

Developing A Subscription-Based E-commerce System

BY

Name: Rupom Biswas

ID: 172014043

A project report submitted in partial fulfillment of the requirements for the degree of

Bachelor of Science in

Computer Science and Engineering

Supervised By:

Dr. Abul Kalam Al Azad

(Associate Professor)

Department of Computer Science and Engineering (CSE)

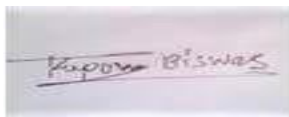


Computer Science and Engineering University of Liberal Arts Bangladesh
House 56, Road 4/A @ Satmosjid Road, Dhanmondi, Dhaka-1209, Bangladesh.

10th October 2021

DECLARATION

This project report is submitted to the Computer Science and Engineering, University of Liberal Arts Bangladesh in partial fulfillment of the requirements for the degree of Bachelor of Science. So, I hereby declare that this project report is based on the surveys found by me. Materials of work found by other researchers are mentioned by reference. This project report, neither in whole nor in part, has been previously submitted for any degree.



Rupom Biswas
172014043

Email Address: rupom.biswas.cse@ulab.edu.bd

CERTIFICATE OF APPROVAL

The project report entitled “Developing a subscription-based e-commerce system” is Submitted to the **Department of Computer Science and Engineering**, University of Liberal Arts Bangladesh, Dhaka in partial fulfillment of the requirements for the degree of Bachelor of Science.

Dated: 10th October 2021

Prof. Syed Akhter Hossain, PhD
Professor and Head
Department of Computer Science and Engineering
University of Liberal Arts Bangladesh

Signature & Date

Dr. Abul Kalam Al Azad
(Associate Professor)
Department of Computer Science and Engineering
University of Liberal Arts Bangladesh

Signature & Date

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to my project supervisor, **Dr. Abul Kalam Al Azad**, for allowing me to work along with him on this project. I am highly indebted to him for his guidance and constant supervision as well as for providing necessary information regarding the project.

The Department of Computer Science & Engineering also remains one of the key players as it has provided me with the opportunity to nurture my skills and develop myself. The invaluable support I have received from the entire faculty and staff members of the department has immensely affected my undergraduate study course in the best way possible.

I would like to thank my family members for their kind cooperation and encouragement throughout this project and also during the last 4 years of my undergraduate study. Without their love and care, I would not have been able to complete this endeavor and for this, I am extremely grateful to my parents.

Rupom Biswas

University Of Liberal Arts Bangladesh

Date: 10th October 2021

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; he grew up fast. 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, here users can easily get their daily life needed products for the long term by subscribing.

Additionally, users can get some special boxes based on their subscription. If users want some special kind of 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.

Keywords: Subscription box, users, products, subscription-based etc.

List of Figure

Fig 1: Project Management and Finance.	14
Fig 2: Birch Box.....	16
Fig 3: Dollar Shave Club.....	17
Fig 4: LM Beauty Obsessed	18
Fig 5: ChalDal	19
Fig 6: Meena Click.....	20
Fig 7: Business Process Modeling	21
Fig 8.1: Data Analysis.....	22
Fig 8.2: Data Analysis.....	22
Fig 8.3: Data analysis	23
Fig 8.4: Data Analysis.....	24
Fig 8.5: Data Analysis.....	25
Fig 8.6: Data Analysis.....	25
Fig 9: Use Case Modeling and Description	27
Fig 10: SDLC.....	28
Fig 11: Flow Chart	29
Fig 12: Activity Diagram	32
Fig 13: Entity Relationship Diagram	31
Fig 14.1: Interaction Design and User Experience (UX)	32
Fig 14.2: Interaction Design and User Experience (UX)	33
Fig 14.3: Interaction Design and User Experience (UX)	33
Fig 15: Popup in Home	37
Fig 16: Header.....	38
Fig 17: Scrolling Navigation.....	39
Fig 18: Footer	39
Fig 19: Log In	40
Fig 20: Sign Up	40
Fig 21: Forgot password.....	41
Fig 22: Update Password	42
Fig 23: Reset Password.....	42
Fig 24: User Profile & Logout	43
Fig 25: Edit Profile.....	44
Fig 26: Subscription Package	44
Fig 27: Choose Category.....	45
Fig 28: Monthly box demo	45
Fig 29: Special box demo.....	46

Fig 30: Monthly Subscription & Search Bar	46
Fig 31: Using Search	47
Fig 32: Pagination	48
Fig 33: Pagination-2	48
Fig 34: Add To Cart	49
Fig 35: Cart	49
Fig 36: Item added over amount of subscription	50
Fig 37: Remove items	51
Fig 38: Go to the next process	51
Fig 39: Special Boxes	52
Fig 40: Open Box and Order.....	53
Fig 41: Order	53
Fig 42: Shipping address.....	54
Fig 43: View order item:.....	55
Fig 44: Payment	55
Fig 45: Cash on delivery	56
Fig 46: Online Payment	57
Fig 47: Confirmation email.....	57
Fig 48: Unsubscribe	58
Fig 49: Log In	59
Fig 50: Forget Password.....	59
Fig 51: Enter Email.....	60
Fig 52: Clicking this link reset password	61
Fig 53: Please Enter Your New password	61
Fig 54: Admin dashboard	62
Fig 55: Customer orders.....	63
Fig 56: Edit customer order	63
Fig 57: Delete customer order	64
Fig 58: Products	65
Fig 59: Edit products.....	65
Fig 60: Delete products	66
Fig 61: Add product	67
Fig 62: Product categories	67
Fig 63: Edit product categories.....	68
Fig 64: Delete product categories	69
Fig 65: Add product categories.....	70
Fig 66: Customer information.....	71
Fig 67: Edit Customer information	72
Fig 68: Delete Customer information.....	72
Fig 69: Logout	73

List of Tables

Table_1: users	35
Table 2: product.....	36
Table_3: payment	36
Table_4: orders	36
Table_5: order_details	37
Table 6: Unit testing of users	75
Table 7: Unit testing of admins.....	76

Table of Contents

DECLARATION	1
CERTIFICATE OF APPROVAL.....	2
ACKNOWLEDGEMENT	4
ABSTRACT	5
Chapter 1: Introduction	(12-15)
1.1 Introduction.....	12
1.2 Motivation.....	12
1.3 Objectives	13
1.4 Expected Outcomes.....	14
1.5 Project Management and Finance	14
1.6 Report Layout.....	15
Chapter 2: Background	(16-21)
2.1 Related Works	16
Birch Box	16
Doller Shave Clube.....	17

LM Beauty Obsessed:	18
2.2 Comparative Analysis	18
ChalDal	19
Meena Click:	20
2.3 Scope of the Problem	20
2.4 Challenges	21
Chapter 3: Requirement Specification	(21-27)
3.1 Business Process Modeling	21
3.2 Requirement Collection and Analysis	22
3.3 Use Case Modeling and Description	27
3.4 Design Requirement	27
Chapter 4: Design Specification	(28-34)
4.1 Methodology	28
4.2 Front-end Design	29
Flow Chart	29
Activity Diagram	30
4.3 Back-end Design	31
Entity Relationship Diagram	31
4.4 Interaction Design and User Experience (UX)	32
4.5 Implementation Requirements	34
Software Requirements	34
Hardware Requirements	34
Chapter 5: Implementation and Testing	(35-76)
5.1 Implementation of Database	35
Schema Table Names	35
1. users	35
2. product	36
3. payment	36
4. orders	36
5. order_details	37
5.2 Implementation of Front-end Design	37
Popup in Home	37
Header	38
Scrolling navigation bar	39
Footer	39

Log In	40
Sign Up:	40
Forget Password:	41
Update password:	42
Reset password:	42
User Profile & Logout	43
Edit Profile	44
Subscription package	44
Choose Category	45
Monthly box	45
Special box	46
Monthly subscription & Search Bar	46
Using Search	47
Pagination.....	48
Pagination-2:	48
Add to cart.....	49
Cart.....	49
Item added over amount of subscription	50
Remove items.....	51
Go to the next process	51
Special Boxes	52
Open Box and Order	53
Order	53
Shipping address	54
View order item	55
Payment	55
Cash on delivery.....	56
Online Payment.....	57
Confirmation email	57
Unsubscribe	58
Admin Site.....	58
Log In	59
Forget password:	59
Enter email	60

Please Enter Your New password.....	61
Admin dashboard	62
Customer orders	63
Edit customer order	63
Delete customer order	64
Products	65
Edit products	65
Delete products	66
Add product.....	67
Product categories.....	67
Edit product categories.....	68
Delete product categories	69
Add product categories.....	70
Customer information.....	71
Edit Customer information	72
Delete Customer information.....	72
Logout.....	73
5.3 Testing Implementation	73
5.4 Test Results and Reports.....	74
Test Cases.....	74
Chapter 6: Impact on Society, Environment and Sustainability	(77-80)
6.1 Impact on Society	77
6.2 Impact on Environment	78
6.3 Ethical Aspect	79
6.4 Sustainability Plan	80
Chapter 7: Conclusion and Future Scope.....	(81-82)
7.1 Discussion and Conclusion	81
7.2 Scope for Further Developments	82
References	83

Chapter 1: Introduction

1.1 Introduction

The Internet has given rise to a new type of commerce known as electronic commerce. E-commerce involves the use of the Internet in advertising, identification, payment, and delivery of goods and services. It applies the opportunity to cross borders as new entrants, business models, and changes in technology remove barriers that have punished every industry from another. In developing countries, large enterprises, as well as small and medium enterprises, have adopted the business process of e-commerce. Here 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. This is followed by the subscription box business model whose short form of the name is “sub-com”. The Sub-com business model is an e-commerce business site where people can get their products based on their subscription amount and choose able products mostly.

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. Subscription boxes are used by subscription-based e-commerce businesses, referred to as "sub-coms" that follow a subscription business model. 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. There are an estimated 400 to 600 different types of subscription boxes in the United States alone, with many more in other countries [2]. 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. And also by using this website users can easily subscribe to a package and get their weekly or monthly or yearly products based on their choice in Bangladesh. 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 bachelor’s 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

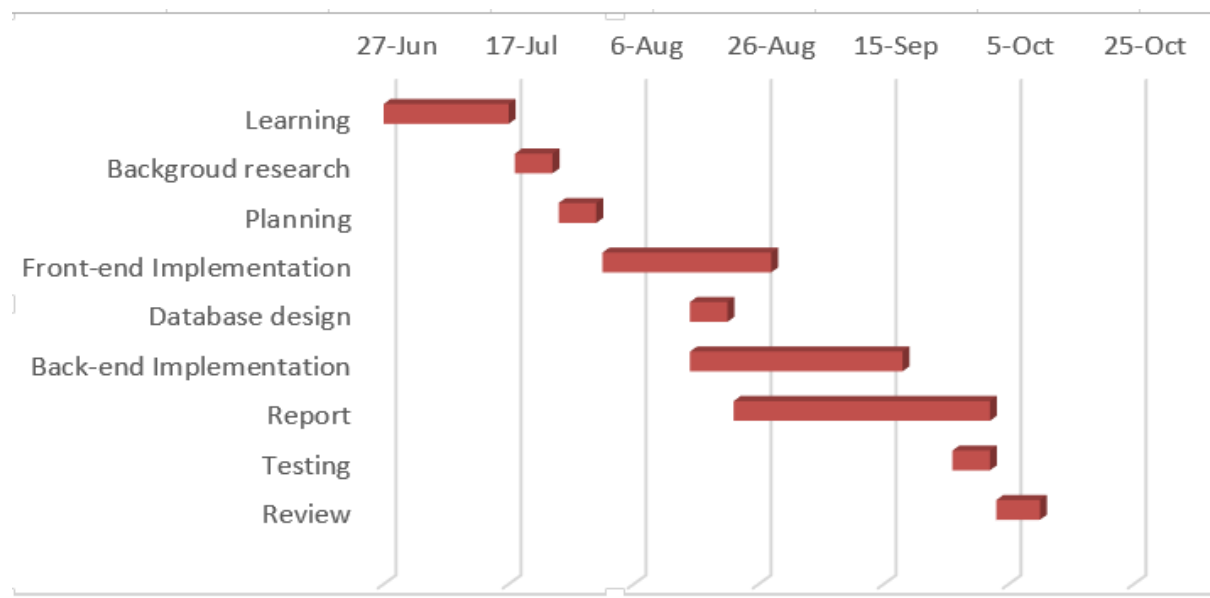


Fig 1: Project Management and Finance.

When I knew about the subscription box business model I started work for this project on 27 June 2021. I learned about this system, how it works and also I learned

based on the project about some programming languages for implementation from 27 June to 16 July. 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 July and I also continued database design parallel. After that, the implementation was completed on 16th September. To complete the front-end implementation I took almost 30 days and for backend implementation, I took 35 days. I managed to complete my project in a short time because of good planning and parallel working.

1.6 Report Layout

Project layout of this paper is given below:

Chapter-2: Here I am going to introduce why I am choosing this project and why I want to develop this project and some similar work that the project flow of the project flow theirs represent the mass that is existing already and what will be the impact of our country and also what will be the best for our country.

Chapter-3: In this section, I am going to tell about why this system is needed for our country and what people want from this system and what is the requirement of people from this system and also in the project.

Chapter-4: Here I am going to show the total design of this system and also showing the design of data flowing of this system.

Chapter-5: Here I am going to show the project implementations and describe how it works

Chapter-6: Here I elaborate on this system's ethics demands, environmental impacts, and sustainability.

Chapter-7: In this chapter I am going to conclude that my whole system works and I am going to explain some plans for this system.

Chapter 2: Background

2.1 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:

Birch Box:

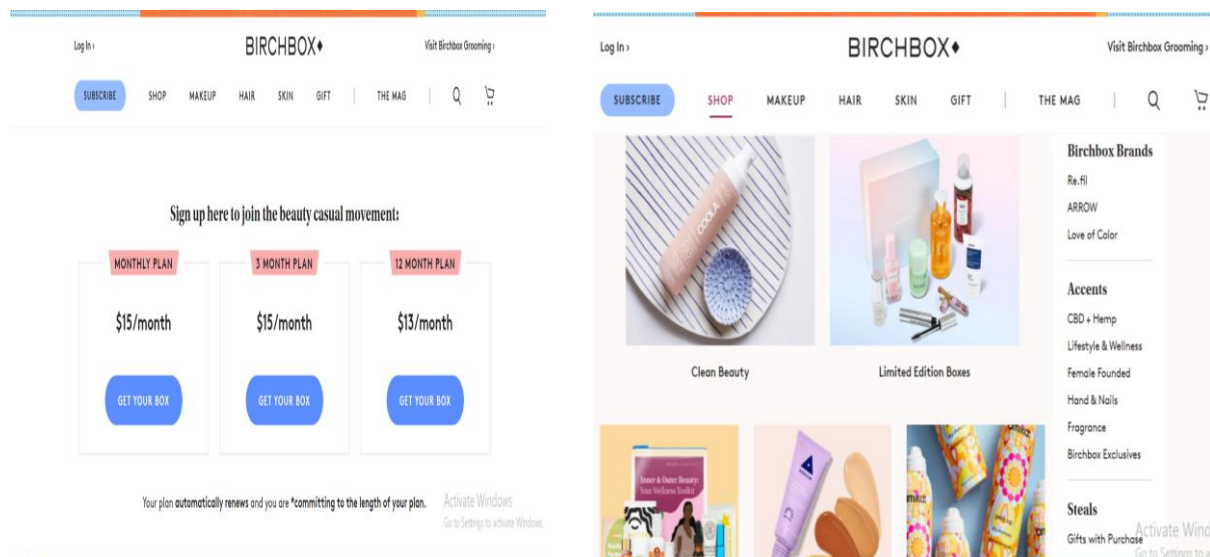


Fig 2: Birch Box.

This is a subscription-based website in the US. Birchbox 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 [5]. Products include skincare items, fragrances, organic products, and many other cosmetic products. Birchbox was created in September 2010 by Katia Beauchamp and Hayley Barna, both graduates of Harvard Business School. In October 2010, Birchbox seed funding began with \$1.4 million in seed funding from investors, including First Round and Accel

Partners. As of January 2021, Birchbox has 300,000 subscribers and 500,000 active customers [6].

Doller Shave Clube:

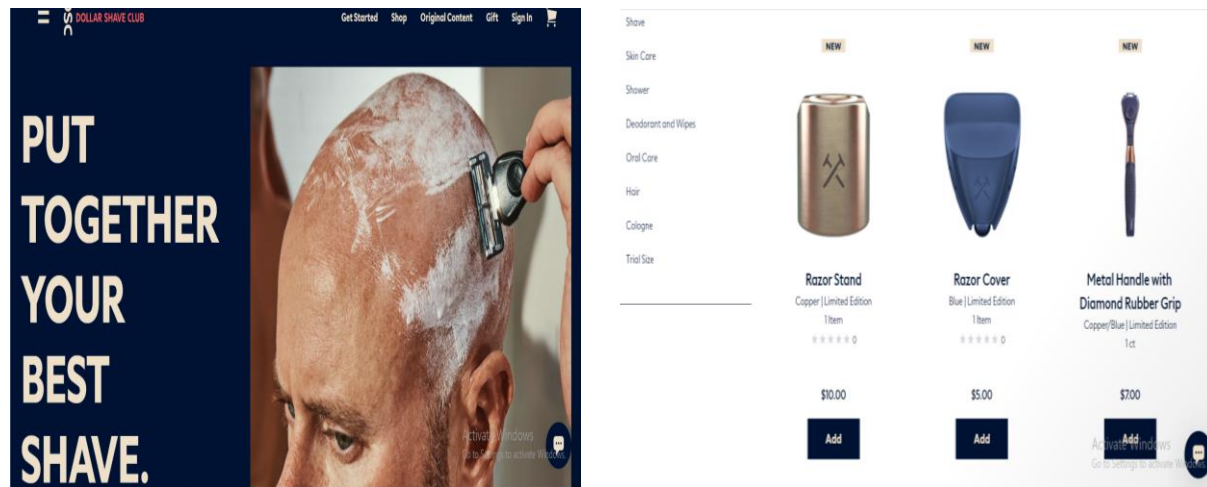


Fig 3: Dollar Shave Club.

This is also a subscription-based website in the USA. Dollar Shave Club is an American company based in Venice, California that delivers razors and other personal care products to customers by mail. It sends out razor blades on a regular basis and also delivers grooming items to your door. Mark Levine and Michael Dubin established Dollar Shave Club. The two met at a party and talked about their frustration with the cost of razors. With their own money and investments from the startup incubator Science Inc., they started operations in January 2011 and launched their website in April 2011. In 2016, the company achieved 3.2 million subscribers. Although the company primarily markets its products to men, about 20% of its customers are women [7].

LM Beauty Obsessed:

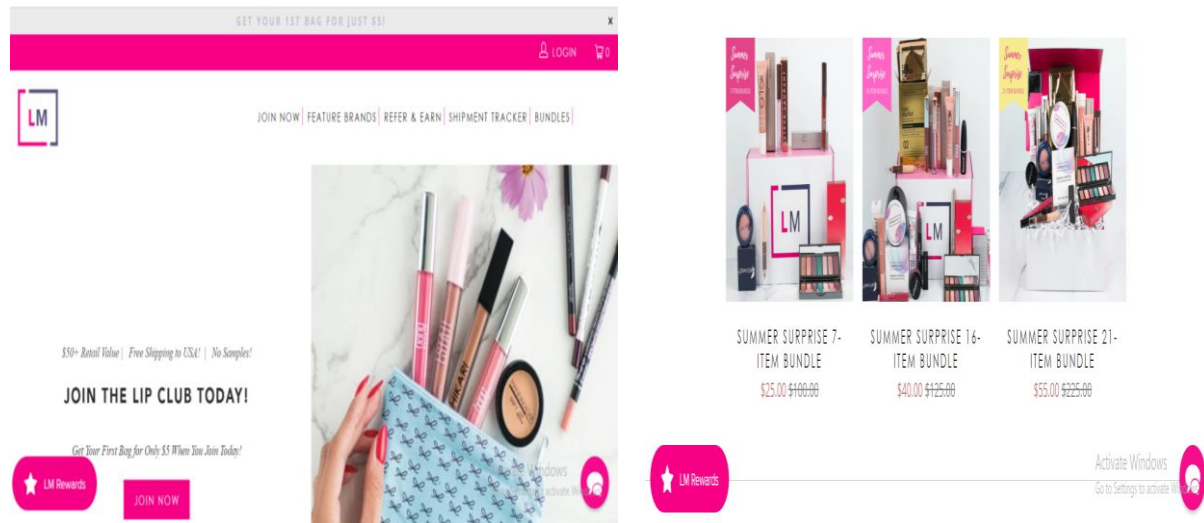


Fig 4: LM Beauty Obsessed.

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 [8].

2.2Comparative Analysis

In Bangladesh, people aren't familiar with the subscription system that much because in Bangladesh most of the websites don't have any subscription system. For example in food e-commerce websites:

ChalDal:

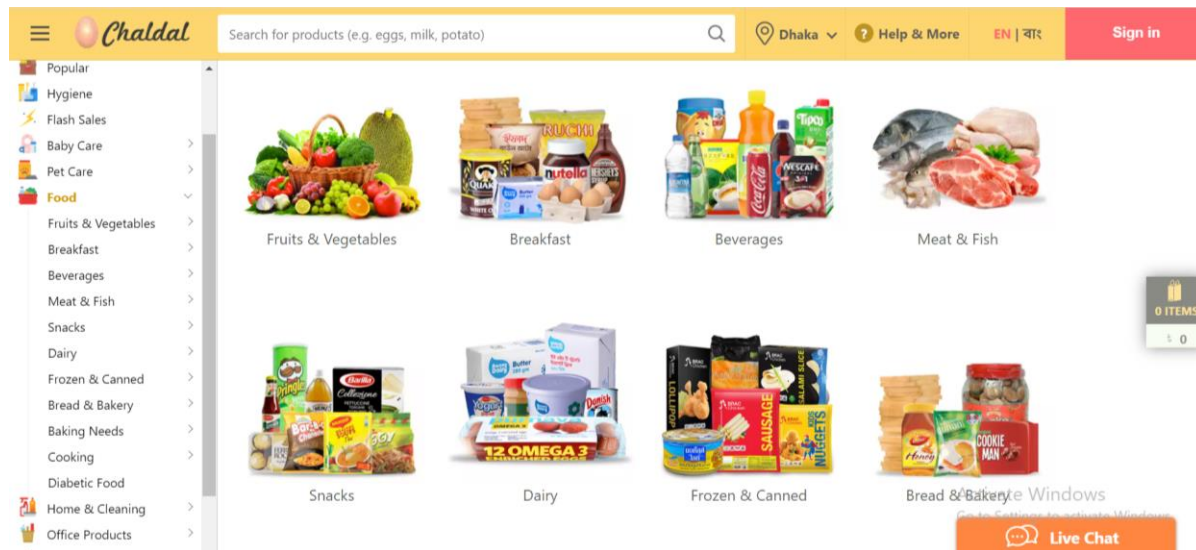


Fig 5:ChalDal.

Chaldal.com [9] 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 [10].

Meena Click:

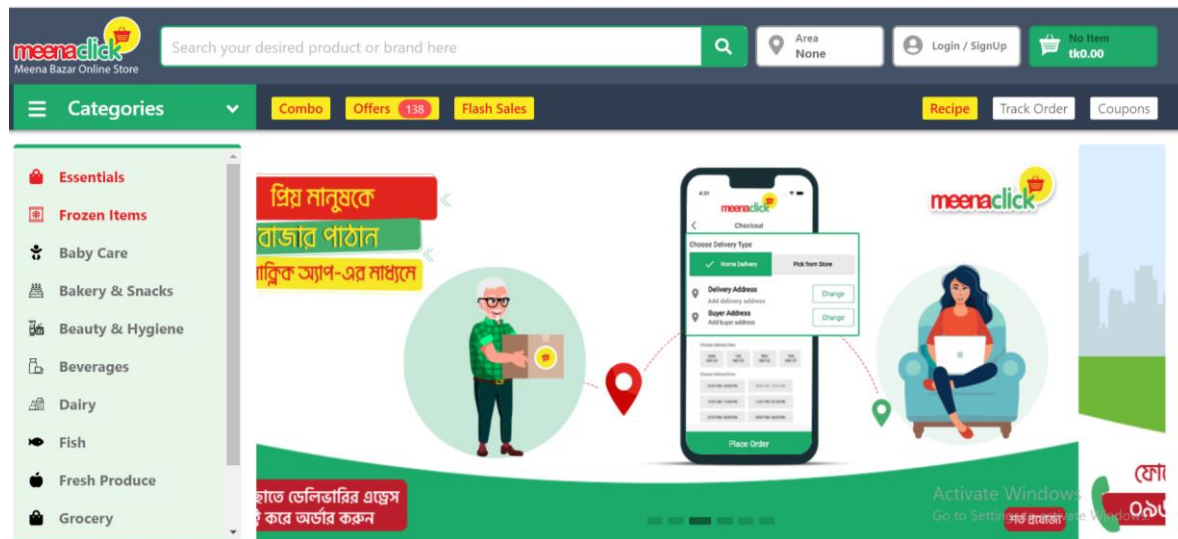


Fig 6: Meena Click.

Meena Click is the online e-commerce platform of Meena Bazar, the leading grocery store platform in Bangladesh [11].

Apart from those most of the e-commerce websites in Bangladesh they don't have any subscription system.

2.3 Scope of the Problem

Because of any food ordering e-commerce websites in Bangladesh, they don't have any subscription option so sometimes people want to shop for a month or yearly 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.

2.4 Challenges

The main challenge of this project is familiarizing Bangladeshi people with this subscription system. Most of the people in Bangladesh don't know about the subscription Box business model and also challenging for this system is the pay first process. Because most Bangladeshi people feel hesitant to pay for the first system.

Also challenging of this project is maintaining the subscription system and order system because people subscribe once but after a time they want to change some products. That tracking system maintenance is the most challenging part of this project.

Chapter 3: Requirement Specification

3.1 Business Process Modeling

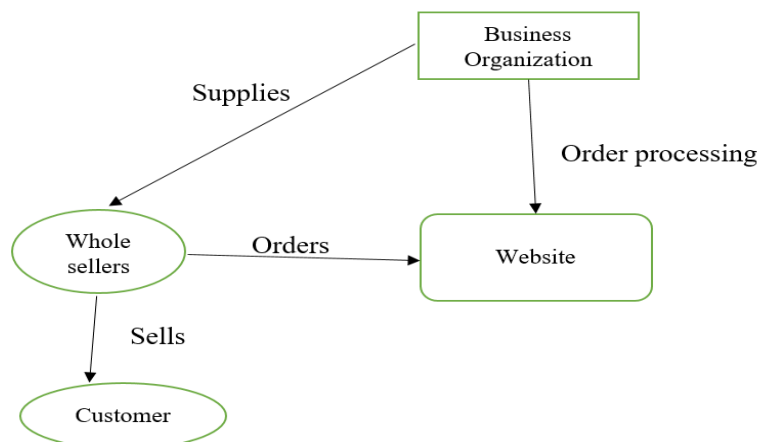


Fig 7: Business Process Modeling.

I already defined e-commerce, I have to define a "business model. But 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:

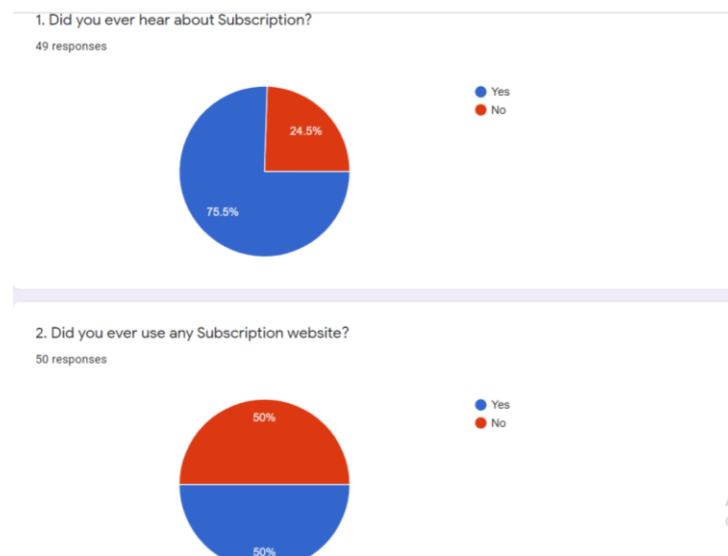


Fig 8.1: Data Analysis



Fig 8.2: Data Analysis

Here almost 75% of people know about the subscription system but 50% of people do not ever use any subscription system. But they feel that a subscription system in an e-commerce website is very helpful for them. 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.

5. Did you ever purchase any Food items from E-commerce website?
49 responses

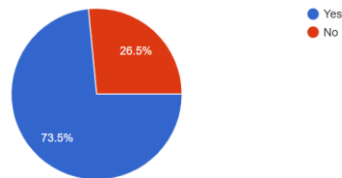
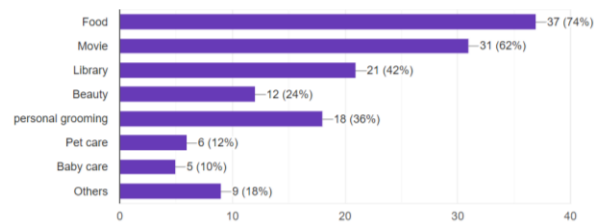


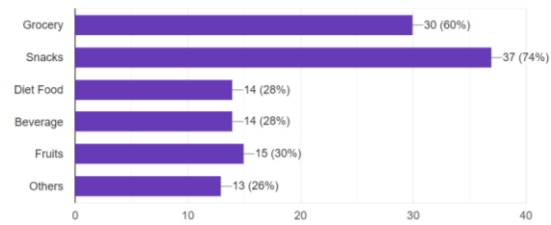
Fig 8.3: Data analysis

4. Which type of Subscription website you like?
50 responses



6. Which kind of Food you prefer for subscription?

50 responses



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 snacks items from the food sector where they want a subscription system in e-commerce.

7. Which type of Subscription you need?

50 responses

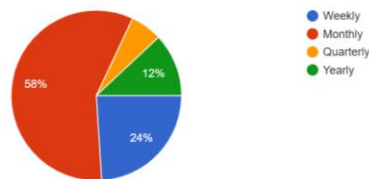


Fig 8.4: Data Analysis

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

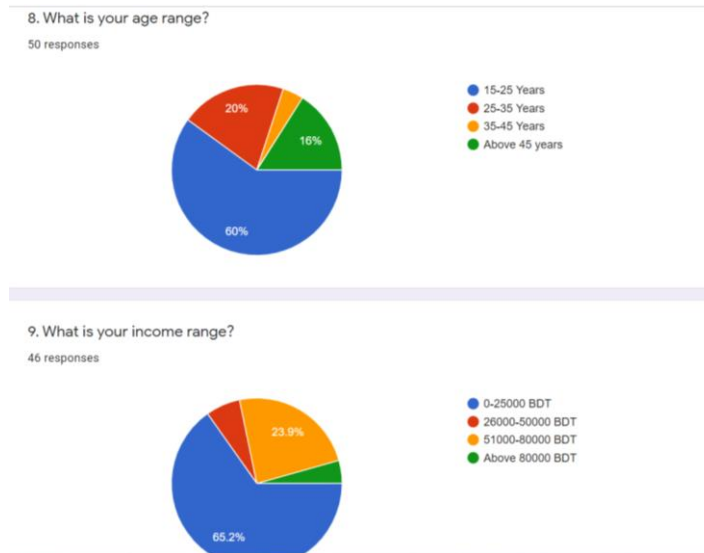


Fig 8.5: Data Analysis

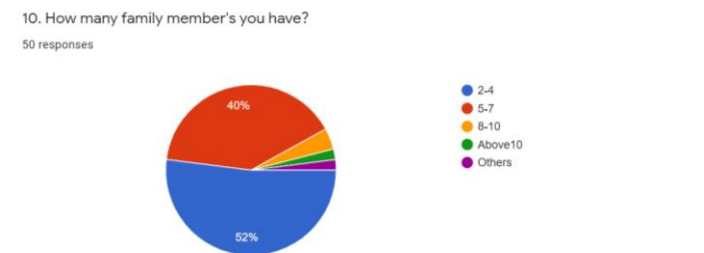


Fig 8.6: Data Analysis

The age range of those surveyors is mostly 15 to 35 years old. Who are mostly shopping from e-commerce and those peoples' income range between 0-25000BDT and 51000-80000BDT and their family member's range 2-4 or 5-7. So apart from this survey, I built a subscription based e-commerce website about snacks items where people can get their choose-able products using a monthly subscription system.

Based on the survey the requirements of my system is given below:

Registration: using the subscription system-based website users have to register because to fulfill the registration users get a secure user profile and history of their relationship between the website.

Login: After user's registration, users can get an authenticated user profile. By using this authentication users can enter this website.

Subscription system: The subscription system plays an important role in this website. By subscribing, users can get products. Amount of subscription analysis based on the survey which I already explained. Most of the people in Bangladesh belong to a middle-class family and members of their family are mostly 2-7 people which are already mentioned in the survey.

Category: category is very important because I have to choose which categories of food people like most and in the survey I saw that most of the people want snacks items.

Add to cart: Add to cart feature is required for running a website for e-commerce. Because before ordering people want to add their choice into a card. This is a common feature of most e-commerce websites.

Order system: The ordering system of this website is also important because people after a subscription choose items from the website and they have to order. If this ordering system is not working then the system will not work at all.

Payment system: The payment system of this website also plays an important role because this subscription system is a pay first system so for any subscription users have to pay first.

Confirmation: After the order and payment the confirmation system is very important on this website.

3.3 Use Case Modeling and Description

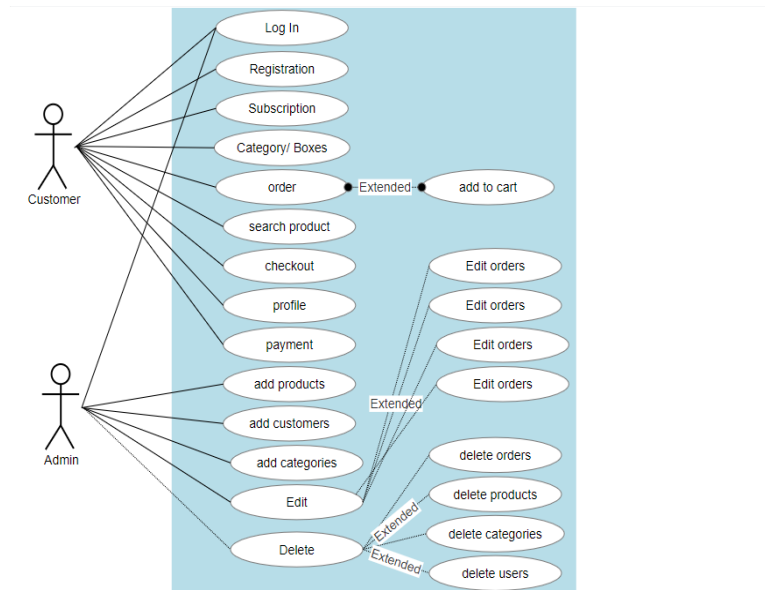


Fig 9: Use Case Modeling and Description

A 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, subscription, order, search products, checkout, and payment and in the other site in the system admin can log in, edit products, edit user information, edit orders, edit categories and also delete user information, delete orders, delete categories, delete products.

3.5 Design Requirement

Design requirements of this subscription system e-commerce website are given below:

- Allow admin to update the products.
- Allow admin to update the orders and user's information.
- Allow users to upload feedback.
- Allow admin to upload products.
- Provide a login for both user and admin.
- Provide a subscription for users.
- Provide an order for users.
- Provide payment for users.

Chapter 4: Design Specification

4.1 Methodology

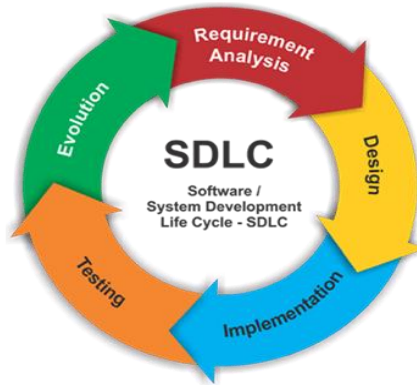


Fig 10: SDLC

Here for completing my project I followed the Software Development Life Cycle (SDLC). Software development life cycle is a process where it is used for a well-organized design, development and test of high-quality software [12]. Using SDLC in this project, at first I made a plan, then I analyzed all the requirements I needed for the project and then I designed the whole project. After that, I went to the implementation part, and then I tested the whole subscription system-based website and took the value.

4.2 Front-end Design

Flow Chart:

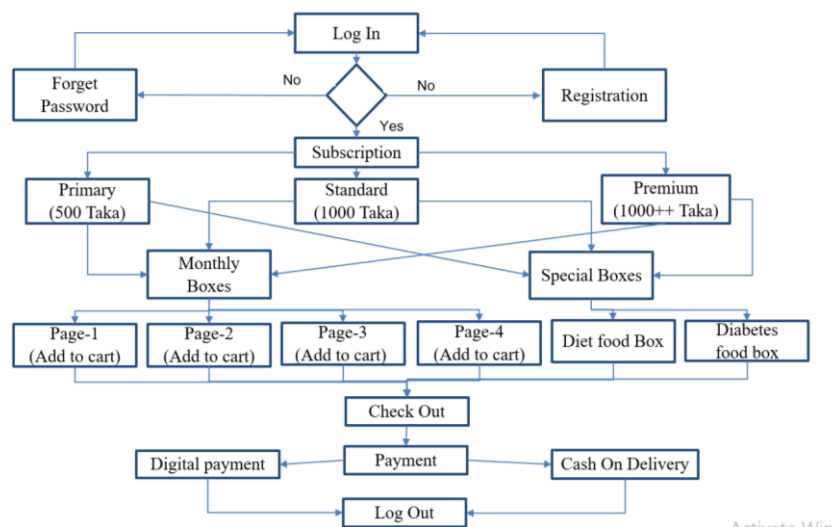


Fig 11: Flow Chart

A flow chart means a diagram where sequentially actions of things are involved in a complex system. This is the initial flow chart of this project where the rectangles indicated the features of the projects, the diamond shape indicated the decision phase and the arrows indicated the data flow of the project.

Activity Diagram:

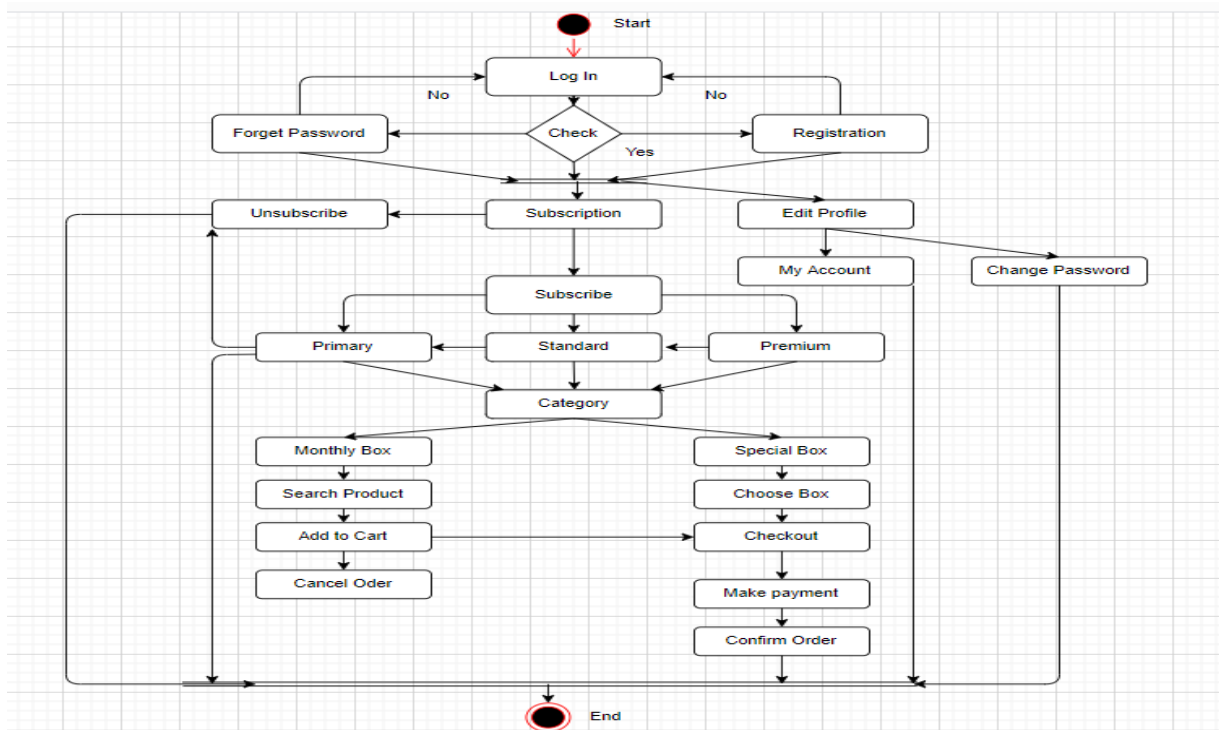


Fig 12: Activity Diagram

Activity diagram is basically the flow of one step to another step of the project. Here in this activity diagram represents the users' site data flow of the project. Here in the activity diagram at first, the start users have to log in, if a user is not an authenticated flow member of this system then the user has to register after that user can log in. If users forget their password then users can reset their password.

After login, a user has to choose a subscription package and after subscribing to a package user can choose a category of products which are monthly boxes or special boxes. After choosing the products of boxes, users can checkout and complete the payment in two methods one is cash on delivery and another one is an online payment method. After that user will get a confirmation message from the website for completing the order successfully. After that users can log out from their profiles

and also users can unsubscribe if they think they don't need to continue their chosen cable subscription package.

4.3 Back-end Design

Entity Relationship Diagram:

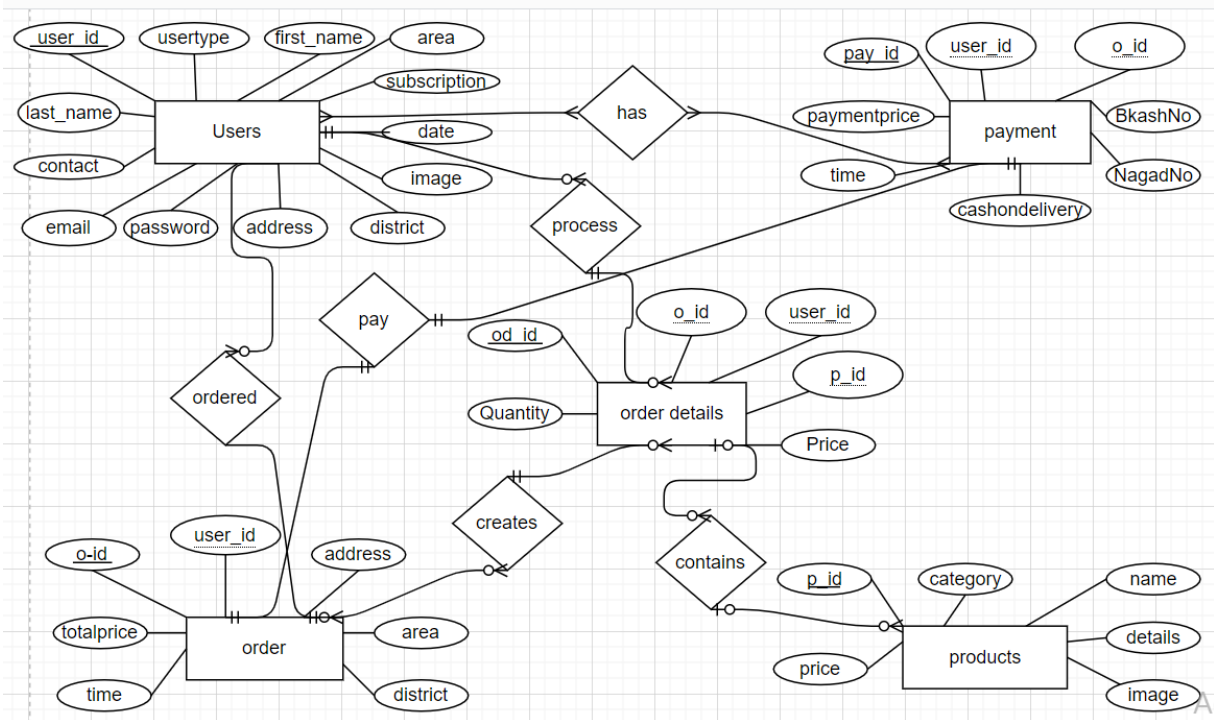


Fig 13: Entity Relationship Diagram

An Entity-Relationship (ER) Diagram is one kind of flowchart that shows how "entities" in a system interact one with another. Here this project needed 5 entities which are users, payment, order, products, order_details. Here this ER diagram rectangle represents the entities, diamond shape represents the relationship of one entity to another and arrows represent the data flow relation between one entities to another.

4.4 Interaction Design and User Experience (UX)

Interaction design is to make it easier for consumers and products of the website to interact. The purpose of interaction design is to create products that help users achieve their goals in the most efficient way possible.

This project interaction design demo will be given below:

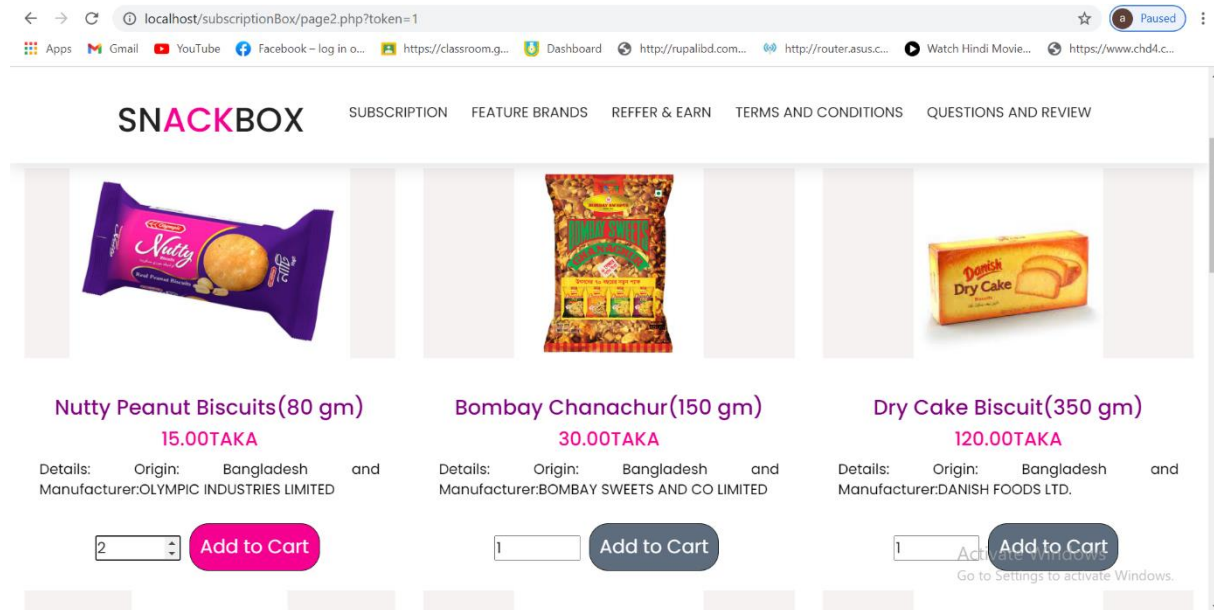


Fig 14.1: Interaction Design and User Experience (UX)

This is a product page of the website. Here users can interact and choose their products and save them to add to the cart for the order.

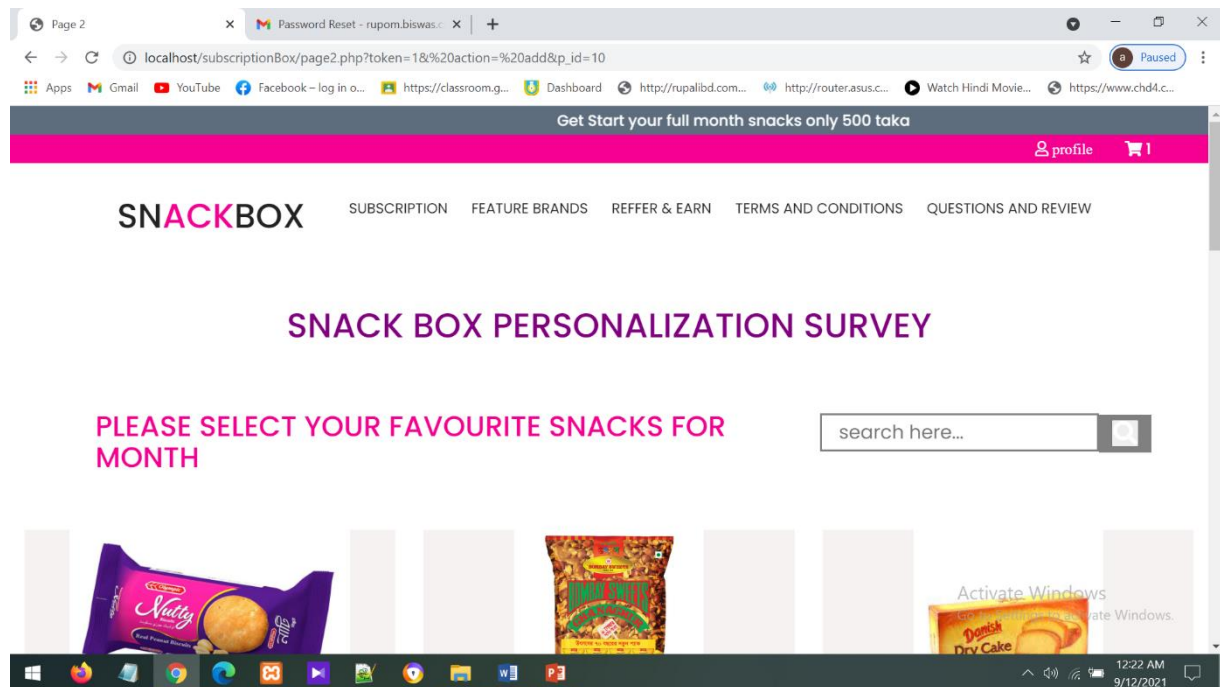


Fig 14.2: Interaction Design and User Experience (UX)

Users add to cart shows up into the right corner where users can see how many items they already added for the order.

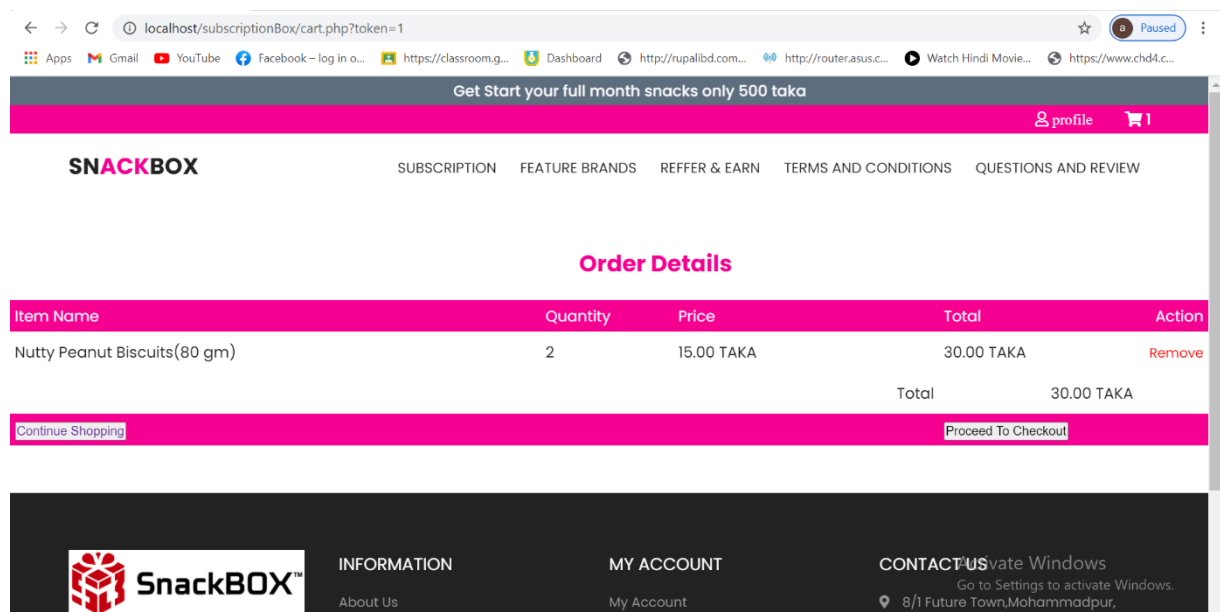


Fig 14.3: Interaction Design and User Experience (UX)

After adding products users can see how many items they added into the cart and how many quantities and what amount cost them to buy those products. After this interaction, people can order their choice products from this website.

4.5 Implementation Requirements

Below are the implementation requirements to develop:

Software Requirements:

- Operating System: Windows 10
- IDE: repl.it, Notepad++
- Database: MySQL, XAMPP Control Panel 3.2.4
- Front End: HTML5, CSS3, JavaScript, Bootstrap 5
- Back End: PHP
- Web Service: Apache HTTP Server 2.4.46
- Browser: Chrome or Firefox or Microsoft Edge

Hardware Requirements:

- Processor: Intel core i5
- Processor speed: 2.70 GHz
- RAM: 8 GB

Chapter 5: Implementation and Testing

5.1 Implementation of Database

Schema Table Names:

1. users
2. product
3. payment
4. orders
5. order_details

1. users

Column	Type	Size
<u>user_id</u>	int	11
first_name	varchar	255
Last_name	varchar	255
email	varchar	255
address	varchar	255
area	varchar	255
district	varchar	255
contact	int	11
password	varchar	255
image	varchar	255
subscription	varchar	255
action	int	11
date	timestamp	Current_timestamp

Table 1: users

Table 1 is designed to store registered users' data and also store admin data for further log-in authentication and tracing users' other activities via stored email address. Here user_id is the primary key.

2. product

Column	Type	Size
<u>p_id</u>	int	11
catagory	varchar	255
name	varchar	255
price	double	10,2
details	varchar	255
image	varchar	255

Table 2: product

Table 2 is designed to store all the product data of different categories. Here p_id is the primary key.

3. payment

Column	Type	Size
<u>pay_id</u>	int	11
o_id	int	11
user_id	int	11
pay_type	varchar	255
bkash_number	Int	11
transaction_id	Int	11
time	Timestamp	Current_timesta mp

Table 3: payment

Table 3 is designed to store users' payment data with different payment types. Here pay_id is the primary key and o_id, user_id is the foreign key of this schema.

4. orders

Column	Type	Size
<u>o_id</u>	Int	11
user_id	Int	11
address	Int	11
area	varchar	255
district	varchar	255
contact	varchar	255
time	timestamp	Current_timesta mp

Table 4: orders

Table 4 is designed to store all the orders data of different users with their shipping addresses. Here o_id is the primary key and user_id is the foreign key.

5. order_details

Column	Type	Size
<u>od_id</u>	Int	11
o_id	Int	11
p_id	Int	11
quantity	Int	11

Table 5: order_details

Table 4 is designed to store each of the orders data of different users with different products they choose. Here od_id is the primary key and o_id, p_id is the foreign key.

5.2 Implementation of Front-end Design

The implementation of this subscription based system project is a fully responsive website whose name is “SnackBox”.

Popup in Home:

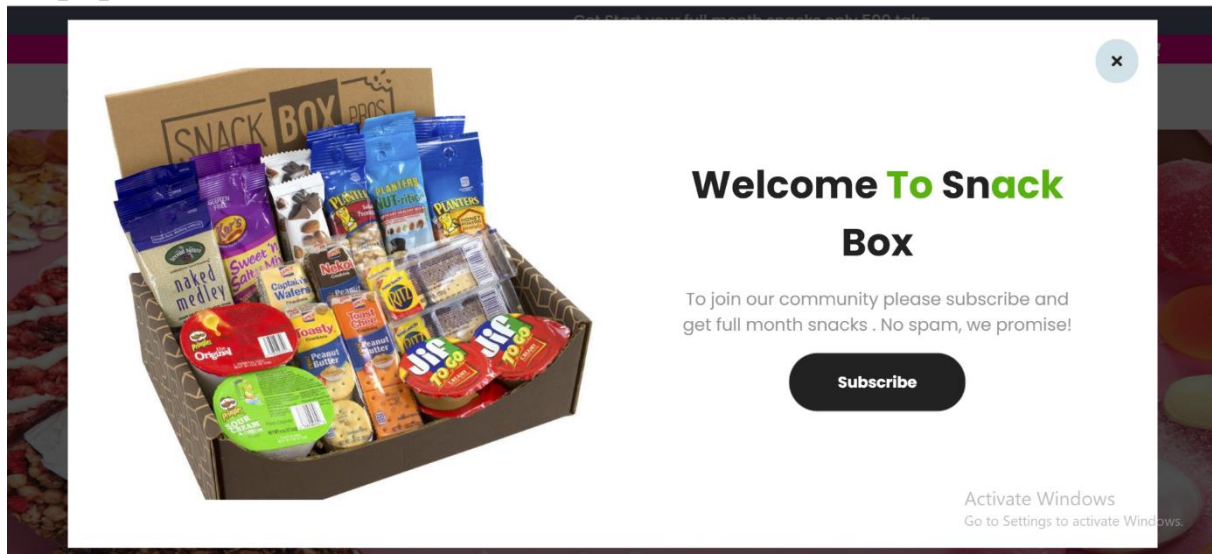


Fig 15: Popup in Home

This is the starting page of this project website. If users go to the website users can see this pop up page first and if users click the subscription button from here user go to the subscription package page.

Header:

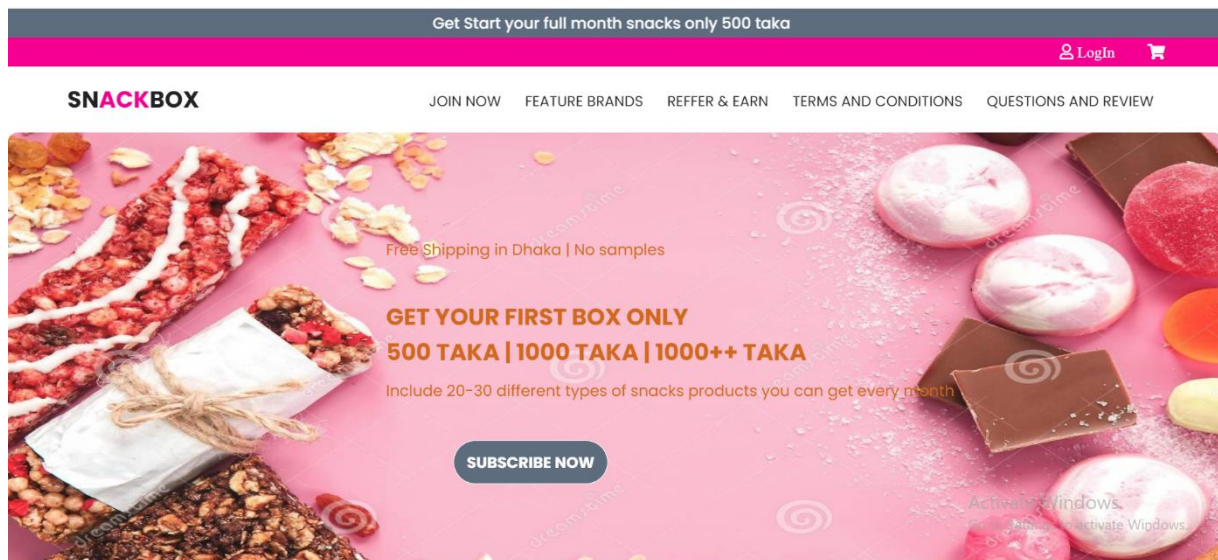


Fig 16: Header

This is the header section of the website which includes all pages of the website. Here in the header section the headline runs left to right by using marquee tags in HTML.

Scrolling navigation bar:

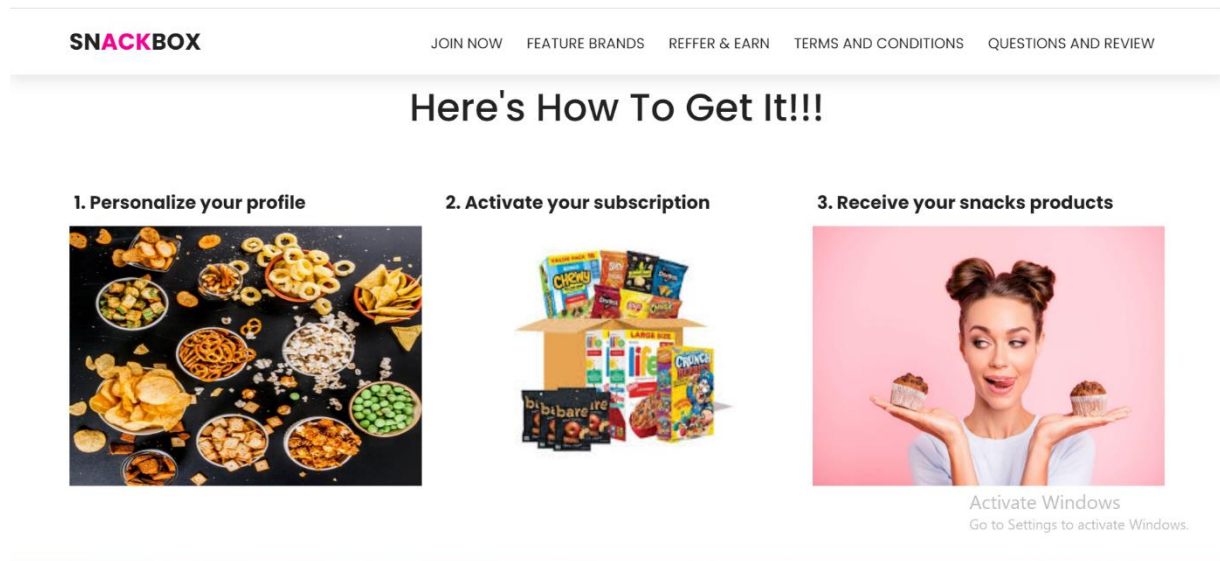


Fig 17: Scrolling Navigation

This is also the home page but in every page the navigation bar is the same and it is fixed when users scroll the page up to down. The navigation bar includes the subscription option, feature brands, question and review section etc.

Footer:

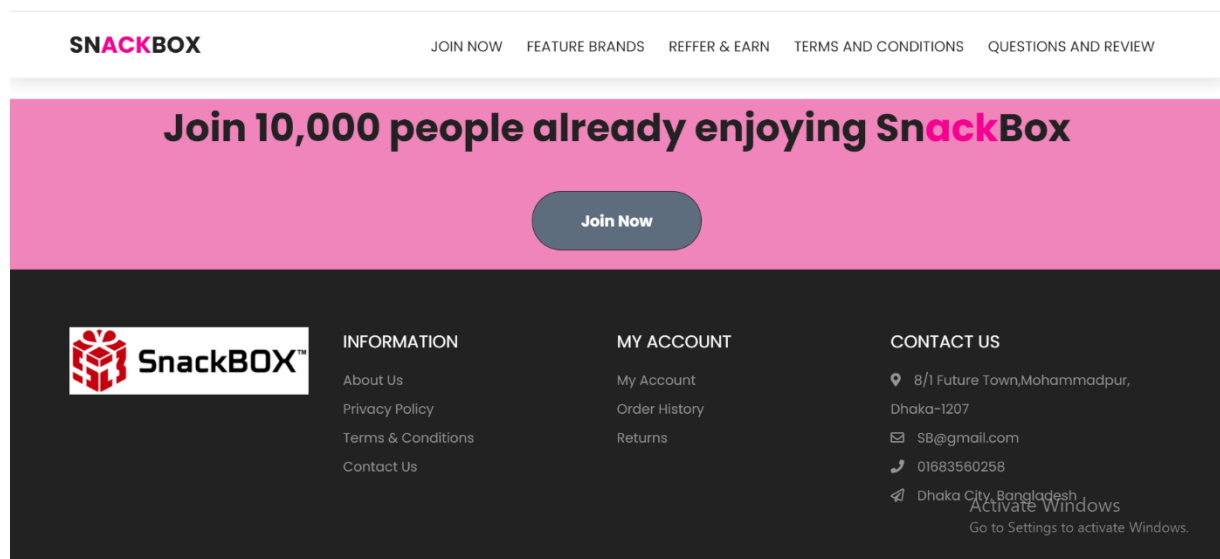


Fig 18: Footer

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

Log In:

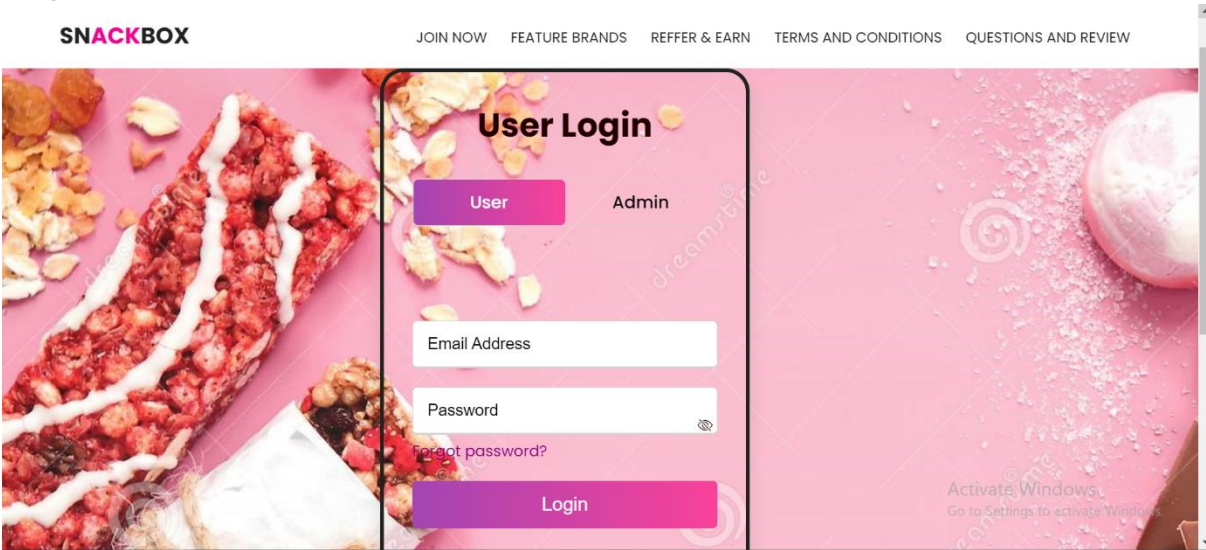


Fig 19: Log In

This is the login page of the website. If users are authenticated users then users can login into this website from here.

Sign Up:

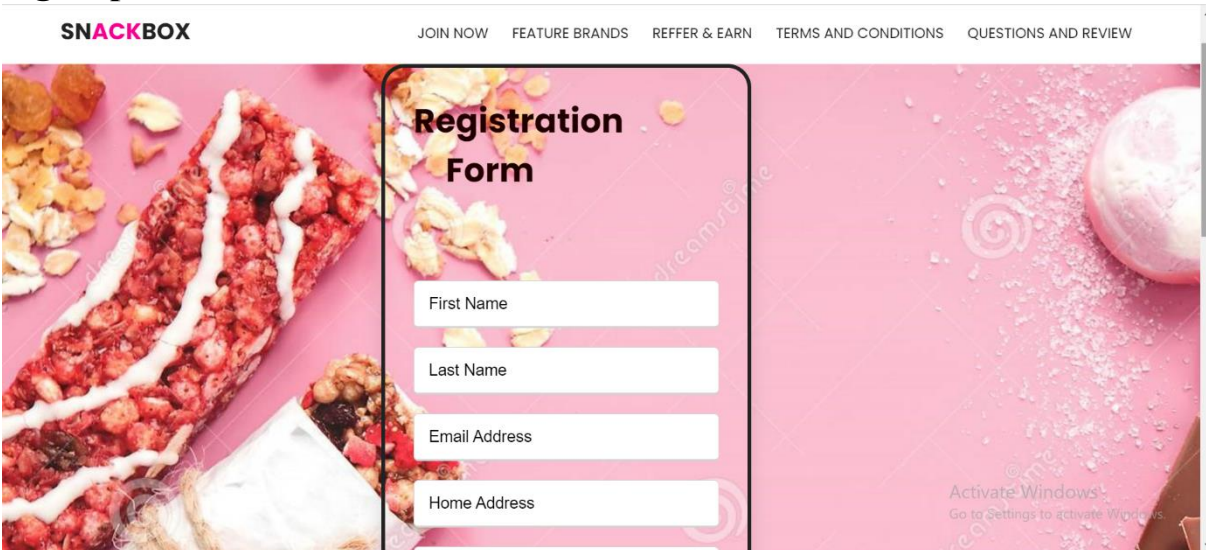


Fig 20: Sign Up

If users are not an authenticated user or don't have an account against this website then users have to sign up with some valid information.

Forget Password:

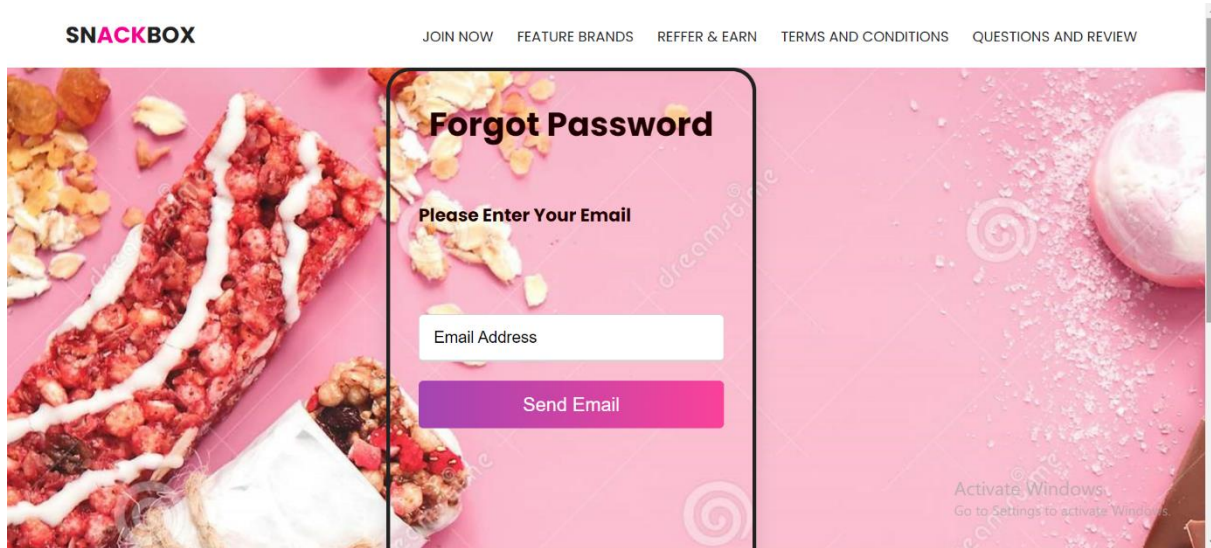


Fig 21: Forgot password

This is the forget password page where users can give an email to reset their password if they forget their password for login.

Update password:

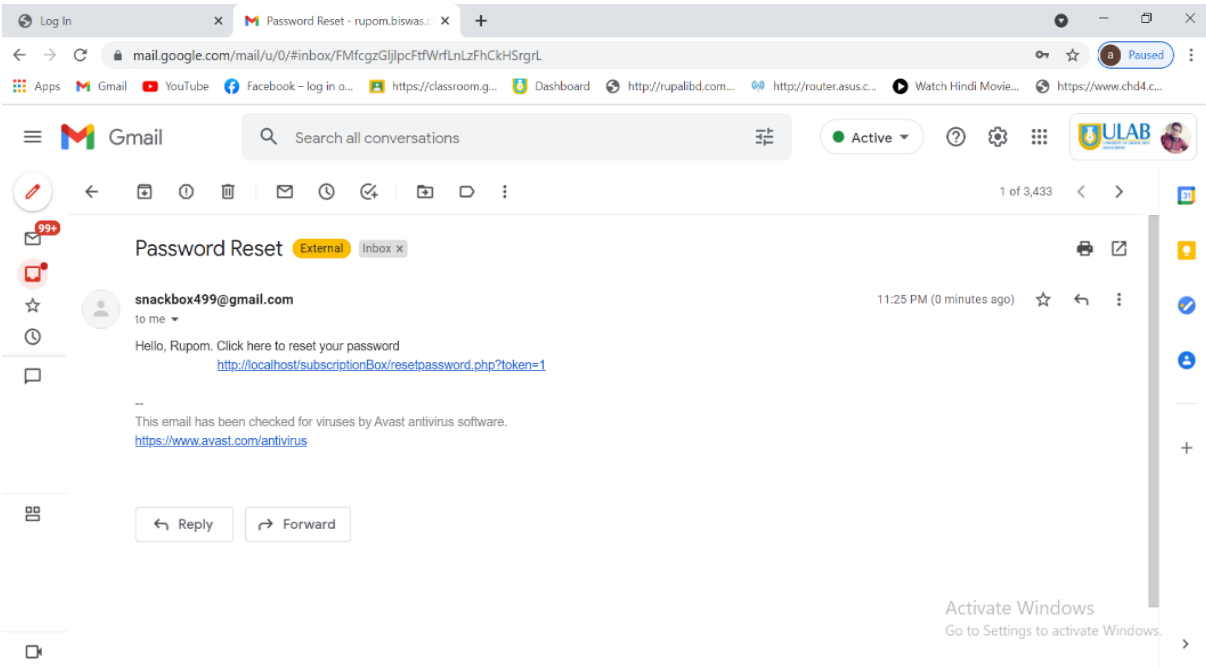


Fig 22: Update Password

This is the email of the forgotten password. Users are who forget their password, they give their authenticate password in forget password page then they get an email like this on their authenticated own email address. After clicking this link they go to another page where they can update their password.

Reset password:

Fig 23: Reset Password

This is the reset password page where users can update their password. after clicking the link in figure-22 then get this page to update their password.

User Profile & Logout:

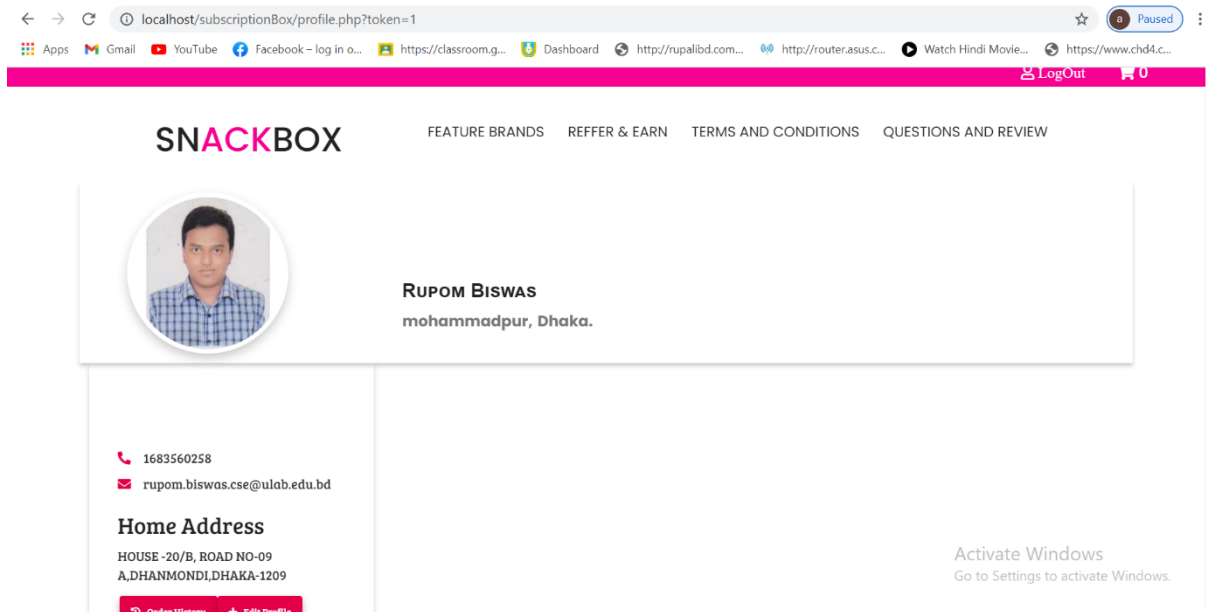


Fig 24: User Profile & Logout

This is the profile page of users. Each authenticated user can see their profile from here and if they want to logout from the website. They can also logout from here.

Edit Profile:

localhost/subscriptionsBox/editprofile.php?token=1

Apps Gmail YouTube Facebook – log in o... https://classroom.g... Dashboard http://rupalibd.com... http://router.asus.c... Watch Hindi Movie... https://www.chd4.c...

SNACKBOX FEATURE BRANDS REFFER & EARN TERMS AND CONDITIONS QUESTIONS AND REVIEW

 Name:

Choose File No file chosen Location:







Home Address



Activate Windows
Go to Settings to activate Windows.

Fig 25: Edit Profile

This the edit profile page of the website where users can edit their personal information from here.

Subscription package:

localhost/subscriptionsBox/subscription.php?token=1

Apps Gmail YouTube Facebook – log in o... https://classroom.g... Dashboard http://rupalibd.com... http://router.asus.c... Watch Hindi Movie... https://www.chd4.c...

SNACKBOX FEATURE BRANDS REFFER & EARN TERMS AND CONDITIONS QUESTIONS AND REVIEW

MONTHLY SUBSCRIPTION

ONLY 500 TAKA

GET YOUR 1ST SNACK BOX ONLY 500 TAKA

10-15 DIFFERENT TYPES OF SNACKS ITEMS

COME WITH SUPER CUTE PACKING

FREE SHIPPING FOR DHAKA

MONTHLY SUBSCRIPTION

ONLY 1000 TAKA

GET YOUR 1ST SNACK BOX ONLY 1000 TAKA

20-25 DIFFERENT TYPES OF SNACKS ITEMS

COME WITH SUPER CUTE PACKING

FREE SHIPPING FOR DHAKA

MONTHLY SUBSCRIPTION

ONLY 1000++ TAKA

WANT MORE THEN GET YOUR BOX ONLY 1000++ TAKA

30++ DIFFERENT TYPES OF SNACKS ITEMS

COME WITH SUPER CUTE PACKING

FREE SHIPPING FOR DHAKA

Activate Windows
Go to Settings to activate Windows.

Fig 26: Subscription Package

This is the subscription page. After login users can choose any of the subscription packages from here.

Choose Category:

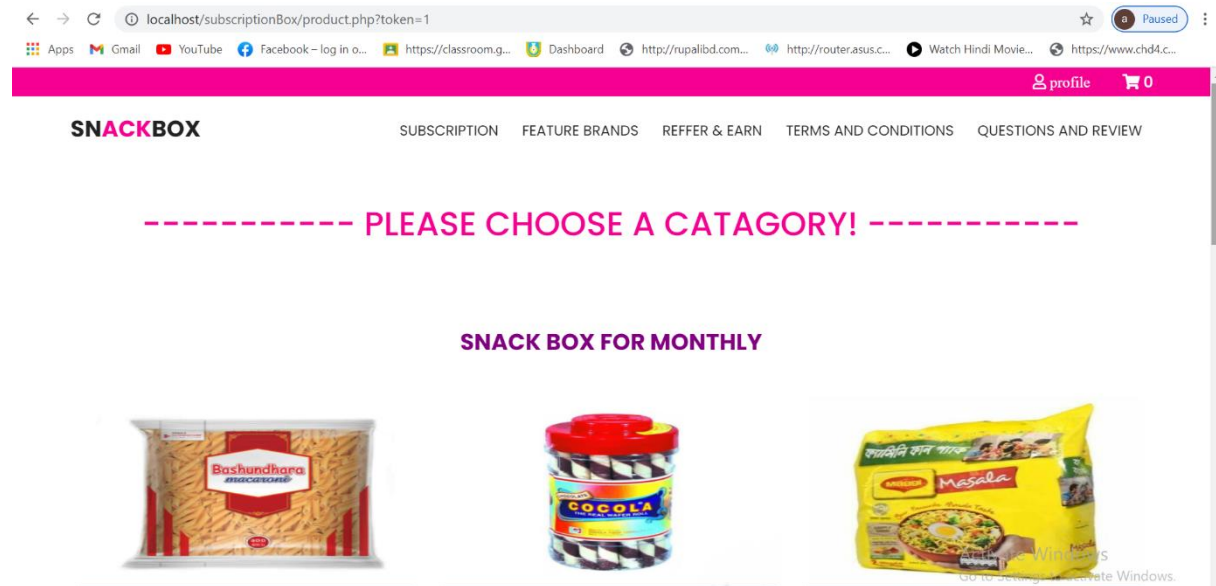


Fig 27: Choose Category

After choosing any subscription packages users can choose any categories of boxes.

Monthly box

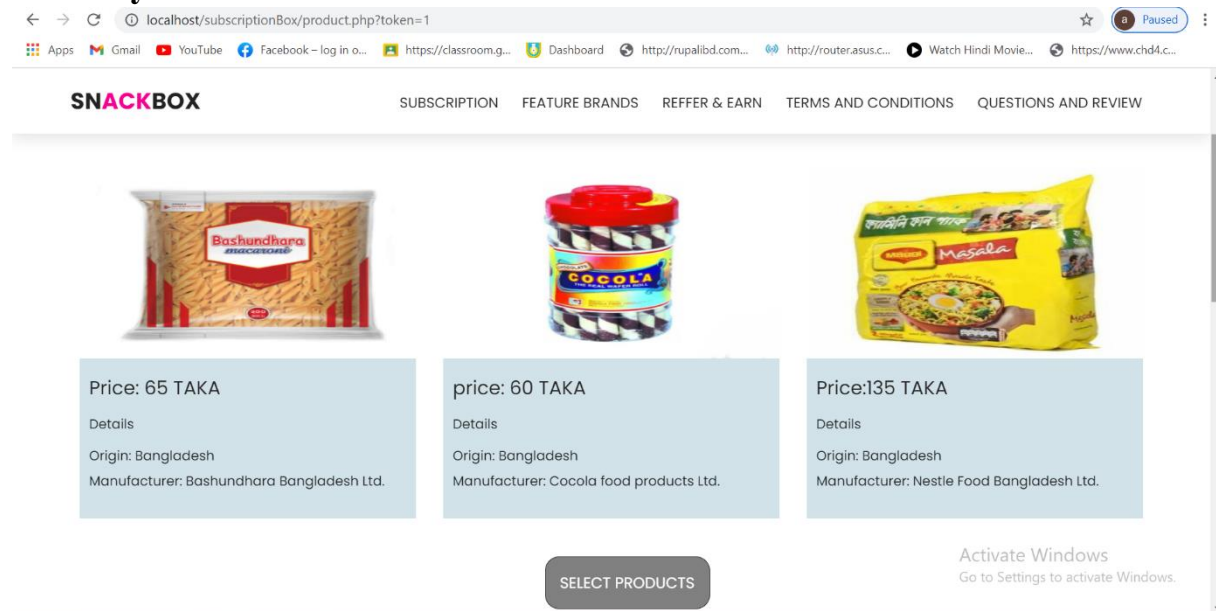


Fig 28: Monthly box

This is the monthly category box. Here people get their monthly products.

Special box

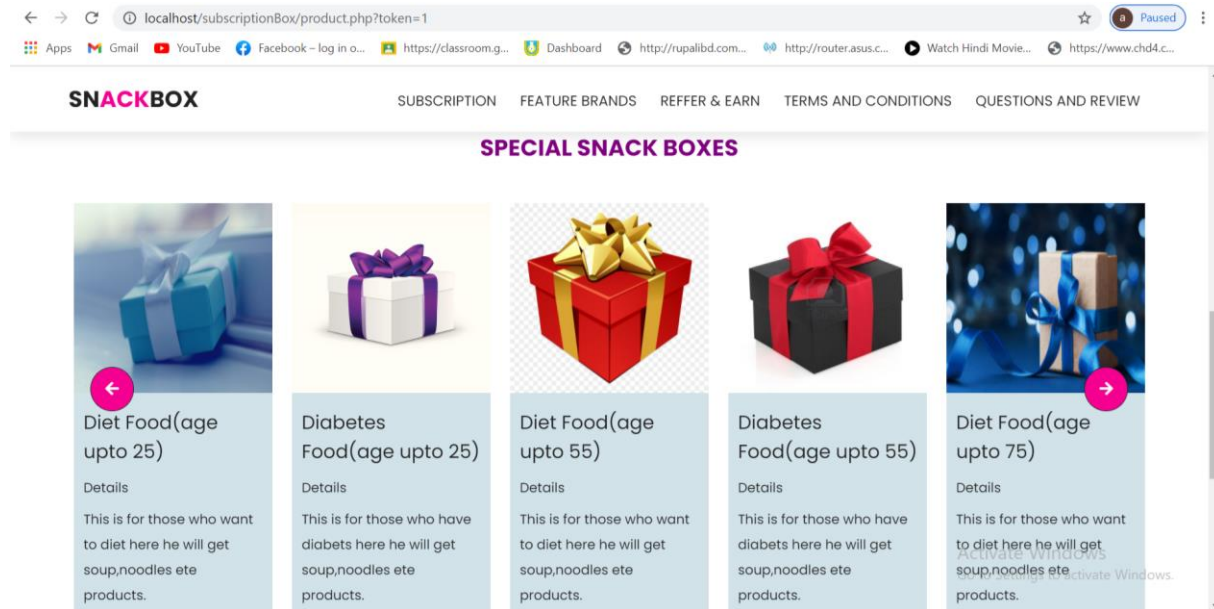


Fig 29: Special box

These are the special boxes where users can get their special boxes from here.

Monthly subscription & Search Bar:

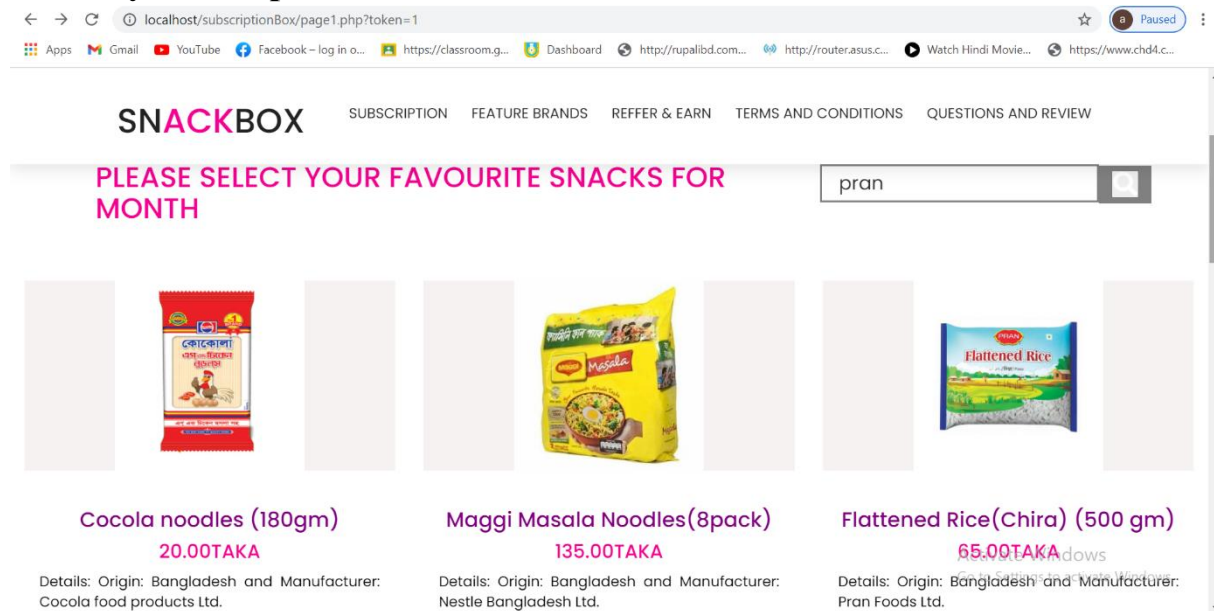


Fig 30: Monthly Subscription & Search Bar

After choosing the monthly box users can choose their products and also search their favorite products using some keyword in the search bar. Here in the search bar in figure 30 users search pran products.

Using Search:

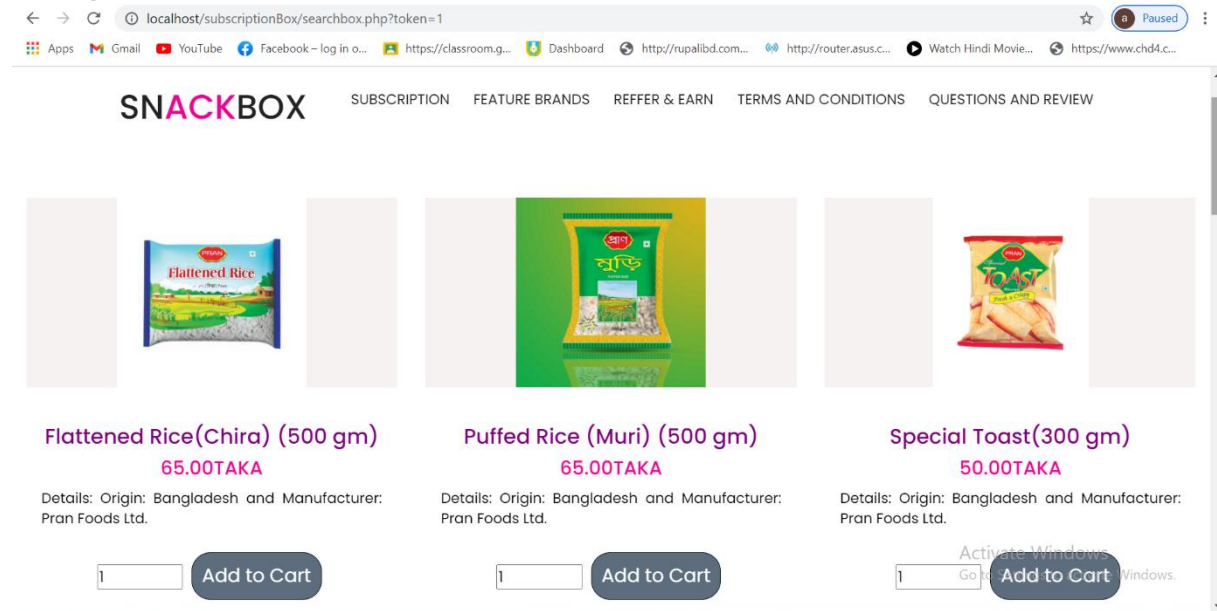


Fig 31: Using Search

After searching the keyword pran users can get all the pran products from the website.

Pagination:

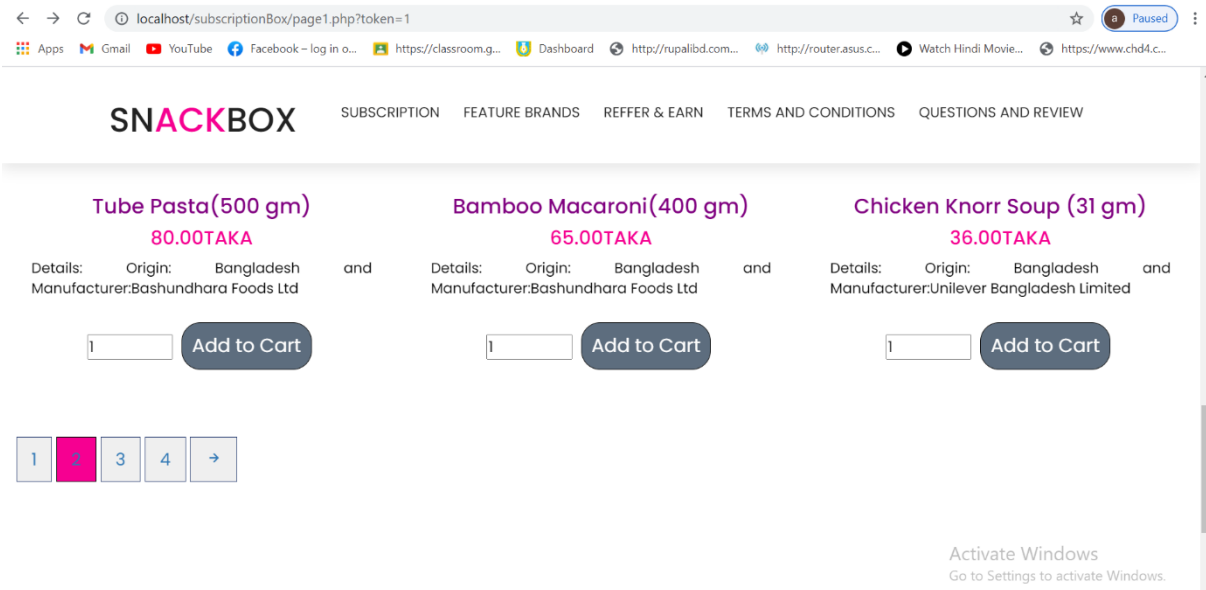


Fig 32: Pagination

This is the pagination field where users can go to another product page after clicking the page numbers.

Pagination-2:

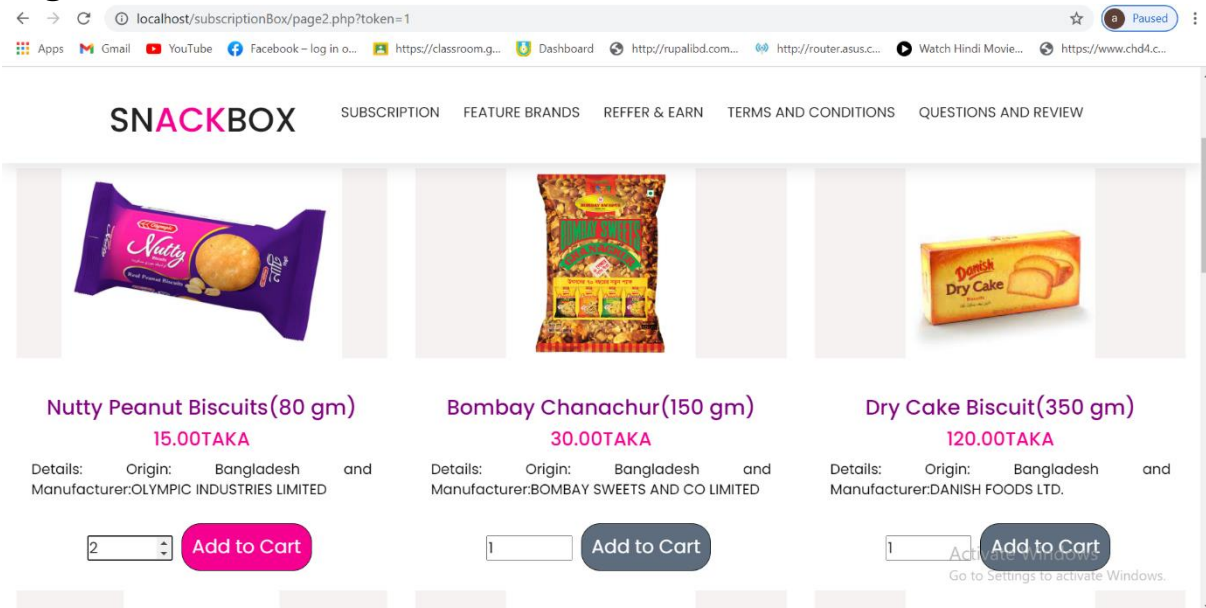


Fig 33 : Pagination-2

After clicking the pagination button 2 in figure 32 this page is showing and also added to cart from any kind of product of any pages.

Add to cart:

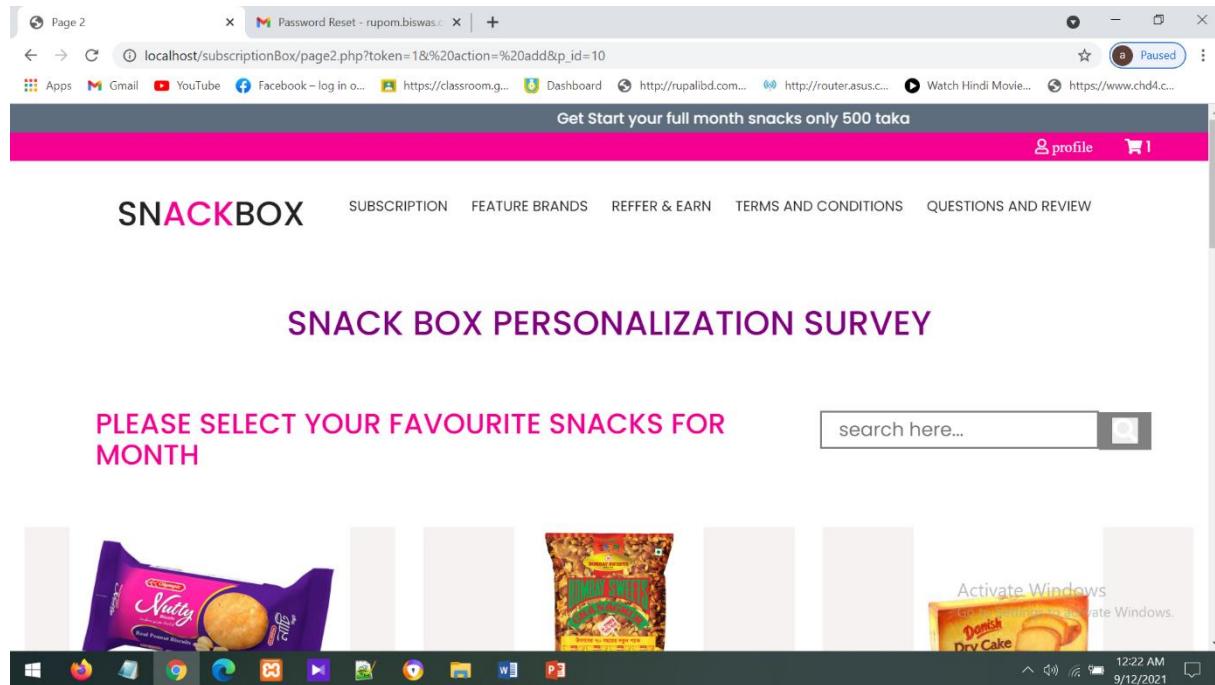


Fig 34: Add To Cart

This is the add to cart counter. In the figure 33, 2 quantity of biscuits items added into the add to cart here in this page we can see that in add to cart counter added one item already.

Cart:

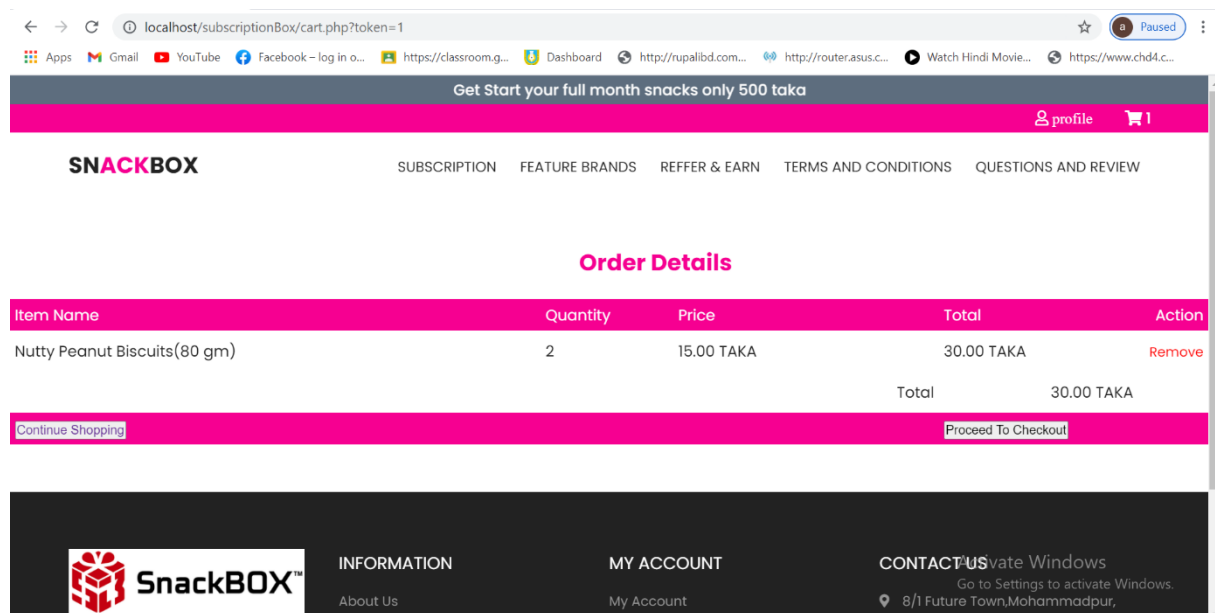


Fig 35 : Cart

After clicking the cart counter this website is opened where users can see how many items they added and what will be the cost of them. If they don't cross the subscription limit they can get the next process checkout option otherwise they cannot go to the next process.

Item added over amount of subscription:

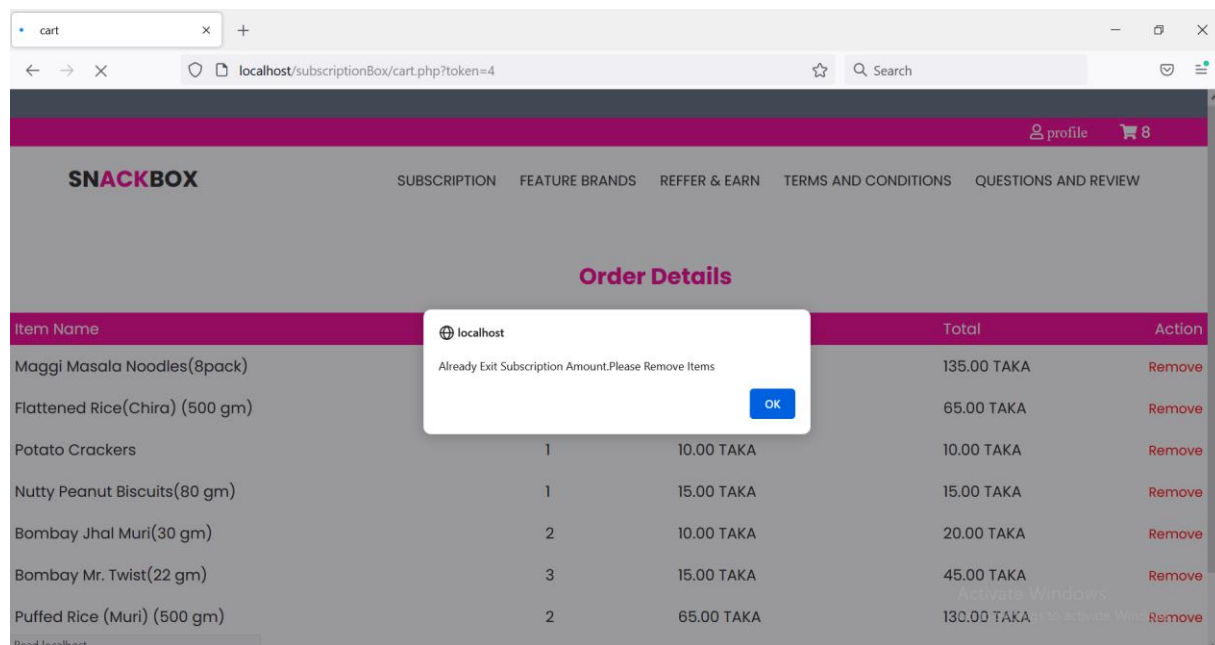


Fig 36: Item added over amount of subscription

This is the error showing to users when users cross the limit of subscription.

Remove items

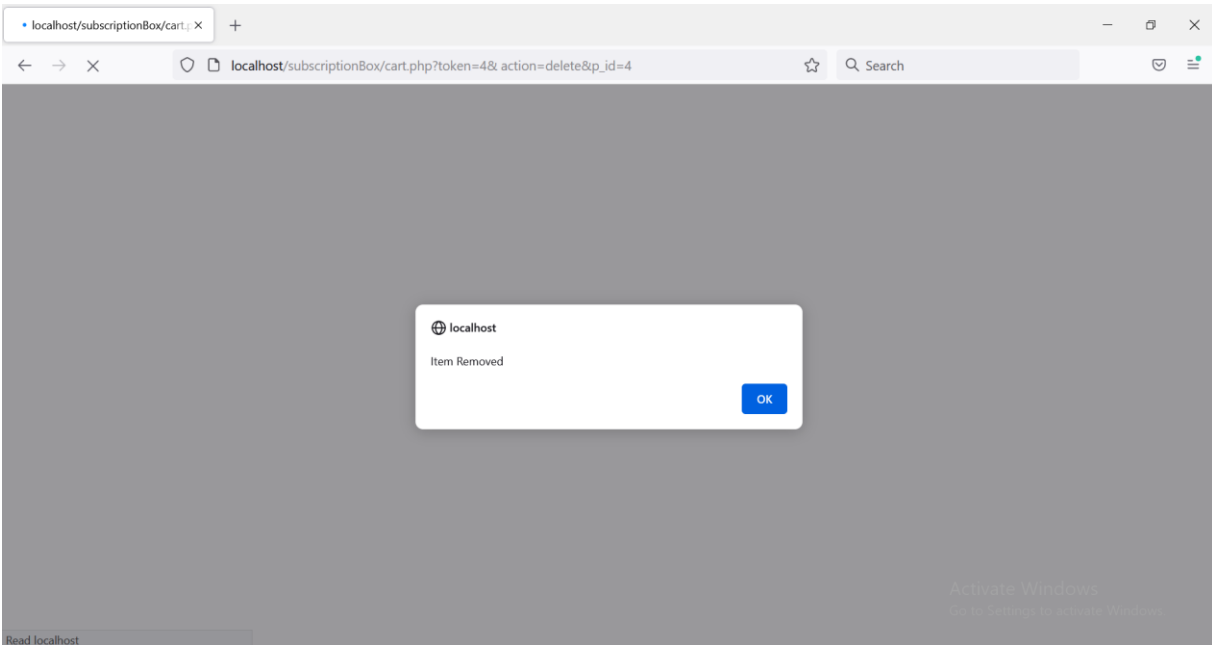


Fig 37 : Remove items

After clicking the remove button users can get a confirmation from the website like this page.

Go to the next process

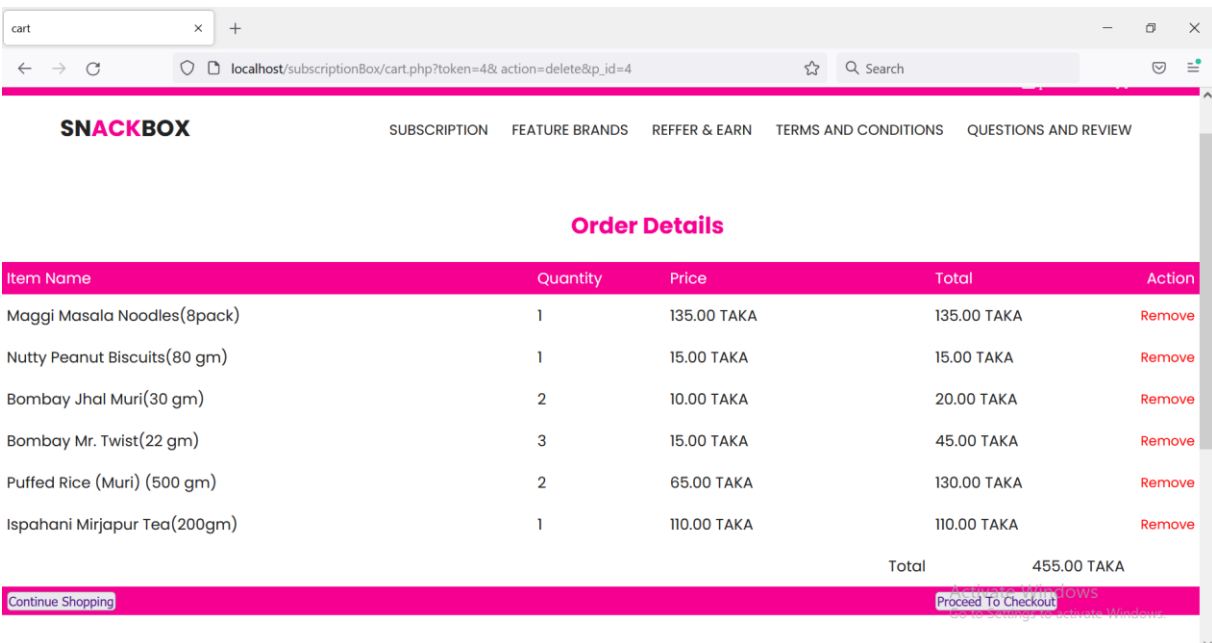


Fig 38: Go to the next process

After adding to cart successfully which does not cross the limit of subscription amount users can see the items they chose and go to the next process which is process to checkout.

Special Boxes:

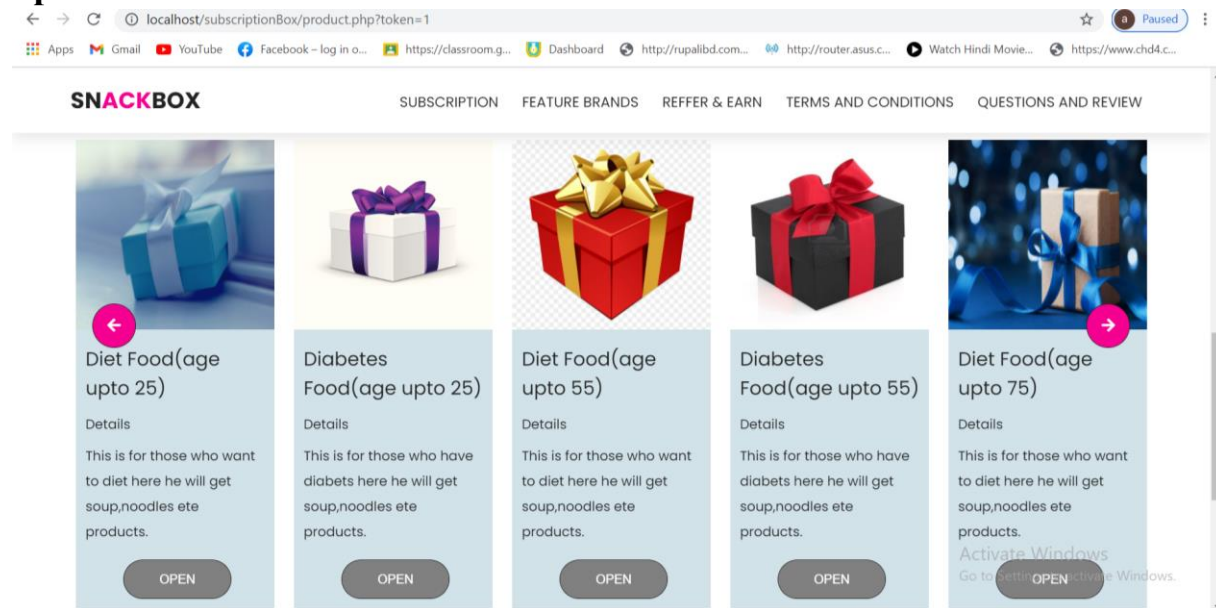


Fig 39:Special Boxes

If users don't choose the monthly box then users can choose any of the special boxes from this page.

Open Box and Order:

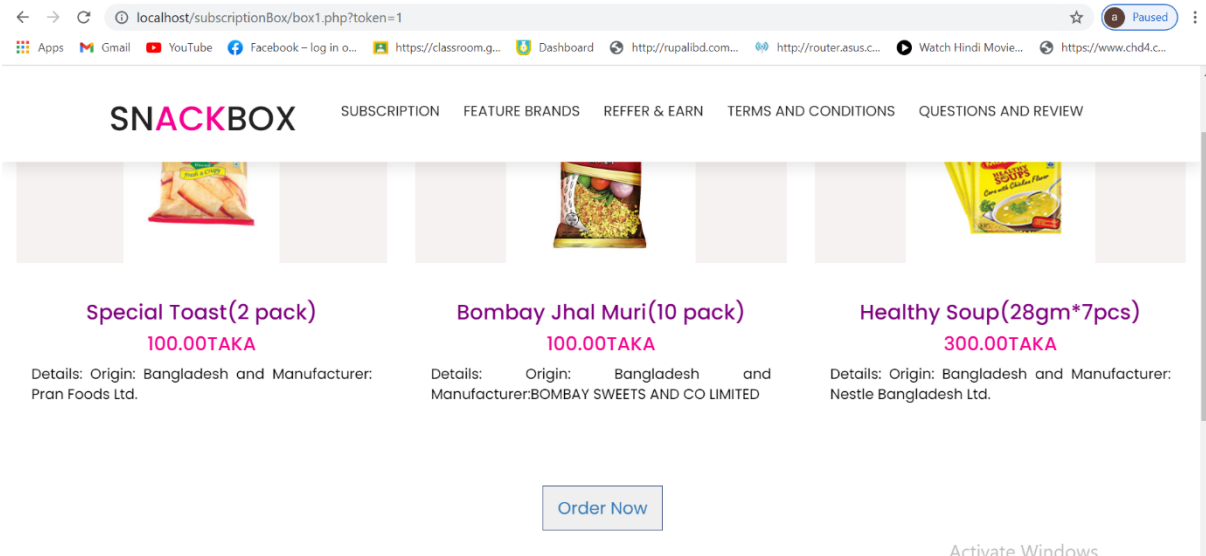


Fig 40: Open Box and Order

After clicking to open the boxes users can see this page where users can see all product details and also users can order any boxes if they want.

Order:

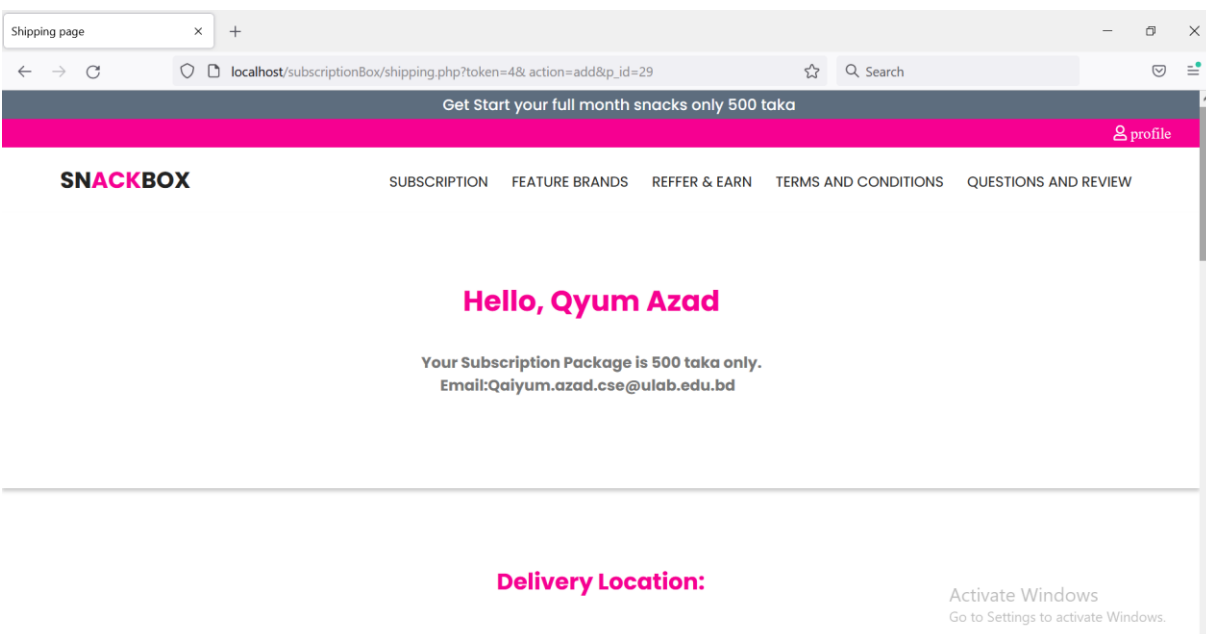
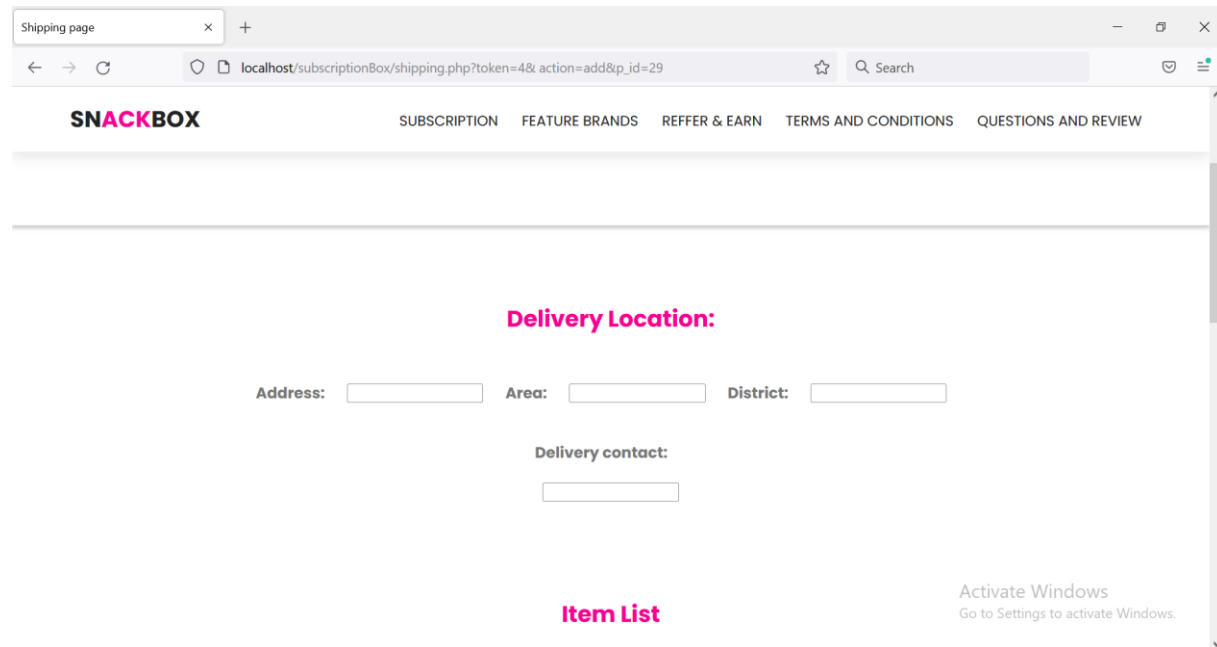


Fig 41: Order

After ordering any boxes or monthly box items, users can see this shipping page.

where users can see their personal details and subscription details in the upper section of this website.

Shipping address



The screenshot shows a web browser window with the title "Shipping page". The address bar displays "localhost/subscriptionBox/shipping.php?token=4& action=add&p_id=29". The website header features the "SNACKBOX" logo and navigation links: "SUBSCRIPTION", "FEATURE BRANDS", "REFERRER & EARN", "TERMS AND CONDITIONS", and "QUESTIONS AND REVIEW". The main content area is titled "Delivery Location:" in pink. Below this title, there are three input fields labeled "Address:", "Area:", and "District:". Further down, there is a label "Delivery contact:" followed by a single input field. At the bottom of the form, the text "Item List" is displayed in pink. A Windows watermark "Activate Windows Go to Settings to activate Windows." is visible in the bottom right corner.

Fig 42: Shipping address

After clicking the order users can see the shipping page where user have to give their shipping address on this page.

View order item:

Item Name	Quantity	Price	Total
Maggi Masala Noodles(8pack)	1	135.00 TAKA	135.00 TAKA
Nutty Peanut Biscuits(80 gm)	1	15.00 TAKA	15.00 TAKA
Bombay Jhal Muri(30 gm)	2	10.00 TAKA	20.00 TAKA
Bombay Mr. Twist(22 gm)	3	15.00 TAKA	45.00 TAKA
Puffed Rice (Muri) (500 gm)	2	65.00 TAKA	130.00 TAKA
Ispahani Mirjapur Tea(200gm)	1	110.00 TAKA	110.00 TAKA
Total			455.00 TAKA

Payment
Fig 43: View order item

After giving the shipping address users can see their products items and cost before payment.

Payment:

Puffed Rice (Muri) (500 gm)	2	65.00 TAKA	130.00 TAKA
Ispahani Mirjapur Tea(200gm)	1	110.00 TAKA	110.00 TAKA
Total			455.00 TAKA

☐ Cash On Devlivery
 ☐ Online Payment

Confirm Order

Fig 44: Payment

After giving all information for order then the user can pay from this page where users have two options for paying there payment.

Cash on delivery

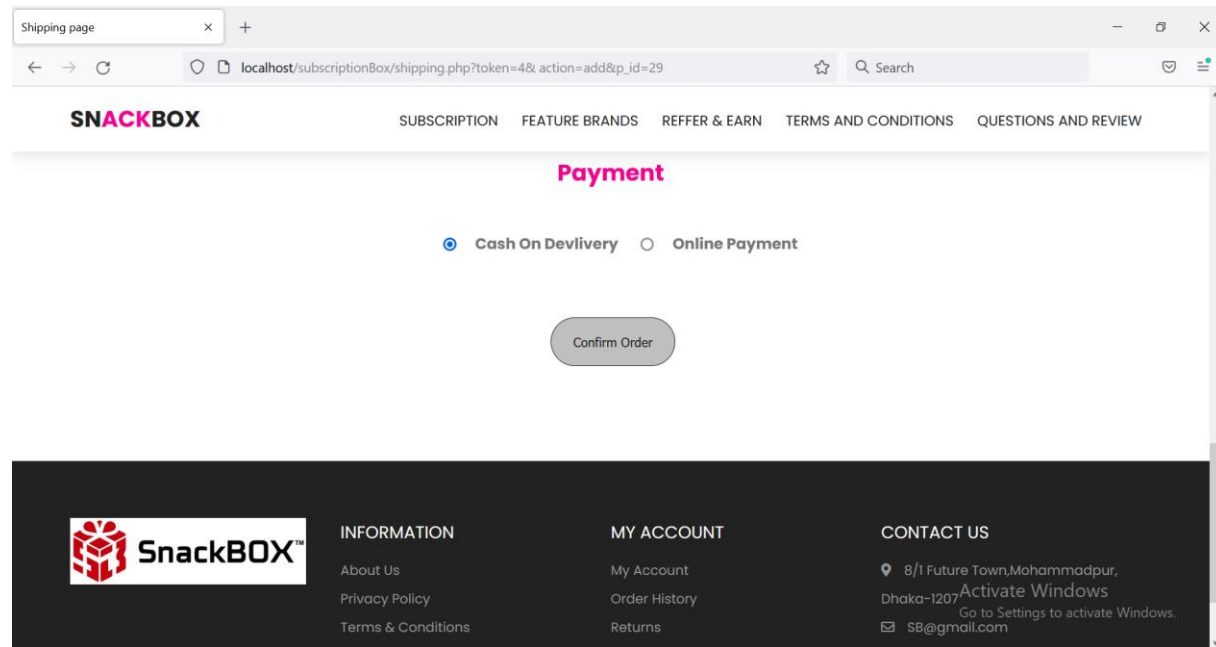


Fig 45: Cash on delivery

If the users choose cash on delivery. Users have to click on cash on delivery and then click to confirm order for confirmation.

Online Payment

Shipping page

localhost/subscriptionBox/shipping.php?token=4& action=add&p_id=29

SNACKBOX

SUBSCRIPTION FEATURE BRANDS REFFER & EARN TERMS AND CONDITIONS QUESTIONS AND REVIEW

Payment

☐ Cash On Delivery ☒ Online Payment

At first you pay the payment in this number given below and after that fill up the form.
Bkash Personal No:01683560258

Your Bkash Number: Bkash Transection ID:

bKash

Confirm Order

Activate Windows
Go to Settings to activate Windows.

Fig 46: Online Payment

If the users choose online payment. Users have to click on online payment o and users get the bKash option to pay their bill on bKash and then click to confirm order for confirmation.

Confirmation email:

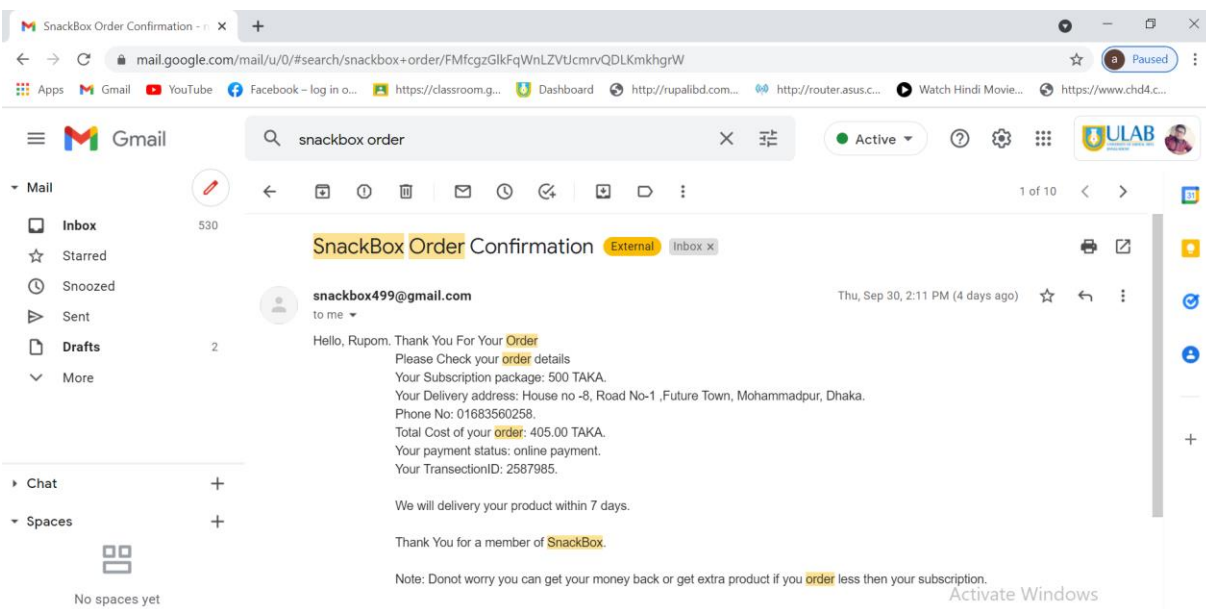


Fig 47: Confirmation email

After completing the payment, the user gets a confirmation email from the website like this.

Unsubscribe:

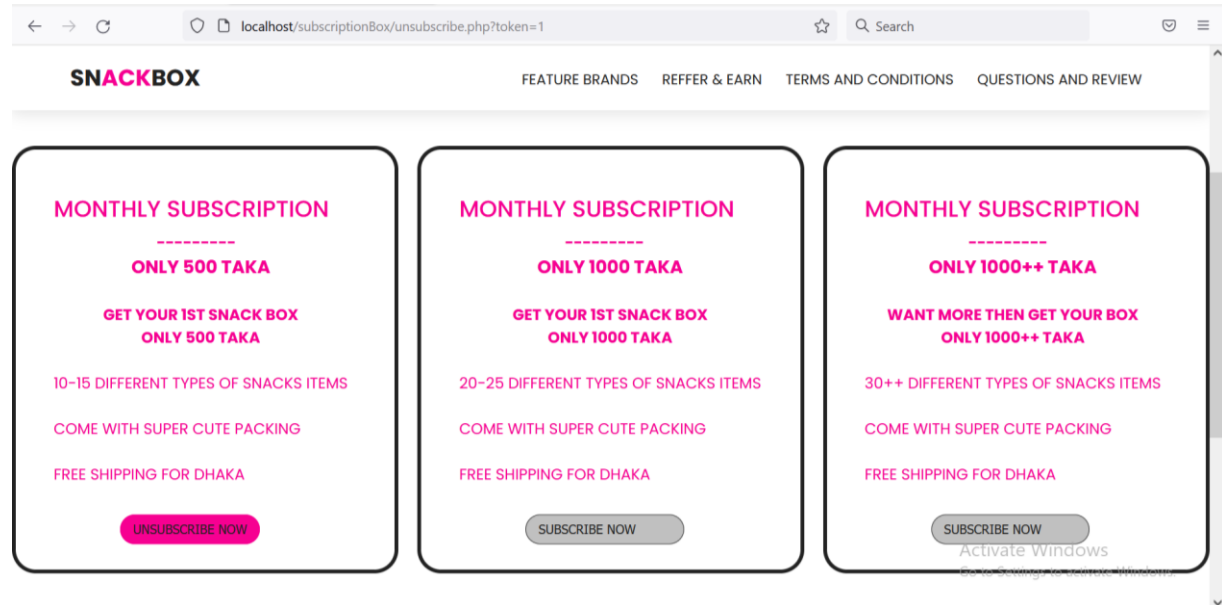


Fig 48: Unsubscribe

If users think they don't want to continue their subscriptions then users can unsubscribe from this page.

Admin Site

Log In:

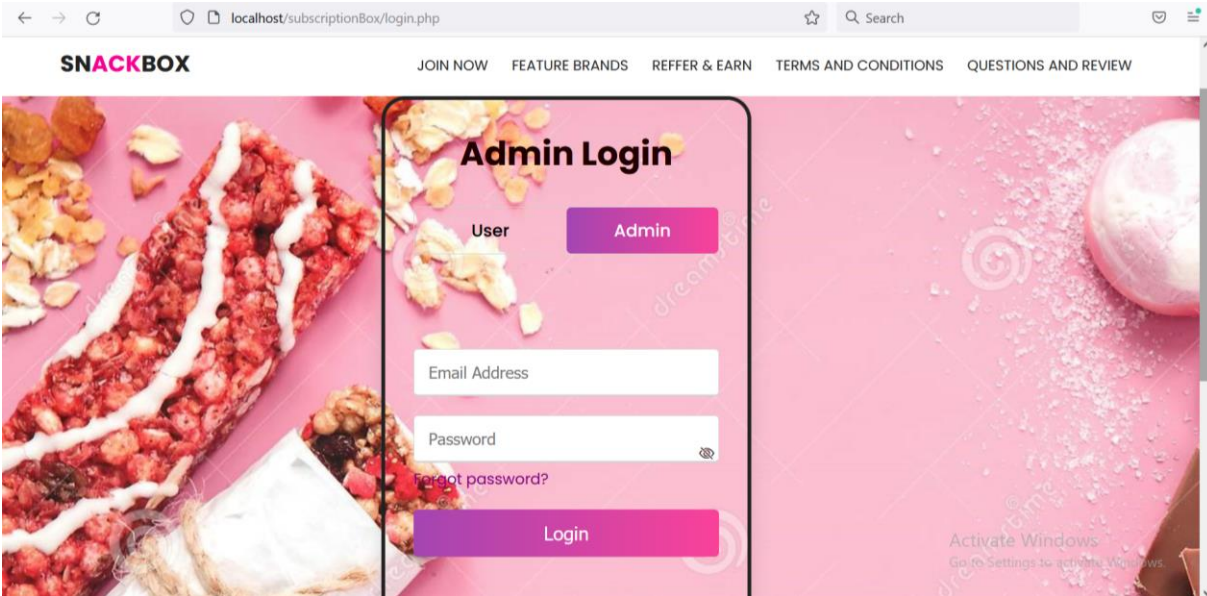


Fig 49: Log In

This is the login page for admin. If anyone is allocated for admin then he/she can login from here as an admin.

Forgot password:

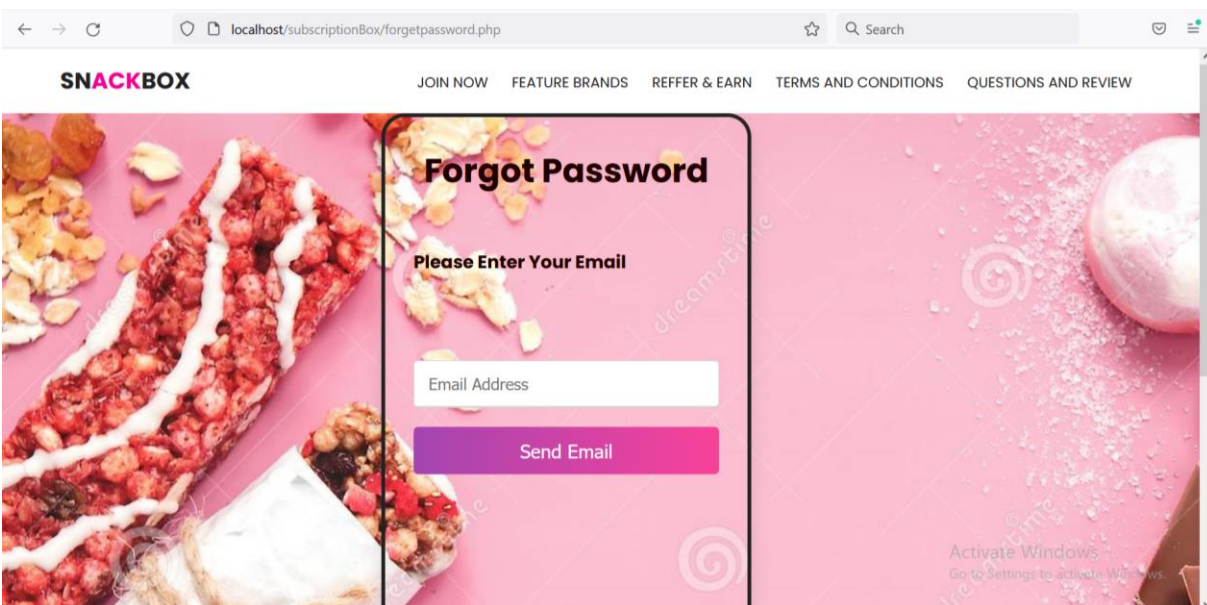


Fig 50: Forget Password

This is the forget password page. If any admin forget their password then they can enter their authenticated mail here and send email for requesting reset their password.

Enter email

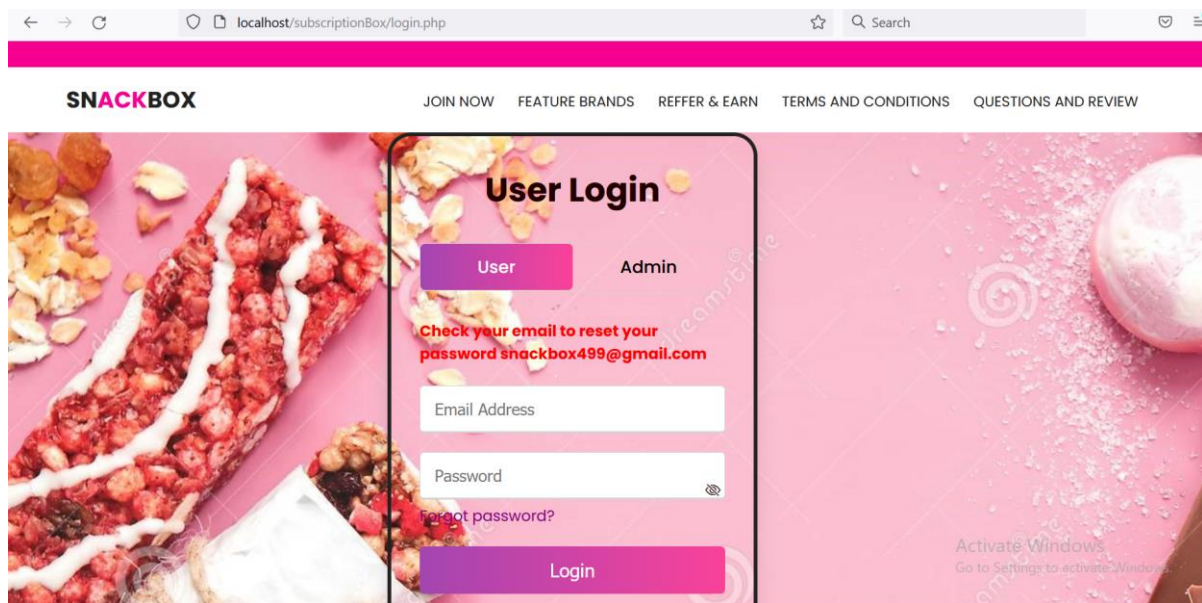


Fig 51: Enter Email

After send the request for reset password then this page will notified you to check your email.

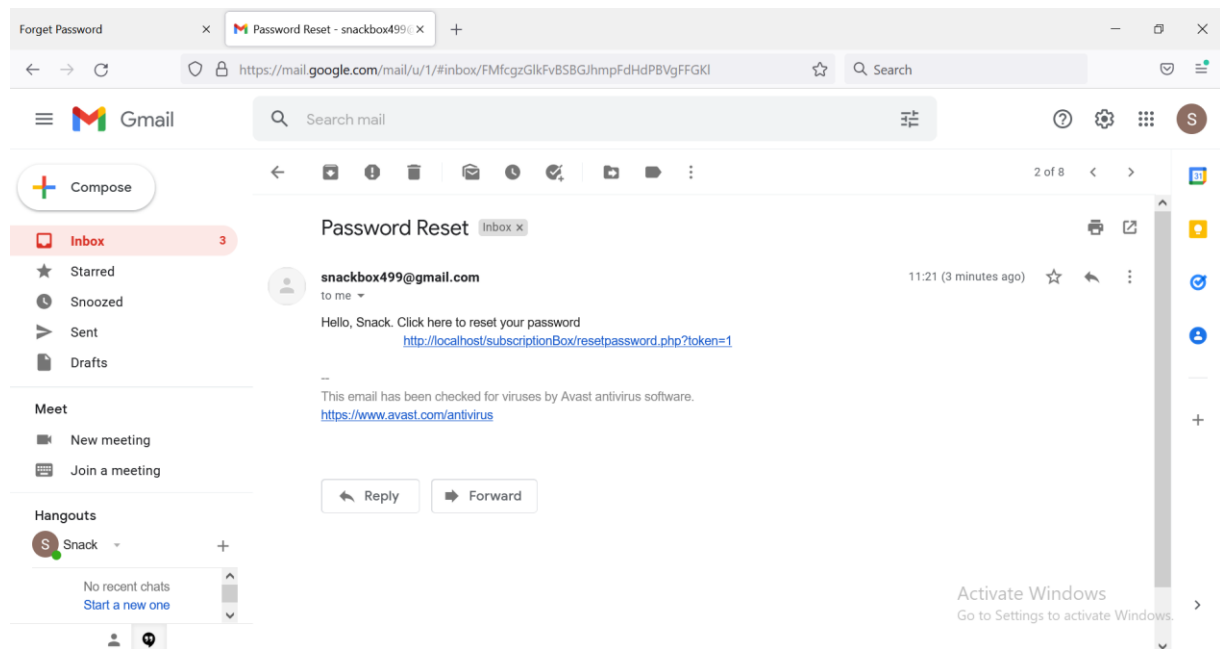


Fig 52: Clicking this link reset password

This is the email where an admin can reset their password after clicking this link.

Please Enter Your New password

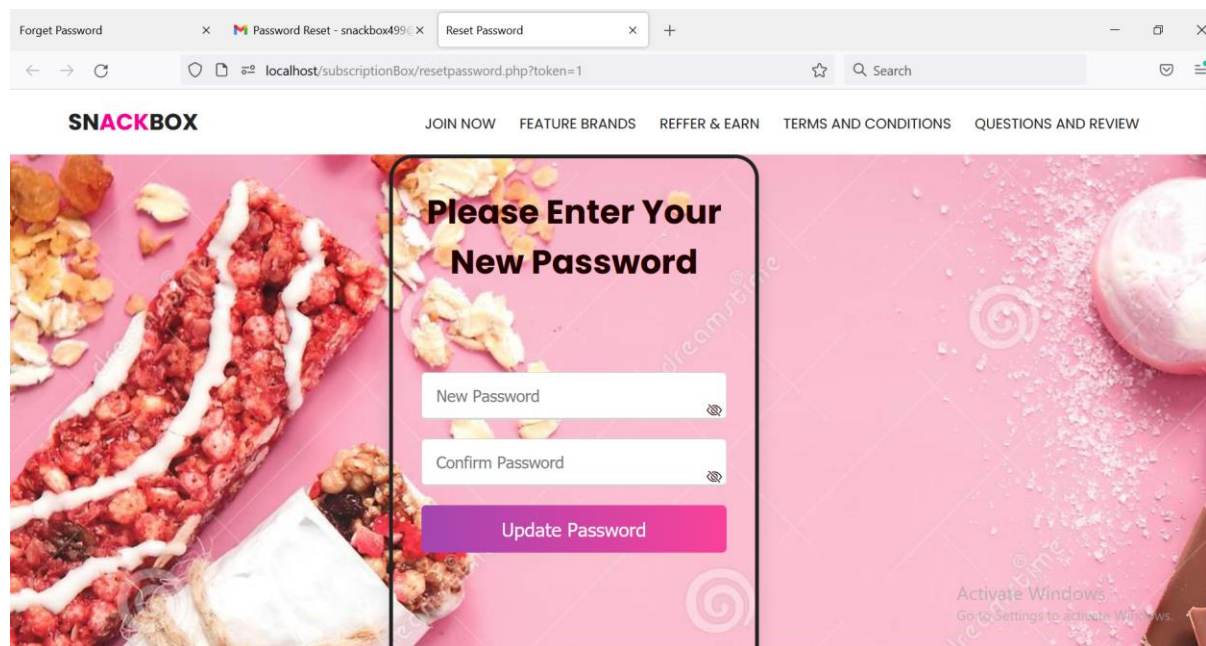


Fig 53: Please Enter Your New password

After clicking the link admins go to this page where they can reset their new password.

Admin dashboard

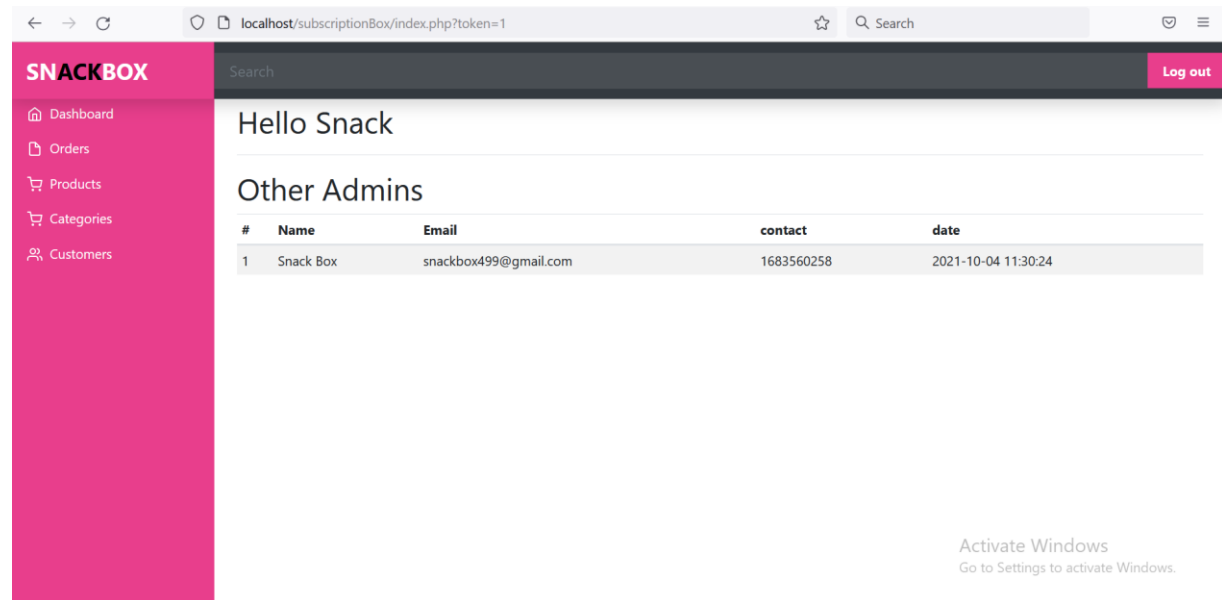


Fig 54: Admin dashboard

After login this the admin dash board where admins can see how many admins are there and also see the full information of admins.

Customer orders

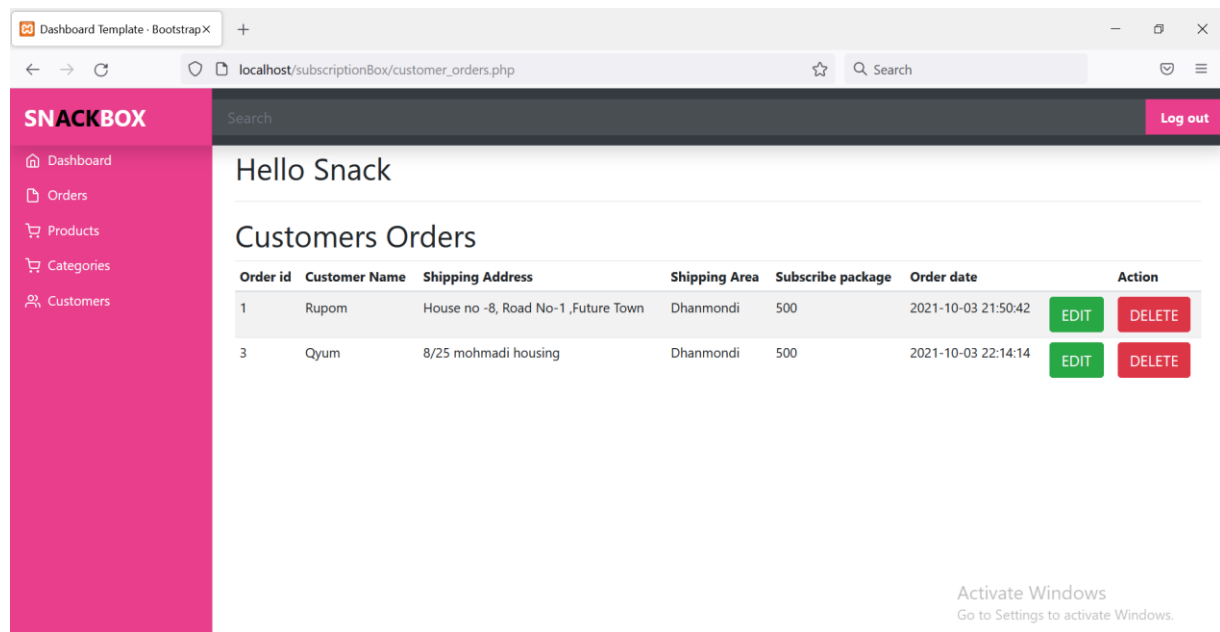


Fig 55: Customer orders

This is the order section of this admin panel, where admins can get all the information of all orders.

Edit customer order

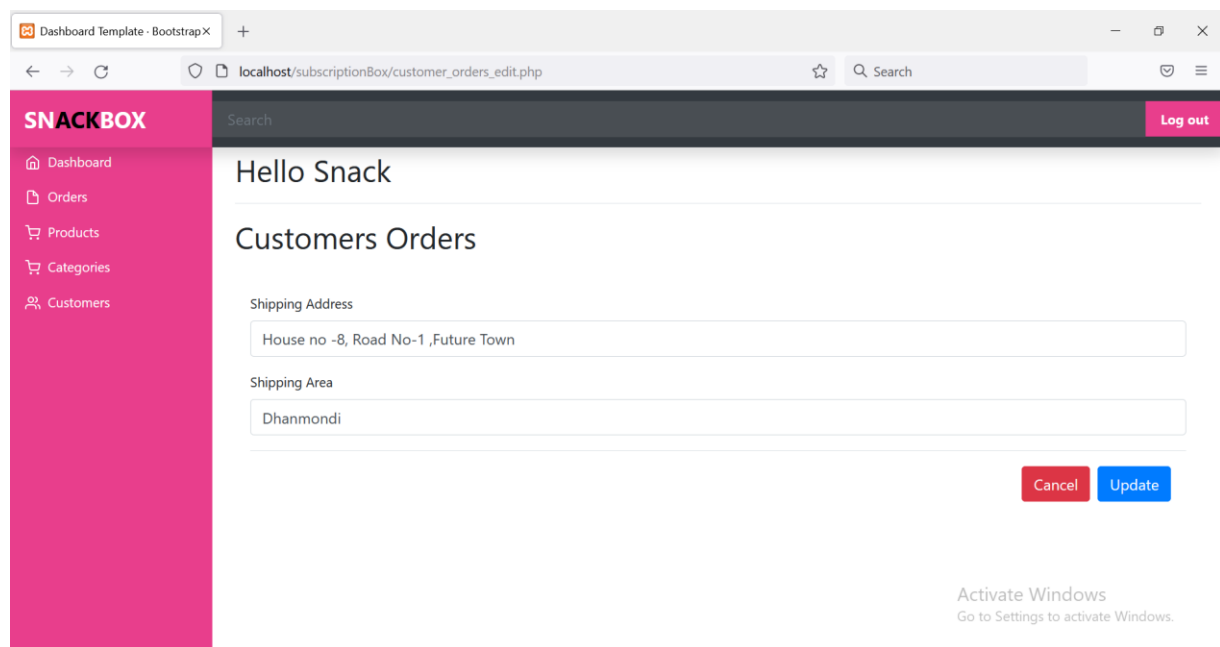


Fig 56: Edit customer order

After clicking the edit options of any order then admin can change the shipping address and area any users.

Delete customer order

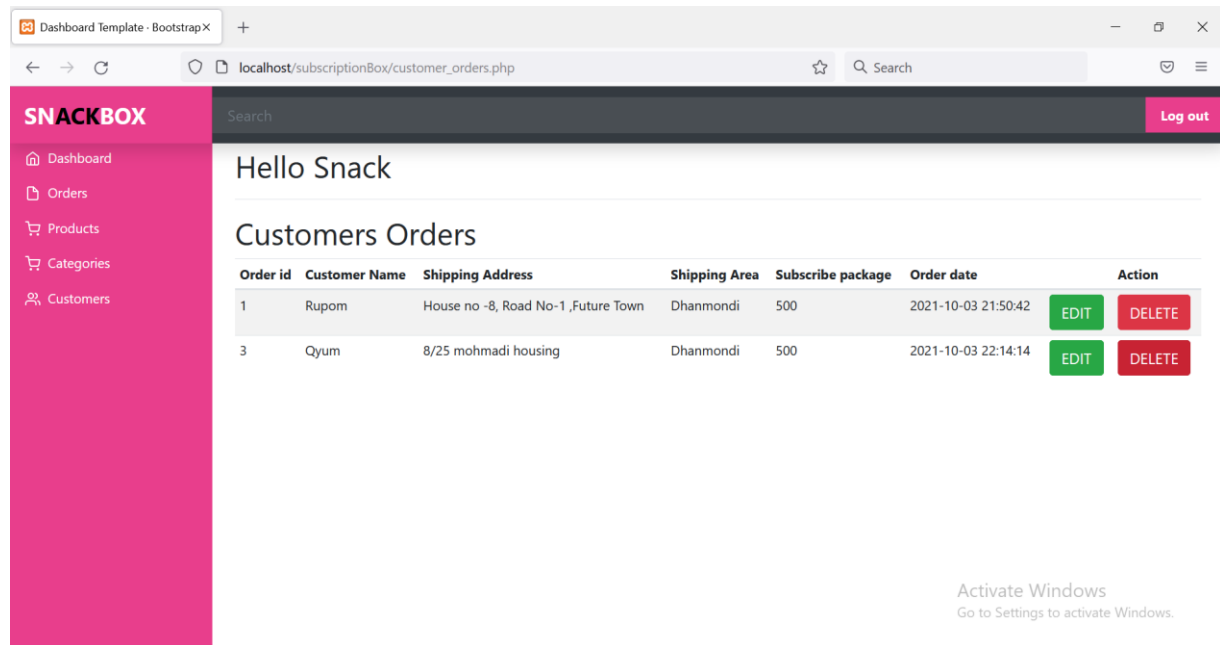


Fig 57: Delete customer order

If admin want to delete any order option then admin can delete all the information of an order by clicking the delete button from here.

Products

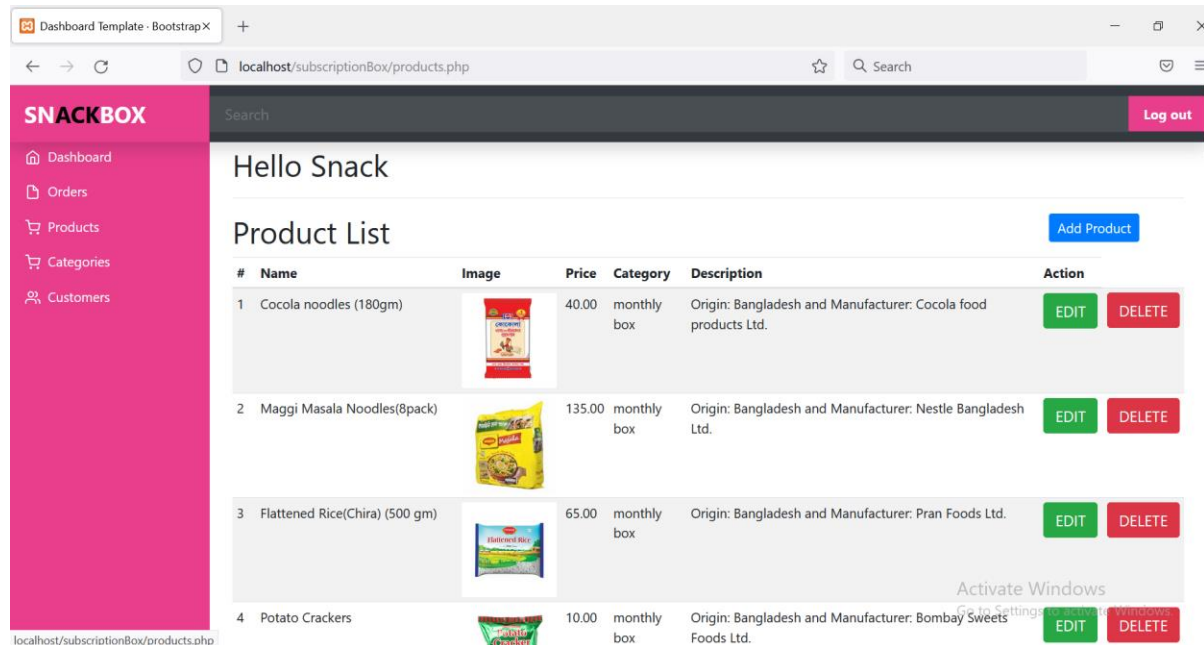


Fig 58: Products

This is the Product section of this admin panel, where admins can get all the information of all products.

Edit products

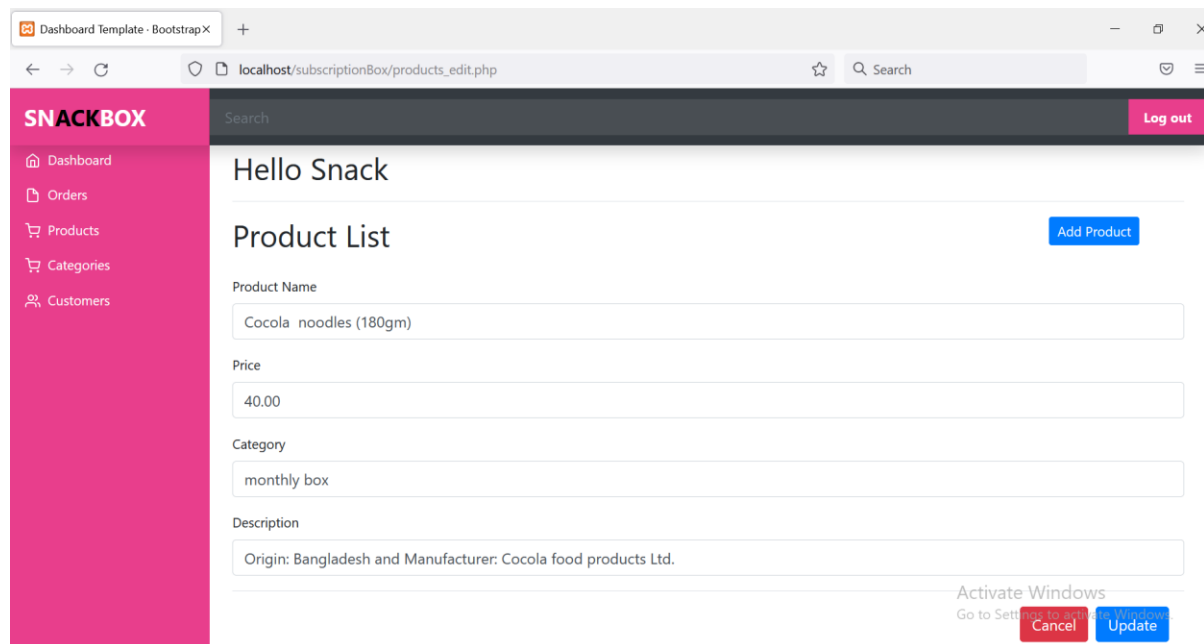


Fig 59: Edit products

After clicking the edit options of any product then admin can change the product name, price, categories and description of any products.

Delete products

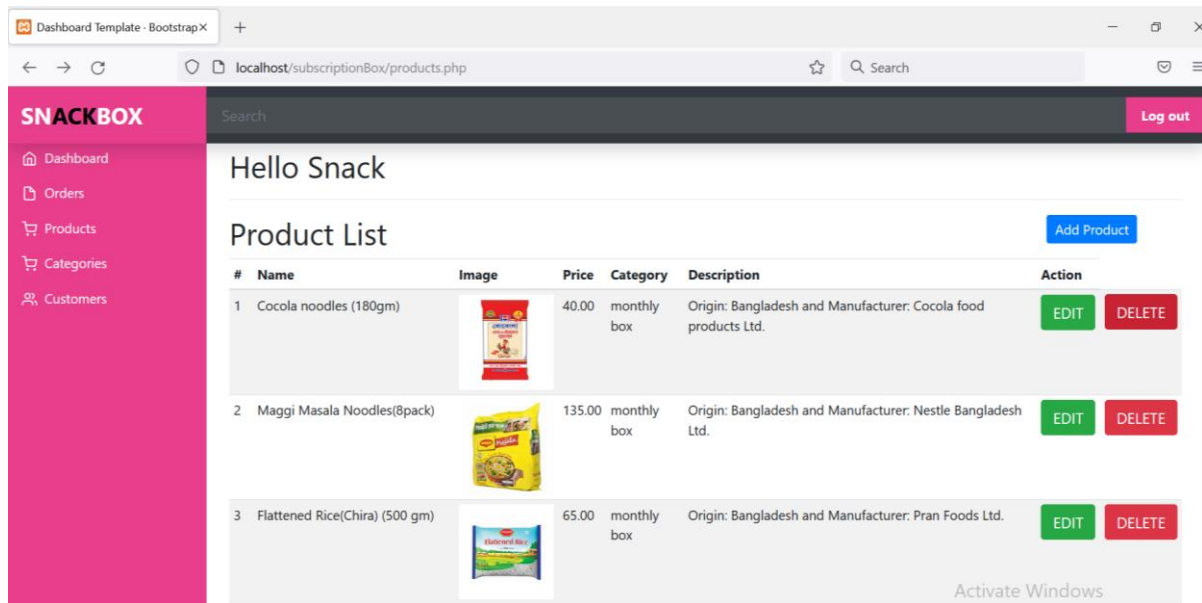


Fig 60: Delete products

If admin want to delete any product option then admin can delete all the information of a product by clicking the delete button from here.

Add product

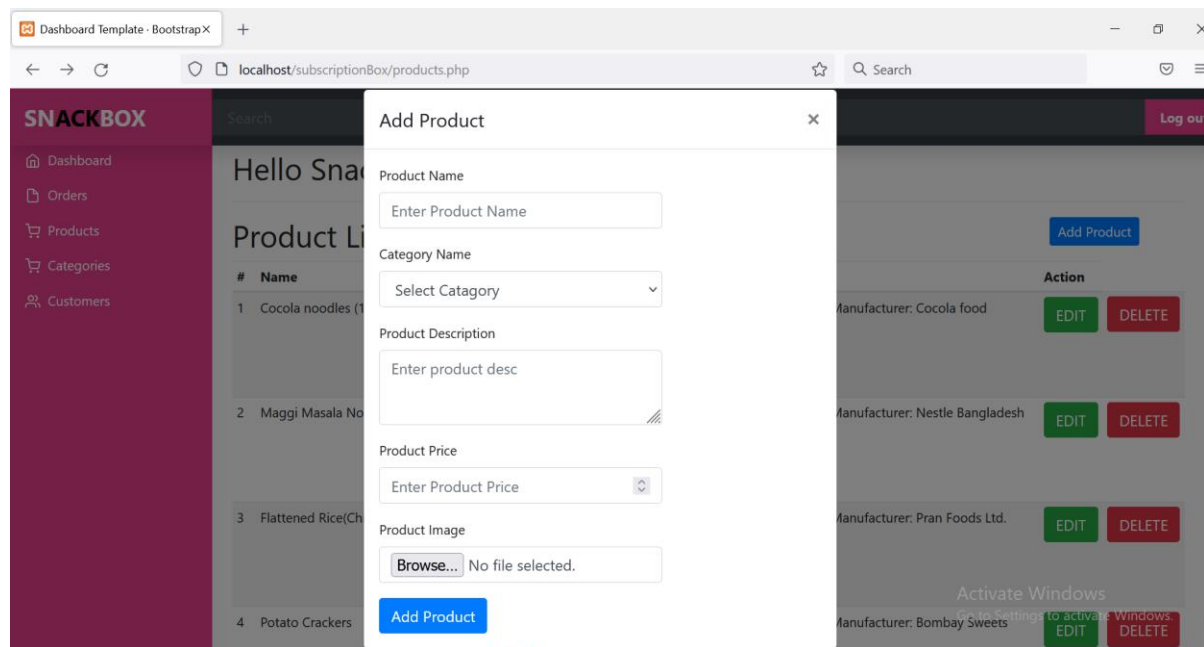


Fig 61: Add product

After clicking the add product button admin can launch a new product in the website but adding product here.

Product categories

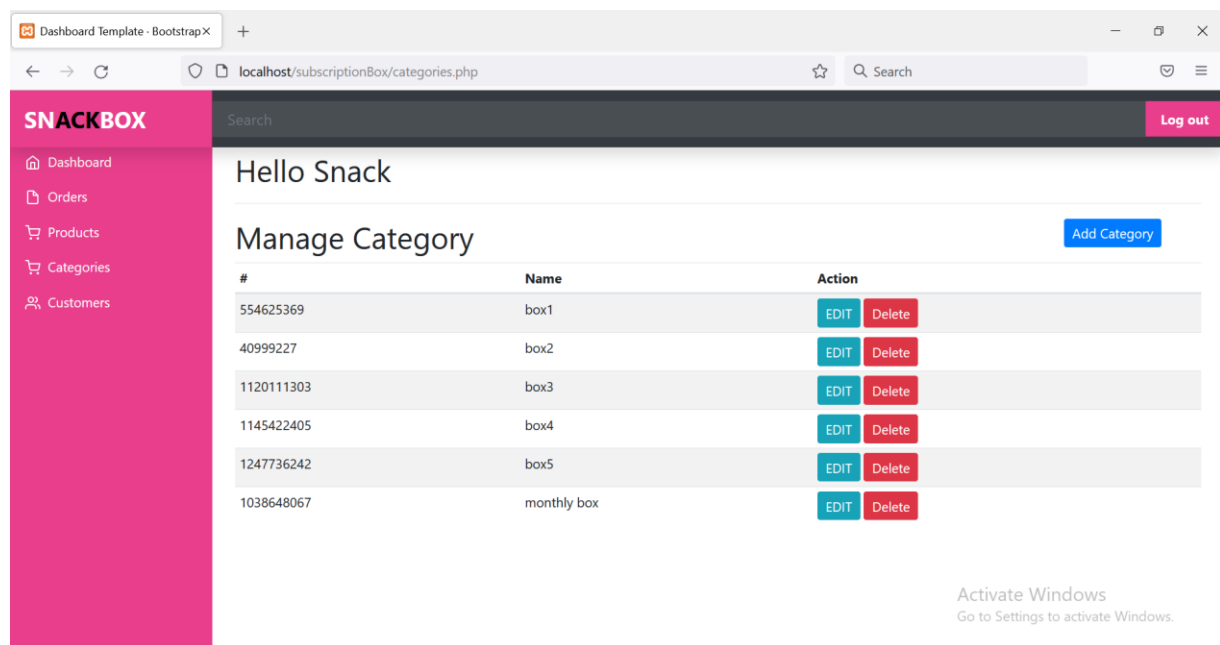
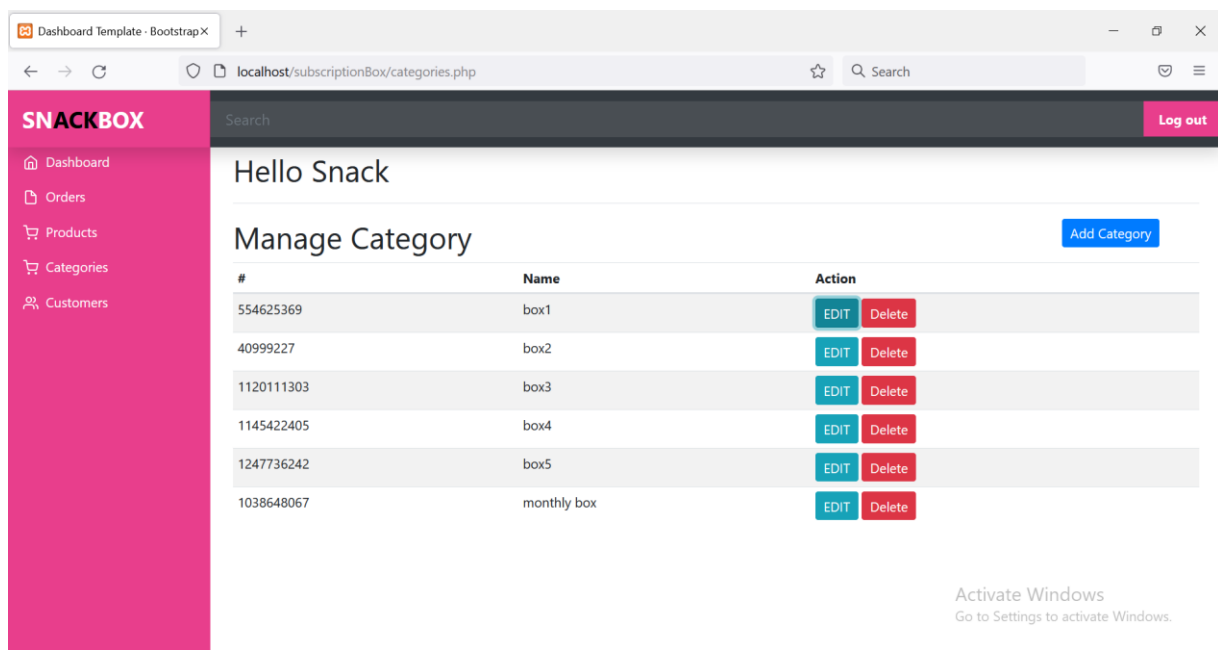


Fig 62: Product categories

This is the Product category section of this admin panel, where admins can get all the information of all products categories.

Edit product categories



The screenshot displays the 'Manage Category' section of the SNACKBOX admin panel. The interface includes a sidebar with navigation links: Dashboard, Orders, Products, Categories, and Customers. The main content area features a 'Hello Snack' greeting, a search bar, and an 'Add Category' button. Below this is a table with the following data:

#	Name	Action
554625369	box1	EDIT Delete
40999227	box2	EDIT Delete
1120111303	box3	EDIT Delete
1145422405	box4	EDIT Delete
1247736242	box5	EDIT Delete
1038648067	monthly box	EDIT Delete

An 'Activate Windows' watermark is visible in the bottom right corner of the screenshot.

Fig 63: Edit product categories

After clicking the edit options of any categories then admin can change the category name against all the products.

Delete product categories

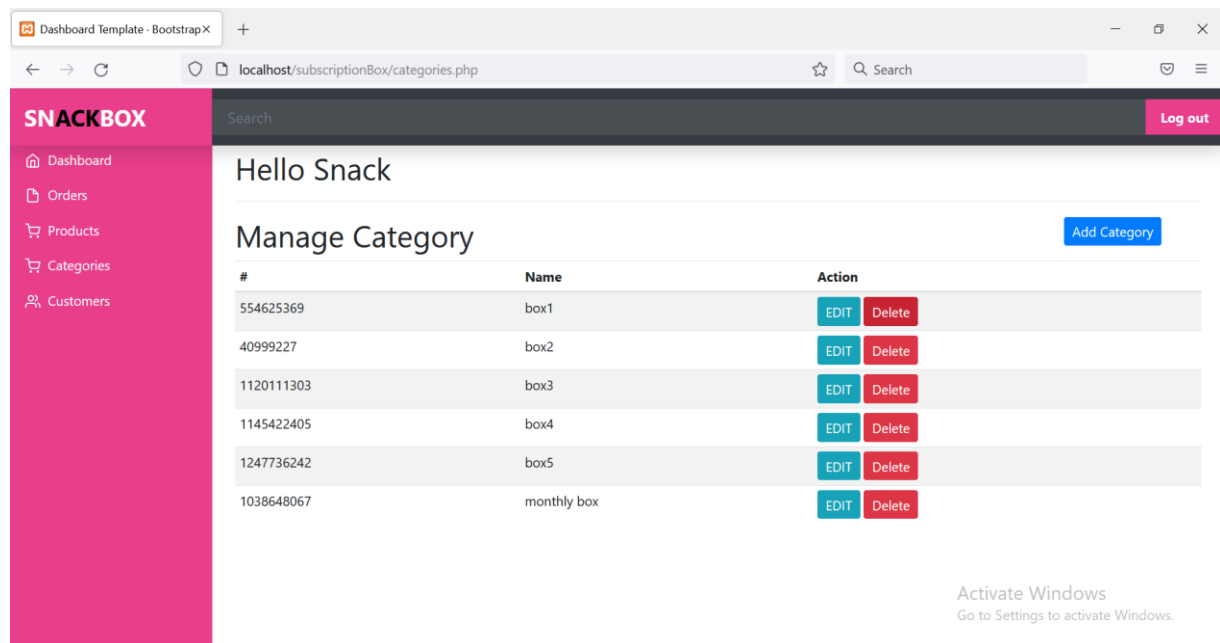


Fig 64: Delete product categories

If admin want to delete any product categories then admin can delete all the information of a category by clicking the delete button from here and also deleted products against this deleted categories from website.

Add product categories

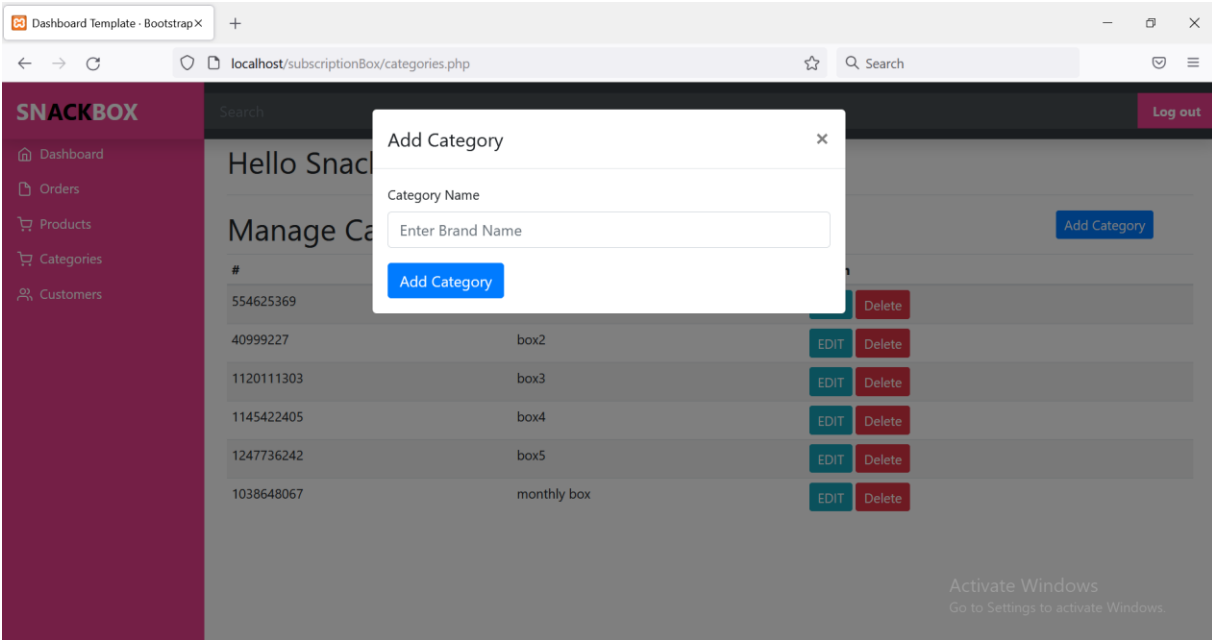


Fig 65: Add product categories

After clicking the add category button admin can launch a new category in the website.

Customer information

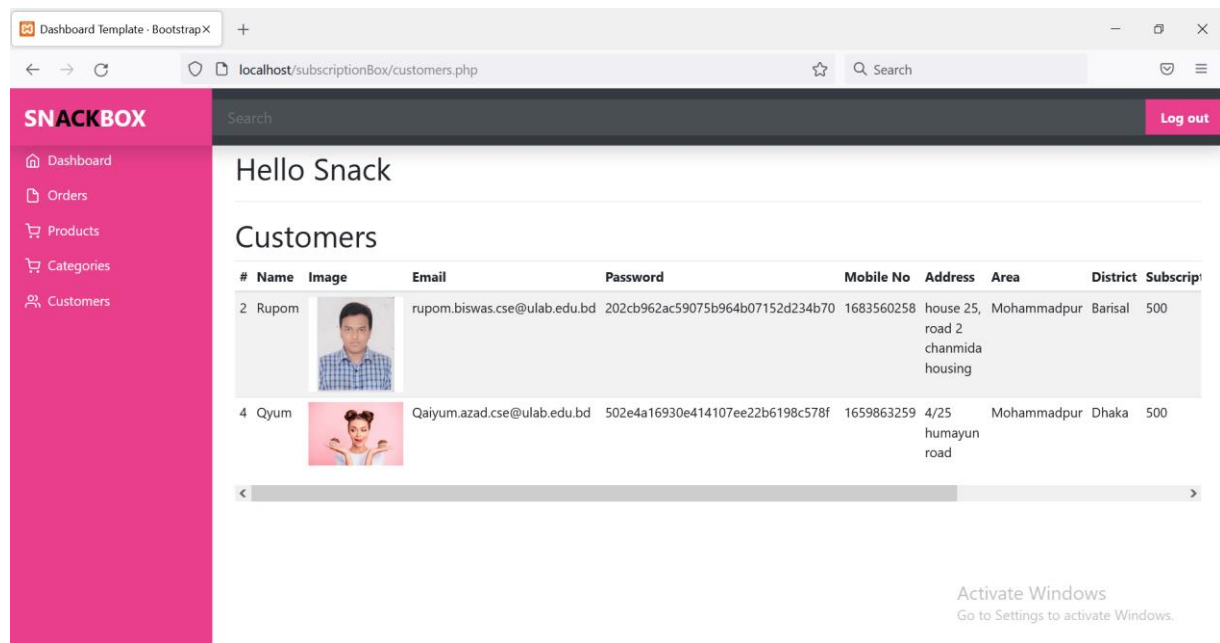


Fig 66: Customer information

This is the users section of this admin panel, where admins can get all the information of all users.

Edit Customer information

Dashboard Template - BootstrapX

localhost/subscriptionBox/customers_edit.php

SNACKBOX

Search

Log out

Username

Rupom

Email

rupom.biswas.cse@ulab.edu.bd

Mobile No

1683560258

Address

house 25, road 2 chanmida housing

Area

Mohammadpur

District

Barisal

Activate Windows

Go to Settings to activate Windows.

Cancel Update

Fig 67: Edit Customer information

After clicking the edit options of any users then admin can change the personal information of any users from here.

Delete Customer information

Dashboard Template - BootstrapX

+

←

→

↺

🔒

📄

localhost/subscriptionBox/customers.php

☆

🔍 Search

🔒

☰

SNACKBOX

🏠 Dashboard

📄 Orders

🛒 Products

📂 Categories

👤 Customers

Search

Log out

Hello Snack

Customers

Password	Mobile No	Address	Area	District	Subscription	Date	Action	
is.cse@ulab.edu.bd	202cb962ac59075b964b07152d234b70	1683560258	house 25, road 2 chanmida housing	Mohammadpur	Barisal	500	2021-10-01 00:52:12	EDIT DELETE
l.cse@ulab.edu.bd	502e4a16930e414107ee22b6198c578f	1659863259	4/25 humayun road	Mohammadpur	Dhaka	500	2021-10-03 21:59:10	EDIT DELETE

◀

▶

Activate Windows

Go to Settings to activate Windows.

Fig 68: Delete Customer information

If admin want to delete any users from the website then admin can delete all the information of any users by clicking the delete button from here and after clicking the delete button also deleted all the activities of that user from the website.

Logout

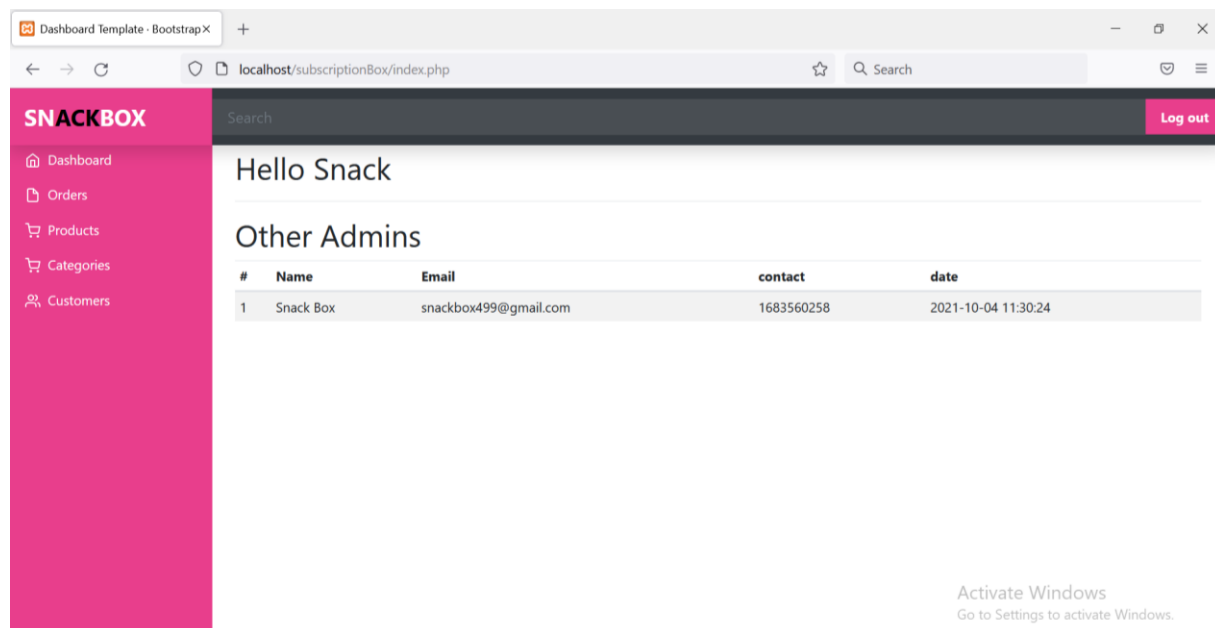


Fig 69: Logout

After completing admin working, if admin want then admin can logout from the website by clicking logout button.

5.3 Testing Implementation

Software testing is a process for verifying whether or not a software product fits the requirements and is defect-free. The purpose of software testing, in contrast to actual requirements, is to detect errors, gaps, and missing requirements [13].

Testing is a crucial stage of development in which programmers run a program locally to find defects that prevent the application from performing as expected.

The ultimate goal of testing, regardless of the development process, is to confirm that everything has been developed according to plan. 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. Unit testing is the part of white-box testing where individual software units are tested. The ultimate goal of this testing is to ensure that each unit of software code works as intended.

5.4 Test Results and Reports

Several levels of testing are as follows:

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 (SnackBox).

TEST MODULE	TEST CASE	EXPECTED RESULT	TEST RESULT
USERS	Provide details for signup	Users successfully registered	PASS
USERS	Providing an invalid email or password is not matching with a ,confirmed password	A displays error message like invalid email or password does not match	PASS

USERS	Upon successful login upload profile photo	Users uploads profile photo and save	PASS
USERS	Edit personal info's and change password	Users edit and save info's properly and after changing the password user can log in	PASS
USERS	Users forget password and update the new password	Users updates password by email authentication and log in with the new password	PASS
USERS	Users choose a subscription package and choose a category what they want	Users can choose any package and choose any categories of products they want	PASS
USERS	Users can add to the cart the products they choose and order those products.	Users can use add to cart system and order system.	PASS
USERS	Users can order unlimited products they want.	Users can order only between the subscription amounts they subscribe to.	FAIL

Table 6: Unit testing of users

Table 7 is the chart of tests cases, expected outcomes, and achieved results regarding all users related functions.

TEST MODUL E	TEST CASE	EXPECTED RESULT	TEST RESULT
--------------------	-----------	--------------------	----------------

ADMINS	Admin can sign up	Admins can registration own.	FAIL
ADMINS	Providing an invalid email or password is not matching with a confirmed password	A displays error message like invalid email or password does not match	PASS
ADMINS	Upon successful login upload profile photo	Admin uploads profile photo and saves	FAIL
ADMINS	Edit personal info's and change password	Admins can edit and save their info's properly and after changing the password users can log in	FAIL
ADMINS	Users forget password and update the new password	Users updates password by email authentication and log in with a new password	PASS
ADMINS	Admin can edit and delete users chosen subscription packages and chosen categories.	Admin can edit and the order information of users	PASS
ADMINS	Admin can edit and delete the user's personal information and also delete the profile of users.	Admin can edit users and delete all the information of a users	PASS
ADMINS	Admin can order and add different categories of products and also add categories. Also can delete any products.	Admin can edit and delete any products and any categories. Also, add both.	PASS

Table 7: Unit testing of admins

Table 7 is the chart of tests cases, expected outcomes, and achieved results regarding all admin-related functions.

Chapter 6: Impact on Society, Environment and Sustainability

6.1 Impact on Society

This project is based on people's daily food choices. What they want and what they need is only our main goal to reach their satisfaction with our honesty. The subscription system gives away more opportunity to all categories of people in our society who are busy in their daily life, it will reduce their pressure to find and buy their necessity food into the market which may take a longer time to find. This project offers a subscription starting amount of buying a food package is at 500/= BDT which will be preferable for every standard people who struggle in their daily life with their financial balance. This package will be also 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 subscription box allows buying food at the lowest amount like 500/= BDT, and also offers a high ranged food package which is at 1000/= and more than that. This website offers some special boxes according to their subscription category. So in this case, if someone chooses a package of 500/=-, they will have some special boxes within this range. Also, this site has an unsubscription method in case someone is not willing to buy food from here anymore or someone no longer has any satisfaction.

This 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 our main goal. To serve society and their people, we 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 with their daily life. This project gives no hamper or any other risky issues to our environment. We can call this an environmentally friendly project since this does not affect the environment. We already mentioned some benefits for the society which will be served by our website. We believe that people should be helpful from every aspect of their life, like socially, financially, and environmentally. We wish people would be very helpful financially and also socially but currently, we are thinking of some future implementation in our business method which will be great for the environment. Like, we will think of reducing the use of plastic and more use of our products that are made by our people with jute. Jute bags are very helpful for our environment. After our project establishment, we will start to use jute bags and no use of plastic will be our one motive for our environment. This reason shows our project as an environment-friendly project which is our pride for the country and us. We will also ensure the delivery man with proper hygiene during this corona pandemic. All kinds of precautions will be served by us and our workers.

6.3 Ethical Aspect

Every business with proper ethics can get their cherished success. Same for the project building also cherished some success with their ethical terms. We 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, we managed to keep the database secure with the user information. We applied some hashing methods to keep safe user id, names and some private information. That information will be provided by our customers and they also cherish, good security of their information like their phone number, password, bank or bkaash account (for online payment method) from us. That's why when saving all the information we 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 our website, we 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. We ensure customers with our honesty that we will bring fresh and quality food to them in time. We also provide an option of un-subscription in case they are no anymore willing to buy food from us. We are not pressurizing them to subscribe with us for a long time without their concern through their activity. We also will check out their activity on our website and also ask them if we are serving them properly with our FAQ questions. The FAQ questions will mark their answer and also we 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. We 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

A sustainability plan refers to a statement of how we serve the community and our customers for a longer period. We choose a topic where people from all stages of life can get a satisfactory service from us which makes us survive in this challenge for a long time. We planned to refer to a quality full and quantity full arrangement for them to satisfy their heart. Before coming to this implementation, we did a short survey on more than 100 people about their choice and their knowledge of the subscription box/website. We 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 we designed this project and tried to implement their choices into our website. Then we also managed to give some FAQ questionnaires to ask them if they are satisfied with our service. If their response is satisfactory then we will manage to do this and if not satisfied then we will ask them what we should do to satisfy their heart with our food service. We will ask for their choice, their satisfaction with quality service and also the delivery system. We also have some upgrade options in case of their switching to another subscription package to our website. So this is how we will serve our customers for the long term.

Chapter 7: Conclusion and Future Scope

7.1 Discussion and Conclusion

Subscription box is an online based website where all kinds of food packages are available into some budget ranges. We designed this website for all classes of people in Bangladesh. The designing part of this project was done with some html languages and CSS. The backend was implemented with JavaScript and we used a MySQL database. There are 2 users- customer and admin. So we designed the site for both of them and set their information in a database. We tried to manage the security issues of the customer so that they had all personal information like phone number, address, package information and password. This is very essential for them to believe in our service and get known with our business.

We designed the packages which start at 500/= BDT and also have some packages at 1000/= and more than that. So people can be benefited with their budget issues. We also wish to give the best quality of food and fresh food will be delivered with maintaining proper hygiene. During this corona time, people expect this and we also cherish doing business with a healthy service. This project has a very user-friendly front end which makes it easy to understand the basics of our website. Also a FAQ questionnaire will be set by us to get feedback from our customers so that we can connect with them. We also will check their activity and also observe the un-subscription ratio in daily life which should be in limit. If the un-subscription rate increases daily, we will try to figure out the issue and try to solve this. Interacting with customers will help us to grow our website day by day. People will also be satisfied with our improvement through all those steps. Hopefully everyone

will love to communicate with us and our subscription based website will do a good profit in its own method.

7.2 Scope for Future Development

Website has some challenges in its implementation period. After building a website and publishing it, way more challenges may come our way. We already built a website where we implemented almost everything we planned. We are planning for tracking the order system to implement in future. This tracking method will be helpful for making the customer get known with their order delivery process and also be assured about 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.

We will also add some other categories of food which are healthy for consuming. Some foods are not available in our nearby shop, so we 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. We will try to keep them in stock after getting the orders from the customers. Basically we will try to increase our stock according to all our customers after establishing our business in a proper way.

References

1. The free encyclopedia, Subscription, 7 July 2021, Wikipedia
https://en.wikipedia.org/wiki/Subscription_box
2. Daniel M. McCarthy, Peter S. Fader, & Bruce G.S. Hardi, December 2016, Valuing Subscription-Based Businesses Using Publicly Disclosed Customer Data,
https://www.researchgate.net/publication/311782314_Valuing_SubscriptionBased_Businesses_Using_Publicly_Disclosed_Customer_Data
3. Shainne Jennifer Elizabeth, 28 September 2021, <https://www.lmbeautyobsessed.com>
4. Tim, August 2018, <https://www.dollarshaveclub.com/>
5. Birchbox, 2 September 2021, Online, <https://www.birchbox.com/>
6. Birch box, 2 September 2021.wikipedia,
<https://en.wikipedia.org/wiki/Birchbox>
7. Dollar Shave Club, 2 September 2021, Wikipedia
https://en.wikipedia.org/wiki/Dollar_Shave_Club
8. Shainne Jennifer Elizabeth, 28 September 2021, Online, <https://www.lipmonthly.com/>
9. Chaldal, 2 september 2021, Online, <https://chaldal.com>
10. Chaldal.com, 2 september 2021, wikipedia, <https://en.wikipedia.org/wiki/Chaldal.com>
11. Kazi shahid Ahmed, 1979, Meena Bazar,
<https://gemcongroup.com/businesses/retail/>

14. MD. Rezanul Alam, 26 th September 2020, study solve,

<https://studysolve.online/php-and-mysql-database-tutorial-bengali-book-pdf/>

15. Julie C. Meloni, 2012, Sams Teach Yourself HTML, CSS and JavaScript,

<https://www.doc-developpement-durable.org/file/Projets-informatiques/cours-&-manuels-informatiques/html>.