DESIGN AND IMPLEMENTETION OF AN BUSINESS STATIONARY E-COMMERCE SITE

BY

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

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DAFFODIL INTERNATIONAL UNIVERSITY

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APPROVAL

This Project/internship titled “DESIGN AND IMPLEMENTETION OF AN BUSINESS STATIONARY E-COMMERCE SITE”, submitted by Md. Khairul Basar, ID No: 173-15-10285 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 07-10-2020.

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I am declare that, this project has been done by us under the supervision of **Mr. Abdus Sattar, Assistant Professor of CSE Department,** Daffodil International University. Me also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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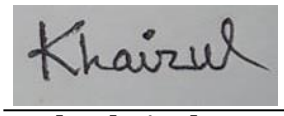

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We really grateful and wish our profound our indebtedness to **Mr. Abdus Sattar, Assistant Professor of CSE Department, Daffodil International University.** Deep Knowledge & keen interest of our supervisor in the field of "*Web Development Project*" to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

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Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

In today's fast-growing business environment, it is important to be able to understand and respond to clients' demands with the most effective behavior. In fact e-commerce is a business style that contains a variety of fashionable and lifestyle essentials. The scheme enables registered users to view a variety of available products whenever they use the bank card payment method to purchase their desired products and buy with cash. It provides an easy access to administrators and managers to view all orders placed using a variety of payment arrangements. Some technologies must be studied and understood to develop an e-commerce site. These include programming languages such as C, PHP, Laravel Framework, HTML5, CSS3, JavaScript and related databases. The purpose of this project is to develop a primary website where the customer is provided with a shopping cart application. This document will discuss each technology for creating an ecommerce website.

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CHAPTER 1
INTRODUCTION

1.0 Introduction

E-commerce is a huge multi-billion dollar industry nowadays. It is one of the best way to get the wanting products to be in home or office. In recent times business-to-consumer e-commerce has grown into the most famous and prolific form of online commerce. In Electronic bussiness it is very important to build a great relation with the customers also important to have their faith on that ecommece site, to be able to find the customers satisfaction level and dissatisfaction level. It is commerce between businesses and consumers. Actually It is a dynamic platform. In our country this kind of initiative can decrease our unemployment day by day. Through this e-commerce platform, merchants can easily find the ordered products and speed up the business. This kind of e-Commerce is made our life very easy to lead because we can get all the things what we want by ordering online and for saving our time .On one hand, less time wasted On the other hand, reduce the unemployment of our own country by offering unemployed youth services. I wish one day this kind of platform will take the unemployment problem up to 0%.

1.1 e-Commerce:

Sometimes we shuffled between e-Commerce and e-Business but e-Commerce and e-Business is different things. e-Commerce is totally a virtual process where product is sold virtually. if you have a physical shop where you sell or buy products that is not e-Commerce business, if you have a physical shop with a Website then it is called e-Commerce. e-Business is Internet Business but e-Business is not only Internet Business but also where internet technology is used To built up the business and productivity of the business.

1.2 e-Business:

Actually In E-business there are exist all the site of running a business selling products, services , customer education, developing the business, Marketing etc. The money transections in business is the term of e-Commerce. For the successful business, e-Commerce and e-Business both must have a quality, accuracy. E-business is like the pillar of the e-Commerce site. Without e-Business , e-commerce business running impossible. To run the e-commerce, need a good combination of both e-business and e-commerce.

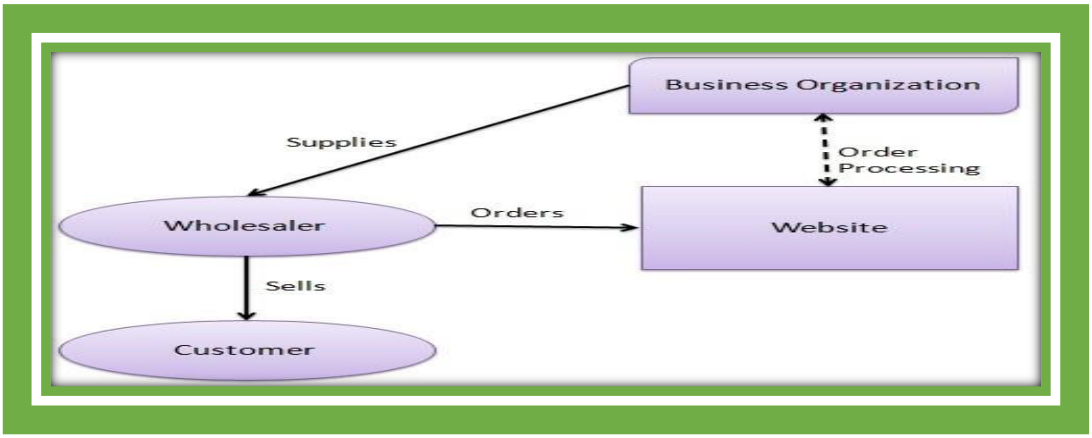
1.3 Business Models:

There is some categories in e-Commerce business model. Those are in below.

1. Business to Business
2. Business to Consumer
3. Consumer to Consumer
4. Consumer to Business

1.3.1 Business to Business:

In the Business to Business Model, at first product is sold to an intermediate customer then that product is sold to the final customer. Example: A wholeseller place an order to the germents after that Retailer places order to the wholeseler.



Figure(1.3.1) : Business to Business

1.3.2 Business to Consumer:

In this model it sells directly to the customers. In this model customer can directly order to the business site as per customers choice.

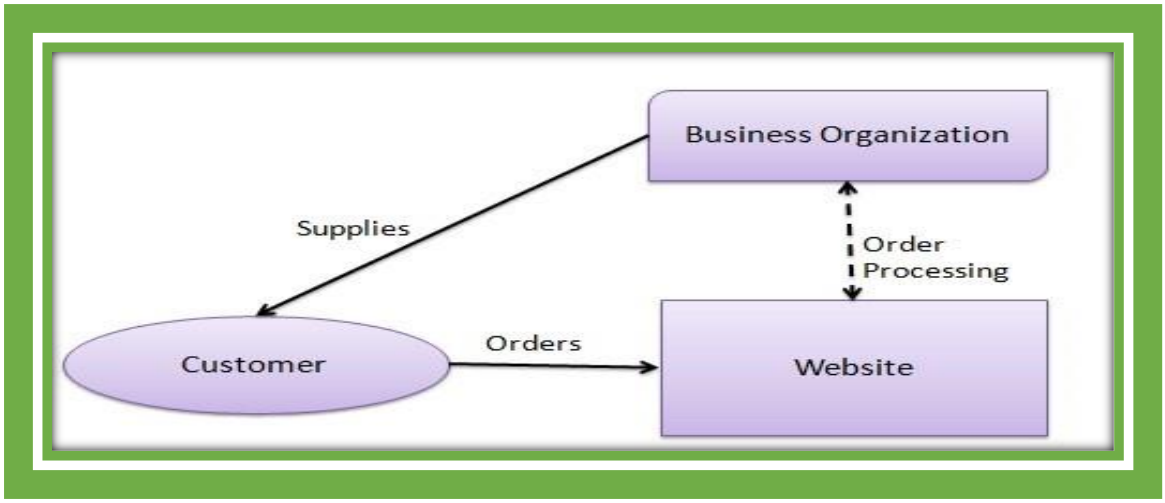
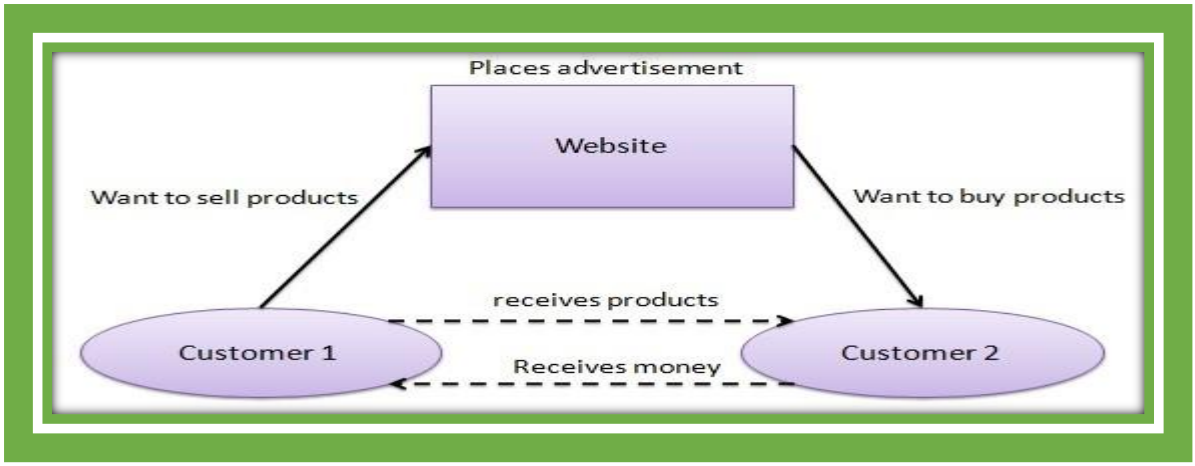


Figure (1.3.2) : Business to Cunsumer

1.3.3 Customer to Customer :

In this model it helps 1st customer (consumer) to sell their products or assets as like their flats , shops, land, cars, or others things to the Other customer . Actually by this model all the information of the consumer assets is published in the website then other customers viewing the products they can grave their likable assets or product.



Figure(1.3.3) : Customer to Customer

1.3.4 Consumer to Business:

It's be like in this model consumers shows various websites of various business organization for a particular service .

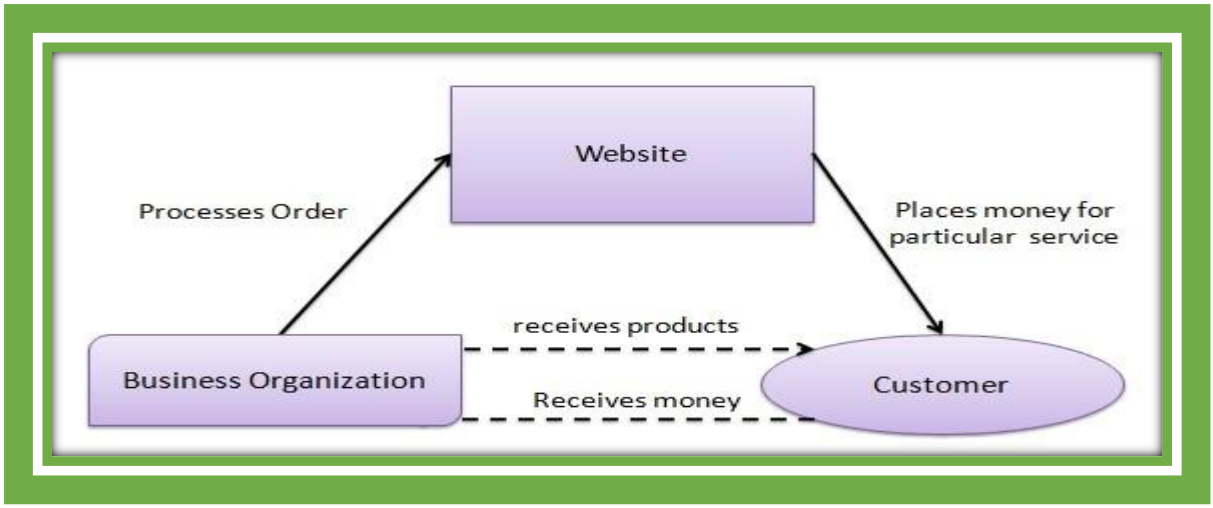


Figure (1.3.4) : Consumer to business

1.4 Motivation:

I have been involved in business since childhood. I know that almost every businessman in the country uses a mobile phone or computer. It is very difficult for a trader to understand the purchase price, the purchase price, the selling price when buying or ordering a product. There are many problems in returning expired products to the company. So using this e-commerce site will reduce most of the wasted time of the trader and make doing business easier.

1.5 Objectives :

☛ To create a dynamic Platform.

☛ To reduce the rate of unemployment.

☛ To reduce the loss of time as well as reduce the annoyance of human beings.

☛ Actually it is our passion also to have an e-Commerce site of our own for our business.

☛Accelerate business

1.6 Expected Outcome :

☛ Everybody can start Investing small amount of money for this business.

☛ People can get profit easily.

☛ It impacts on self-employment.

☛ Reduce dependency On others reasonable

☛ it will increase the economical status of Bangladesh

☛Unemployed people will be encouraged to do business.

☛Business policy is being digitized through e-commerce sites.

1.7 Report Layout :

The Initial matter consists of the Introduction, Motivation, Objectives, Expected outcome. Initial pages are paginated independently from whatever remains of the content. We have organized our report as follows:

Chapter 2, Discuss the overall description of the project. Here I have described about the Login page, registration page, Customer page, Admin page, Shop Keeper page.

Chapter 3, Decide the requirements of the project. I am defined the use case diagram and design requirements. I also discussed about the requirement collection and analysis process.

Chapter 4, Specified the front end and the back end design of the project.

Chapter 5, Here described about data management.

Chapter 6, Discussed about conclusion and Operational requirement of the project. At last of all report I give the related reference to ensure that the information in the report are must be correct.

CHAPTER 2

RELATED WORKS

2.0 Introduction :

e-Commerce is a huge multi-billion dollar industry nowadays.It is one of the best way to get the wanting products to be in home or office. In recent times business-to-consumer e-commerce has grown into the most famous and prolific form of online commerce.In Electronic bussiness it is very important to build a great relation with the customers also important to have their faith on that ecommece site, to be able to find the customers satisfaction level and dissatisfaction level . It is commerce between businesses and consumers. Actually It is a dynamic platform. In our country this kind of initiative can decrease our unemployment day by day. This kind of e-Commerce is made our life very easy to lead because we can get all the things what we want by ordering online and for saving our time .On one hand, less time wasted On the other hand, reduce the unemployment of our own country by offering unemployed youth services.In the e-Commerce side there are some disadvantages also.We will describe about some e-Commerce site in below.

Admin

In admin panel there also some sections to control frontend content.

Category: Admin can show, add, delete, edit, active and deactivate category

Brand/Manufacture: Admin can show, add, delete active, deactivate and edit brand

Product: Admin can show, add, delete, active, deactivate and edit product

Oder: Admin can see all the order and order details like shipping address, all individual product and individual product price, discount and total price.

Discount: Can add, show, delete and edit discount along with coupon.

Daily report: see the daily report how many product has been sold in a day and total cost, total income etc.

These are the main functionality of my website.

2.1 MEENA BAZAR:

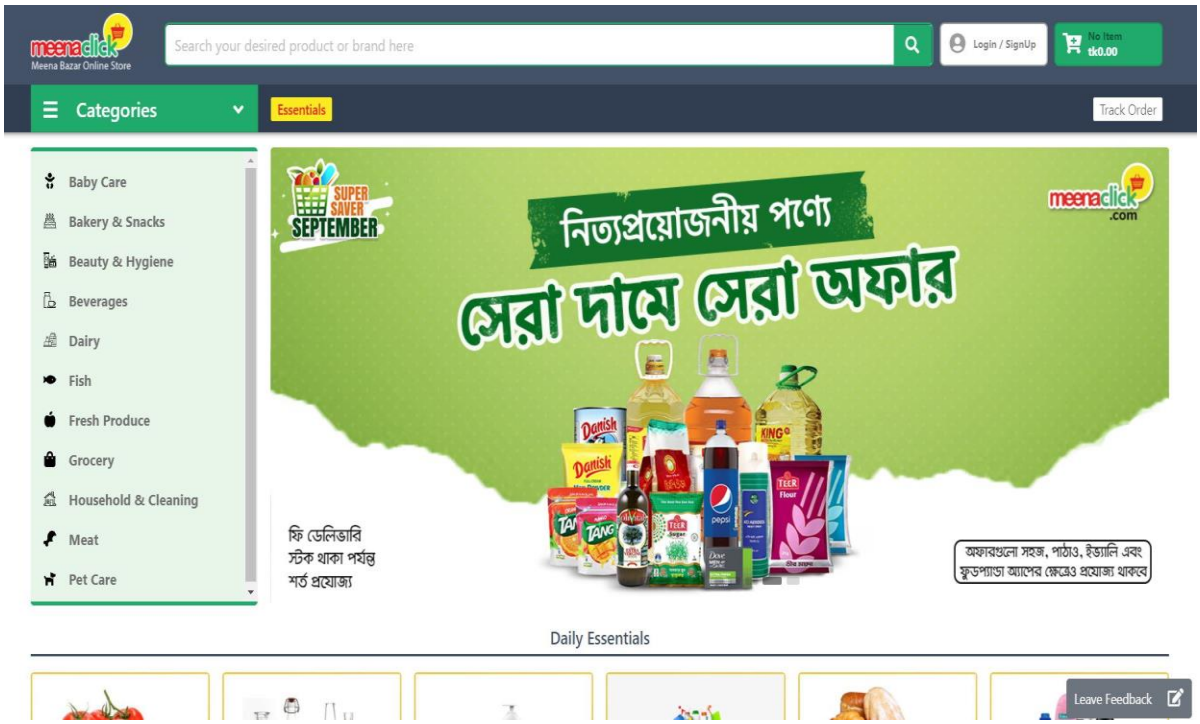


Figure: 2.1 Meena Bazar

Meena Bazar is a supper shop destination its offers hassle free shopping with good security system. They have some common features like other supper shop that is used card, payment system, Reviews / star rating of a product, good resolution photos, search option, related products option, wish list, special offers/visible hotlines, detailed shipping information and there are some extra features that is in Exciting Offers which is daily offer name is unique that is Colorful Friday, Super Saturday, Fashion Sunday, Budget Monday, Houseful Tuesday, Brand Bazar Wednesday, Powerful Thursday. Now we will talk about the disadvantages of websites that is here is no guaranty of any products in this super shop only you can change this product if you don't like this product seeing live. After that Mechanical failures can cause unpredictable issues. For safety issue all the websites have some bugs that is found by the hackers because hackers all the time try to hack customer's card because most of the customers pay their bill by their card.

2.2 Prince Bazar:

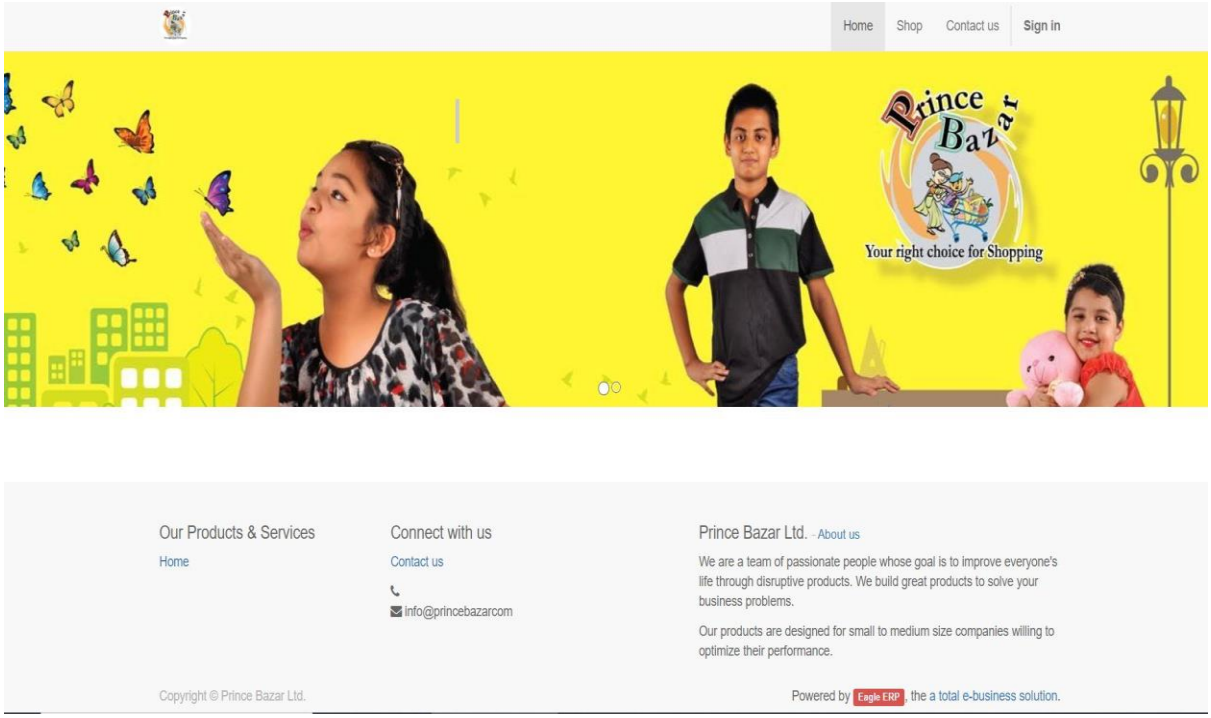


Figure: 2.2 Prince Bazar

Prince Bazar is a supper shop destination its offers hassle free shopping with good security system. They have some common features like other supper shop that is used card, payment system, Reviews / star rating of a product, good resolution photos, search option, related products option, wish list, special offers/visible hotlines, detailed shipping information and there are some extra features that is in Exciting Offers which is daily offer name is unique that is Colorful Friday, Super Saturday, Fashion Sunday, Budget Monday, Houseful Tuesday, Brand Bazar Wednesday, Powerful Thursday. Now we will talk about the disadvantages of websites that is here is no guaranty of any products in this super shop only you can change this product if you don't like this product seeing live. After that Mechanical failures can cause unpredictable issues. For safety issue all the websites have some bugs that is found by the hackers because hackers all the time try to hack customer's card because most of the customers pay their bill by their card.

2.3: eorange.com:

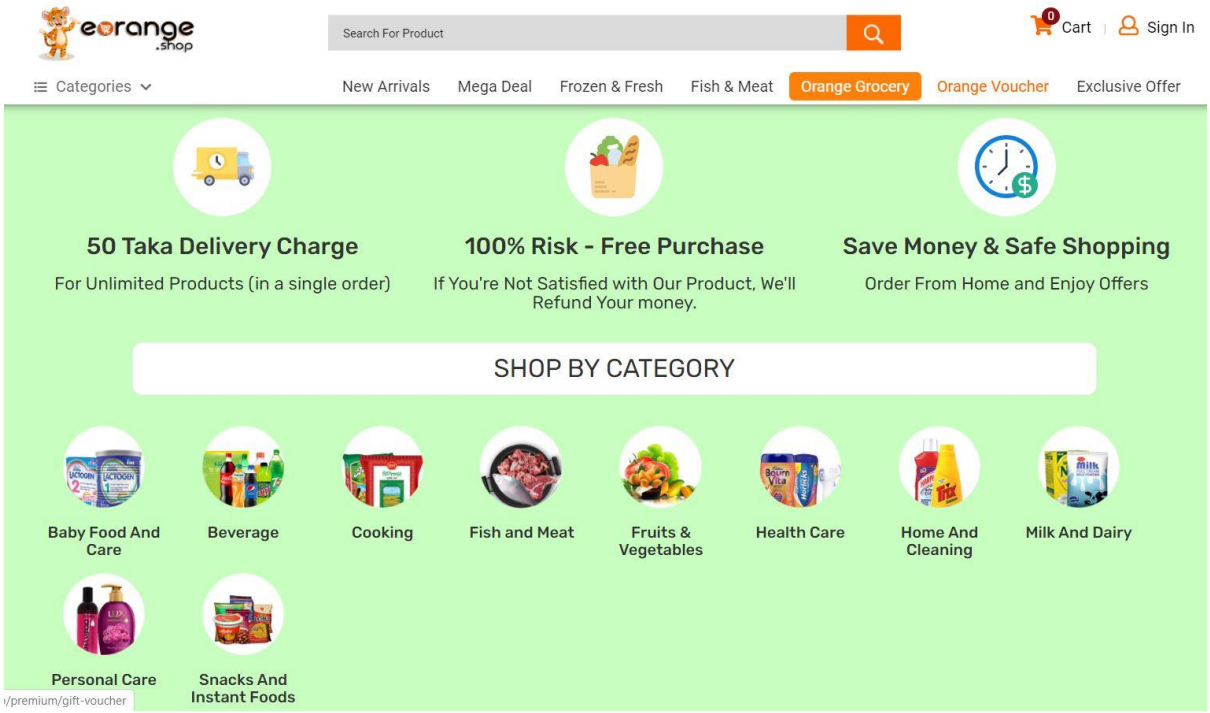


Figure: 2.3 eorange

eorange is a E-supper shop destination its offers hassle free shopping with good security system. They have some common features like other supper shop that is used card, payment system, Reviews / star rating of a product, good resolution photos, search option, related products option, wish list, special offers/visible hotlines, detailed shipping information and there are some extra features that is in Exciting Offers which is daily offer name is unique that is Colorful Friday, Super Saturday, Fashion Sunday, Budget Monday, Houseful Tuesday, Brand Bazar Wednesday, Powerful Thursday. Now we will talk about the disadvantages of websites that is here is no guaranty of any products in this super shop only you can change this product if you don't like this product seeing live. After that Mechanical failures can cause unpredictable issues. For safety issue all the websites have some bugs that is found by the hackers because hackers all the time try to hack customer's card because most of the customers pay their bill by their card.

2.4: Sunny Mart:

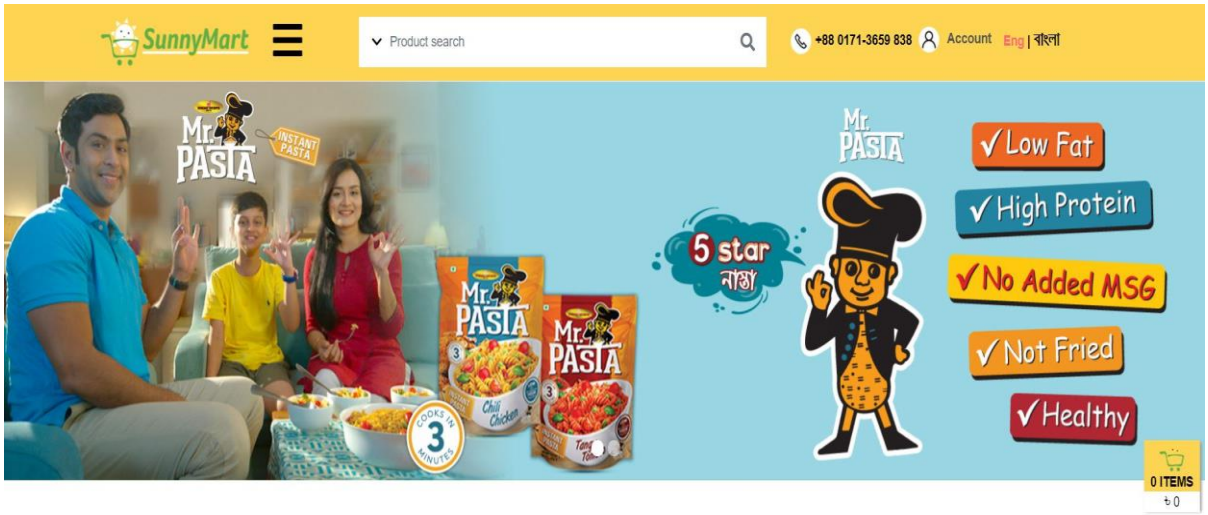


Figure: 2.4 Sunny Mart

SunnyMart is a supper shop destination its offers hassle free shopping with good security system. They have some common features like other supper shop that is used card, payment system, Reviews / star rating of a product, good resolution photos, search option, related products option, wish list, special offers/visible hotlines, detailed shipping information and there are some extra features that is in Exciting Offers which is daily offer name is unique that is Colorful Friday, Super Saturday, Fashion Sunday, Budget Monday, Houseful Tuesday, Brand Bazar Wednesday, Powerful Thursday. Now we will talk about the disadvantages of websites that is here is no guaranty of any products in this super shop only you can change this product if you don't like this product seeing live. After that Mechanical failures can cause unpredictable issues. For safety issue all the websites have some bugs that is found by the hackers because hackers all the time try to hack customer's card because most of the customers pay their bill by their card.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.0 Description:

Nowadays

☛ All members or any kind of member can view available products and anyone can register.

☛ Only registered member can purchase single or multiple products.

☛ There are three roles that is Visitor, User and Admin.

- Only User can view and purchase products
  Visitor can only view products
- Contact page is available for any kind of problem to contact Admin.
- But the Admin has all the facilities including all the facilities of visitors and user

- ✓ All right have the Admin to edit products information, add products or remove products.
- ✓ All right have the Admin to edit user information, add user and also can remove user.
- ✓ All right have the Admin to ship order to user according to the customers placed order by sending confirmation mail.

3.1 Functional Requirements :

☛ Dashboard:

Overview: Today, This week, This Month, This Year.

Purchase, Sale, Expense, Gross Profit.

☛ Business :

➡ Products And Items :

- Products
- Categories
- Unit

➡ Customers :

- All Customers
- Walk in Customers
- Wholesale Customers
- Retails Customers

➡ Suppliers :

- Supplier ID
- Company Name
- Mobile
- Address
- Action

➡ Purchase :

- New Purchase
- New Purchase Return
- Purchase List
- Purchase Return List

➡ Sales :

- New Invoice
- New Return Invoice
- Invoices
- Return Invoices

➡ Stock Adjustment :

☛Search By Product Name

☛Barcode

☛Product ID

➡ Transaction :

- Money In
- Money Out
- History
- Transaction Methods

➡ **Shopkeeper's page details:**

☛ Home

☛ Available Products

☛ Discount

☛ Inventory

☛ Profile

☛ Logout

➡ **Management:**

☛ Reports: Stocks, Low Stock, Supplier Dues, Customer Dues, Extra Expences, Extra Income, Damage List.

☛ Users : Photo, Name, Email, Mobile, Verified, Role, Action.

☛ Configuration: Settings, Environment Variable, Permission, Roles.

3.2 Non-Functional Requirements :

The back-end design of an application is generally the design of database. The database is related to the connectivity between the user and the server. In our project the back-end design is design of XAMPP. We used XAMPP as our database server.

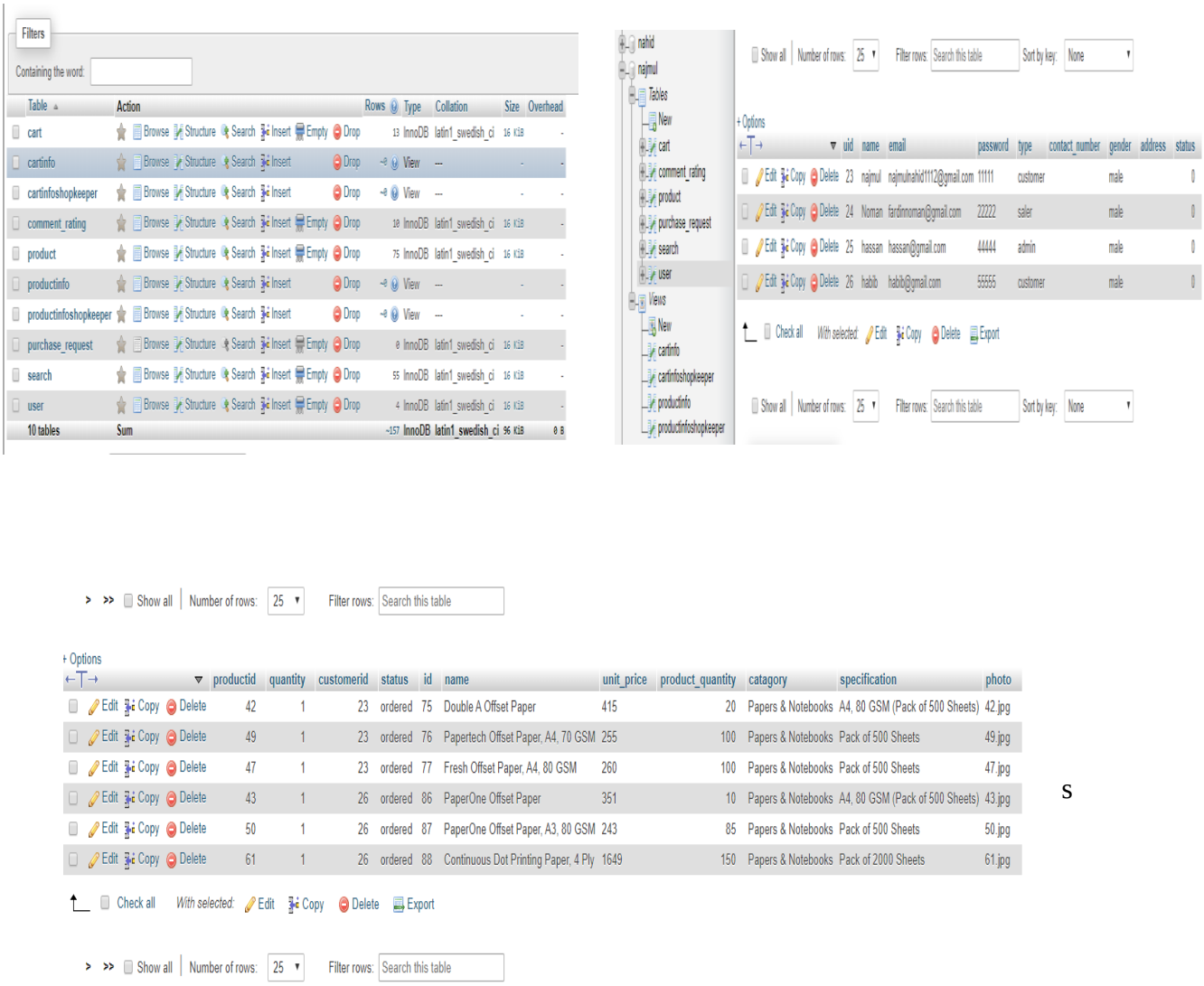


Figure: 3.2 Database Table

This database consists of

- **Users:** User and Admin information is added to database with unique ID based on their roles.
- **Shopping:** Complete products information is stored in the table.
- **Orders:** Delivery information, Status and Customer ordered products are stored in this table.

3.3 DFD Level 0 Diagram :

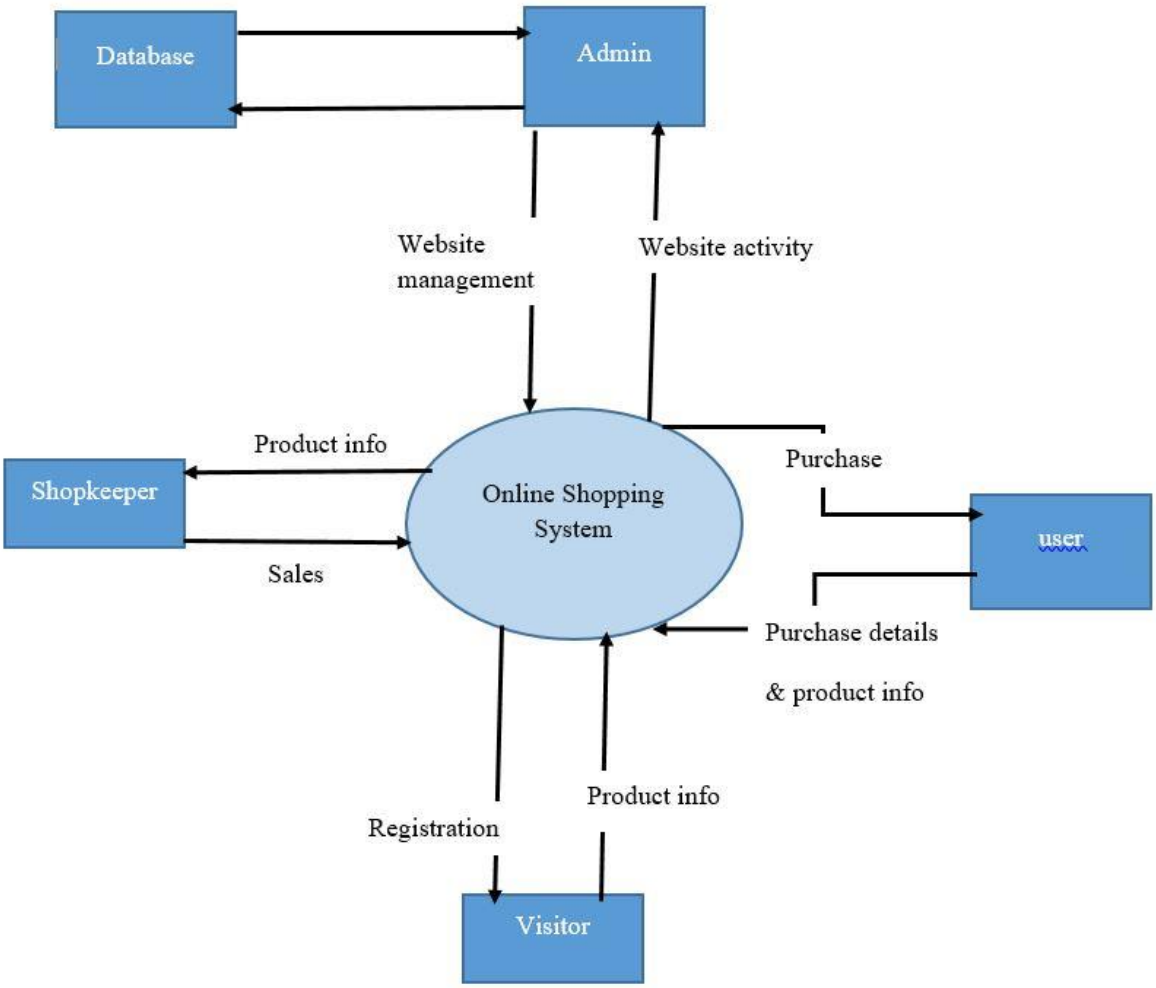


Figure: DFD Level 0

Figure: (3.3) DFD level 0

3.4 Use Case Diagram:

In this diagram we will see the full system of our e-Commerce site at a glance. Here we can see that user can view items, purchase single or multiple items also can cancel the ordered products, visitor only can view the items once he/she will register him/ herself, then they will get the facilities as like a user And lastly Admin have all the right to control all over the things and also have that facilities which is not for users.

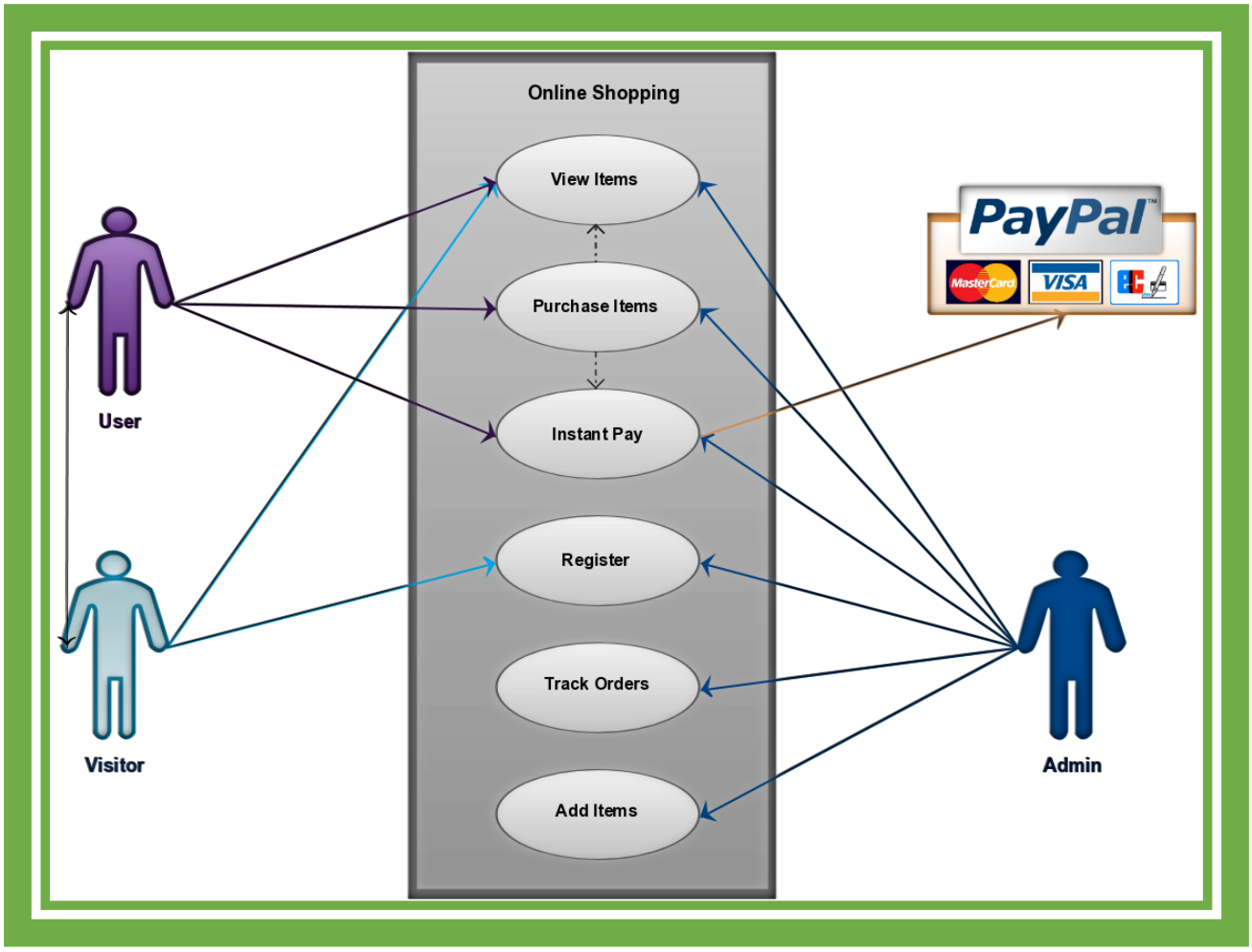


Figure (3.4) : Use Case Diagram

3.5 Sequence Diagram:

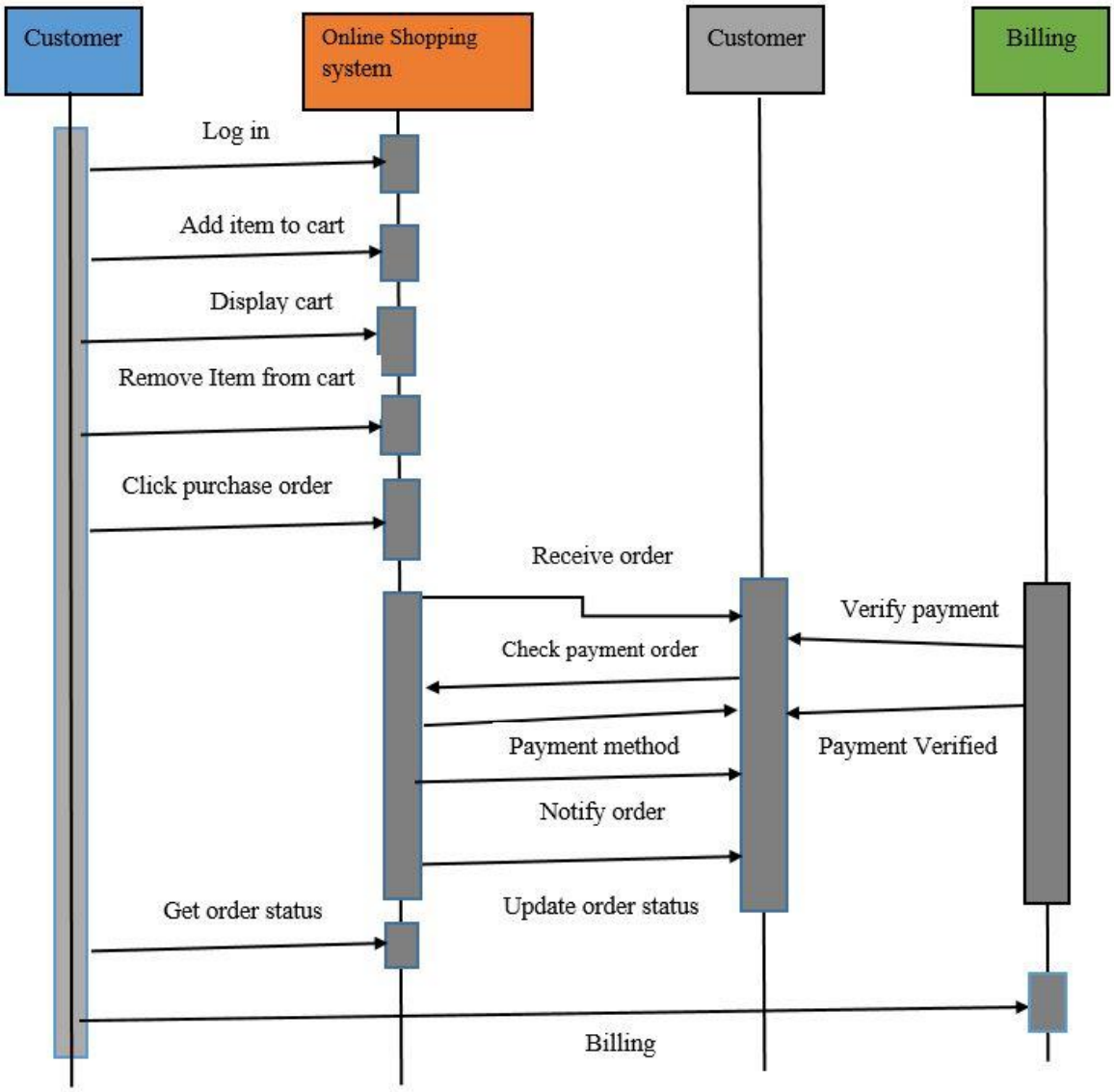


Figure (3.5) : Sequence Diagram

3.6 Class Diagram :

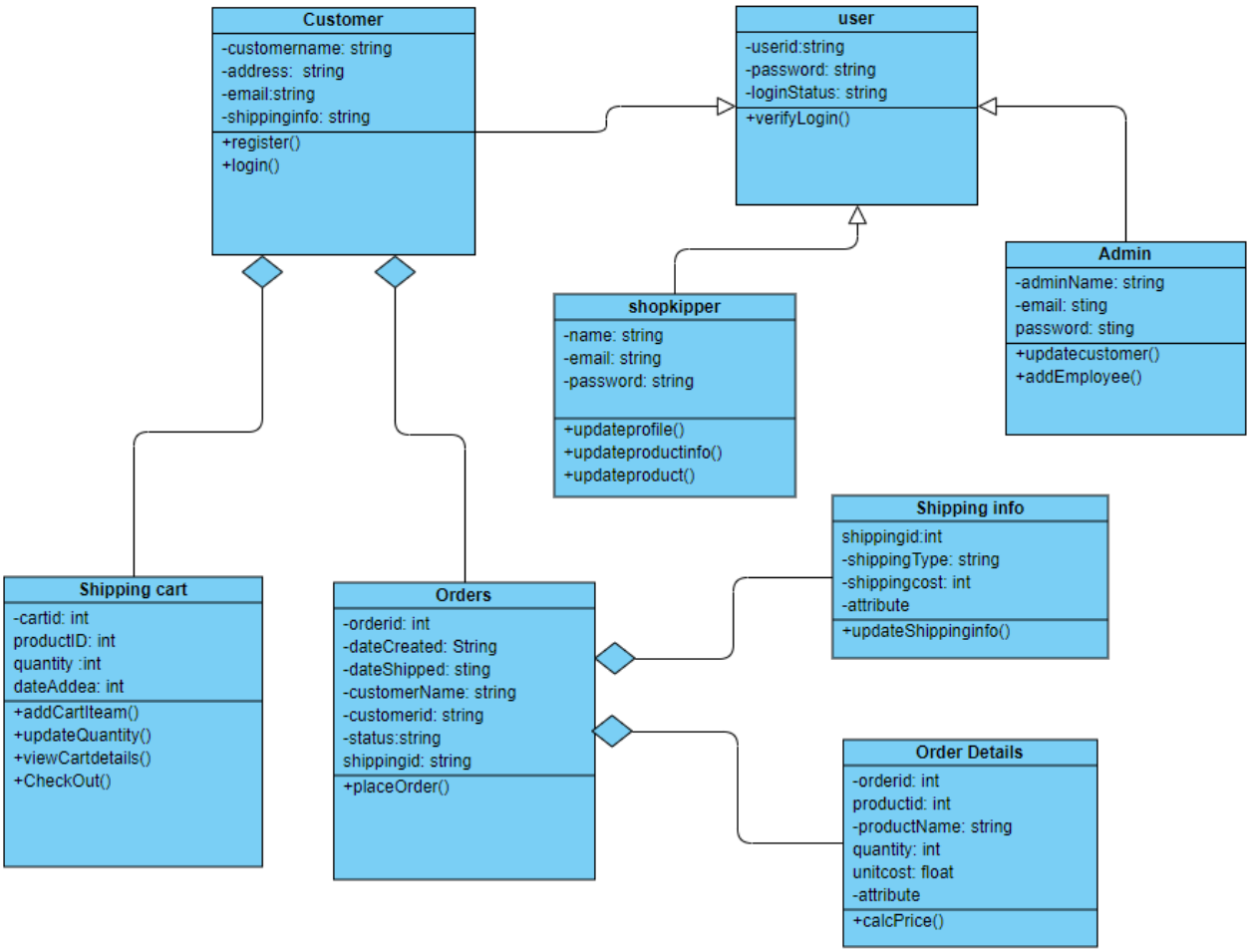


Figure (3.6): Class Diagram.

Chapter 4

IMPLIMENTATION AND TESTING

4.0 Implementation:

Except registered customer anyone can view the ecommerce website and available products but for registered customer they have to login by their Email and their password for purchasing or order products. All can register by his/her own. When he/she is registered, then his/her role will be a user.

4.1 LOGIN ACCOUNT:

Admin will first create account then login with that account and manage this e-business.

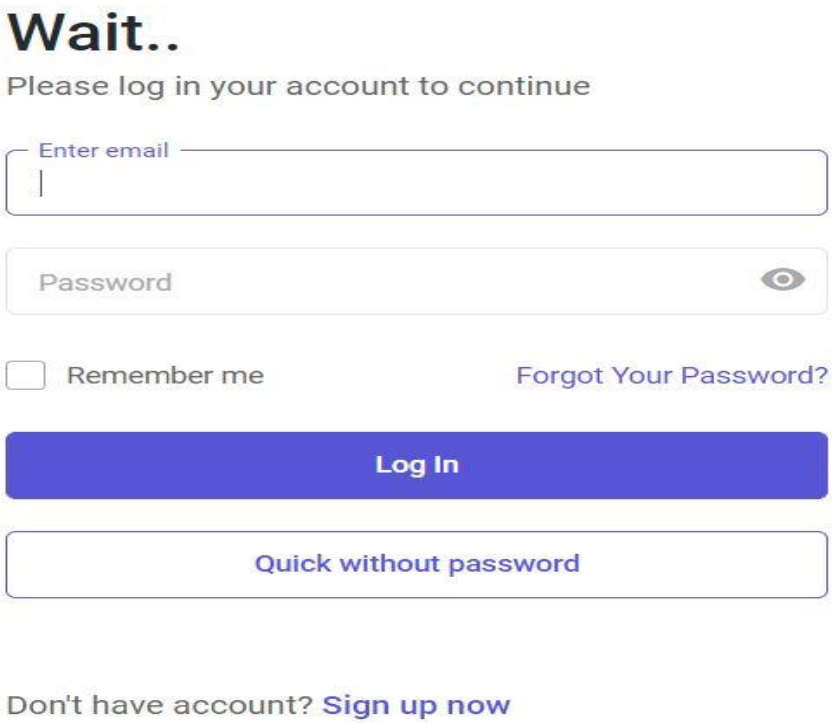


Figure: 4.1 login account

4.2 DASHBOARD:

This page consist of all the product with details. The full documentation of the products that the merchant will buy and which companies he will pay and the products that he will sell to the customer will be displayed on the dashboard so that the admin can see the day to day or monthly and yearly transactions and profit or loss.

TODAY:

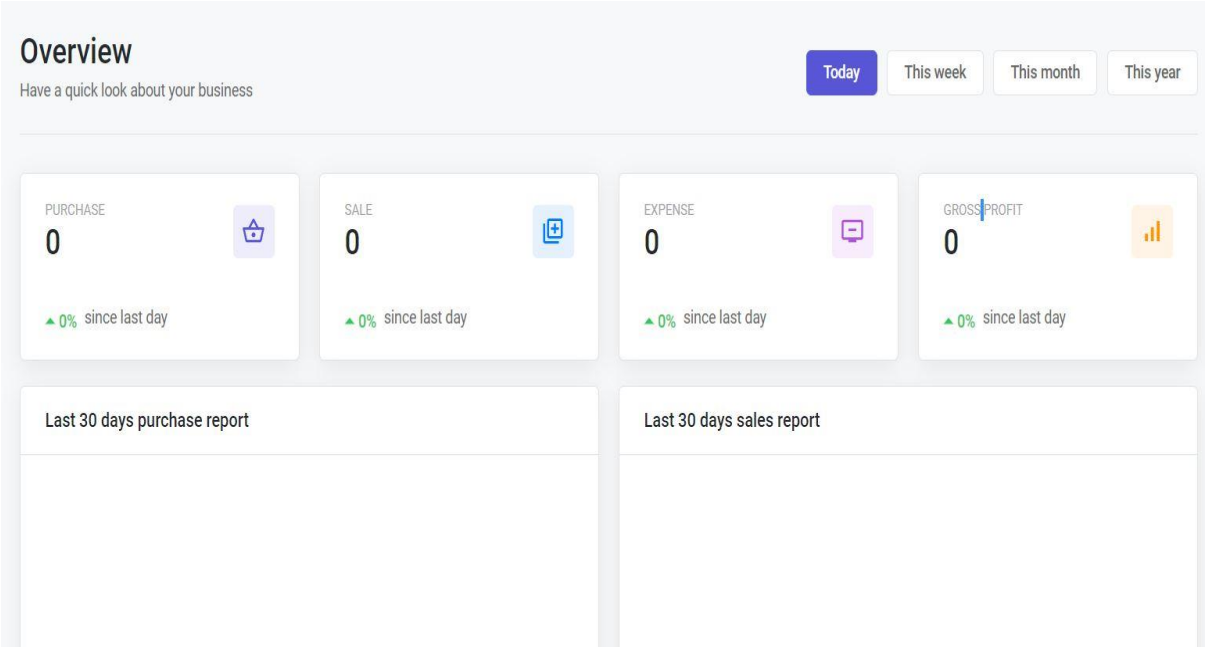


Figure: (4.2.1) Today

THIS WEEK:

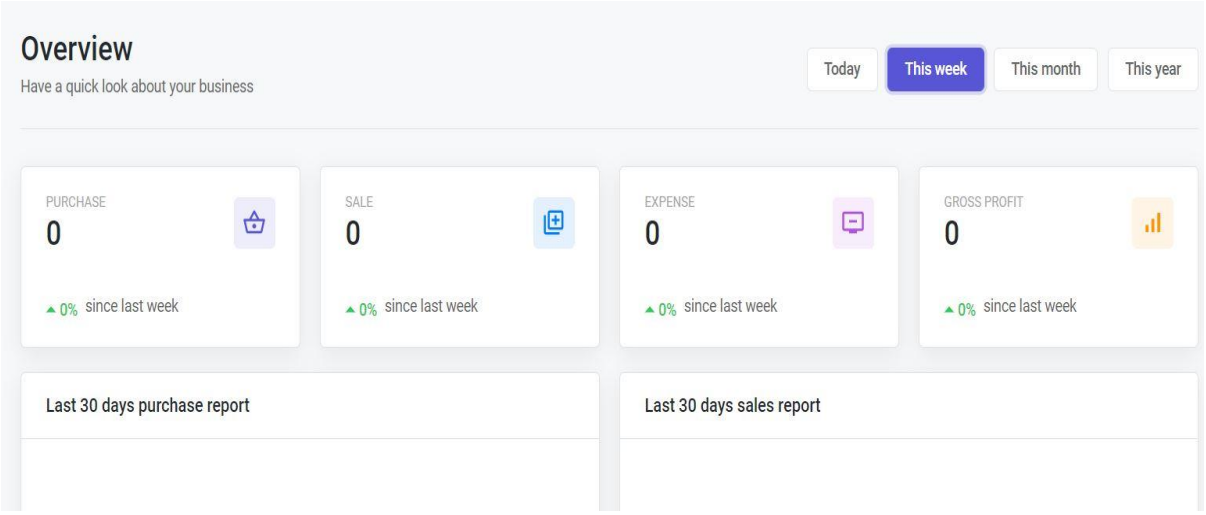


Figure: (4.2.2) This week

THIS MONTH:

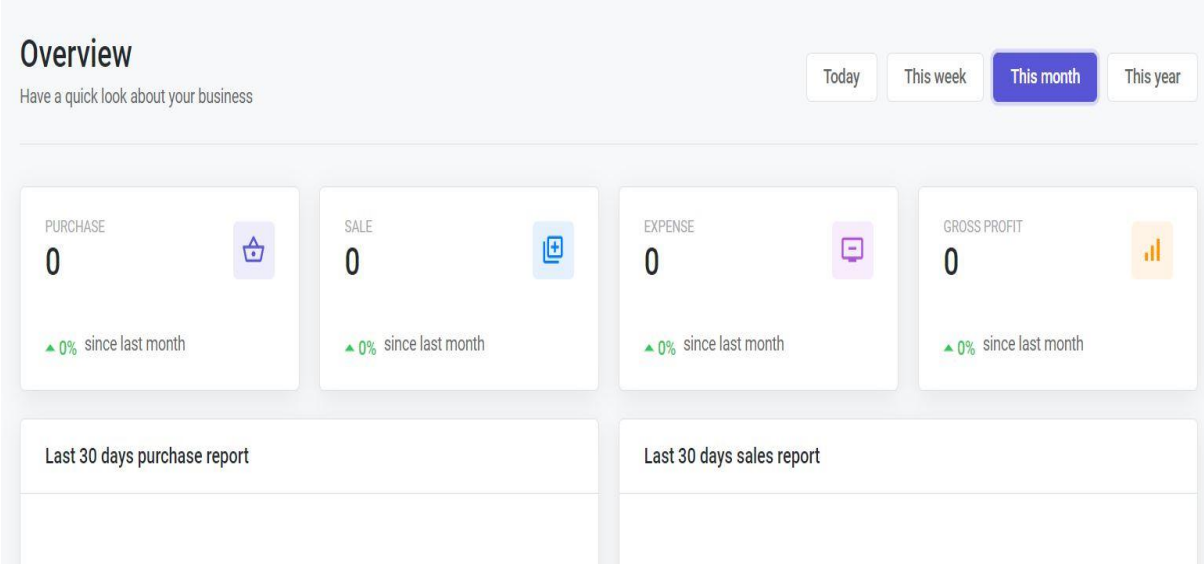


Figure: (4.2.3) This month

THIS YEAR:

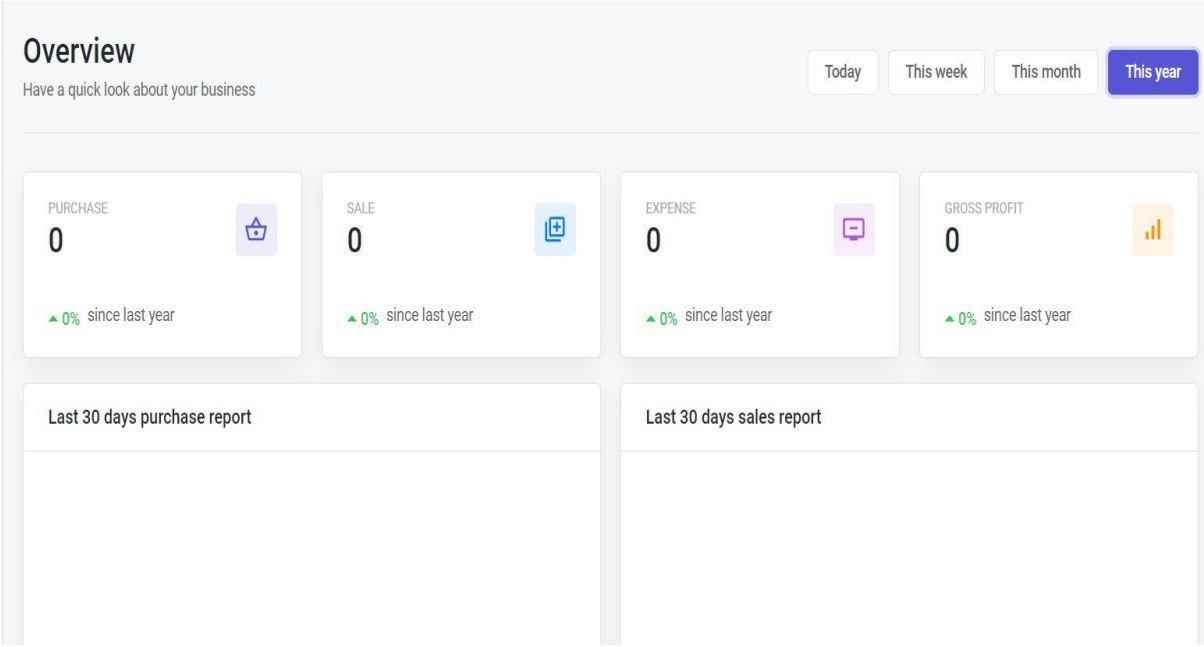


Figure: (4.2.4) This year

4.3 PRODUCTS: The product has all the things recorded like Product ID, Product Name, Category Supplier, Unit, Purchase, wholesale Category, Retailer Category, Action

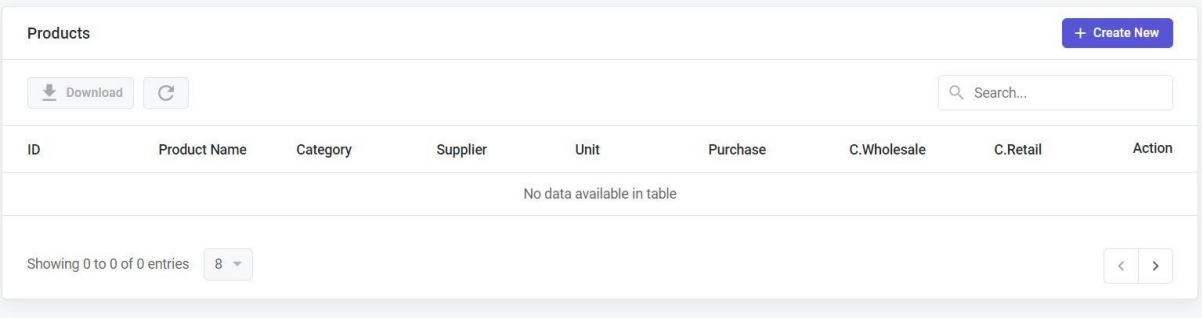


Figure: 4.3 Products

4.4 PRODUCT CATEGORIES: The complete documents of how many products a trader has and which companies have them will be in this list.

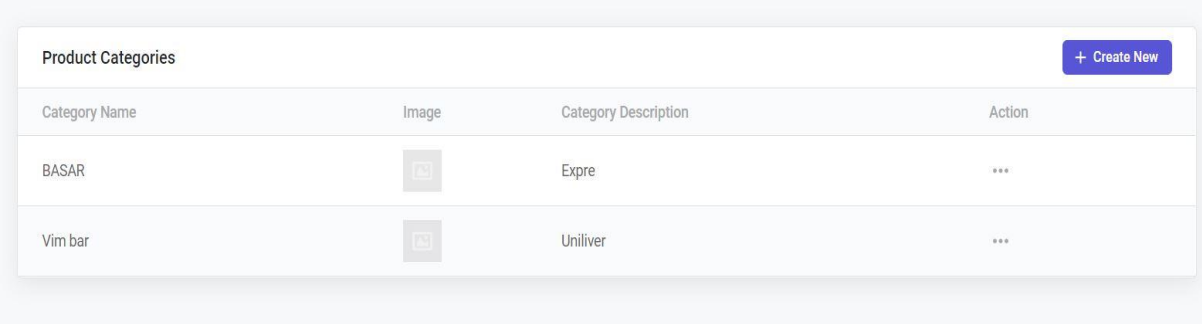


Figure: 4.4 Product categories

3.5 PRODUCT UNITS: From here it is possible to know which unit the product is in, whether it is in kg or in pounds, or in meters or in milligrams.

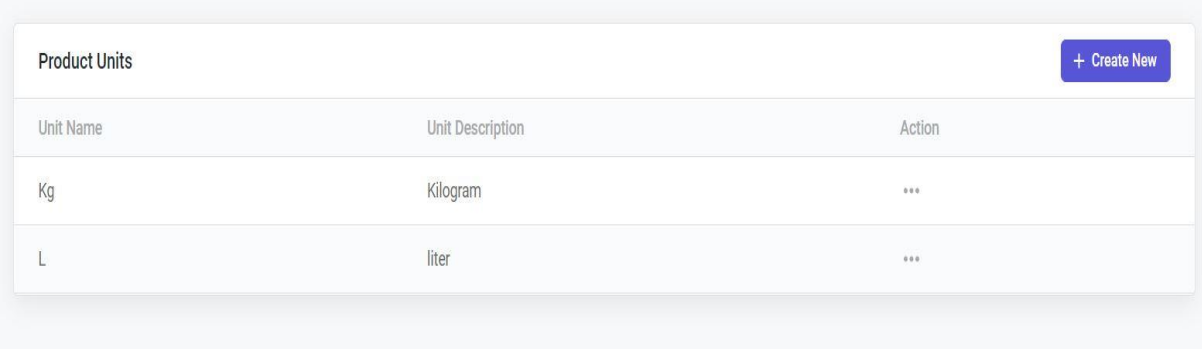


Figure: (4.5) Product unit

4.6 CUSTOMERS: This list will have customer details, customer name, customer address, customer phone number, etc.

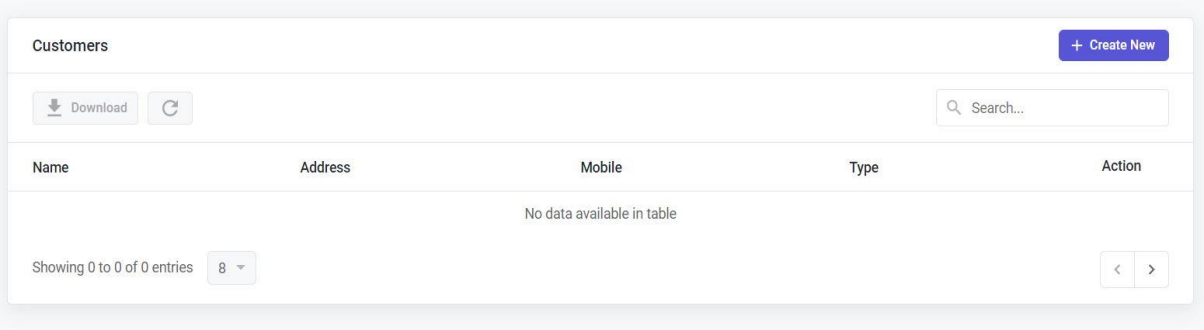
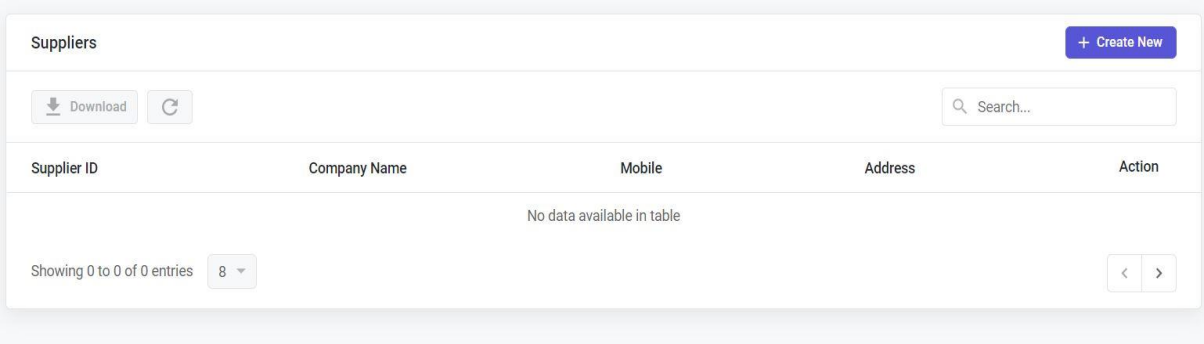


Figure: (4.6) Customers

4.7 SUPPLIERS: This list will give the details of the company, name of the company, supplier ID, mobile number, address, action, etc.



4.8 PURCHASES: Through Purchase, the customer and the admin will be able to know how many products have been sold in their store and which products have been returned and whether the bill has been paid in cash or by card.

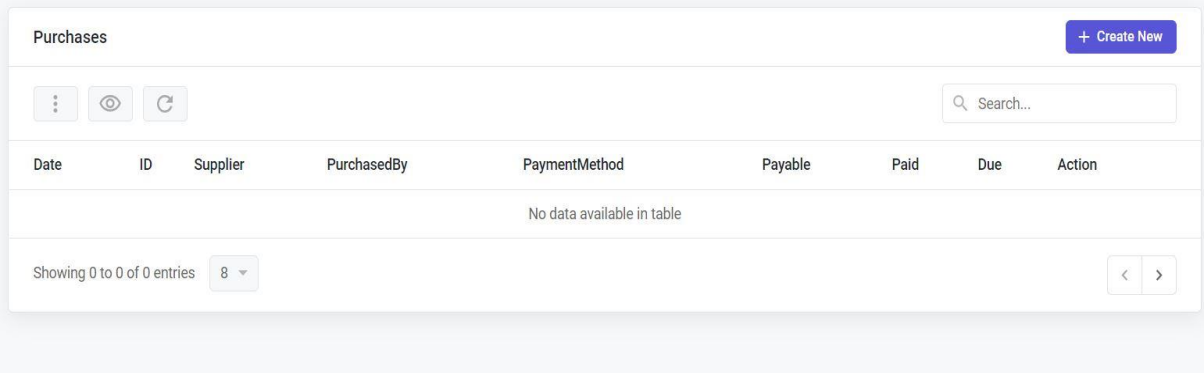


Figure: 4.8 Purchases

4.9 CASH MEMO: After the sale of the product the merchant will provide the receipt of the products purchased by the customer where the name and address of the shop can be used.

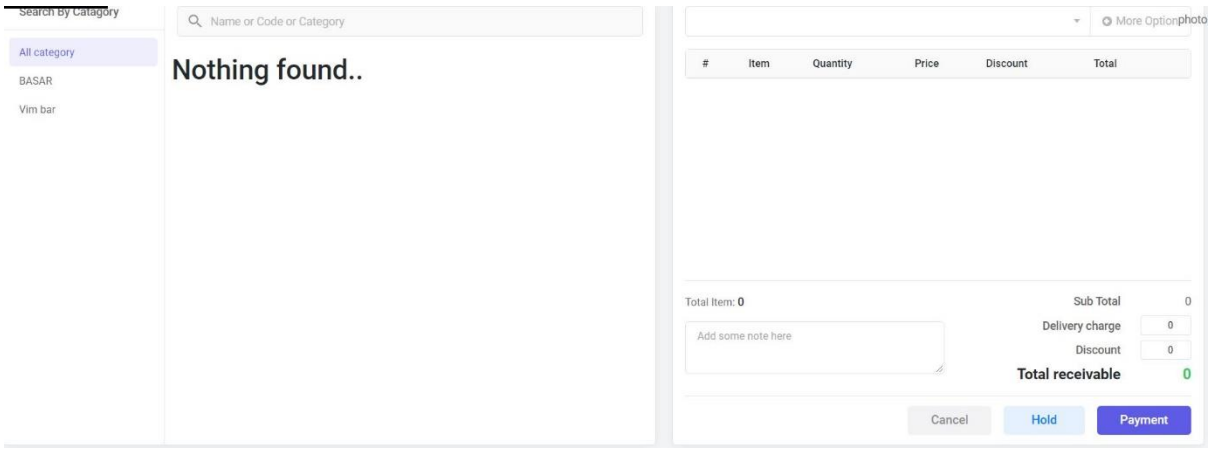


Figure: (4.9) Cash memo

4.10 PEMENT METHOD: Payment Methods In this method the admin will be informed whether the customer has paid in cash or card or left.

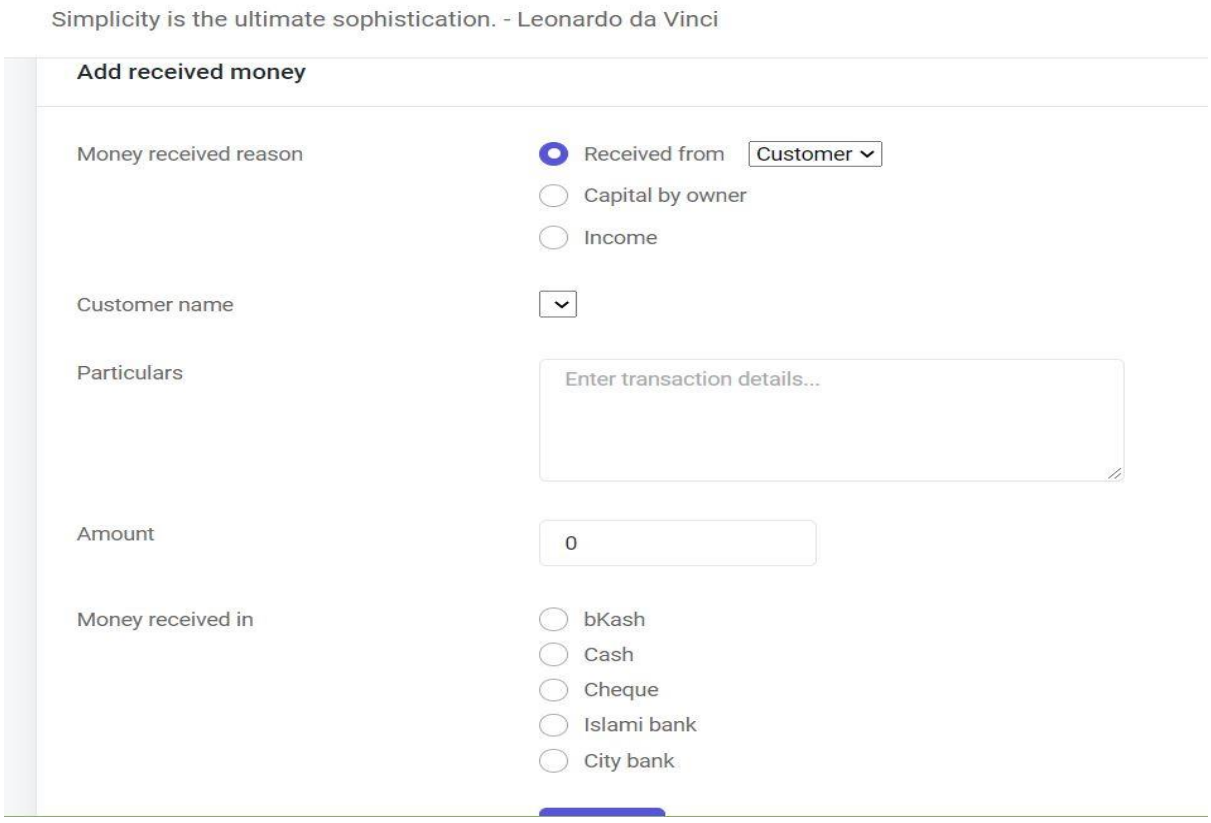


Figure: (4.10) Pement method

4.11 STOCKS: This list will tell you how many products are in stock in the store.

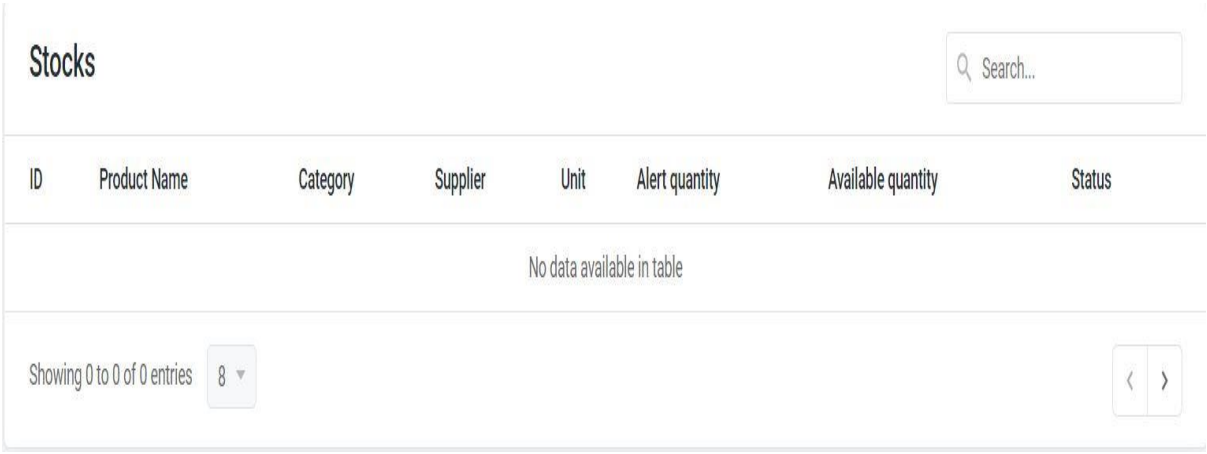


Figure: (4.11) Stocks

4.12 CREATE USER: Here the admin will create and use his account.

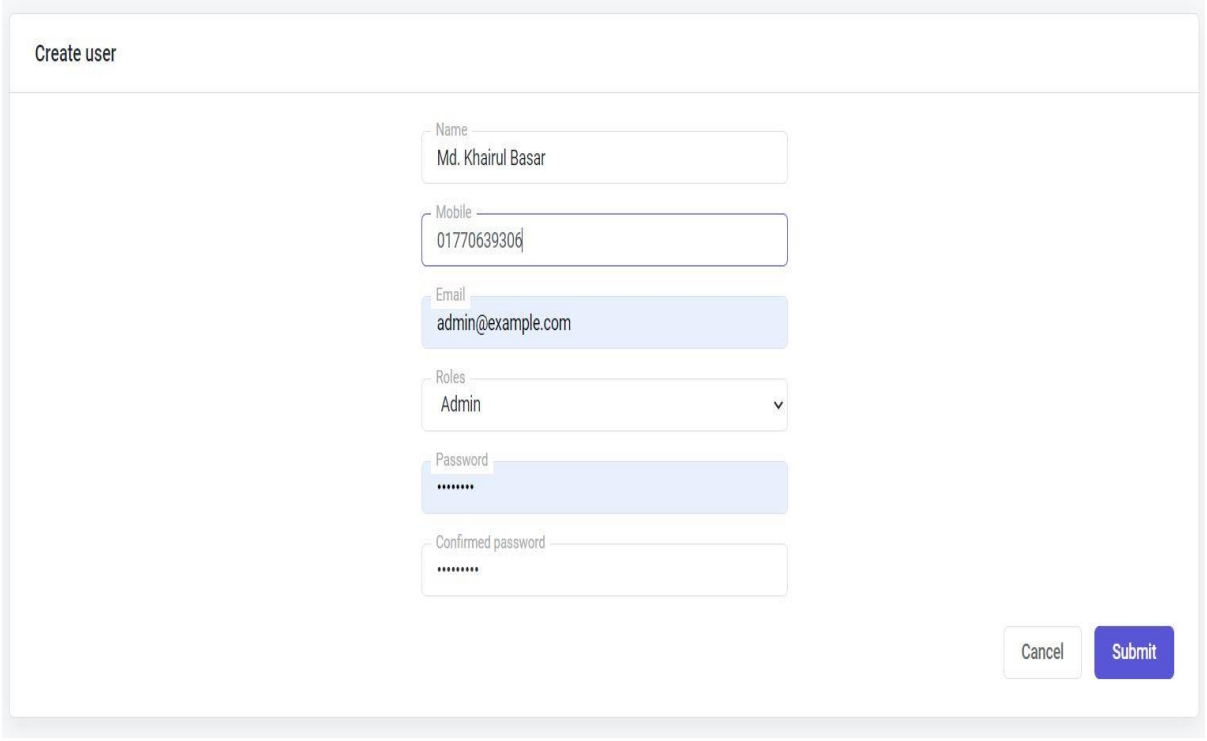


Figure: (4.12) Create User

4.13 SETTINGS: With the setting, the merchant can decide whether to print the store name, address, phone number, logo, memo, back up all the data, whether to use the store name of the invoice.

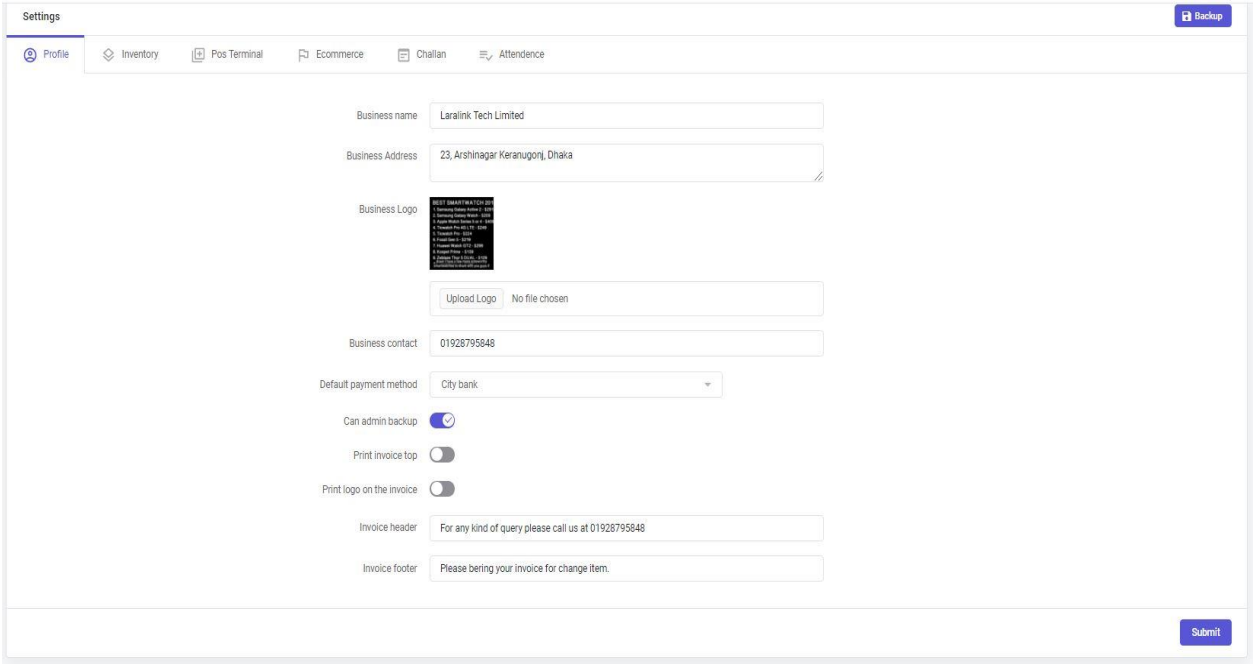


Figure: (4.13) Settings

4.14 PERMISSION: The names of the merchants who will allow you to use this application and everything will be fine here.

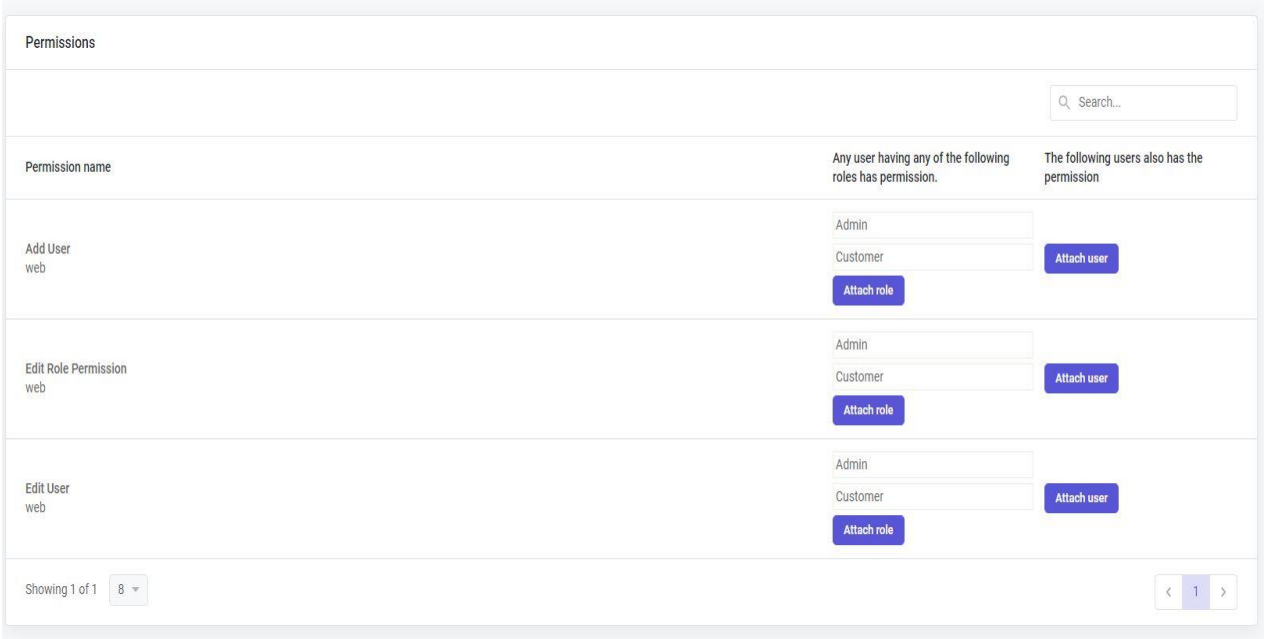


Figure: (4.14) Permission

4.15 ROLES: There will be Rules of Resolution Details because whether a product is refunded or the rest will be sold, the store licenses will all be here.

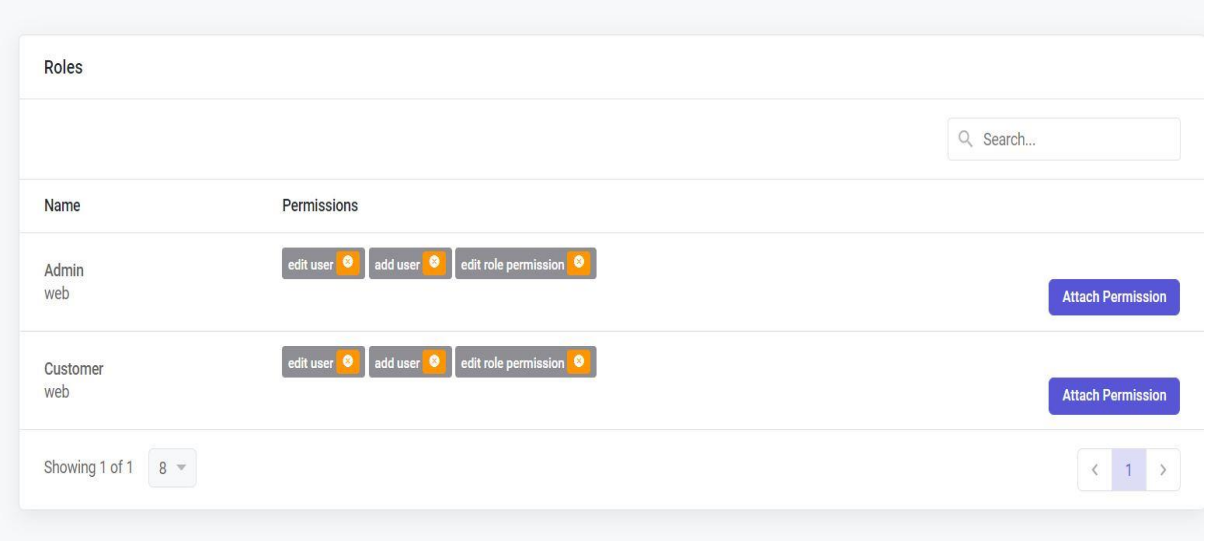


Figure: (4.15) Roles

4.16 ORDER REMOVE:

When the buyer selects the required items and brings them to the cash counter, it is found that he does not have the amount of the bill. Now the seller can deduct any price from the list if the seller does not sell the rest of the product or if the buyer returns it after buying the product.

4.17 TESTING:

This testing is needed to prevent from errors. By this test, the ensuring of parallelism to the client by adding values to the products.

The need for Web Testing

- How much activity the site can handle.
- How reliable is the technology.
- How about browser compatibilities.
- Is the site content meaningful?
- Is the application easy to use?
- The server have the enough power?

Type of Testing	Testing Process
Browser Compatibility	• Linux, Windows, Mac should cover the principal platform. • Each Extensions of browsers • Lack of backing to early browsers.
Page display	• Display errors • Slow Downloading time • Runtime error message
Back-up and recovery	• Failure of backup • Fall over Recovery • Failure recovery
Availability	• Inadmissible levels of unavailability.
Usability	• Lack of support • Site navigation • Catalog navigation
Session Management	• Storage • Expiration
Content Analysis	• All the time available • Offensive content • Copyright contravention.
Transection	• Auditing • Integrity of transection • Throughput

Order process and purchasing	• Processing of payment • Tracking of order • Functionality of cart • Processing of payment system

Internationalization	• Cultural sensitivity • Display of language • Regional Accounting • Support of language
Operational business procedures	• Bottleneck observation
System Integration	• Integrated performance • Updates • The capacity of interface volume • The format of data interface
Login and security	• Viruses of computer • Attacks of Web • Digital Signature • Transmission of unsecured information • Login capability

CHAPTER 5

CONCLUSION AND FUTURWORK

CONCLUSION:

The internet market business is growing day by day.it becomes one of the pillar of modern business, though electronic shopping has achieved importance not only from entrepreneurship but also customer aspects. E- Shopping generates business opportunities and for the customer, it makes shopping possible.

As per a survey, in online most of the customers are very emotional and usually make decisions to be on a site for the few seconds looking on the sites. If website design is not good actually your design is like a shops interior. A customers will be attracted by seeing website design, ifdesign is okay then customers at least will not skip your website within a second. In this project a customer is provided an electronic commerce site to buy products and this product is made by PHP, HTML, CSS.

An e-commerce sites cart design must be accompanied with user friendly cart. For the customers it should be convenient to view the cart and should be able to add or remove the ordered items from the cart. In this project a customer is provided an electronic commerce site to buy products and this product is made by PHP, HTML, CSS, LARAVEL**.**

This project actually gives me a lot of knowledge that is how to use PHP, html, css3 to develop a website, and how to connect to the database to access the data and to provide the user, the system of modifying data and web pages with a shopping cart application.

Future Work:

As this site is made for our own business, actually this is for student business that's why now this site consist of only the stationary product. In future when our business grown up then gradually all the daily needy garment's products, all kind of plastic product, Electronics, gadgets etc. will be included in our site.

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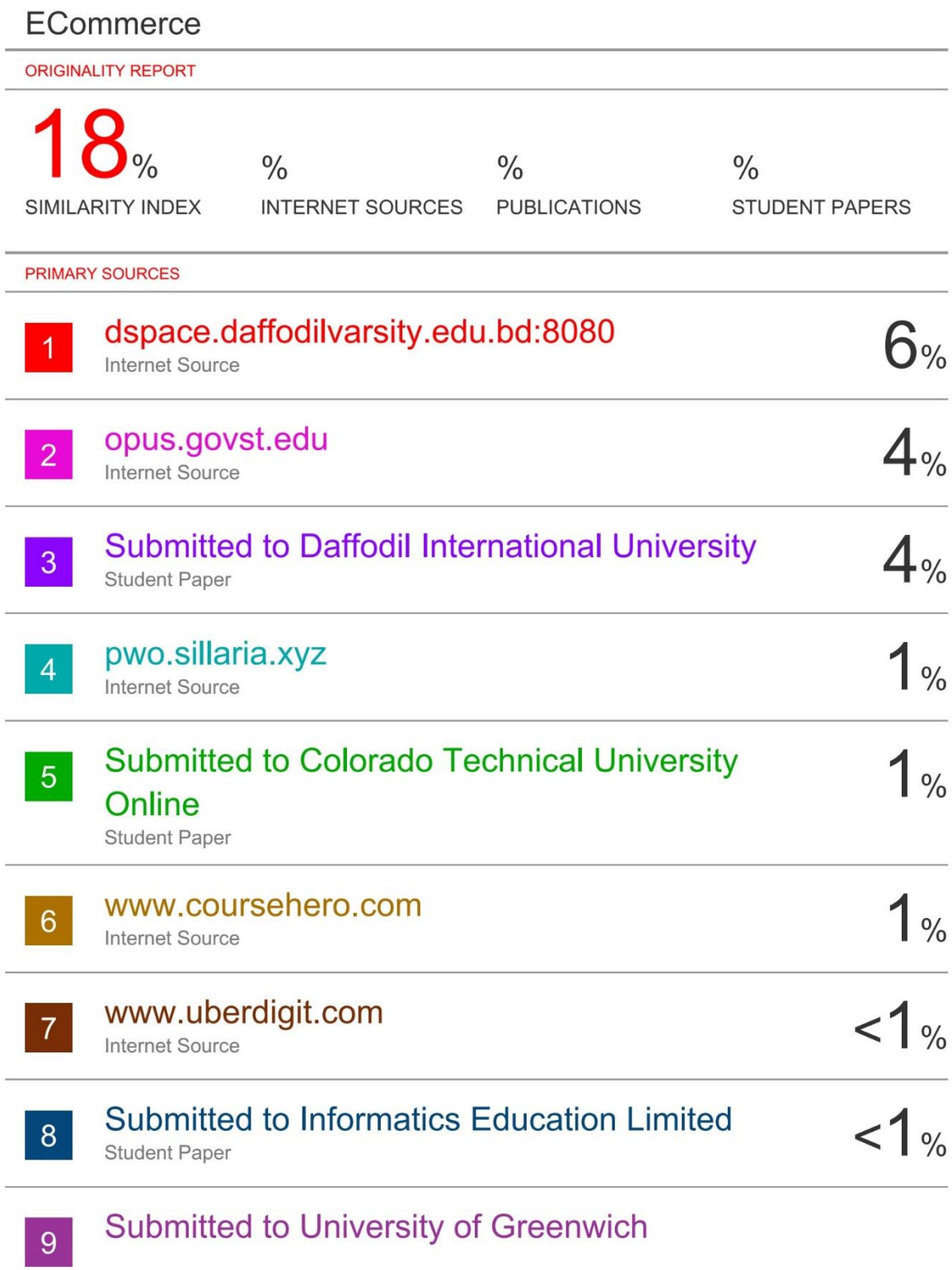
Plagiarism report:



ECommerce

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