Introduction

This is a web based application that helps consumers and vendors do business online. The system serves as an online shop or store platform for groceries that can handle multiple vendors. Thus allows multiple vendors to publish their available products online. It has a simple and pleasant user interface with the help of Bootstrap Framework. It also has user-friendly features and functionalities to give the end-users a hassle-free and better experience while using the system.
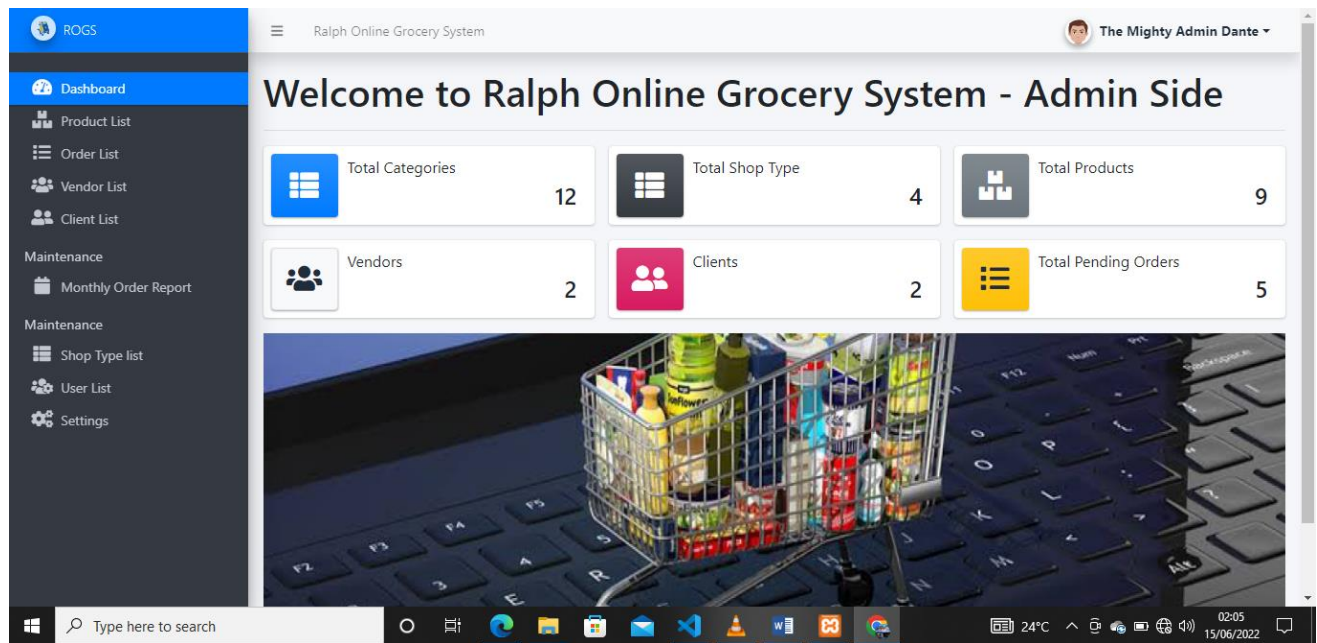
The main objective of this system is to help vendors and consumers sell and buy products virtually at ease no matter their distance. Vendors are able to advertise their surplus products via our system. The consumers are able to view the products and buy them via our online system

There are Ecommerce systems such as jumia that are using the same technology as ours but with our technology it is so user-friendly that anybody can access it. With this system, vendors will be able to reach many customers and other vendors who would need their products and this will make them become advantageous in profits and gaining connections.
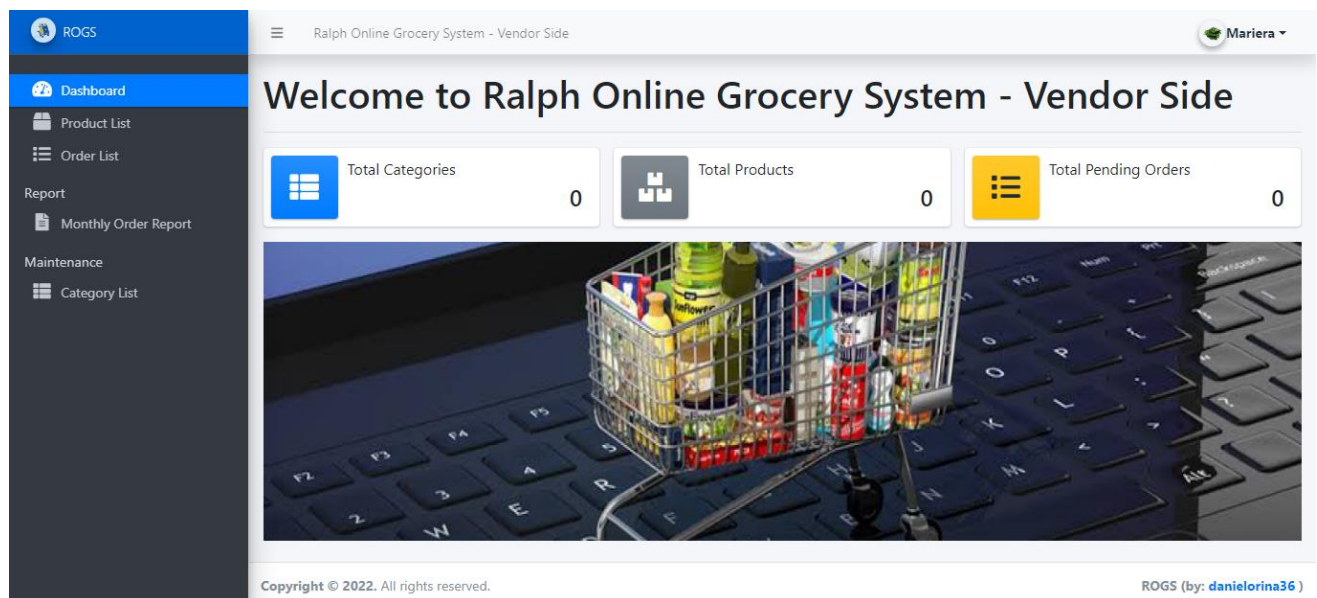
Sides of Multi-Vendor Ecommerce user interface

The Multi-Vendor Online Groceries Management System Project has 3 sides of the user interface. It has a side for Management, Vendors, and Clients. Each of the user groups has different restrictions to each other.

The Management Side is the side of the system where the management can manage and access the data in the system. This side is mainly for managing the system information, users, and all that are related to all sides of the system. It can be accessed by 2 types of user roles which are the Administrators and Staff. The Administrator Users have the privilege to access and manage all the features and functionalities of the said system side while the Staff Users have only limited access. This side can list and view all the transactions of all vendors.
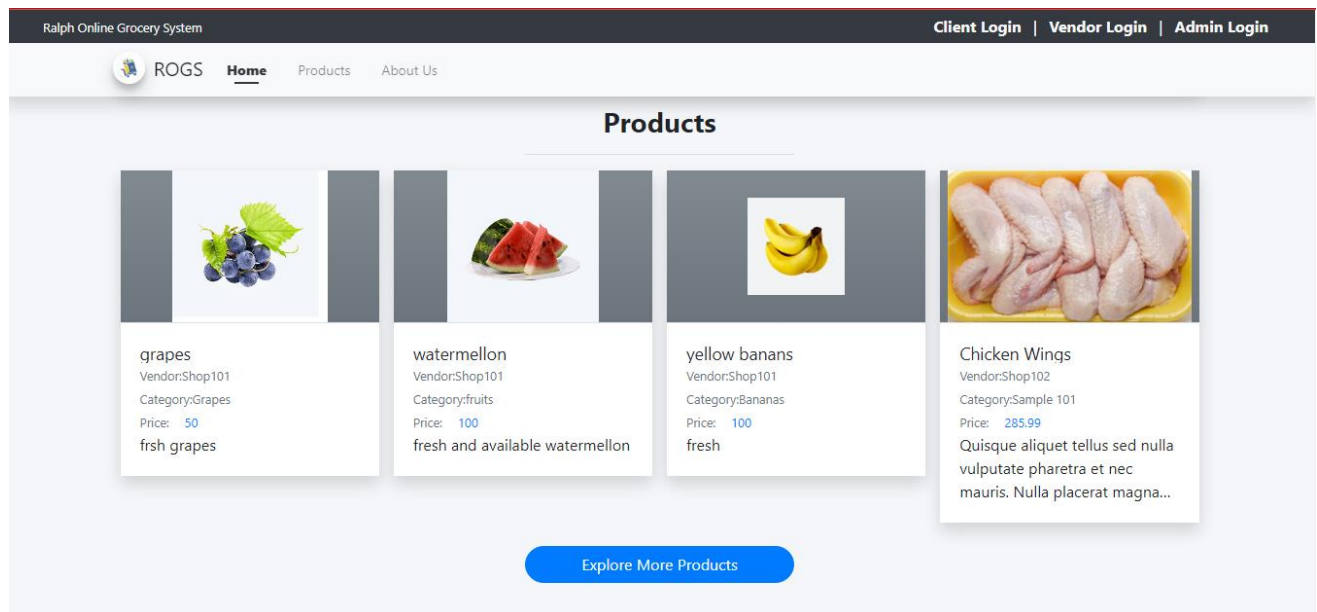
The Vendor Side is the side of the vendors where they can list all the products they are selling. Vendors can also list and manage all their clients' orders. They can update the status of the order and generate printable monthly order reports.
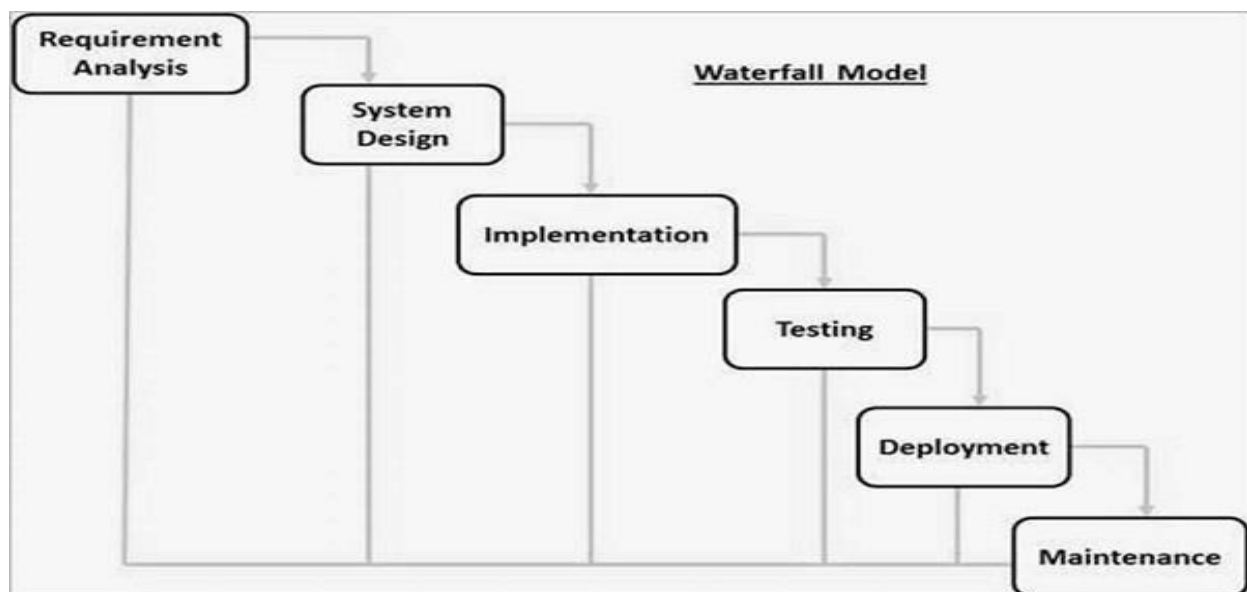

The Client-Side is the side for the registered clients and for anonymous visitors. They can explore the products listed in the system from multiple vendors. The client can simply create their system credentials so that they can access some other functionalities of the system that are only available for registered clients. They can add products to their shopping cart for later checkout. In the Cart list, the added products of the client is being listed and organized per vendor. When the client places their order, the system will save the orders per vendor, so if the client orders are from multiple vendors their order transaction will be separated

per vendor. They can also list all their orders and check for status updates. The clients are only allowed to cancel their pending orders.

Methodology Development Model

The sequential phases in Waterfall model are –

Requirement Gathering and analysis – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

- **System Design** – The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.

- **Implementation** – With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.

- **Integration and Testing** – All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.

- **Deployment of system** – Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.

- **Maintenance** – There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

Tools and Technique needed to come up with the project

a. Php

b. Xampp

c. Mysql

d. HTML

e. Bootstrap

f. Sublime text

g. Git hub

h. Java Script

i. Css

Software Product Features

Multi-Vendor Ecommerce system

Login Information System ➢

Description

-The system will maintain the login information of its user to enter in to the software

➢ Validating Checks

-Administrator need to login the unique id and password.

-Contact number should have maximum 10 digits.

-All the details must be fill up.

-Email address should be in the proper format.

➢ Sequencing information

-Login information should be filled before the user allowed.

➢ Error Handling

-If user doesn't fill up validate information then the system display error message for user and request to enter the validate information.

Performance required

➢ Security

-System should be Protected from unauthorized access Where the validate Username and Password are required so no other can access.
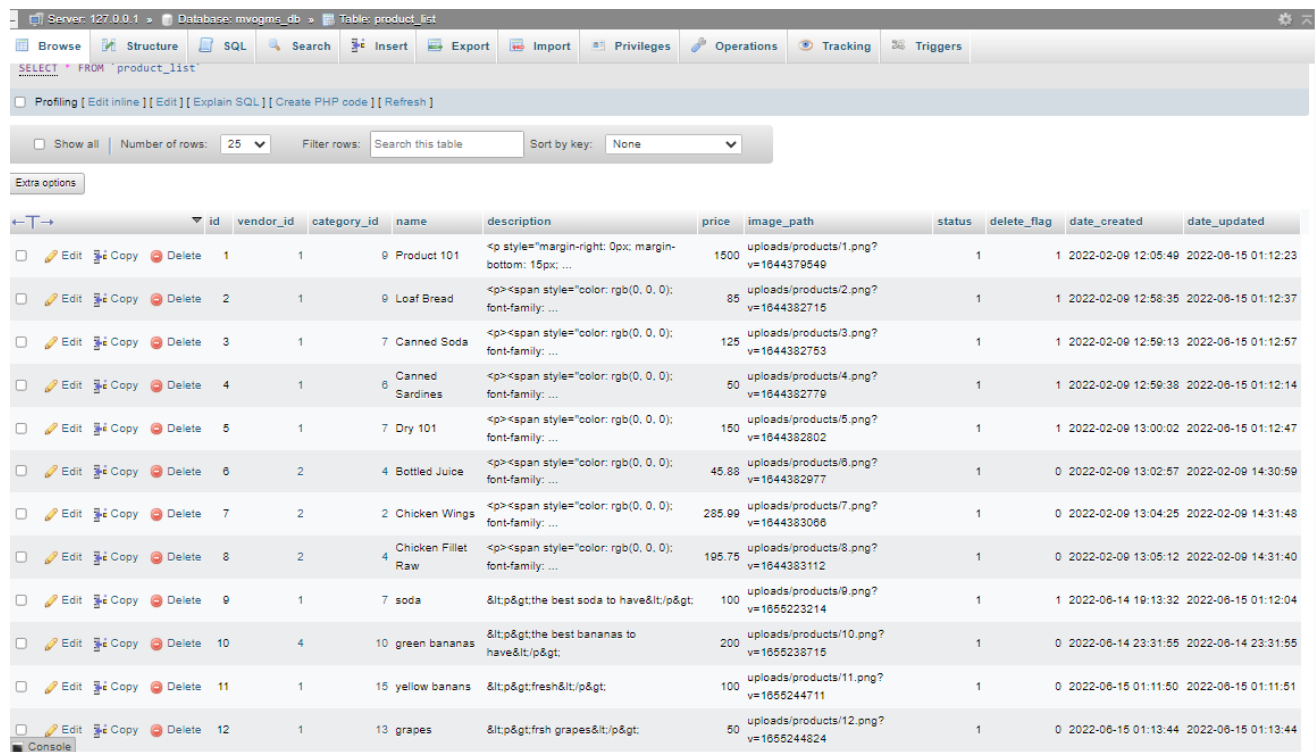
➢ Maintainability

-System should be design in a maintain order. So it can be easily modified.

Login Admin Credentials

Username: Dante

Password: Dante123

Logical Database

	id	vendor_id	category_id	name	description	price	image_path	status	delete_flag	date_created	date_updated
☐ 🖉 Edit 🗐 Copy ⊗ Delete	1	1	9	Product 101	<p style="margin-right: 0px; margin-bottom: 15px; ...	1500	uploads/products/1.png?v=1644379549	1	1	2022-02-09 12:05:49	2022-06-15 01:12:23
☐ 🖉 Edit 🗐 Copy ⊗ Delete	2	1	9	Loaf Bread	<p><span style="color: rgb(0, 0, 0); font-family: ...	85	uploads/products/2.png?v=1644382715	1	1	2022-02-09 12:58:35	2022-06-15 01:12:37
☐ 🖉 Edit 🗐 Copy ⊗ Delete	3	1	7	Canned Soda	<p><span style="color: rgb(0, 0, 0); font-family: ...	125	uploads/products/3.png?v=1644382753	1	1	2022-02-09 12:59:13	2022-06-15 01:12:57
☐ 🖉 Edit 🗐 Copy ⊗ Delete	4	1	6	Canned Sardines	<p><span style="color: rgb(0, 0, 0); font-family: ...	50	uploads/products/4.png?v=1644382779	1	1	2022-02-09 12:59:38	2022-06-15 01:12:14
☐ 🖉 Edit 🗐 Copy ⊗ Delete	5	1	7	Dry 101	<p><span style="color: rgb(0, 0, 0); font-family: ...	150	uploads/products/5.png?v=1644382802	1	1	2022-02-09 13:00:02	2022-06-15 01:12:47
☐ 🖉 Edit 🗐 Copy ⊗ Delete	6	2	4	Bottled Juice	<p><span style="color: rgb(0, 0, 0); font-family: ...	45.88	uploads/products/6.png?v=1644382977	1	0	2022-02-09 13:02:57	2022-02-09 14:30:59
☐ 🖉 Edit 🗐 Copy ⊗ Delete	7	2	2	Chicken Wings	<p><span style="color: rgb(0, 0, 0); font-family: ...	285.99	uploads/products/7.png?v=1644383066	1	0	2022-02-09 13:04:25	2022-02-09 14:31:48
☐ 🖉 Edit 🗐 Copy ⊗ Delete	8	2	4	Chicken Fillet Raw	<p><span style="color: rgb(0, 0, 0); font-family: ...	195.75	uploads/products/8.png?v=1644383112	1	0	2022-02-09 13:05:12	2022-02-09 14:31:40
☐ 🖉 Edit 🗐 Copy ⊗ Delete	9	1	7	soda	<p>the best soda to have</p>	100	uploads/products/9.png?v=1655223214	1	1	2022-06-14 19:13:32	2022-06-15 01:12:04
☐ 🖉 Edit 🗐 Copy ⊗ Delete	10	4	10	green bananas	<p>the best bananas to have</p>	200	uploads/products/10.png?v=1655238715	1	0	2022-06-14 23:31:55	2022-06-14 23:31:55
☐ 🖉 Edit 🗐 Copy ⊗ Delete	11	1	15	yellow banans	<p>fresh</p>	100	uploads/products/11.png?v=1655244711	1	0	2022-06-15 01:11:50	2022-06-15 01:11:51
☐ 🖉 Edit 🗐 Copy ⊗ Delete	12	1	13	grapes	<p>frsh grapes</p>	50	uploads/products/12.png?v=1655244824	1	0	2022-06-15 01:13:44	2022-06-15 01:13:44

Data Design

Data Model: A database model is a type of data model that determines the logical structure of a database and fundamentally determines in which manner data can be stored, organized and manipulated.
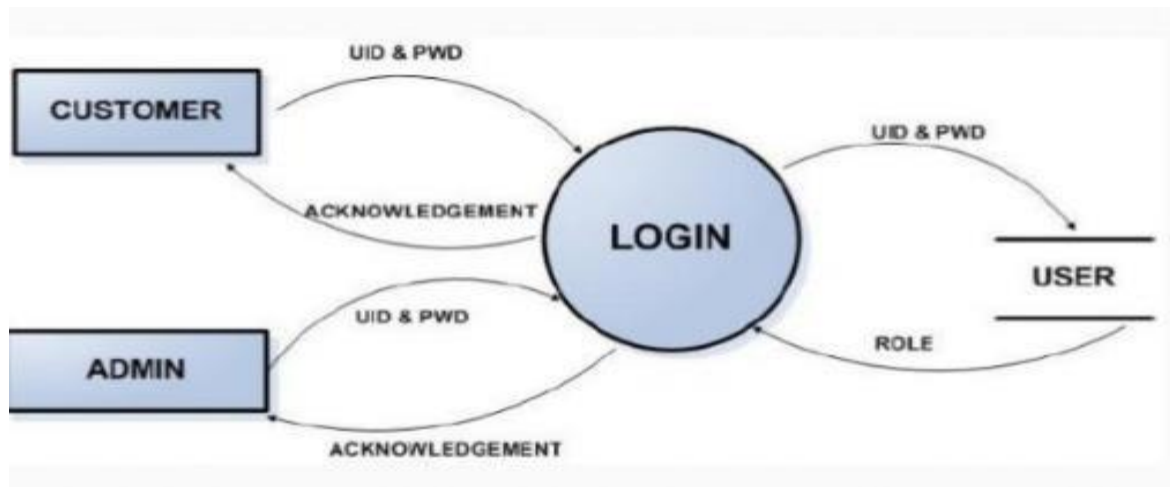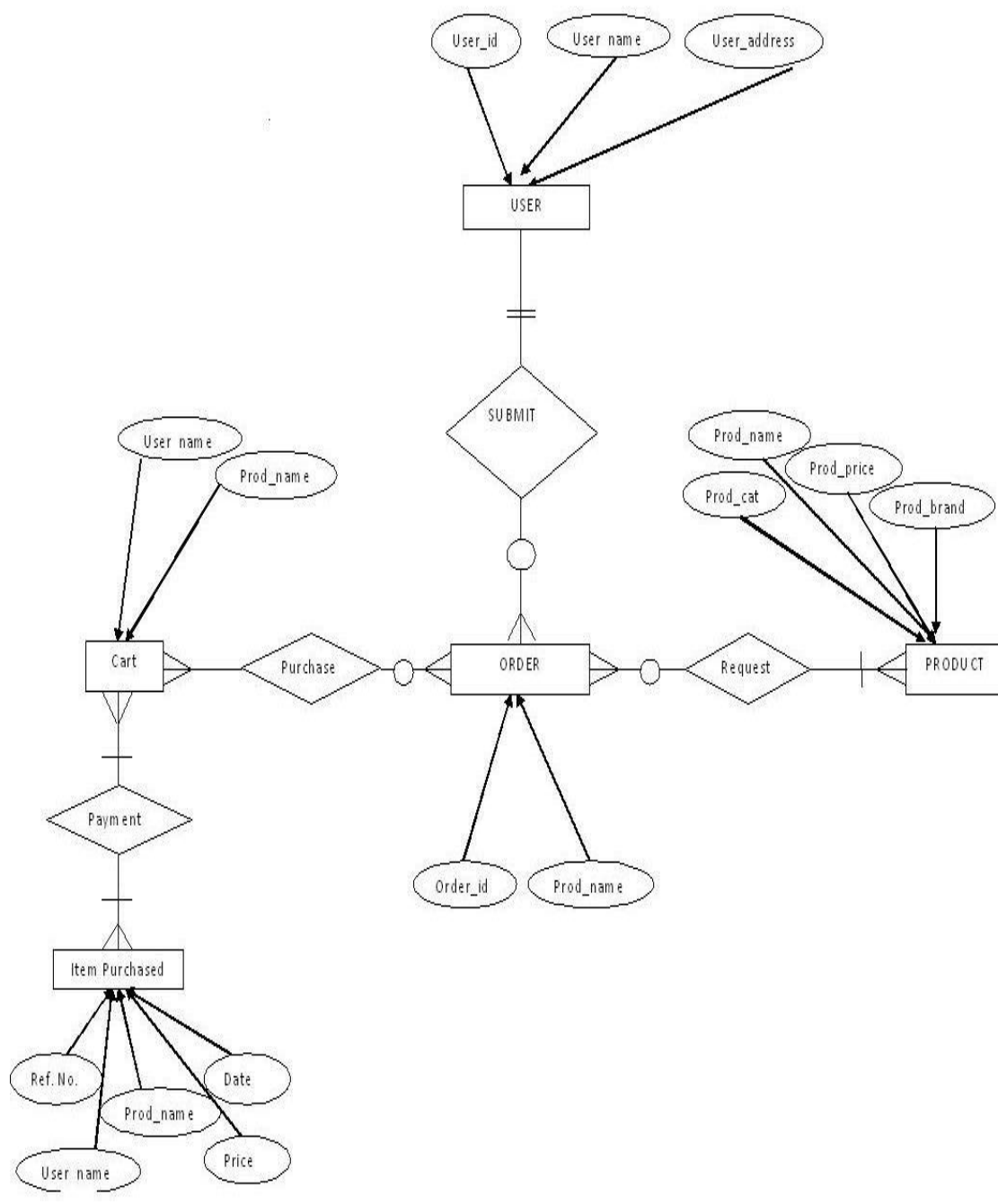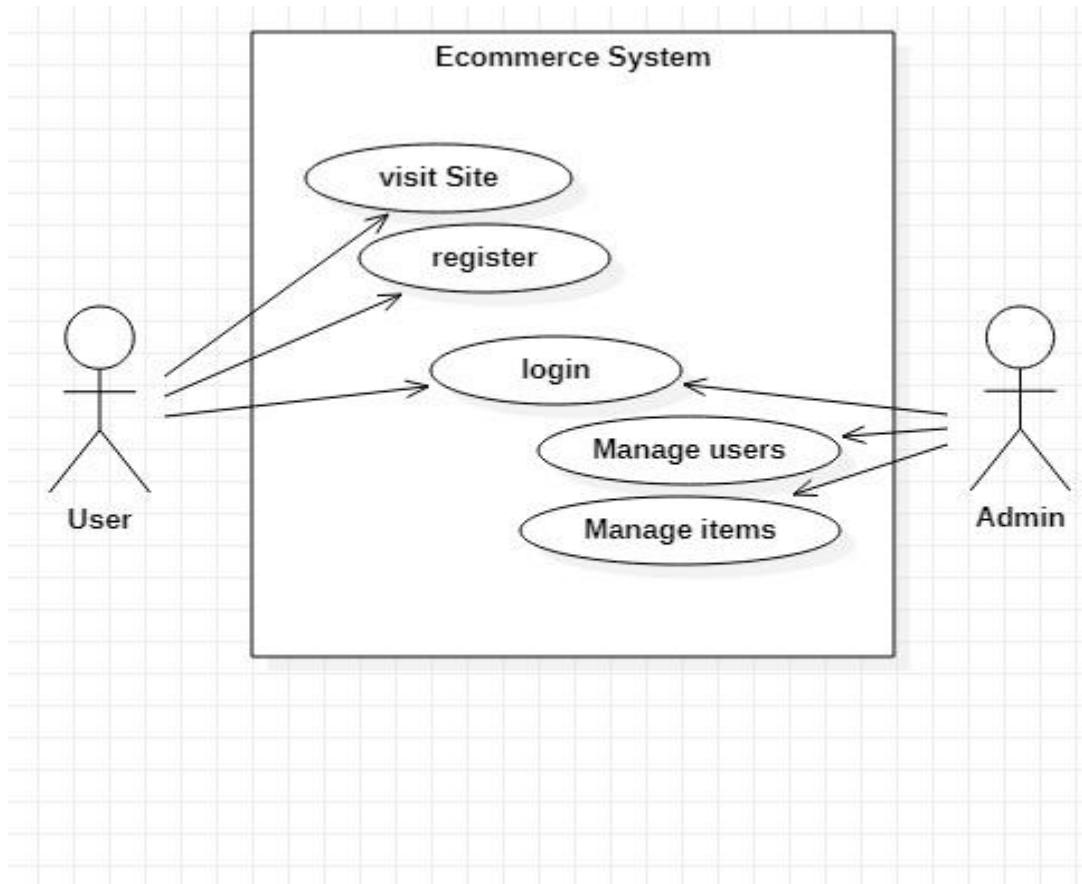
Level 0

Figure: Data flow

Figure:ER diagram

Figure: Use case Diagram of Ecommerce

```
                          Start


      Login                          Registration


   Enter Email                        Fill the
   address and                          form
    password
      no    yes                      no   yes

        index                         Register
                                     Succesfully


       Admin                          profile


        edit                         category


       Delete                          order


                    End
```
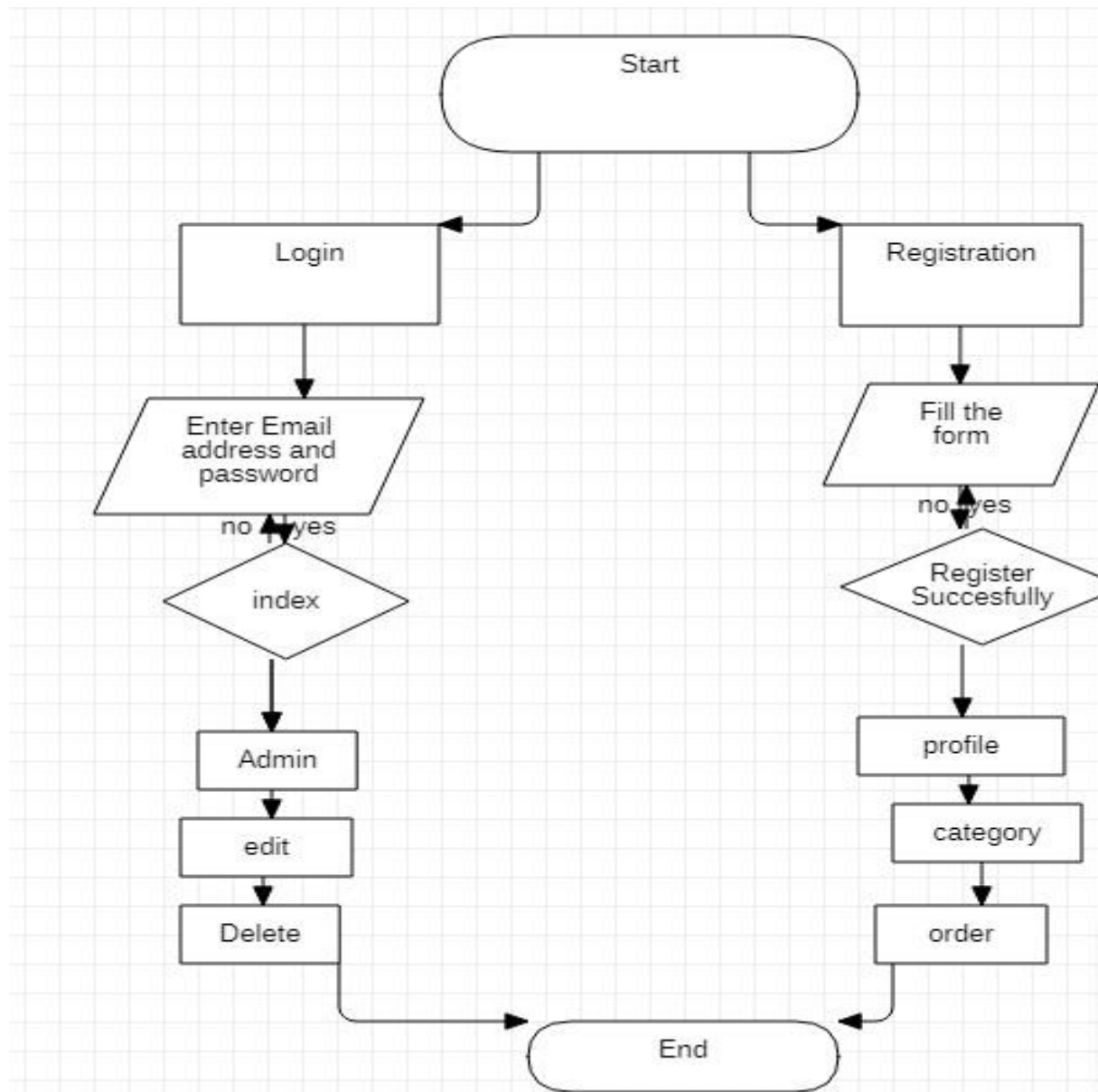
Figure: Flowchart of Ecommerce

2.1 Profile of Problems

One must know what the problem is before it can be solved. The basis for ecommerce is to buy products online and save the timing.

A Ecommerce, who want to buy any product of their need, has to contact different Shoppers, before deciding upon a particular Product that best suit his needs, requirements and satisfaction. Moreover, most of the work involved in this development process has to be done manually which is very time consuming and cumbersome and also, it reduces the efficiency, accuracy.

To know the facts and understanding of the problem in detail, *System Analysis* is carried out. It is the process of studying the business processes and procedures, generally referred to as business systems, to see how they can operate and whether improvement is needed.

2.2 Structure of the project

- ❖ Before Login
  - ➢ Login
  - ➢ Register
  - ➢ Forget Password
  - ➢ Administrator Login
  - ➢ About Us
  - ➢ Contact Us
- ❖ After Administrator Login
  - ➢ Edit Website Details
  - ➢ Add products
  - ➢ Add Category
  - ➢ Add Items
  - ➢ Delete products

- ➢ Delete Category
- ➢ Delete Items
- ➢ Manage User
  - • See Users
  - • Users Shopping
  - • Add Users
  - • Delete Users
- ➢ Logout
- ❖ After User Login
  - ➢ My Profile
    - • Edit Profile
    - • Change Password ➢ Buy Products
    - • Categories (Controlled by Admin. Which can be add it dynamically according to their needs)
  - ➢ My Cart
  - ➢ My Shopping's
  - ➢ Checkout
  - ➢ Logout

Problem Analysis

Ecommerce system is a computerized, online solution to the various problems faced by the Product buyer and seller wishing to outsource their software development work to a Provider at an economical cost, thus achieving high performance, accuracy, reliability and high speed of data retrieval.

In this system, there is a registration process each for the Product buyer and seller. The Administrator of the site verifies the Provider after his registration and if satisfied, assigns him a user name and password.

Our site can be used by anyone who is searching for Products whether he/she is first time visiting our site. Our site also provides some discounted Products as same u get on any shop.

Chapter III: Discussion and Conclusion