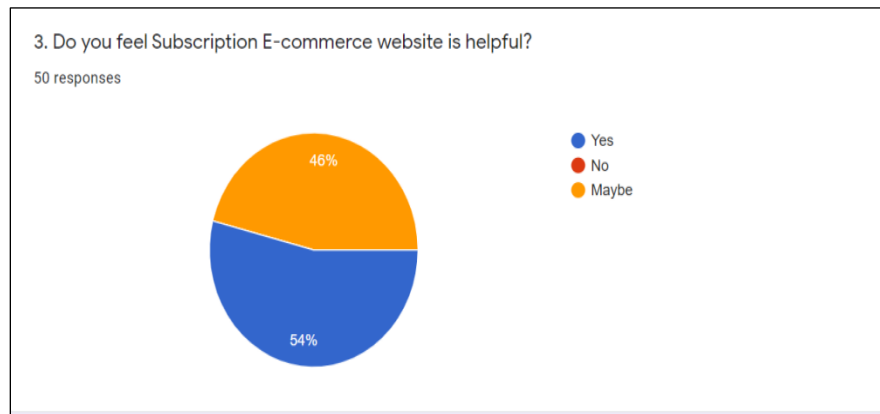


Figure 3.2.2: Data Analysis

Here almost 75% of people know about the subscription system, but 50% of people do not ever use any subscription system. The ratio said that 54% of people think this is helpful to them and 46% people think it will be helping them also if they get any system like this in e-commerce.

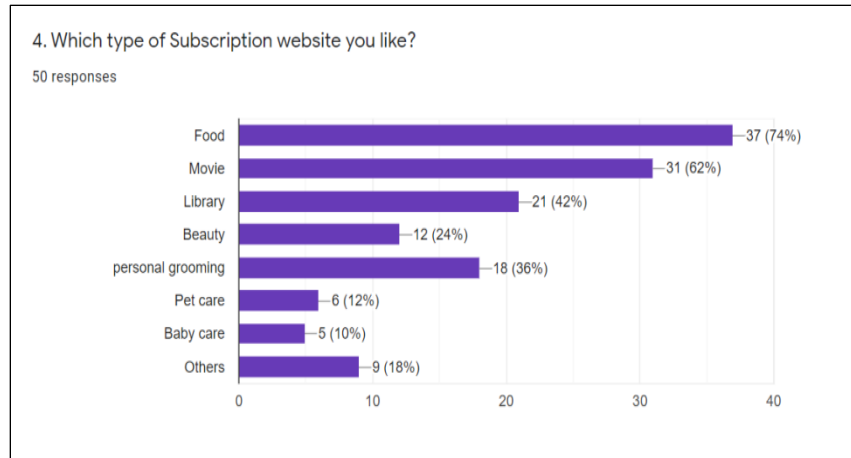


Figure 3.2.3: Data Analysis

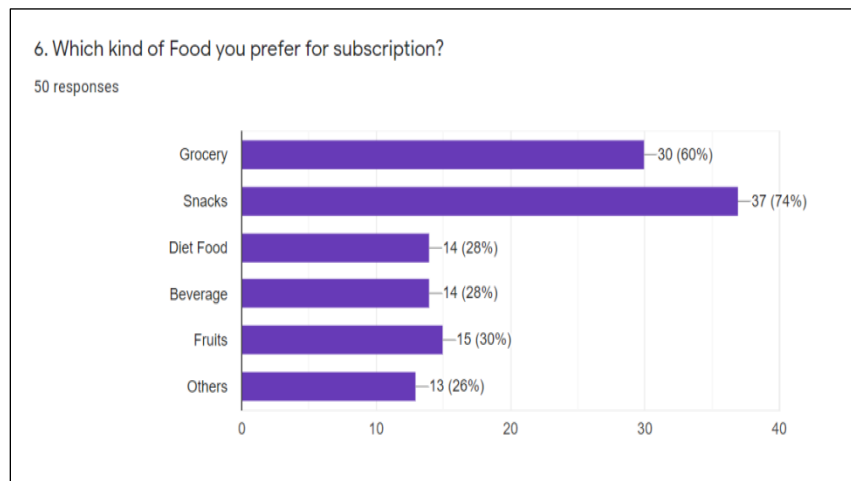


Figure 3.2.4: Data Analysis

In this survey, I can see that almost 73% of people purchase food items from e-commerce and they also want a subscription system on food items. Here 74% of people want to subscribe to food items e-commerce business and from the survey, I see that 74% of people voted for the snack items from the food sector where they want a subscription system in e-commerce.

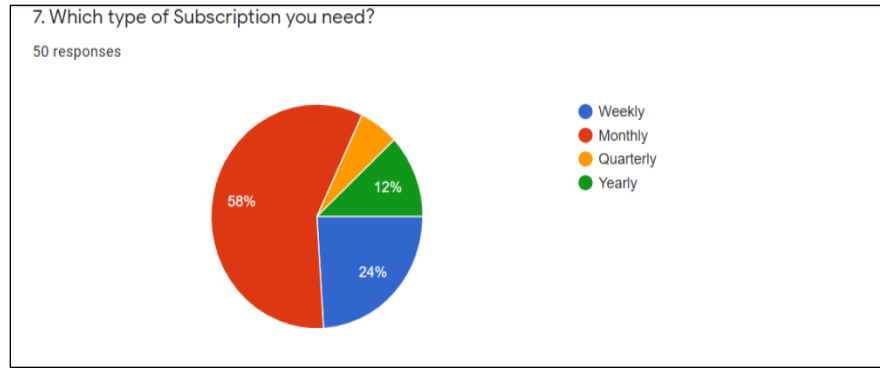


Figure 3.2.5: Data Analysis

People mostly want to subscribe to a monthly subscription system, in this survey 58% of people want a monthly subscription system.

The age range of those surveyors is mostly 15 to 35 years old. So, apart from this survey, I built a subscription based e-commerce website about snack items where people can get their choose-able products using a monthly subscription system.

### 3.3 Use Case Modeling and Description

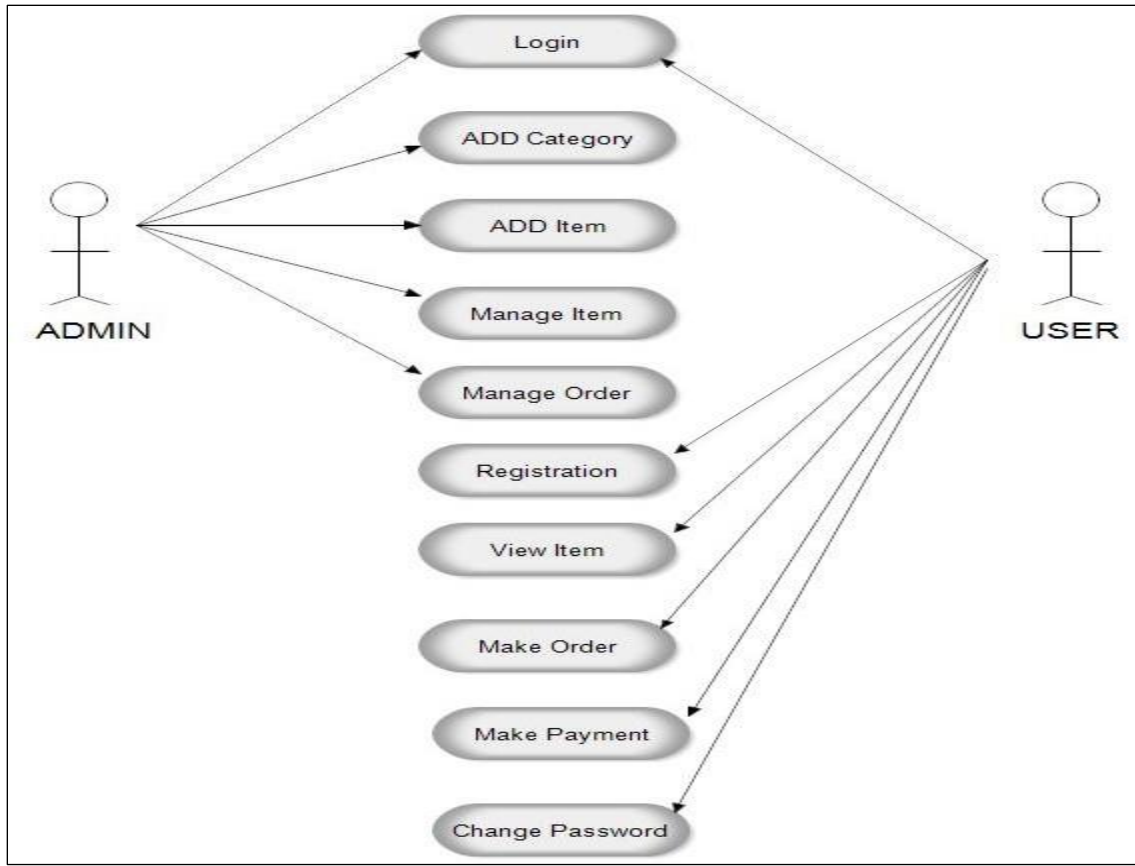


Figure 3.3.1: Use Case Model

Use case diagram sometimes referred to as a Unified Modeling Language (UML), is a graphical representation of system actions and user roles. This is a simple representation of how a system user interacts with the system.

Here in the user site user can log in, register, manually handle subscription, order, checkout, and payment and in the other site in the system admin can log in, add packages, add admin, delete user, delete orders, delete categories, delete products.

### 3.4 Logical Data Model

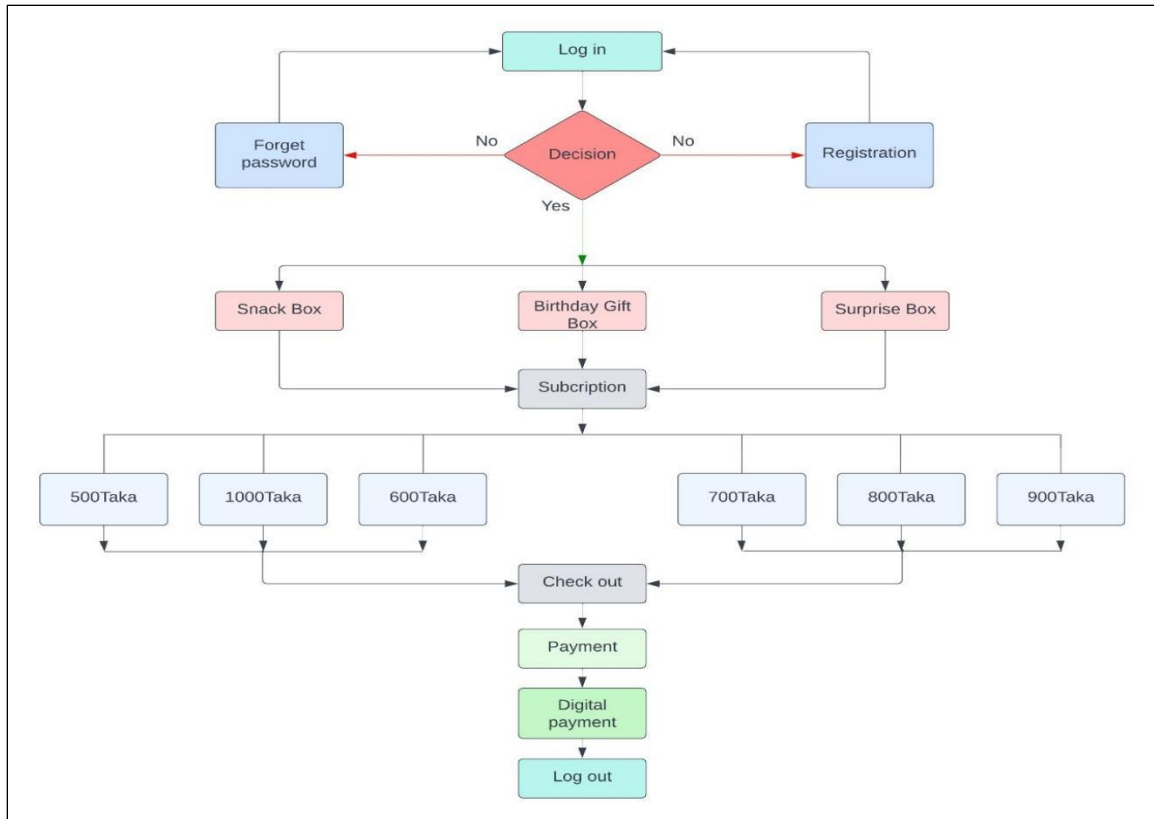


Figure 3.4: Logical Data Model

### 3.5 Design Requirements

- Allow admin to upload the packages.
- Allow admin to view the orders and users information.
- Allow admin to delete packages and users.
- Provide a login for both user and admin.
- Allow users to customize subscription date and time.
- Provide an order for users.
- Provide payment for users.

## **CHAPTER 4**

### **DESIGN SPECIFICATION**

In this chapter, I will show how the design of my system works. The technology and the techniques I used to develop my system are all described as well.

#### **4.1 Front-end Design**

Front-end web development, sometimes referred to as client-side development, is the process of developing HTML, CSS, and JavaScript for a website or Web application so that a user can view and interact with it directly. Difficulty of front end development lies in the fact that the developer must remain abreast of the ever-evolving tools and methods needed to design the front end of a website. Whenever a visitor accesses our site, we want the information they see to be clear and useful, which is why good design is so important [5].

##### **4.1.1 HTML:**

The acronym HTML refers to the Hyper Text Markup Language. It is the universal markup language for making websites. HTML components, including tags and attributes, are the fundamental building blocks of a website, enabling the construction and organization of sections, paragraphs, and connections. Since it cannot provide dynamic functionality, HTML is not classified as a programming language [6].

##### **4.1.2 CSS:**

Cascading Style Sheets (CSS) is a design language created to make it easier to create visually appealing web pages. The style and presentation of a website is managed through CSS. We may change the text color, font style, paragraph spacing, column width and height, background color or image, layout, design, display variants for various devices and screen sizes, and many other effects using CSS [7].

##### **4.1.3 Tailwind:**

Tailwind CSS is essentially a utility-first CSS framework that helps designers quickly

develop distinctive user experiences. It is a low-level CSS framework with a focus on flexibility, providing the tools to create unique designs without the distraction of obtrusive, hard-to-override predefined styles. The great thing about using tailwind is that it doesn't dictate design guidelines or the aesthetic of our site [8].

#### **4.1.4 JavaScript:**

JavaScript is a programming language and it is very adaptable. It's small and convenient, and it's most often seen on web pages since its implementations make it possible for client-side script to have direct user interaction and create dynamic sites. It's an object-oriented language that may be programmed in an interpreted environment [9].

#### **4.1.5 React JS:**

Commonly referred to as "React," React.js is a free, open-source JavaScript package. Putting together pieces of code (components) to make whole websites is the most efficient way to create user interfaces. Initiated by Facebook, Meta and the open source community are now responsible for its upkeep. We may use as much or as little of React as we choose, which is one of its many advantages. We may use React for as little as one page or as much as our complete site. JSX, a hybrid of JavaScript and XML, is the foundation upon which React.js is based. The JSX language is used to design the elements, and JavaScript is used to render them on the page [10].

### **4.2 Back-end Design**

Program's or app's back end is the code that is crucial to the program's or app's functionality but is not directly available to the user. The server, the application, and the database that stores and organizes data all make up the back end, often known as the server side [11].

#### **4.2.1 Node JS:**

A cross-platform, open-source runtime environment is offered by Node.js to enable the development of server-side and networking applications. The Node.js runtime environment supports OS X, Windows, and Linux, and applications written in JavaScript. While developing web applications with Node.js, we may take use of the platform's extensive



library of JavaScript modules, which greatly reduces the learning curve [12].

#### **4.2.2 Express JS:**

Express is an open-source framework for developing online and mobile apps in the node.js environment. It's used to create any kind of web program, from simple to complex. It's an extra layer on top of Node JS for routing and server management [13].

#### **4.2.3 MongoDB:**

NoSQL database MongoDB stores massive amounts of data in a document-oriented format. In place of the tables and rows seen in relational databases, MongoDB uses collections and documents. Key-value pairs, which make up documents, are MongoDB's fundamental data structure. Collections are like database tables in that they store and organize related documents and functions together [14].

### **4.3 Interaction Design and User Experience (UX)**

The goal of interaction design is to develop products that enable users to accomplish their objectives as effectively as feasible. Interaction design is to make it easier for consumers and products of the website to interact.

### **4.4 Implementation Requirements**

- HTML
- CSS
- Tailwind CSS
- Java Script
- React JS
- Firebase
- Node JS
- Express JS
- MongoDB
- Mailgun

# CHAPTER 5

## IMPLEMENTATION AND TESTING

### 5.1 Implementation of Database

For implementing the database, I use MongoDB in my project. MongoDB is an open source NoSQL database management system [14].

#### 5.1.1 All Database Table

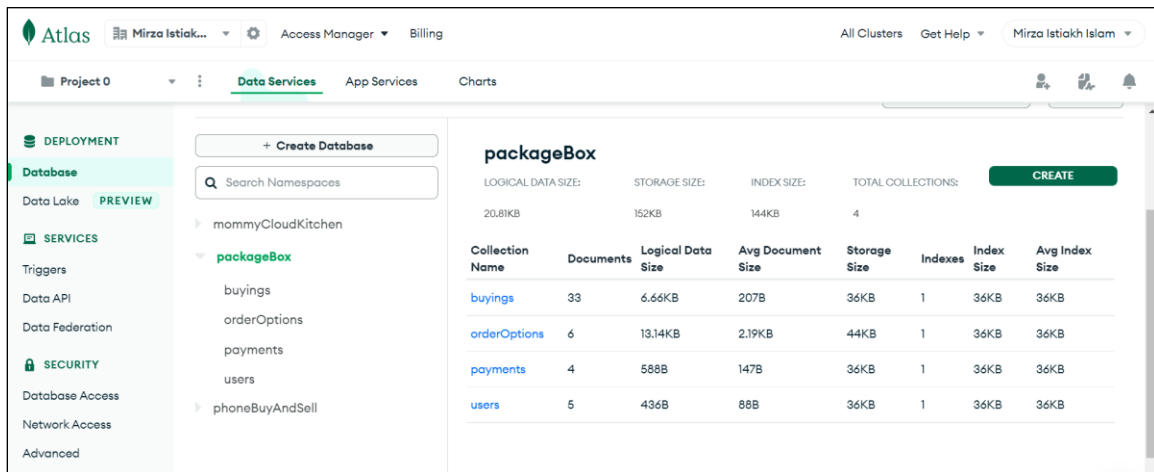


Figure 5.1.1: All database

#### 5.1.2 Users Table

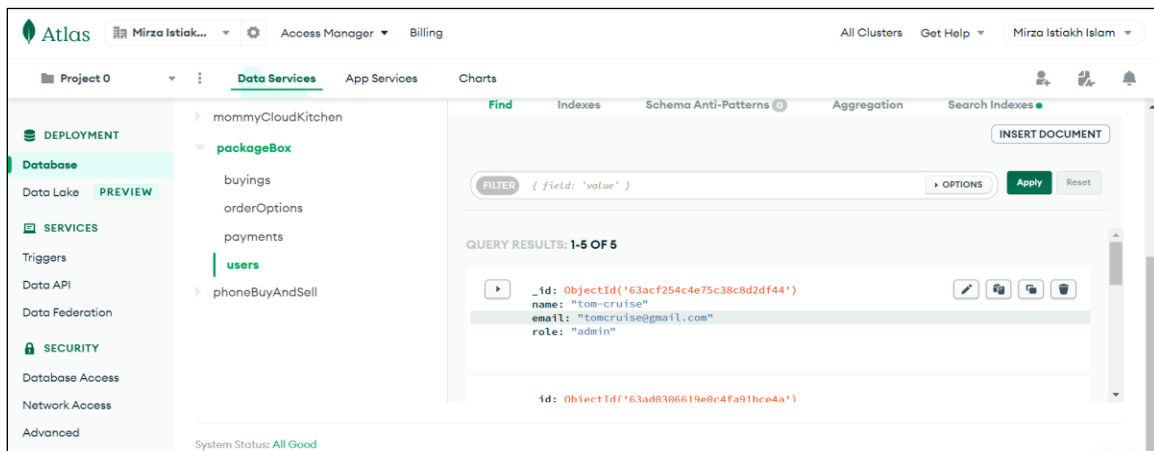


Figure 5.1.2: Users Database

Here store all the registered user's data and also store admin data for further login and tracing users other activities via stored email address.

### 5.1.3 Order Options Table

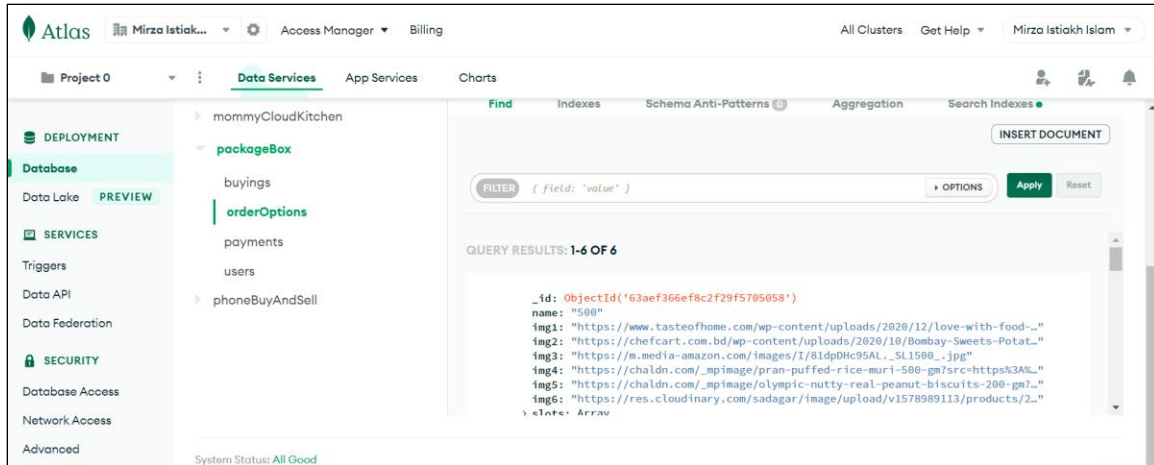


Figure 5.1.3: Order Options Database

All kinds of packages are stored here.

### 5.1.4 Order Details Table

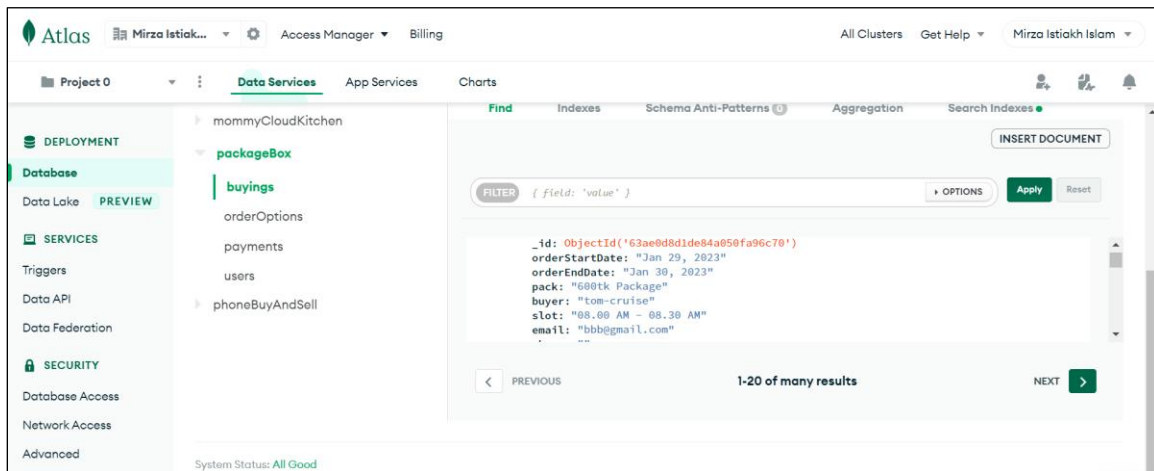


Figure 5.1.4: Order Details Database

Store all the order's data of different users with their choose-able subscription date, delivery addresses etc.

## 5.1.5 Payment Details Table

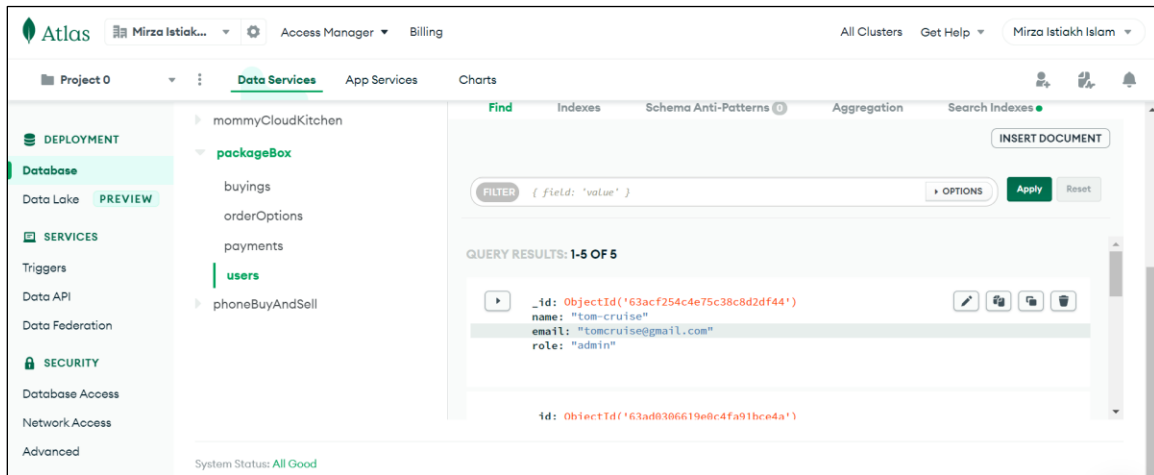


Figure 5.1.5: Payment Details Database

Here Store all the payment details of all the users.

## 5.2 Implementation of Front-end Design

It turned out to be a huge task for me to create a user-friendly interface. I made my website with the goal of giving visitors the best experience possible. The implementation of this subscription based system project name is “Package Box”.

### 5.2.1 Home Page:

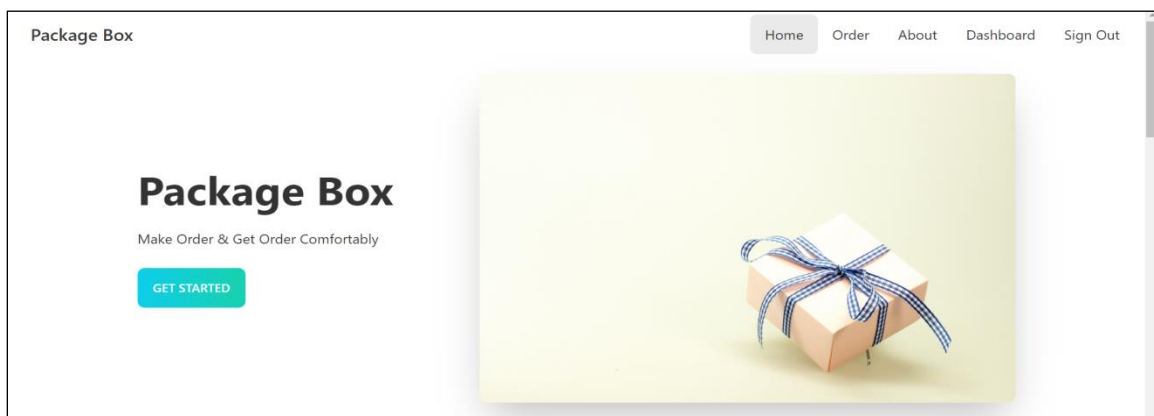


Figure 5.2.1: Home Page

In my website, it is the starting page. If users go to the website users can see this navigation

bar and header section first. In every page, the navigation bar is the same (Except Dashboard).

### 5.2.2 Services:

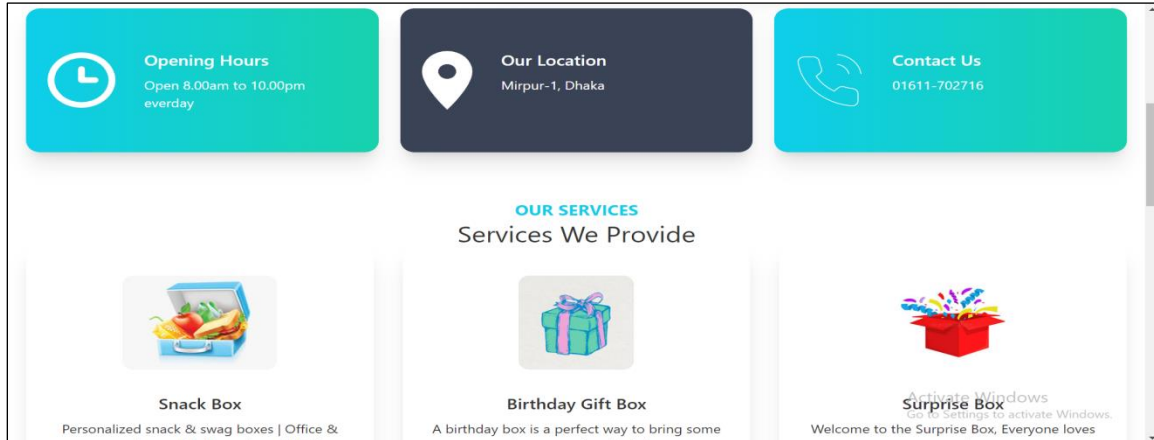


Figure 5.2.2 Homepage (Services)

In this part, users can see the company opening time, closing time, location and contact information. Here, users also see the services.

### 5.2.3 Order Details Section:

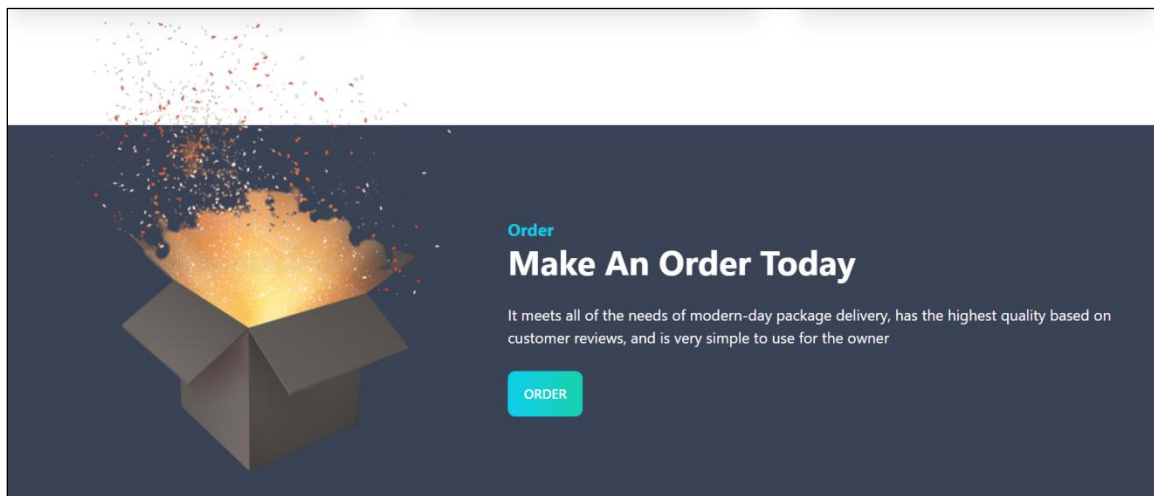


Figure 5.2.3: Homepage (Order Details)

In this section, users can find why they order in this website.

## 5.2.4 Testimonial:

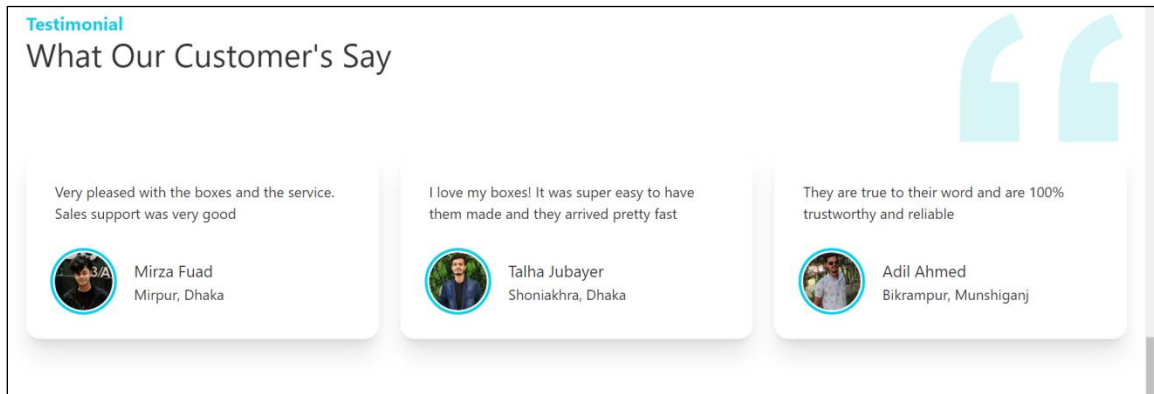


Figure 5.2.4: Home Page (Testimonial)

In this section, users can find other users experiences. Here, users can explain their thoughts about our site.

## 5.2.5 Footer:

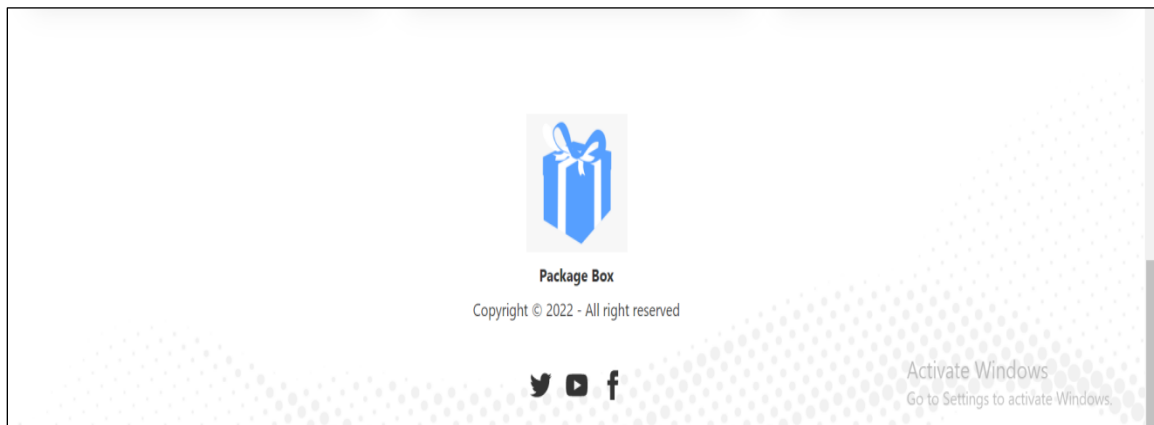


Figure 5.2.5: Homepage (Footer)

This is the footer of all pages in the website. In this section people can know about companies and get some external information.

## 5.2.6 Order Page (Subscription):

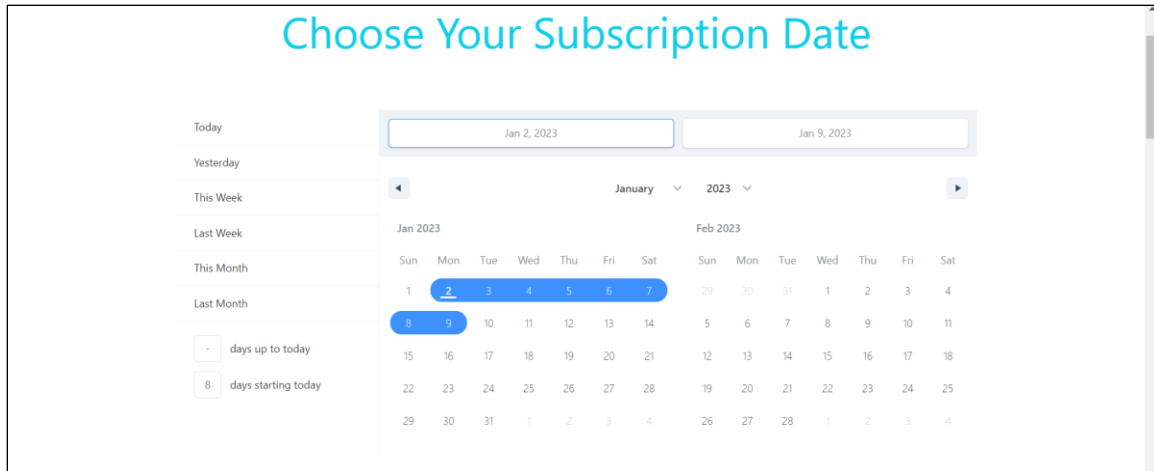


Figure 5.2.6: Order page (Subscription)

This is the order page and subscription section. In this section, users choose their subscription date easily.

### 5.2.7 Order Page (package box):

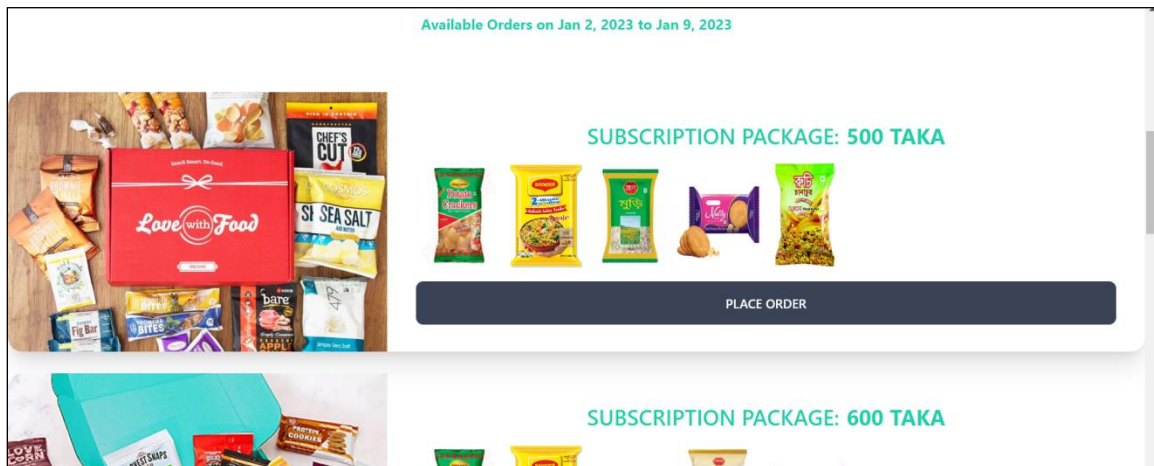


Figure 5.2.7: Order page (Package Box)

In this section, users choose their package for order. Here, users see the all packages easily. They choose what they need.

### 5.2.8 Order Page (Placing Order):

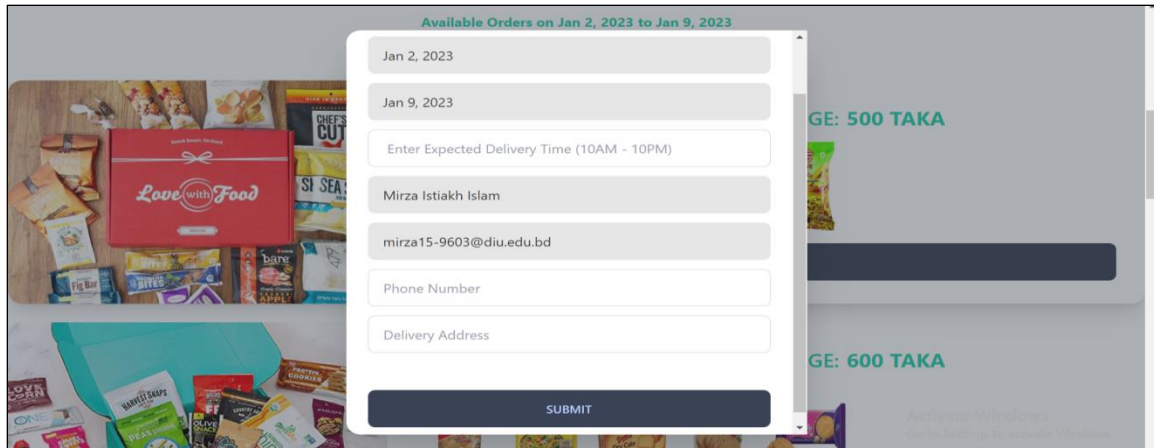


Figure 5.2.8: Order page (Placing Order)

After choose the package, users need to click on the place order button. Then he/she find this modal. Here, they fill-up the full form, then click submit.

### 5.2.9 Dashboard (Users):

	NAME	PACKAGE	DATE	DELIVERY TIME	PAYMENT
1	Nil Akash	500 TAKA	Jan 2, 2023 - Jan 9, 2023		<a href="#">PAY</a>
2	Nil Akash	500 TAKA	Feb 26, 2023 - Feb 26, 2023	6.00pm - 7.00pm	Paid

Figure 5.2.9: Users Dashboard

This is the dashboard page. Here, users see their selected package. For buy the package they need to pay first. So they need to click the pay button. After paying, they saw the paid text with a successful toast.

### 5.2.10 Admin Dashboard (All users):



	NAME	EMAIL	ADMIN	DELETE
1	tom-cruise	tomcruise@gmail.com		DELETE
2	tom-cruise	bbb@gmail.com		DELETE
3	packagebox	package@box.com		DELETE
4	packagebox	packagebox@box.com	MAKE ADMIN	DELETE
5	Mirza Istiak Islam	mirza15-9603@diu.edu.bd		DELETE
6	Nil Akash	nil21758@gmail.com	MAKE ADMIN	DELETE

Figure 5.2.10: Admin Dashboard

In this part, admins can see all the registered user's. Admins can also see how many admins are there.

### 5.2.11 Admin Dashboard (Add Packages):

Figure 5.2.11: Admin Dashboard (Add Package)

In this section, admins can add a package. Admins can launch a new package in the website by adding products here.

### 5.2.12 Admin Dashboard (Manage Packages):

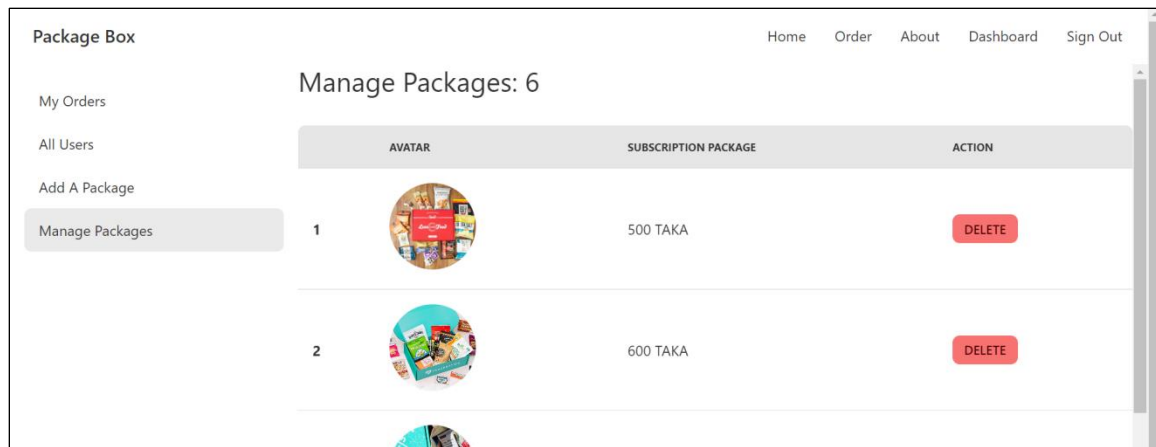


Figure 5.2.12: Admin Dashboard (Manage Packages)

In this section, admins can manage all available packages. Admins see all the packages. If admins want to delete any package option then admin can delete the package by clicking delete button from here.

### 5.3 Testing Implementation

The ultimate goal of testing, regardless of the development process, is to confirm that everything has been developed according to the plan. It is a crucial stage of development in which programmers run a program locally to find defects that prevent the application from performing as expected. Similarly, testing is critical for ensuring the quality and long-term viability of any undertaking. Testing is an important component of my development approach. In addition, I underlined the need of creating test scenarios that have the best chance of detecting flaws or defects. Here in this project, I followed a manual testing technique which is unit testing.

### 5.4 Test Results and Reports

Several levels of testing are as follows:

#### 5.4.1 Test Cases:

A test case refers to the bunch of instructions and conditions to confirm whether a system is working according to the requirements or not. I have planned and implemented a few test cases to ensure that my website is meeting functional requirements. Below are the test

cases for this subscription-based web application (Package Box).

Table 1: Unit testing of users

Test Module	Test Case	Expected Outcome	Test Outcome
Users	Providing the details for registration	Users can Successfully registered	Pass
Users	Providing an invalid email or password	Error message will be shown in the display	Pass
Users	Edit personal info and change password	Users edit and save info properly and after changing the password user can log in	Pass
Users	Forget password and update the password	Update the password by email authentication and log in with the new password	Pass
Users	Choose manually subscription date	Users can choose any date for subscription	Pass
Users	Choose a package according to their need	Users can use order system.	Pass
Users	Users can order unlimited products they want	Users can order only between the subscription amounts they subscribe to	Fail
Users	Payment method for choose-able packages	Users can pay their amount by stripe payment method	Pass

Table 1 is the chart of tests cases, expected outcomes, and achieved results regarding all

user's related functions.

Table 2: Unit testing of admins

Test Module	Test Case	Expected Outcome	Test Outcome
Admins	Admin can sign up	Admins can registration own.	Fail
Admins	Forget password and update the new password	Update the password by email authentication and log in with a new password	Pass
Admins	Admins can edit and delete users chosen packages	Admin can edit and the order information of users	Pass
Admins	Admins can delete the user's information and also delete the profile of users.	Admin can edit all users and can delete all the information	Pass
Admins	Admins can add different packages. Also can delete any products.	Admin can edit and delete any products and any categories.	Pass
Admins	Add Packages	Successfully Added	Pass

Table 2 is the chart of tests cases, expected outcomes, and achieved results regarding all admin-related functions.

## CHAPTER 6

### IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

In this chapter, I'll discuss about the social and environmental impact of our project. I'll try to consider every perspective of social and environmental issues.

#### 6.1 Impact on Society

This project is based on people's daily food choices. This packages will be helpful for those who are students or who live in a mess or a hostel. For them, buying their necessary food with a low budget is way more difficult as they have strict budget limits. Also, the people who are struggling with their financial balance and have a limitation in buying food with a low range is a difficult part of their life.

So, this package box allows buying food at the lowest amount like 500/= BDT, and also offers high range of food packages which is at 1000/= and more than that. This package box helps people who cannot buy low-budget food from the market and also who are having issues with finding their food in the market. This site is open for all categories of people. If someone is from a middle-class family, they also can buy food. Again, who are from lower-income families also have this offer to buy food according to their food budget. All the people from the society can be helpful from this website is my main goal. To serve society and their people, I support them with every kind of special box and subscription packages.

#### 6.2 Impact on Environment

This is an online-based project where people can get their food according to their budget and will be served socially who are struggling in their daily life. This project gives no hamper or any other risky issues to our environment. I can call this an environmentally friendly project since this does not affect the environment.

I already mentioned some benefits for the society which will be served by my website. I believe that people should be helpful. People would be very helpful financially and also socially, but currently, I am thinking of some future implementation in my business method which will be great for the environment. I think, Jute bags are very helpful for our

environment. After my project establishment, I will start to use jute bags and no use of plastic will be my one motive for our environment. This reason shows my project as an environment-friendly project which is our pride for the country. I will also ensure the delivery man with proper hygiene during this corona pandemic.

### **6.3 Ethical Aspects**

Every business with proper ethics can get their cherished success. Same for the project building also cherished some success with their ethical terms. I build this project as a user-friendly website that helps people socially, financially, and also from the environment. Also, this project would be an environment-friendly project as this will serve some benefits to our environment. At the time of implementing this site, I managed to keep the database secure with the user information. I applied some hashing methods to keep safe user id, names and some private information. When saving all the information, I used some methods and technical users to keep them safe from any kind of hacking. Though there are some techniques to get the server down on my website, I will also apply this at the time of any kind of misbehave or external hampering of our database. Also, the process of delivering a good quality of food and delivering them in time will be an ethical aspect of our project. I ensure customers with my honesty that I will bring fresh and quality food to them in time. I am not pressurizing them to subscribe for a long time without their concern through their activity. I also will check out their activity on my website and also ask them if I am serving them properly with our FAQ questions. The FAQ questions will mark their answer and also I will look after their choices. The special boxes are made for their special choice of food where they can buy food according to their budget and their subscription. This method is a very user-friendly method to satisfy all kinds of people in our country. I will also provide some special discounts at the time of the festival so people will be encouraged to buy food for their family.

### **6.4 Sustainability plan**

I choose a topic where people from all stages of life can get a satisfactory service which makes me survive in this challenge for a long time. I planned to refer to a quality full and quantity full arrangement for them to satisfy their heart. Before coming to this

implementation, I did a short survey more than 100 people about their choice and their knowledge of the subscription based website. I asked them if they know about this kind of service or if they know or want, what kind of service and product they want. Then after getting some responses I designed this project and tried to implement their choices into my website. Then I also managed to give some FAQ questionnaires to ask them if they are satisfied with the service. If their response is satisfactory then I will manage to do this, and if not satisfied, then I will ask them what should do to satisfy their heart with our food service. I will ask for their choice, their satisfaction with quality service and also the delivery system. I also have some upgrade options in case of their switching to another subscription package to my website. So this is how I will serve my customers for the long term.

## **CHAPTER 7**

### **CONCLUSION AND FUTURE SCOPE**

In this chapter I'll discuss about the overall usefulness and the expected future scope for my project.

#### **7.1 Discussion and Conclusion**

Package box is an online based website where all kinds of food packages are available into some budget ranges. I designed this website for all classes of people in Bangladesh. The front-end part of this project was done with HTML, CSS, Tailwind CSS, Java Script, React JS. The back-end was implemented with Node JS, Express JS and I used MongoDB. There are two users- customer and admin. So, I designed the site for both of them. I tried to manage the security issues of the customer. For believing my system and service, it is very essential.

I also wish to give the best quality of food and fresh food will be delivered with maintaining proper hygiene. A FAQ questionnaire will be set to get feedback from my customers so that I can connect with them. Interacting with customers will help me to grow my website day by day. People will also be satisfied with the improvement through all those steps. Hopefully everyone will love to communicate and my subscription based package box website will do a good profit in its own method.

#### **7.2 Scope for Further Developments**

Website has some challenges in its implementation period. I already built a website where I implemented almost everything I planned. I am planning for tracking the order system for future implement. This tracking method will be helpful for making the customer get known with their order delivery process and also be assured with their products. They also will be alert to know when the delivery will be completed and also have no issues with delivery time. This process will be also helpful for the people who are engaged in delivery. They will be in charge of doing everything from time to time.

I will also add some other categories of food which are healthy for consuming. Some foods are not available in our nearby shop, so I will keep stocking them in. Some people cherish



some foods which are not available in our country, like some dark chocolate of high end brands, some other kind of pasta, food oils and so on. I will try to keep them in stock after getting the orders from the customers.

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# DESIGN AND DEVELOPMENT OF AN E-COMMERCE SYSTEM BASED ON SUBSCRIPTION BY MIRZA ISTIAKH ISLAM (ID: 172- 15-9603)

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