BGC TRUST UNIVERSITY BANGLADESH

Software Development Project II

Pre Cart (ecommerce site)

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ABSTRACT

Pre Cart is a Business to Consumer online E-commerce application which is designed for creating a smart online shopping opportunity for consumers. This shopping platform has a lot features for consumers. The system is developed using PHP, HTML, CSS, and JavaScript etc. It helps Customers who want to buy their necessary products in a user-friendly manner. The customers can simply visit the system, choosing products from any category, register for order, and log into their accounts and finally can make payment of their purchased amount. The customers can edit their order list before order confirmation. It provides 24x7 supports. Customers can make inquiries about any products or services and place orders anytime, anywhere from any location. The present shopping website includes a range of electronic items, garments of all age groups, home appliances and other necessary products that consumers require on a daily basis. This online E-commerce system may be a complete solution for a customer, which provides a flexible, safe and user-friendly environment.

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CHAPTER 1

INTRODUCTION

1.1 ABOUT THE PLATFORM

The project ***Pre Cart*** is about daily online shopping which is a web-based digital shopping system. This system is designed for making shopping easy and convenient for buyers. By using this web application buyers and sellers will be benefited. The project is developed by using the most popular web programming language PHP. The user-friendly interface and functionality helps users and admin to manage the application easily.

1.2 OBJECTIVES

The objective of the project ***Pre Cart*** is to simplify shopping system that helps the customer to order products and also the sellers to manage the sell easily and paying the bill using online devices like Computer, Smartphone, and Tablet etc. Though a few days ago, people thought that shopping is going to market physically and buy the necessary products or service by the exchange of money in a specific time. But nowadays, the act of purchasing products or services over the internet. Online shopping has grown in popularity over the years, mainly because people find it convenient and easy to bargain shop from the comfort of their home or office. One of the most enticing factors about online shopping, particularly during a holiday season, is it alleviates the need to wait in long lines or search from store to store for a particular item. In addition, the seller may

not go to the specific location in a particular period to sell their products. In online shopping, sellers get their freedoms to sell their products 24/7 in a week from anywhere.

There are several objectives of the project. They are as follows: -

⇒ To provide a user-friendly interface to look at different products which the consumer buy.

⇒ To give an opportunity to open an account if any products are chosen by a customer through online.

⇒ To give an opportunity to pay product price via online without being physically present in a specific place.

⇒ To make the shopping system hassle free and time saving.

⇒ To help the sellers to sell their products anytime over online also on a holiday.

1.3 EXPECTED OUTCOME

This project is mainly designed to change the as usual definition of shopping. Moreover,

⇒ Its main expectation is the outcome of this project brings comfort to our busy life by saving our valuable time and energy.

⇒ Know about the product details and exact price from office, home and anywhere.

⇒ Buy and sell any products from any location over the world.

⇒ Buy and sell products any time on a holiday.

⇒ Enjoy the product discount and low sell cost.

⇒ Easily find the necessary products using search.

⇒ Online payment system helps t buyer and sellers as well as pay and receives the bill.

⇒ No need to the physical gathering to sell or buy products.

1.4 REPORT LAYOUT

⇒ **In chapter 1**, I discussed the objectives and expected outcomes of the *Pre Cart* e-commerce project.

⇒ **In chapter 2**, there will be a discussion about the background of the project, the scope and challenges. Also, the discussion about the similar project and related work.

⇒ **In chapter 3**, Requirements of this project is discussed.

⇒ **In chapter 4**, discussion about the e implementation of the proposed system and after complete the system how I can test the system.

⇒ **In chapter 5**, finally in this part the conclusion will come. In addition, the scope of farther development in the future of this project is discussed.

CHAPTER 2

BACKGROUND

2.1 INTRODUCTION

The ***Pre Cart*** is PHP based application. The application enables to buy any product at anywhere. This is the online marketplace where you can buy the product for your need. This is only a summary of ***Pre Cart***, so there is so many featured, which is, not include right now. ***Pre Cart*** will come with all the required featured very shortly like Daraz, eBay. The modern online life easier the online shopping system and make it more reliable for the consumer.

2.2 RELATED WORKS

This is not important to denote how website product is selling. Facebook like an e-commerce as I see most of the people are buying their product using Facebook, Vk and so many social media. E-commerce concept is electronic commerce there are so many classifications I will consider it below description.

2.3 COMPARATIVE STUDIES

Electronic commerce, combined with mobile commerce, is probably going to become a serious business development across the world within the close to future. The Asian and other country is presently in the midst of an e-commerce and m-commerce revolution. The web has introduced a major wave of the amendment. Communication patterns have modified and interaction with companies happens via internet sites. As a result, the web is driving the creation of recent channels that reach the scope and scale of commerce to e-commerce then m-commerce. The web has enabled makers, retailers, wholesalers, and suppliers to speak and interact their business higher, quicker and cheaper during a wide-range of markets. Its Scepter is the shoppers by giving them access at any time and a wider alternative of merchandise and services than before. Without a doubt, each e-commerce and m-commerce are at an emerging stage in an Asian country, however, these have immense growth prospects within the country.

2.4 SCOPE OF THE PROBLEM

E-commerce websites have different types of problem.

- ⇒ First it is necessary to ensure your internet connection when customer or client wants to see the product and have to order that produces the needed some electronic device such as a smartphone, laptop etc.
- ⇒ Sometimes it fetches some problem such as location tracking and product delivery.
- ⇒ It is difficult to maintain the website.

2.5 CHALLENGES

In today's world, in conditions of globalization, the economy has gained new opportunities on the Internet. The implementation of the economic activity, thanks to the latest information technology, makes it more efficient and profitable. The relevance of this topic is due to the fact that a new sector has emerged in the world economy e-commerce, which is one of the components of the "new economy", gaining more and more practical significance.

The electronic market is not strong enough in comparison with the traditional market. Its potential is realized not for the end for several reasons: -

1. There is no development of the regulatory and legislative framework, which leads to the problem of protection of intellectual property rights for goods or services that are realized in the framework of electronic commerce, as well as financial and contractual problems. As a result, there is a lack of confidence on the part of investors, potential buyers, and the pace of development is declining.
2. There are problems that are associated with the global concept of e-commerce. These include - the lack of confidence that in other parts of the world the partner company and the product or service that it offers are actually existing, differences in traditions and rules for doing business in these companies.

CHAPTER3

REQUIREMENT SPECIFICATION

3.1 BUSINESS PROCESS MODELING

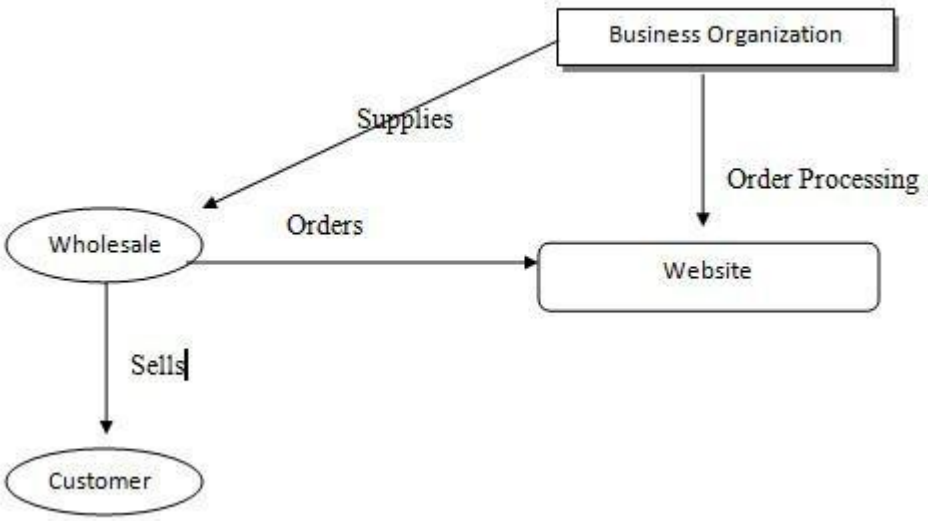

Fig 3.1: *Business Process Modeling*

I have cleared the type of ecommerce. I must define the ***business model*** but depending on the destination of the product and to whom it is directed, the business model changes. For starters, I must define ourselves as manufacturers, distributors or retailers of products, services or content.

3.2 REQUIREMENT COLLECTION AND ANALYSIS

The state and prospects of development of electronic commerce in various countries of the world are considered. Proposals have been developed to improve the constituent elements of electronic commerce of the production and trading enterprise. E-commerce is a trending and promising direction for the development of domestic enterprises and it must be taken into account in marketing strategies. The rapid development of e-commerce in various countries of the world is characterized by an increase in the penetration rates of the Internet in all areas of activity; growth in the volume of the market; the development of electronic commerce as one of the components of e-commerce. In the course of the study, special attention is paid to electronic trade in food products. The object of research was selected products of the company "Typhoon-2000", which is presented in traditional and Internet shops. The competitiveness of online stores in terms of assortment and prices for the products of Typhoon-2000 was evaluated. Analyzed and developed proposals to improve the website of Typhoon-2000 as an important e-commerce tool. The proposed measures comply with the requirements of B2C and C2C-E-commerce. With the aim of developing C2C- E-commerce.

PRODUCT ANALYSIS

First of all, I have to choose which types of product I am willing to publish or sell on my websites and then I have to categories of this product. I have to add that product by their own categories also; I have to summarize their price also. In fashion categories there are three types such as Women wear, Kids Wear, men wear etc. Also, decorate their Brand and price value.

CUSTOMER ANALYSIS

The article considers client experience and its influence on customer loyalty in relation to the online store. The technique of work with data on the history of purchases of customers of the Internet store. Significant factors of the analysis of buyers' behavior, features of determining the characteristics of customers are shown. The content of the article. IntroductionPurchase history and its presentation in CRM systems Distribution of the share of successfully completed orders in the sample Analysis of customer behaviorConclusionClassification using the decision tree. The structural matrix of correlations for the obtained discriminate functionClassification using discriminate functionsLiterature.

TRAFFIC ANALYSIS

Traffic analysis is a process whose importance is known to any IT professional, regardless of whether it works in a small company or in a large corporation. After all, identifying and correcting problems with the network is a real art, which directly depends both on the instinct of the specialist himself and on the depth and quality of the data, he operates. In addition, the traffic analyzer is exactly the tool that this data provides to you. A clever solution for analyzing network traffic can not only help you figure out how packets are sent, received and how securely transmitted over your network, but will also allow you to do much, much more!

WEBSITES OPTIMIZATION ANALYSIS

The plan includes the preparation of a detailed technical assignment for the following items:

- Site structure
- The page links diagram of the site (Mind Map)
- Optimizing URL
- Formation of human-understandable URL (CNC)
- Forming static URLs from dynamic URLs
- Optimizing internal links
- Breadcrumbs
- Optimizing pagination pages
- Optimizing filters
- Multilanguage site
- Generating sitemaps
- Generating an HTML sitemap
- Creation of XML sitemap
- Forming an XML image map
- Forming an XML map of video materials
- Internal analysis of the site: technical component
- Configuring 301 redirects
- Robots.txt file
- Restriction of indexing of individual pages of a site by search robots
- Limiting the ability to go to indexed pages by search engines
- Optimizing Outbound Inbound Links
- Generating correct HTTP headers
- Definition of canonical URLs
- Error pages
- Error page 404
- Page 50X Errors

- Optimization of code and speed of site load
- Internal analysis of the site: the content component
- Tags (Title, H1) and meta tags (Description, Keywords)
- The structure of the headings on the page
- Optimizing images
- Addresses of images
- Alt and title attributes for images
- Integration with search engines and social networks
- Micro-markup of information on the site
- Micro fine bread crumbs
- Micro display of organization contacts
- Micro profile of profiles in social networks
- Micro device of the company logo
- Micro display of goods
- Micro device reviews and ratings
- Open Graph
- Like / share-buttons of social networks
- Follow-buttons groups in social networks
- Setting up web analytics systems
- Google Tag Manager
- Google Analytics
- E-commerce for tracking sales in Google Analytics
- Tracking events via Google Analytics
- Setting Goals
- Server Error Tracking 404

3.3 USE CASE MODELING AND DESCRIPTION

A Use Case Diagram sometimes called unified modeling language (UML) is a graphical representation of a system action and user's roles. It is a simple representation of a system's user interaction with the system. A use case shows the list of actions or events and role of the user's with these actions.

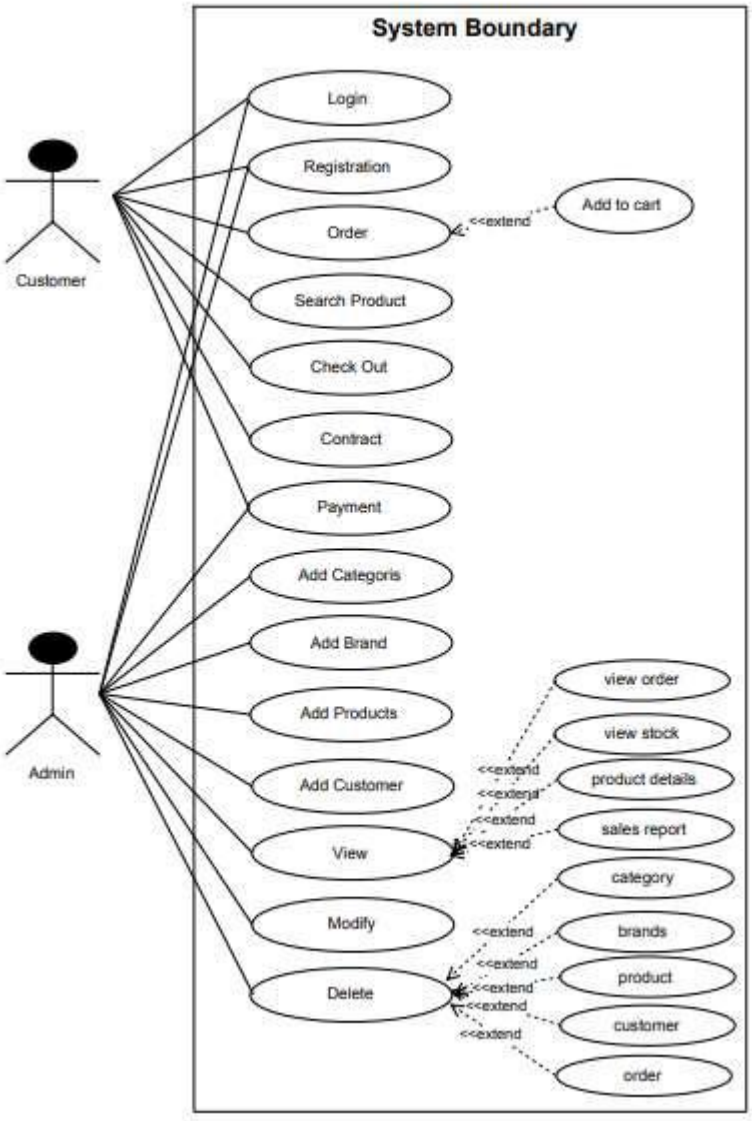

Fig 3.2: *Use Case Modeling and Description*

3.4 LOGICAL DATA MODEL

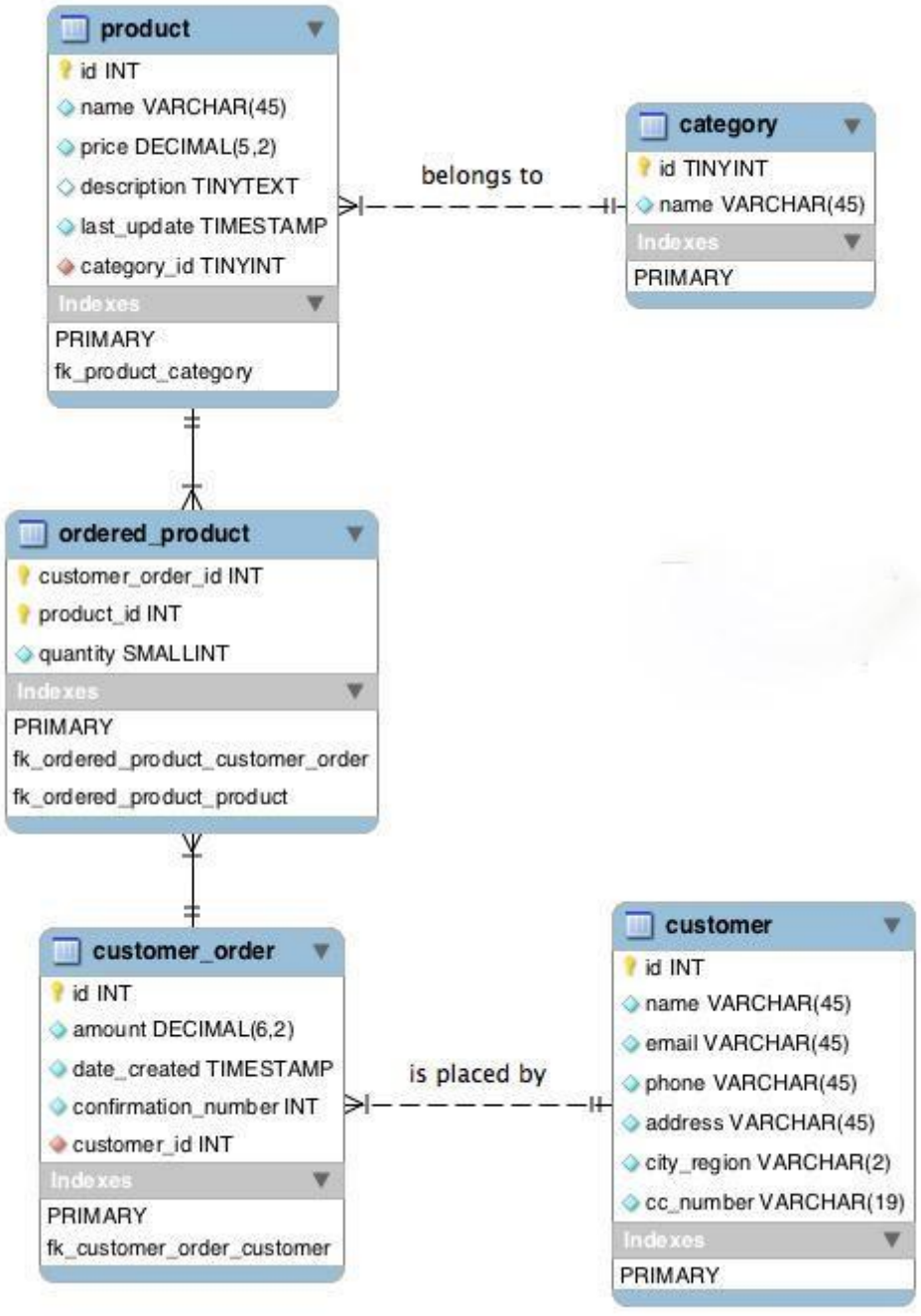

Fig 3.3: *Logical Data Model*

CHAPTER 4

IMPLEMENTATION AND TESTING

4.1 IMPLEMENTATION OF FRONT-END DESIGN

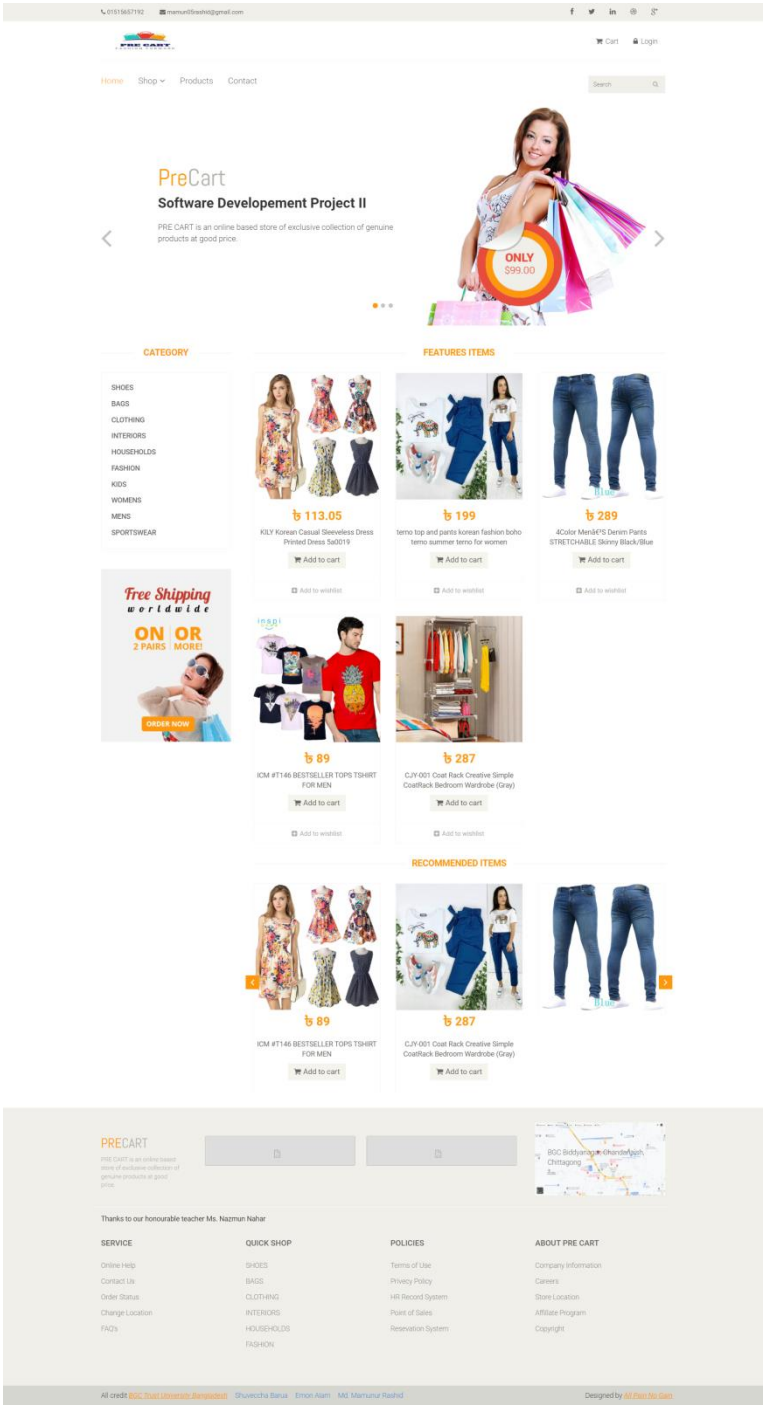

Fig : 4.1: ***Pre Cart***

4.2 SCREENSHOTS FROM THE PROJECT

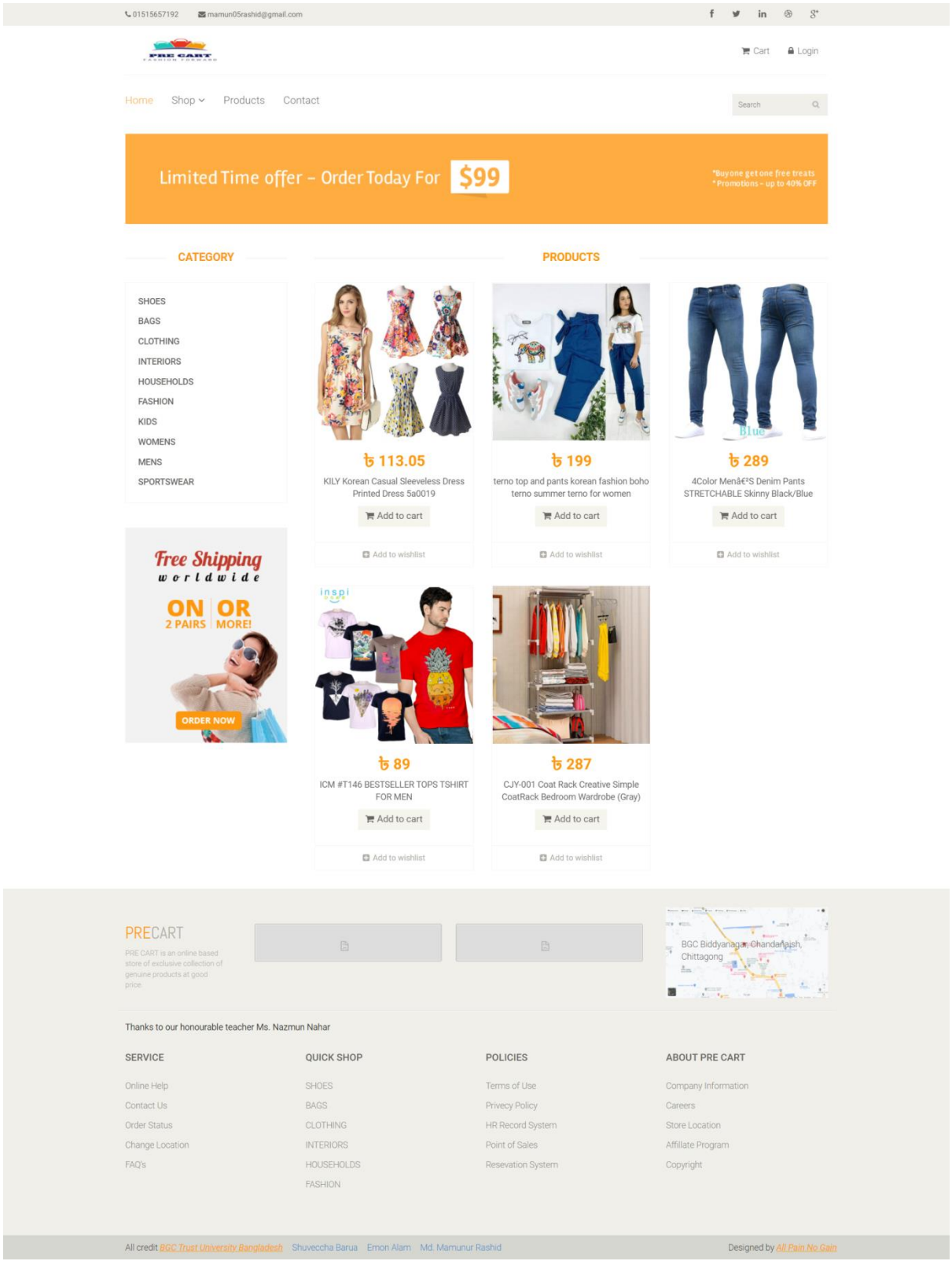

Fig 4.2: ***Products***

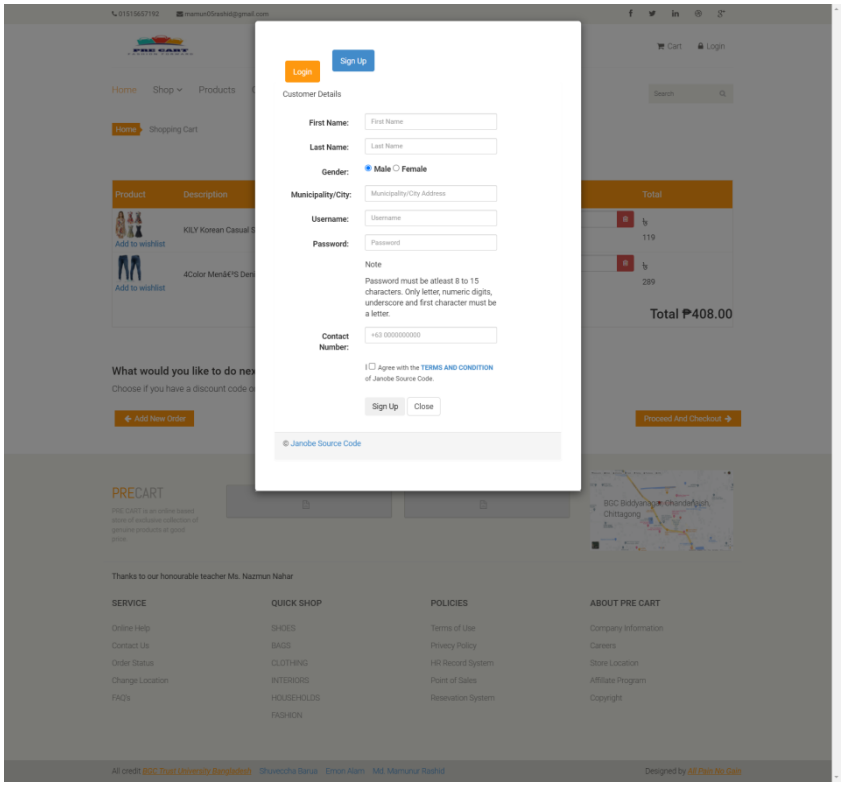

Fig 4.3: *Sign Up for New Customer*

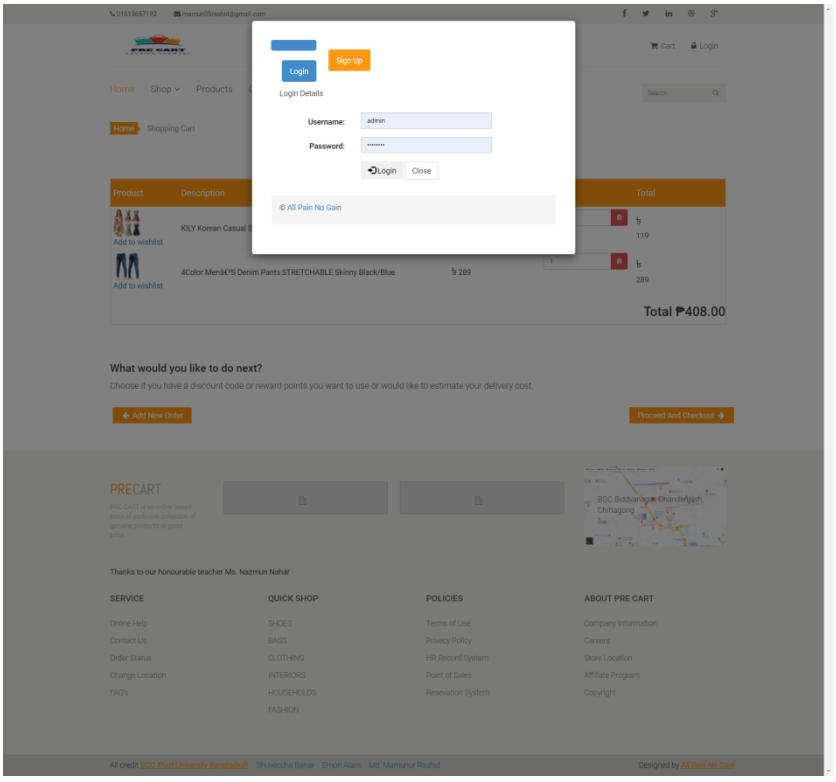

Fig 4.4: *Login for Registered Customers*

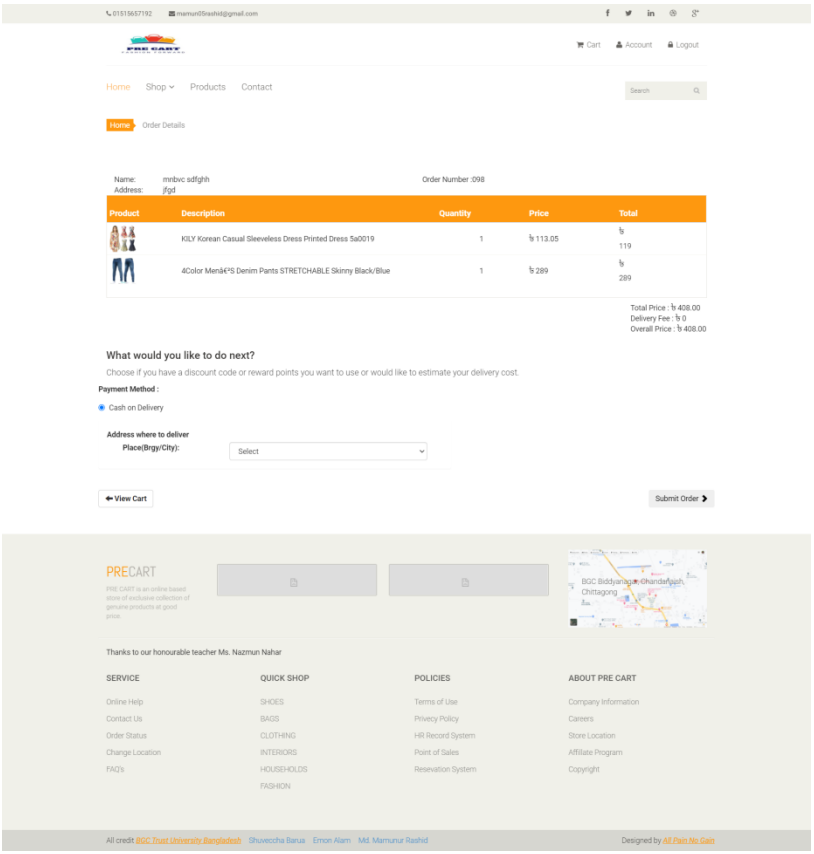

Fig 4.5: *Items in Cart with Payment Getaway*

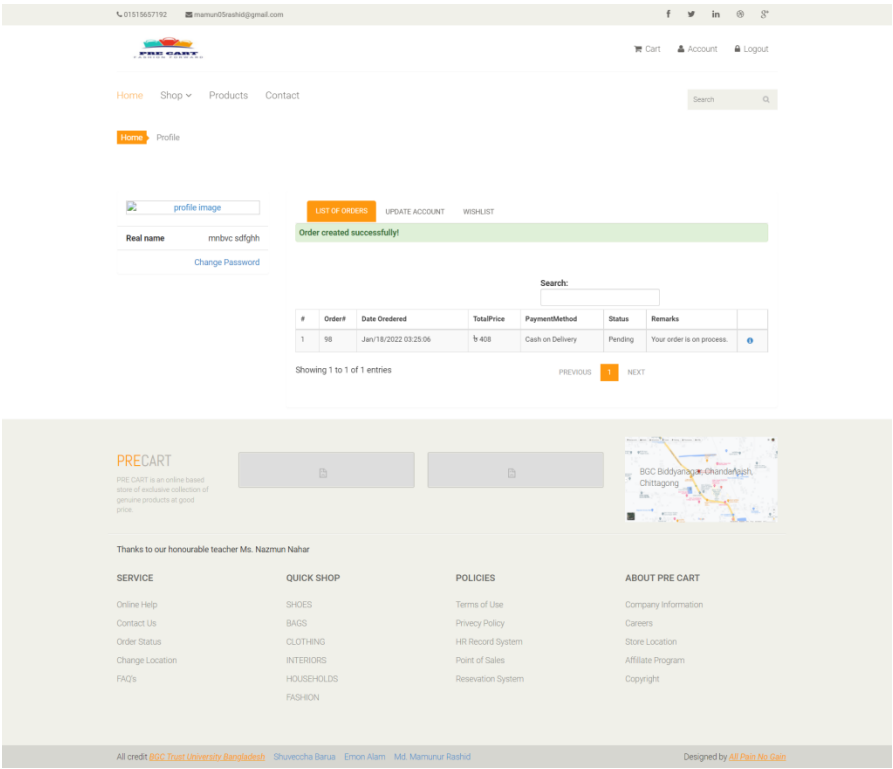

Fig 4.6: *Successful Purchase*

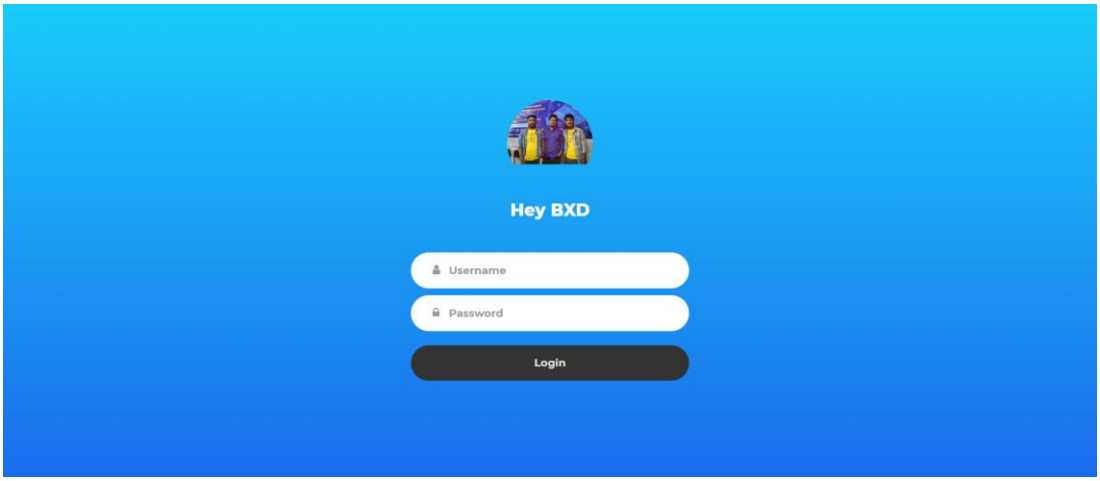

Fig 4.7: *Administration Login*

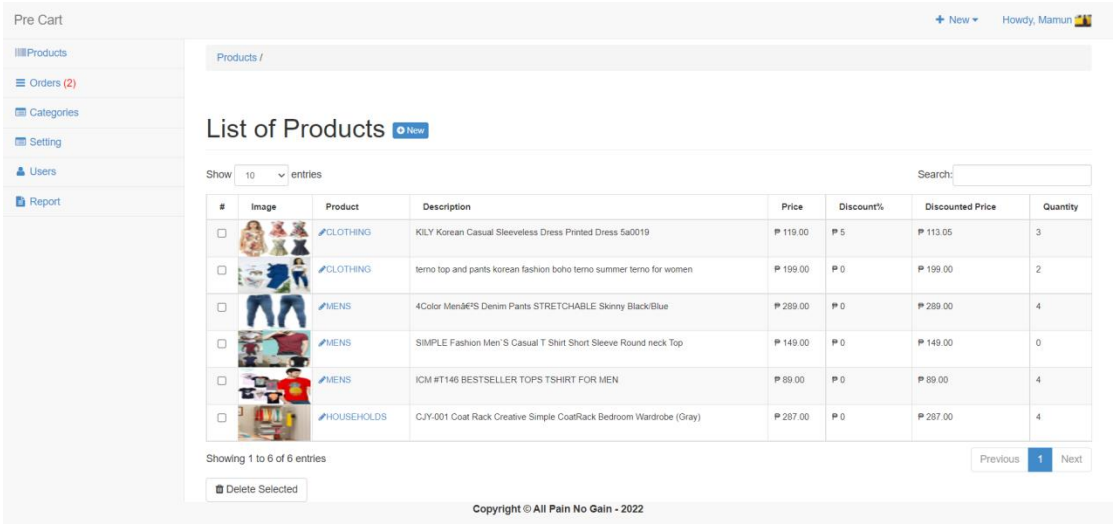

Fig 4.8: *List of Products*

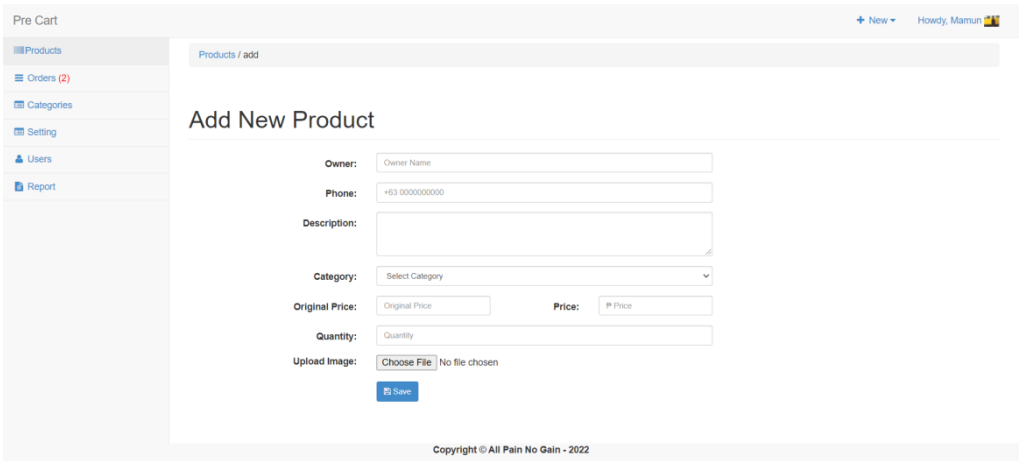

Fig 4.9: *Product Add*

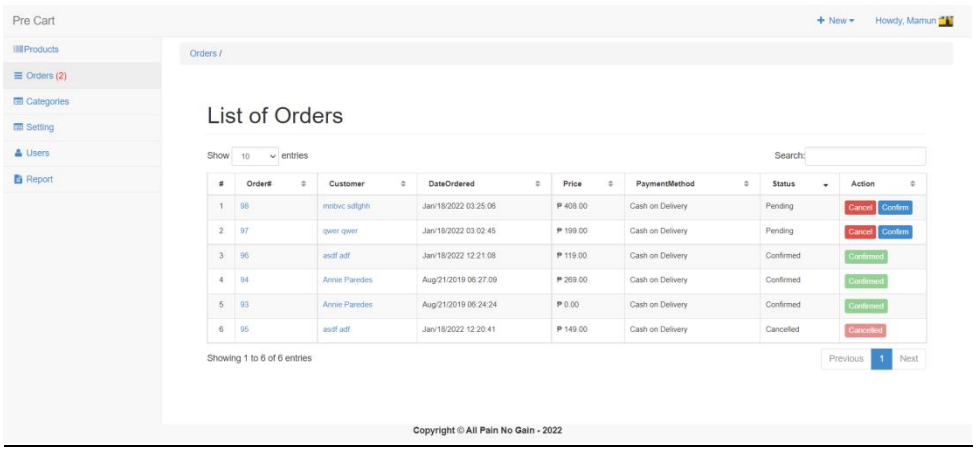

Fig 4.10: *List of Orders*

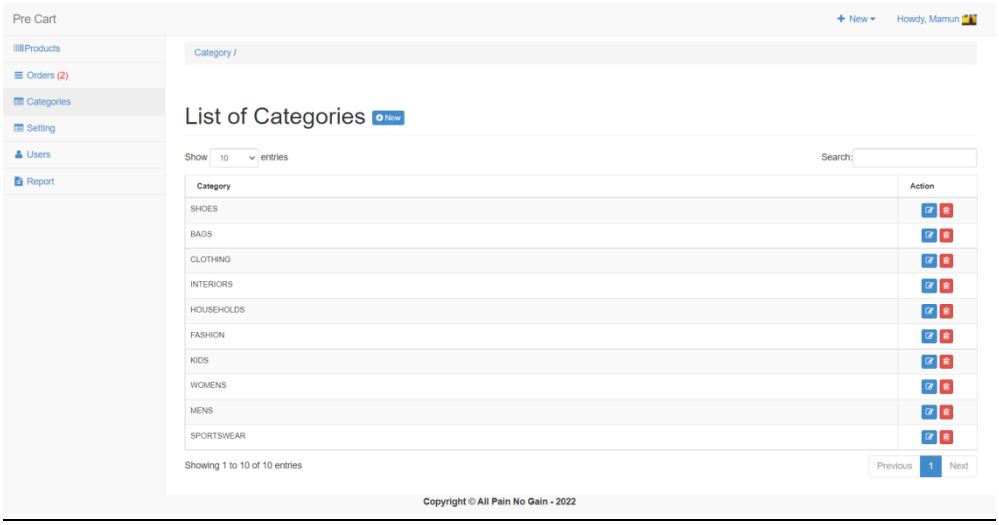

Fig 4.11: *List of Categories*

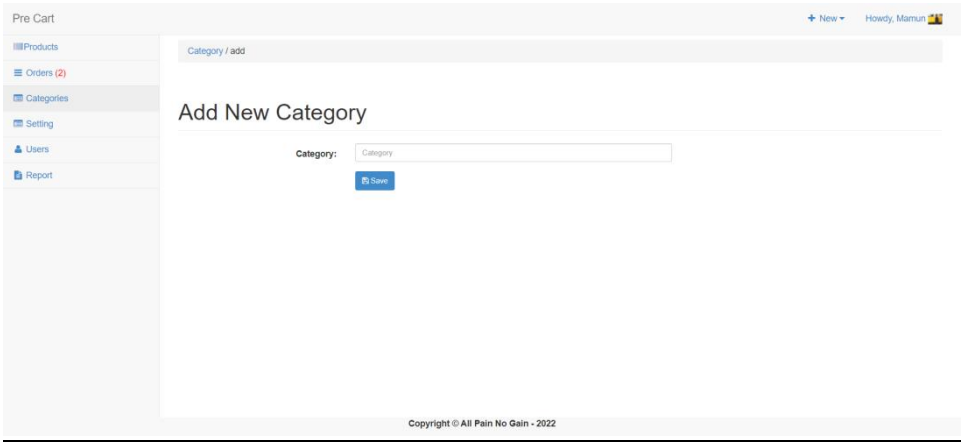

Fig 4.12: *Add New Category*

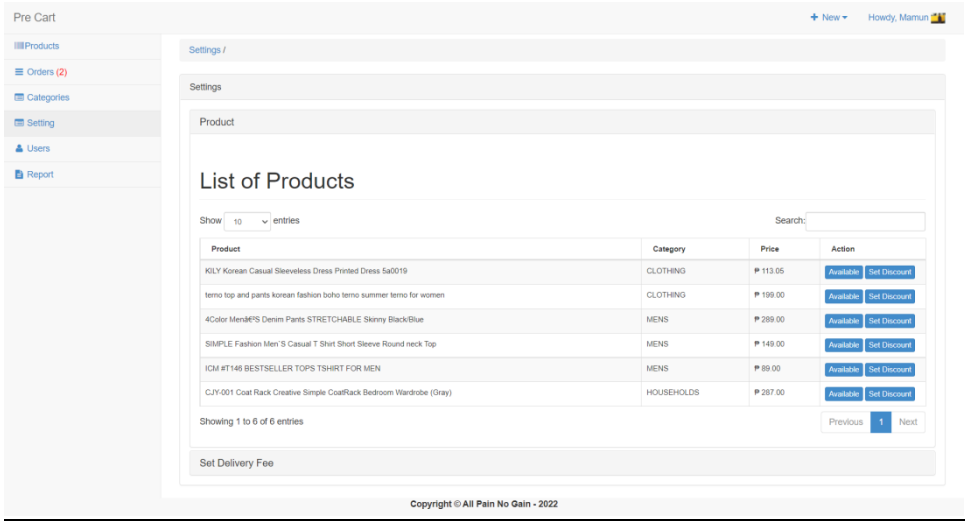

Fig 4.13: *Settings*

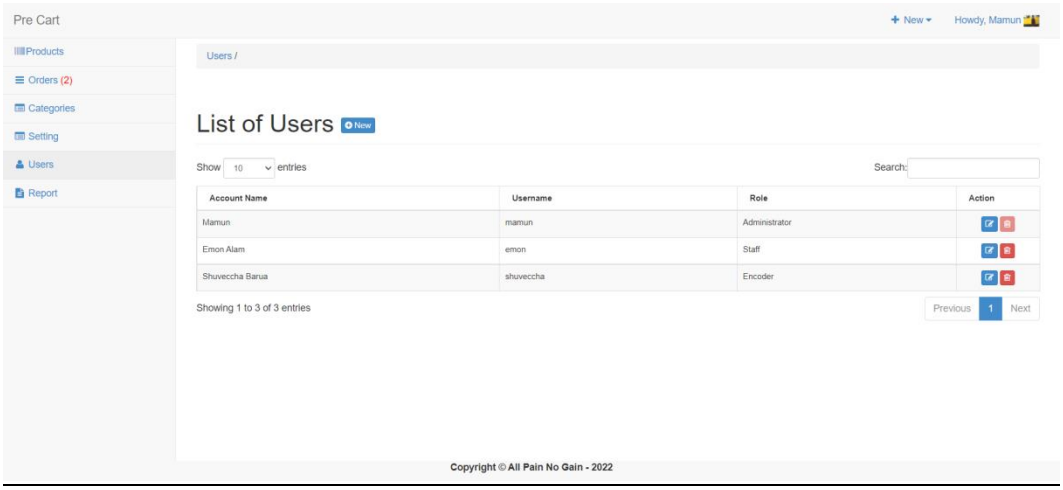

Fig 4.14: *List of Users (Administrative)*

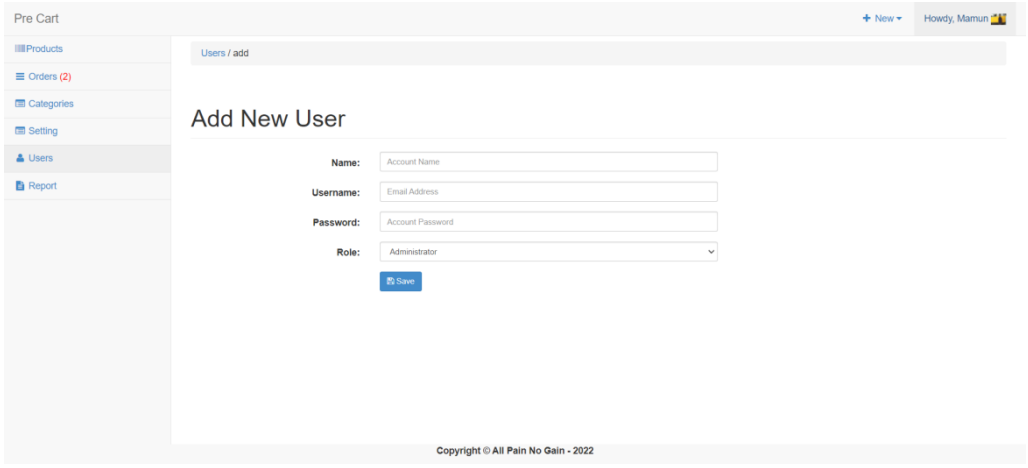

Fig 4.15: *Add New User*

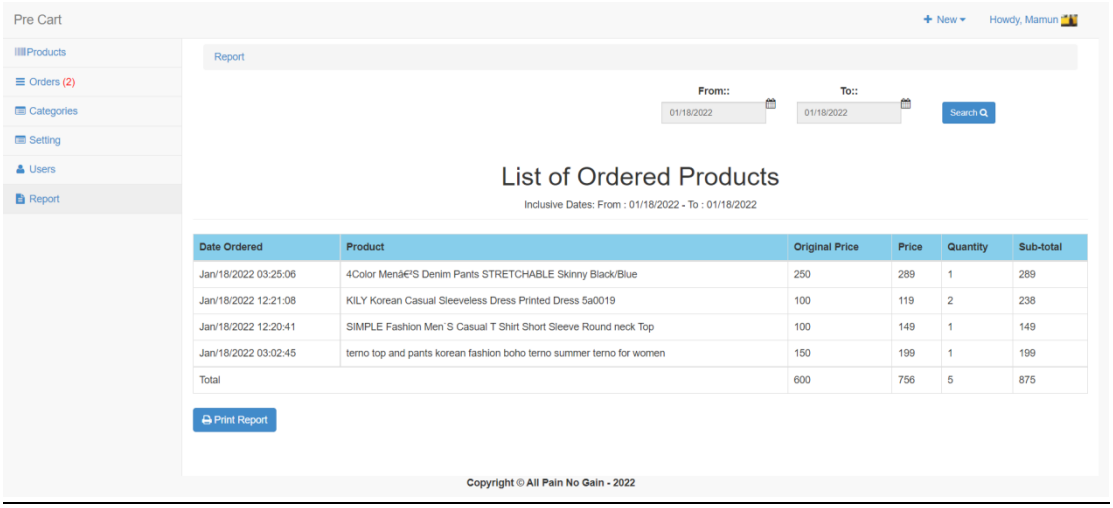

Fig 4.16: *Reports for Certain Period*

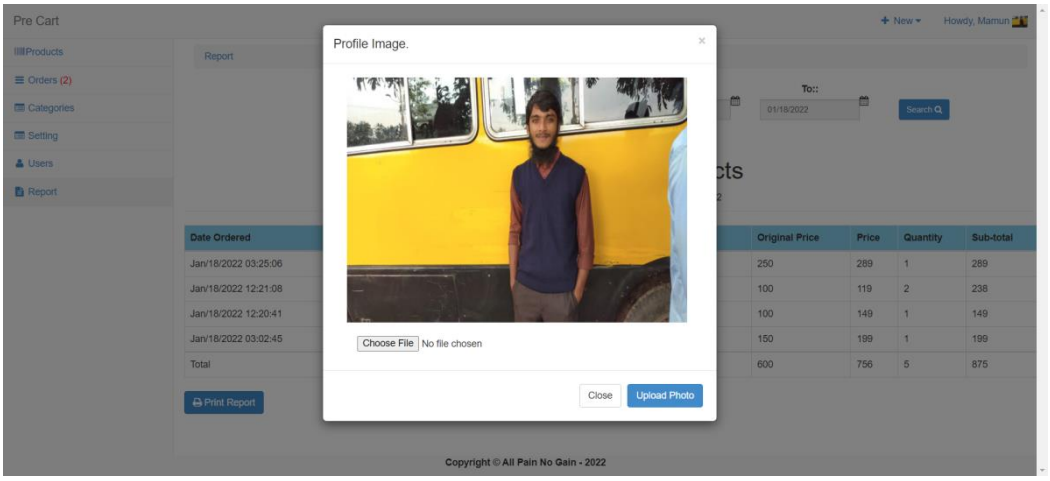

Fig 4.17: *Profile Picture Change*

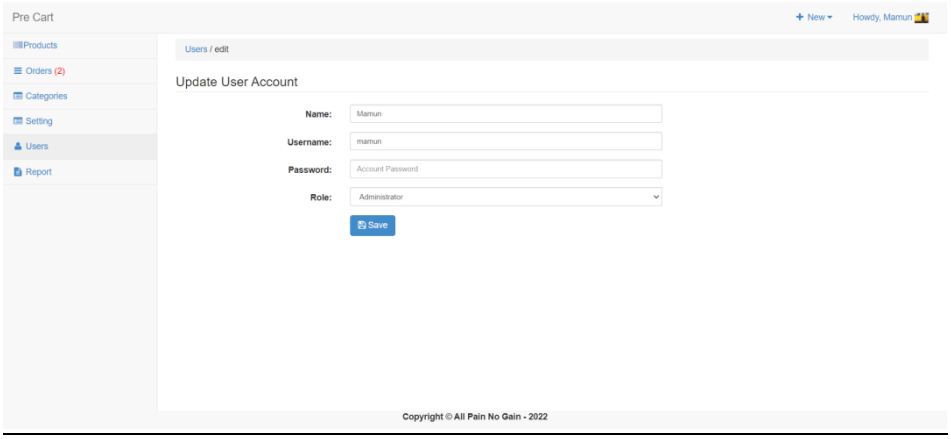

Fig 4.18: *Password Change*

CHAPTER 5

CONCLUSION AND FUTURE SCOPE

5.1 DISCUSSION AND CONCLUSION

There has been an increase in activity in online trading around the world. Following the large companies manufacturing computer equipment, traders began to enter the network with traditional goods. Now, almost any goods can be bought through the Network.

E-commerce is the process of earning money using Internet technologies, or it is a form of supply of products in which the choice and order of goods are carried out through computer networks, and settlements between the buyer and the supplier are made using electronic documents and/or means of payment. At the same time, both individuals and organization scan act as purchasers of goods (or services).

5.2 SCOPE FOR FURTHER DEVELOPMENTS

The concept defines the main directions of e-commerce development in the medium term, ways and forms of expanding the competitive environment, the growth of modern infrastructure and the creation of additional jobs, as well as further improvement of the legislation on e-commerce.

REFERENCES

[1] Use Case, https://www.tutorialspoint.com [Accessed Date: January 2022]

[2] Fundamentals of E-commerce, https://www.CreativeWorld99.com/ [Accessed Date: January 2022]

[3] Related Work and Design, https://www.amazon.com/ [Accessed Date: January 2022]

[4] Coding tutorial, https://www.w3schools.com/ [Accessed Date: January 2022]

[5] Related Work and Design, https://www.daraz.com.bd/ [Accessed Date: January 2022]

[6] Related Work and Design, https://ajkerdeal.com/ [Accessed Date: January 2022]

[7] Report layout and information, https://sites.google.com/daffodilvarsity.edu.bd/picsediu/downloads/ [Accessed Date: January 2022]

[8] Overall information, https://www.wikipedia.org/ [Accessed Date: January 2022]