

“Webbmall E-Commerce Site”

A Project-II Report

Submitted in partial fulfillment of requirement of the

Degree of

**BACHELOR OF TECHNOLOGY in COMPUTER SCIENCE &
ENGINEERING**

BY

**Taha Basrawala (EN18CS302053)
Aziz Saifee (EN18CS302008)
Swapnil Gupta (EN18CS302052)**

Under the Guidance of
Ms. Shimpy Goyal



**Department of Computer Science & Engineering
Faculty of Engineering
MEDI-CAPS UNIVERSITY, INDORE- 453331
May 2022**

“Webbmall E-Commerce Site”

A Project-II Report

**Submitted in partial fulfilment of requirement of the
Degree of**

**BACHELOR OF TECHNOLOGY in COMPUTER SCIENCE
& ENGINEERING**

Submitted By:

Taha Basrawala (EN18CS302053)

Aziz Saifee (EN18CS302008)

Swapnil Gupta (EN18CS302052)

Under the guidance of

Ms. Shimpy Goyal



**Medi-Caps University
AB Rd, Pigdamber, Rau, Indore,
Madhya Pradesh 453331
May 2022**

Certificate

I/We, **Ms. Shimpy Goyal** certify that the project entitled "**Webbmall E-Commerce Site**" submitted in partial fulfilment for the award of the degree of Bachelor of Technology/Master of Computer Applications by **Taha Basrawala (EN18CS302053), Aziz Saifee (EN18CS302008) and Swapnil Gupta (EN18CS302052)** is the record carried out by him/them under my/our guidance and that the work has not formed the basis of award of any other degree elsewhere.

Ms. Shimpy Goyal

Department of Computer Science

Medi-Caps University, Indore

Dr. Pramod S. Nair

Head of the Department

Computer Science & Engineering

Medi-Caps University, Indore

Approval Certificate

The project work “Webbmall E-Commerce Site” is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approved any statement made, opinion expressed, or conclusion drawn there in; but approve the “Project Report” only for the purpose for which it has been submitted.

Internal Examiner

Name:

Designation

Affiliation

External Examiner

Name:

Designation

Affiliation

Acknowledgements

I would like to express my deepest gratitude to Honorable Chancellor, **Shri R C Mittal**, who has provided me with every facility to successfully carry out this project, and my profound indebtedness to **Prof. (Dr.) Dilip K Patnaik**, Vice Chancellor, Medi-Caps University, whose unfailing support and enthusiasm has always boosted up my morale. I also thank **Prof. (Dr.) D K Panda**, Pro Vice Chancellor, **Dr. Suresh Jain**, Dean Faculty of Engineering, Medi-Caps University, for giving me a chance to work on this project. I would also like to thank my Head of the Department **Dr. Pramod S. Nair** for his continuous encouragement for betterment of the project.

I express my heartfelt gratitude to my Internal Guide Dr. /Mr. without whose continuous help and support, this project would ever have reached to the completion.

Student may write as per their experience.

Taha Basrawala (EN18CS302053)

Aziz Saifee (EN18CS302008)

Swapnil Gupta (EN18CS302052)

B.Tech. IV Year

Department of Computer Science & Engineering

Faculty of Engineering

Medi-Caps University, Indore

DECLARATION

Is partial fulfilment of the requirement for the award of the Bachelor of Technology The work has been carried out at Medi-Caps Institute of Technology & Science, Indore under Medi-Caps University is an authentic record of my work carried out under the guidance of Mr. Miss./Mrs Shimpy Goyal. Professor/Assistant Professor. Computer Science Engineering Department, Medi-Caps, Indore,

The matter embodied in the Project presentation has not been submitted by me or anyone else for the award of any other degree or diploma...

Members In project	En No	Signature
• Taha Basrawala	EN18CS302053	_____
• Aziz Saifee	EN18CS302008	_____
• Swapnil Gupta	EN18CS302052	_____

This is to certify that the above statement made by candidate is correct to the best of my knowledge. The presentation is the candidate's own research work and embodies the finding made by the candidate himself under my/our supervision.

I hereby certify that the work which is being presented in to dissertation title
“ _____ ”.

Guide

HOD

Professor/ Assistant Professor

Medi-Caps University Rau Pigdamber,
Indore

SUMMARY

The idea of doing business electronically over network is nothing new; We think nothing of ordering the products we've seen advertised on television or in printed catalog with a phone call or a fax, & ATMs are always within a reach for quick, easy, and automatic banking. Corporations advertise through broadcasting & networks, & consumers flock to local outlets of nation & international franchise networks. As the world become increasingly interconnected, particularly through the internet with its open protocols, forward looking business will be able to make their product available to a global market, without having to create & maintain their own private networks for selling, delivering & supporting customers.

While the techniques for attracting consumer attentions, describing products, & delivering them electronically will be of interest to those who wish to participate in this new markets, this project simply explain how business transaction can be execute across an unreliable & unsecured medium like the internet, & discussed some of the methods currently being planned & implemented – in other words, how you will be buying & selling in the future, & how it will work.

The number of businesses denoted to promoting commerce on the internet has been growing like Topsy since the end of 1994, but they all share the goal of making commercial over the internet safe, simple secure – & earn a profit in the process. The method employed to achieve these ends are somewhat more various, but can be categorized as either creating secure & reliable channel to carry transaction across internet connection (which are inherently unsecured & unreliable), or using more traditional channels to carry sensitive information.

INDEX

Table of Contents	Page No
CERTIFICATION	3
APPROVAL CERTIFICATION	4
ACKNOELEDGEMENT	5
DECLARATION	6
SUMMARY	7
<hr/>	
CHAPTER NO 1.0 INTRODUCTION	
1.1 Introduction	14
1.2 Breaf History of E-Commerce	15
1.3 What is E-Commerce	16
1.4 Defination of E-Commerce	18
1.5 The Element of E-Commerce	19
1.6 Historical Development	21
<hr/>	
CHAPTER NO 2.0 REQUIREMENT ANALYSIS AND DFD	
2.1 Requirement Analysis	23
2.1.1 Requirement Analysis	23
2.1.2 Data Requirement	24
2.1.3 Process Requirement	24
2.2 Use Case Diagram	25
2.2.1 Use Case Diagram Adminstrative Management system	26
2.2.2 Use Case Diagram for Customer	31
2.3 Data Flow Diagram	34
2.3.1 Context Level Diagram	34
2.3.2 First Level DFD	35
2.3.3 Second Level DFD	36

CHAPTER NO 3.0 DESIGN SPECIFICATION

3.1 Customer Interface	38
3.1.1 Home Page	38
3.1.2 Customer Login and Registration Page	40
3.1.3 Add to Cart Page	41
3.1.4 Cart Product Before checkout	42
3.1.5 Final Checkout and Shopping Information	43
3.1.6 Select Payment Methods	44
3.1.7 Customer Shopping Notifaction	45
3.2 Admin Interface	46
3.2.1 Admin Login	47
3.2.2 Admin Home Page	48
3.2.3 Add Category	49
3.2.4 Manage Category	50
3.2.5 View Category	51
3.3.6 Edit Category	52
3.3.7 Delete Category	53
3.3.8 Add Product	54
3.3.9 Manage Product	55
3.3.10 View Product	56
3.3.11 Edit Product	57
3.3.12 Delete Product	58
3.3.13 Manage Product	59
3.3.14 View Product	60
3.3.15 Edit Order Status	61
3.3 Footer Page	62

CHAPTER NO 4.0 MODEL & PROCESS	
4.1 Model of E-Commerce	63
4.1.1 Business to Business	63
4.1.2 Business to consumer	64
4.1.3 Consumer to Consumer	65
4.1.4 Consumer to Business	65
4.1.5 Business to Government	66
4.1.6 Government to Business	67
4.1.7 Government to Citizen	67
4.2 E-Commerce Proces	68
4.3 E- commerce Payment process	69
4.3.1 Credit card	69
4.3.2 Credit Card Payment Process	70
4.3.3 Debit Card	71
4.3.4 Smart Card	71
4.3.5 E-money	71
4.3.6 Electronic Fundtransfer	72
4.4 E-commerce Selling Process	73
CHAPTER NO. 5.0 SUCCESS FACTERE	
5.1 Success Factere in E-commerce	77
5.2 Six Factors in E-commerce success	78
5.2.1 Regulation of Product Price	78
5.2.2 Maintaninge High Quality Product	78
5.2.3 Improving Store Accesibility	79
5.2.4 Making a Wonderfull Impression	79

5.2.5 Securing Your Shipment	80
5.2.6 Taking Advantage of E-commerce	80
CHAPTER NO 6.0 TECHNOLOGIES	
6.1 E-Commerce Technology	81
6.1.1 The Mobile Shift	81
6.1.2 Conversational Marketing	81
6.1.3 Automation And Chat Bot	82
6.1.4 Image Search	83
6.1.5 Fast & Easy Checkout Process	83
CHAPTER NO 7.0 STANDARDS & STOCK	
7.1 E-Commerce Standards	85
7.1.1 Electronic Data Interchange	85
7.1.2 Open Buying on Internet	85
7.1.3 The OPT Tracking Process	85
7.1.4 The Open Profiling Standard	85
7.1.5 Secure Socket Layer	85
7.1.6 Secure Electronic Transaction	86
7.1.7 Trust	86
7.2 Electronic Stock Trading	87
7.3 Electronic Banking	88
7.4 Type of E-Banking	88
7.5 Importance of E-Banking	90
7.5.1 Banks	90
7.5.2 Customers	90
7.5.3 Businesses	91

7.6 E-Banking in India	92
7.7 Secure Electronic Transaction	94
CHAPTER NO 8.0 IMPLEMENTATION & TESTING	
8.1 Implementation	96
8.1.1 HTML	96
8.1.2 PHP	96
8.1.3 MySQL	97
8.1.4 XAMPP Server	97
8.2 Testing	98
8.2.1 Black Box Testing	98
8.2.2 White Box Testing	99
8.3 User Feedback	100
CHAPTER NO 9.0 COADING	
9.1 Coding Page	102
9.1.1 Main Page(INDEX)	102
9.1.1.1 Header	105
9.1.1.2 Footer	105
9.1.2 Search	108
9.1.3 Admin Bar	109
9.1.4 Bookmark	117
9.1.5 Category	127
9.1.6 Login	132
9.1.7 Mail	155
CHAPTER NO 10.0	
10.1 Bibliography	163

CHAPTER NO 11.0 FUTURE EXPECTATION

11.1 Future Expectation About E-commerce	164
11.1.1 The Internal is crushing Department Store	164
11.1.2 Mobile is The Internet	165
11.1.3 Social is the Key Drive	165
11.1.4 E-Commerce with Messaging	165
11.1.5 VR, AR and Wearable Devices.	166
11.1.6 Online Store Have to Fit In	166

CHAPTER NO 1.0

1.1 INTRODUCTION

Two thousand years ago, Roman roads brought trade and commerce to Europe in an unprecedented manner. A thousand years ago, the spice routes linked the cultures of East and West. At the dawn of the second millennium, the Internet, the world's largest computer network, the network of networks, is making fundamental changes to the lives of everyone on the planet-changing forever the way business is conducted.

Internet has become an important medium for doing global business based on the state of the art technology. Global business was conducted in a new way: electronically, using networks and the Internet. The availability of Internet has led to the development of **E-Commerce (Electronic commerce)**, in which business transactions take place via telecommunication networks. E-Commerce has two major aspects: economical and technological. The stress of this course will show you how to get started in the complex and exciting world of Electronic Commerce. New standards and new facilities are constantly emerging and their proper understanding is essential for the success of an operation and especially for those who are assigned a duty to select, establish, and maintain the necessary infrastructure.

1.2 BRIEF HISTORY OF E-COMMERCE

The history of E-commerce is a history of how Information Technology has transformed business processes. Some authors will track back the history of E-commerce to the invention of the telephone at the end of last century. The Internet was conceived in 1969, when the Advanced Research Projects Agency (a Department of Defence organization) funded research of computer networking. The Internet could end up like EDI (Electronic Data Interchange) without the emergence of the World Wide Web in 1990s. EDI (Electronic Data Interchange) is widely viewed as the beginning of E-commerce if we consider E-Commerce as the networking of business communities and digitalization of business information.

EDI, which expanded from financial transactions to other transaction processing and enlarged the participating companies from financial institutions to manufacturers, retailers, services, and so on. Many other applications followed, ranging from stock trading to travel reservation systems. Such systems were described as telecommunication applications and their strategic value was widely recognized. With the commercialization of the Internet in the early 1990s and its rapid growth to millions of potential customers, the term electronic commerce was coined, and EC applications expanded rapidly. One reason for the rapid expansion of the technology was the development of networks, protocols, software, and specifications. The other reason was the increase in competition and other business pressures. From 1995 to 1999 we have witnessed many innovative applications ranging from advertisement to auctions and virtual reality experiences. Almost every medium- and large-sized organization in the United States already has a Web site many are very extensive; for example, in 1999 General Motors Corporation offered 18,000 pages of information that included 98,000 links to its products, services, and dealers.

1.3 What is E-Commerce ?

Such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle, although it may also use other technologies such as e-mail.

Many retail shops are shifting to E-Commerce because e-commerce is rapidly growing in the world.

E-commerce businesses may employ some or all of the following:

- Online shopping web sites for retail sales direct to consumers.
- Providing or participation in online marketplaces, which process third-party business-to-consumers or consumers-to-consumers sales.
- Business-to-business buying and selling.
- Gathering and using demographic data through web contacts and social media.
- Business-to-business electronic data interchange.
- Marketing to prospective and established customers by e-mail or fax (for example, with newsletters).
- Engaging in email for launching new products and services.

1.4 WHAT DO YOU MEAN BY E-COMMERCE:-

Commerce is the exchange of goods & Services, usually for money. When you something at a store you buy something at a store you are participating in commerce. Going to work each day for a company that produces a product, is a link in the chain of the commerce. When one thinks of different ways, he/she immediately recognize several different players of the commerce such as:

- **Buyers:** These are the people or organization with money who want to purchase goods & service products.
- **Sellers:** These are the people who offer goods & service to buyers. Sellers are recognizing in different forms such as retailers who sell directly to consumers and wholesalers who sell to retailers & others. Wholesalers are also known as distributers.
- **Producers:** These are the people organization that create the product & services that seller's offer to buyers. Producer may is classified in the category of a seller. *They can sell there products to any category to customers.*

1.5 DEFINATION OF E-COMMERCE:-

"What is E-Commerce? E-Commerce supports an entire range of activities such as product design, manufacturing, advertising, commercial transactions, settlements of accounts using a variety of computer networks."

Thus , E-Commerce refers to the paperless exchange of business information using electronic data interchange , electronic mail, electronic fund transfer & other networked based technologies.

In a holistic sense electronic commerce can be summarized as:

- ✓ It is a business strategy.
- ✓ It uses technology to achieve business goals.
- ✓ It improves external business relationships,
- ✓ It is an evolution in the way companies' internal.
- ✓ It provides information to facilitate delivery of goods & Services.

1.6 THE ELEMENTS OF E-COMMERCE

In case of an E-Commerce, all the above listed elements are available but they are having slight variation in the real life situation.

- 1) A Product or service:** In case of E-Commerce, it is virtual product shown on a web site. One can demonstrate multimedia presentation of the product & its entire feature on the web page itself, which may not be possible in case of physical products of commerce activity.
- 2) A Place to sell the products:** In the E-Commerce case, a website displays the products in all ways & act as a place for E-Commerce.
- 3) A way to get customers to visit your website:** In case of E-Commerce search engines and linkages with other web sites play an important role in helping the customers to reach web sites of the E-organizations.
- 4) A way to accept returns:** The orders are accepted on the web site itself. On the web pages of the E-commerce companies shopping carts are being provided. One can click on the icon and fill in the shopping card to order items to be purchased and it is accepted by the E-Commerce company as order from customer.
- 5) A way to accept money:** In case of traditional commerce, buyers and sellers are in direct contact with each other. The payments in E-Commerce are made using Electronic fund Transfer in various form using credit cards, smart cards, e-checks etc. the information of payment is routed through Value added Networks (VANs) and Payment Gateway Systems etc.
- 6) A way to accept returns:** As is the case of commerce, in case of E-Commerce all the trading companies have the system of accepting the returns if the goods and services are not to the satisfaction of the customer or not up to the standreds/ specifications mentioned in the product catalogs or brochures hosted on the web pages.

- 7) **A way to handle warranty claims:** Sometimes if the product breaks in the way or some other problems crop up with the product. In such situation, warranty claims are to be honored as in the case of commerce.
- 8) **A way to provide customer service:** The main tools of the customers services are E-mail, Online forms , Online Knowledge bases and frequently asked questions.

1.7 HISTORICAL DEVELOPMENT:-

The meaning of the term “electronic commerce” has changed over the last 30 years. Originally, “electronic commerce” meant the facilitation of commercial electronically, usually using technology like Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT), where both were introduced in the late 1970s, for example, to send commercial documents like purchase orders or invoices electronically.

The ‘electronic’ or ‘e’ in e-commerce refers to the technology/systems; the ‘commerce’ refers to be traditional business models. E-commerce is the complete set of processes that support commercial/business activities on a network. In the 1970s and 1980s, this would also (ATM) and telephone banking in the 1980s was also forms of e-commerce. However, from the 1990s onwards, this would include enterprise resource planning systems (ERP), data mining and data warehousing.

In the dot com era, it came to include activities more precisely termed “Web commerce”—the purchase of goods and services over the World Wide Web, usually with secure connections (HTTPS, a special server protocol that encrypts confidential ordering data for customer protection) with e-shopping carts and with electronic payment services, like credit cards payments authorizations.

Today, it encompasses a very wide range of business activities and processes, from e-banking to offshore manufacturing to e-logistics. The ever growing dependence of modern industries on electronically enabled business processes gave impetus to the growth and development of supporting systems, including backend systems, applications and middleware. Examples are broadband and fiber-optic networks, supply-chain management software, customer relationship management software, inventory control systems and financial accounting software.

When the web first became well-known among the general public in 1994, many journalists and pundits forecast that e-commerce would soon become a major economic sector. However, it took about four years for security protocols (like HTTPS) to become sufficient developed and widely deployed. Subsequently, between 1998 and 2000, a

substantial number of businesses in the United States and Western Europe developed rudimentary web sites.

Although a large number of "pure e-commerce" companies disappeared during the dot-com collapse in 2000 and 2001, many "brick-and-mortar" retailers recognized that such companies had identified valuable niche markets and began to add e-commerce capabilities to their Web sites.

CHAPTER NO 2.0

2.1 REQUIREMENT ANALYSIS

2.1.1. REQUIREMENT ANALYSIS

As the goal of the application is ease of use and to provide an interactive interface, extensive research has been done to gain an insight into the needs and behaviors of various users. The working of the application is made convenient and easy to use for the end user. In online web based shopping systems there are two party who interact with the system, one of them are customer who wants to buy product and other the system admin manage the system. A good web based online shopping system should present the following factors to the customers for better usability.

Customer requirements:

- Knowing when an item have to save not save in the shopping cart.
- Returning *the different parts of the site after adding an item to the shopping cart.*
- Easy scanning and selecting items in the list.
- Effective categorical organization of the products.
- Simple navigation from home page to information and order links for specific products.
- Obvious shopping links or buttons.
- Consistent layout of product information.
- A well-organized web interface to work as admin so that he can handle all the part of the system properly.

2.1.2 DATA REQUIREMENT

- A customer can view the product properly but to buy he has to add the product in shopping cart, for this he has to register or have to login if he is an existing user.
- To launch the system, admin have to select the category of product, company or manufacturer of product will remain in the system for customer view and he can select those from his panel .
- From user part or customer part when a customer order from his part can manage the order of the product.
- Admin can add manufacturer of product, view manufacturer, delete manufacturer, update manufacturer and its status those are not available in shop as unpublished.
- Admin can add product, view product, delete product, update product and its status those are not available in shop as unpublished.
- Admin can add category of product, delete, view, update product and its status those are not available in shop or stop to sell or not to show to customer.
- Another important factor in the design of the software that the feedback. The interactive cycle between a user and website is not complete until the responds to a command by the user.

2.1.3 PROCESS REQUIREMENT

To perform any systems have some specific authentication functionality. The following process requirements are identified for the better performance of the system:

- A valid admin user is needed to access the information of the system for the admin.
- A valid customer ID is need to the customer to buy the product.
- Admin login to the system can view, edit, delete and update category, manufacturer and product related information. Also he can update the order information.

2.2 USE CASE DIAGRAM

A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. It consists of a group of elements (for example, classes and interfaces) that can be used together in a way that will have an effect larger than the sum of the separate elements combined.

The use case should contain all system activities that have significance to the users. A use case can be thought of as a collection of possible scenarios related to a particular goal; indeed, the use case and goal are sometimes considered to be synonymous.

In this use case diagram of Online Shopping admin can add, delete, edit and view Category, Manufacturer and Product as well as admin can manage all of them. Also Admin can manage order those are requested by the customer, and can change the status.

2.2.1 USE CASE DIAGRAM FOR ADMINISTRATIVE MANAGEMENT SYSTEM.

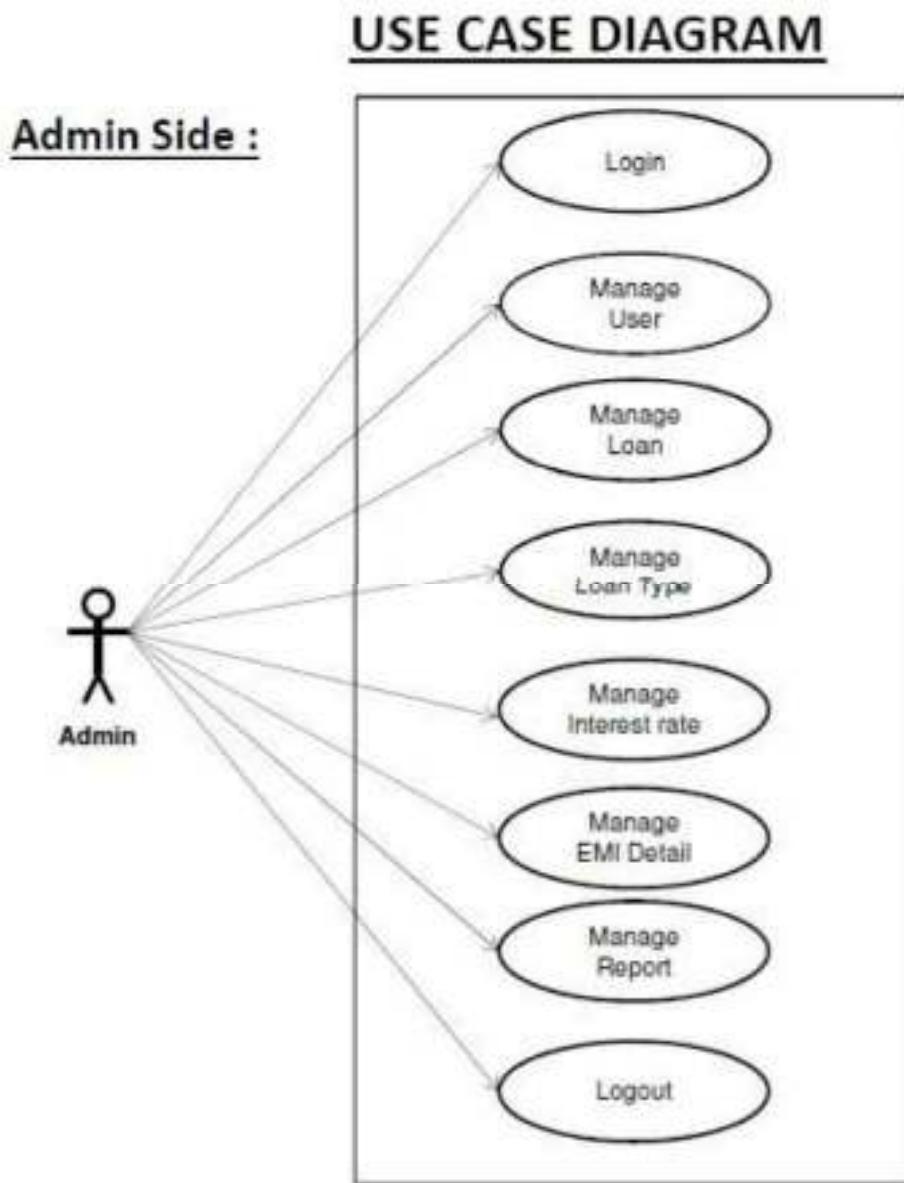


Figure 2.1: Use Case Diagram for Administrative Management

Description:

Use Case No: 001

Use Case Name: Add Category

Actor: Admin

Pre-requisite: login

Primary Path: Click on Add Category

Use Case No: 002

Use Case Name: View Category

Actor: Admin

Pre-requisite: login

Primary Path: Click on View Category

Use Case No: 003

Use Case Name: Edit Category

Actor: Admin

Pre-requisite: login

Primary Path: Click on Edit Category

Use Case No: 004

Use Case Name: Delete Category

Actor: Admin

Pre-requisite: login

Primary Path: Click on Delete Category

Use Case No: 005

Use Case Name: Add Manufacturer

Actor: Admin

Pre-requisite: login

Primary Path: Click on Add Manufacturer

Use Case No: 006

Use Case Name: View Manufacturer

Actor: Admin

Pre-requisite: login

Primary Path: Click on View Manufacturer

Use Case No: 007

Use Case Name: Edit Manufacturer

Actor: Admin

Pre-requisite: login

Primary Path: Click on Edit Manufacturer

Use Case No: 008

Use Case Name: Delete Manufacturer

Actor: Admin

Pre-requisite: login

Primary Path: Click on Delete Manufacturer

Use Case No: 009

Use Case Name: Add product

Actor: Admin

Pre-requisite: login

Primary Path: Click on Add product

Use Case No: 0010

Use Case Name: View product

Actor: Admin

Pre-requisite: login

Primary Path: Click on View product

Use Case No: 0011

Use Case Name: Edit product

Actor: Admin

Pre-requisite: login

Use Case No: 0012

Use Case Name: Delete product

Actor: Admin

Pre-requisite: login

Primary Path: Click on Delete product

Use Case No: 0013

Use Case Name: Manage Order

Actor: Admin

Pre-requisite: login

Primary Path: Click on Manage Order

2.2.2 USE CASE DIAGRAM FOR CUSTOMER

Auction Website Use Cases



Figure 2.2: Use Case Diagram for Customer

Description:

This is the Use Case diagram for customer. This diagram shows the activity done from customer end to buy the product. There are several option of searching a product by the category, manufacturer, top selling and latest product. Those are given below one by one.

Use Case No: 001

Use Case Name: Register

Actor: Customer

Pre-requisite: None

Primary Path: Go to Home page of the shopping system, click on create account, fill the form and finally click on create An Account

Use Case No: 002

Use Case Name: Search Product

Actor: Customer

Pre-requisite: None

Primary Path: Click on Category or Manufacturer name

Use Case No: 003

Use Case Name: View Product

Actor: Customer

Pre-requisite: None

Primary Path: Click on product

Use Case No: 004

Use Case Name: View Image

Actor: Customer

Pre-requisite: None

Primary Path: Put cursor on product image

Use Case No: 005

Use Case Name: Login

Actor: Customer

Pre-requisite: None

Primary Path: Click on login button

Use Case No: 006

Use Case Name: Add to cart

Actor: Customer

Pre-requisite: login

Primary Path: Click on add to cart button

Use Case No: 007

Use Case Name: Edit Cart

Actor: Customer

Pre-requisite: Have to add product to cart

Primary Path: Click on update

Use Case No: 008

Use Case Name: Add Shipping info

Actor: Customer

Pre-requisite: Checkout button

2.3 DATA FLOW DIAGRAM (DFD)

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modelling its process aspects. A DFD is often used as a preliminary step to create an overview of the system, which can later be elaborated.

2.3.1 CONTEXT LEVEL DIAGRAM:

Context level diagram just show the task happening in the whole system, its actually shows the input what is the output for the input.

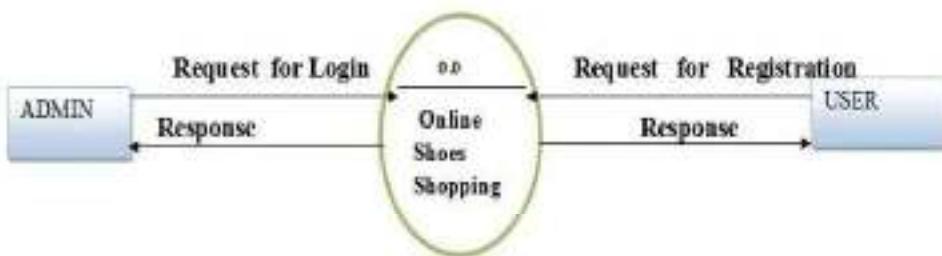


Figure 2.3: Context Level DFD

2.3.2 FIRST LEVEL DFD:

First level DFD shows the major steps that have to complete to buy a product. Initially customer visit the website, search the product by category, manufacturer and top selling, show the details of the product, select payment method, finally the product delivered by the company agent.



Figure 2.4: First Level DFD

2.3.3 SECOND LEVEL DFD:

Second level DFD shows the whole fact that happen in the system and it's given below:

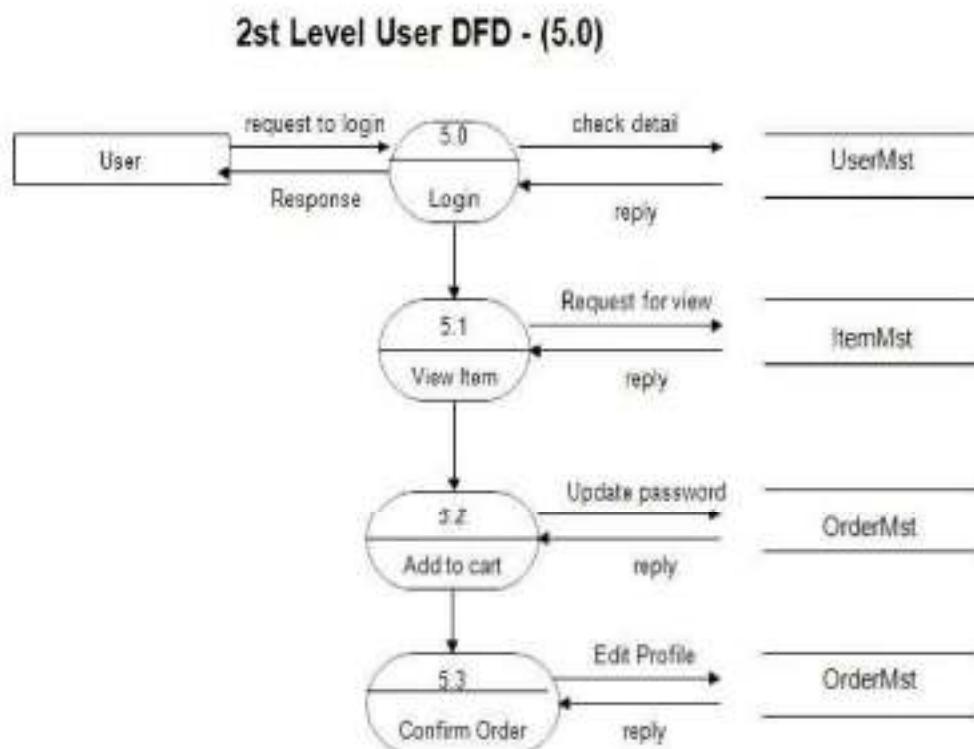


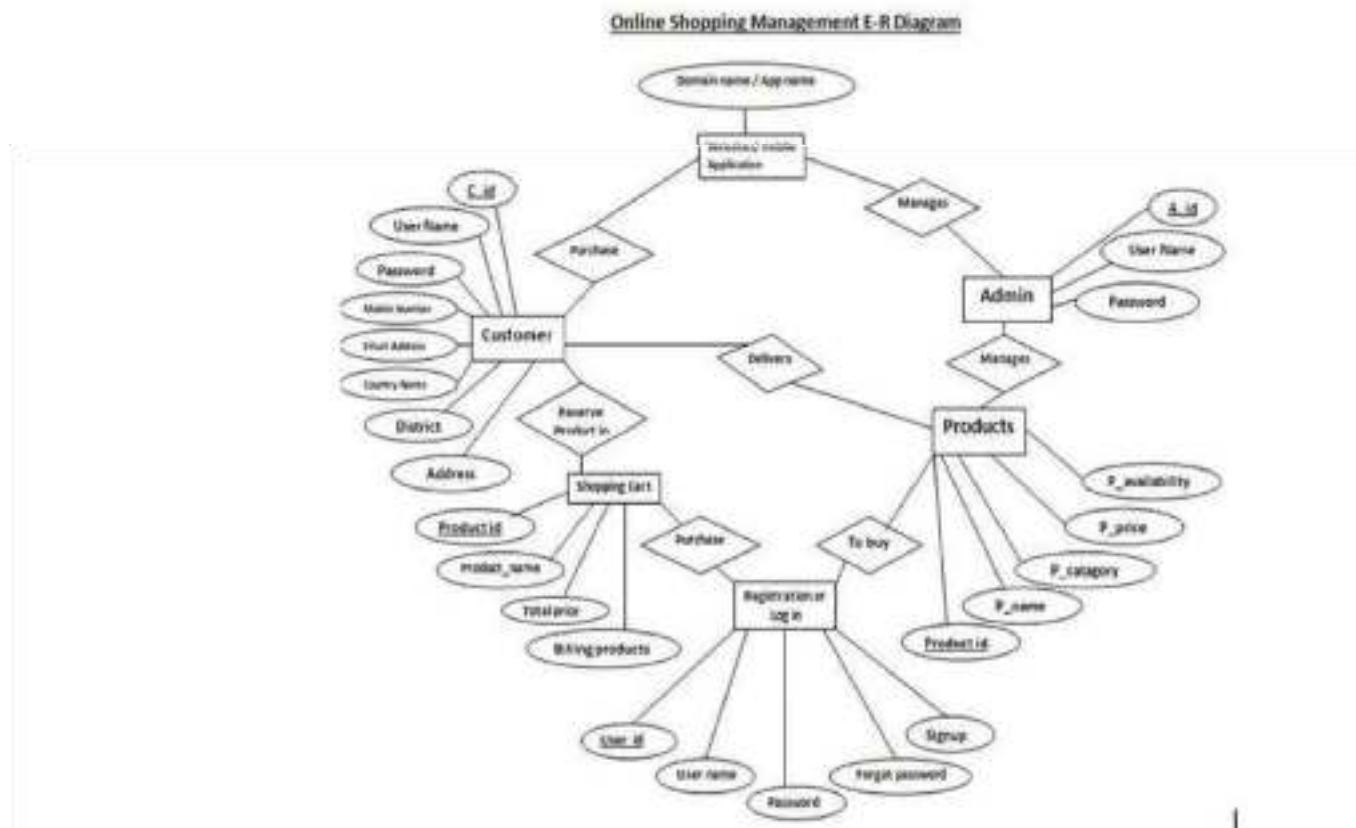
Figure 2.5: Second Level DFD

2.4 ER DIAGRAM

An ER diagram can be used to design logical database schemas. An ER model is a high-level description of the data and the relationships among the data, rather than how data is stored. It focuses on identifying the entities and the relationship among the entities.

In the ER diagram of Online Shopping the relationship between the customer to product is one to many as same customer can buy multiple product, also for category to product is one to many as for a single category have different product. Also here mentioned the relationship between the tables, mention the primary key of the table. Here another important part is that its mention all the entities of the table.

Online Shopping System ER diagram give below:



CHAPTER NO 3.0

DESIGN SPECIFICATION

3.1 CUSTOMER INTERFACE

3.1.1 HOME PAGE

A home page is a webpage that serves as the starting point of website. It is the default webpage that loads when visit a web. The home page is located in the root directory of a website. Most web server allow the home page to have one of several different filenames. Examples include index.html, index.htm, index.shtml, index.php, default.html, and home.html. The default filename of a website's home page can be customized on both Apache and IIS servers. Since the home page file is loaded automatically from the root directory, the home page URL does not need to include the filename. There is no standard home page layout, but most home pages include a navigation bar that provides links to different sections within the website. Other common elements found on a home page include a search bar, information about the website, and recent news or updates. Some websites include information that changes every day. For example, the Tech Terms home page includes a daily quiz and tech term of the day. Home page of shopping system include so many part of the system those are below.

- Top Selling: Top of the home page showing top selling of the product.
- Menu: Home page include menus according to category of product, and customer can search the product according to category of product the customer needed.
- Cart: Customer can see the products he added in his cart.
- Create Account: The customer has no account can register from this page.
- Latest product that added recently showing in the home page right part also the middle of the home page.
- In footer of the home page customer can view the product according to the manufacturer.

- In the middle part of the home page showing the current promotion or offer running.
- Bottom of the page showing Account, Help and Popular menu. Popular menu will show the latest product, Help for contact and Account for register or existing user login.

Home Page view is shown in figure below:

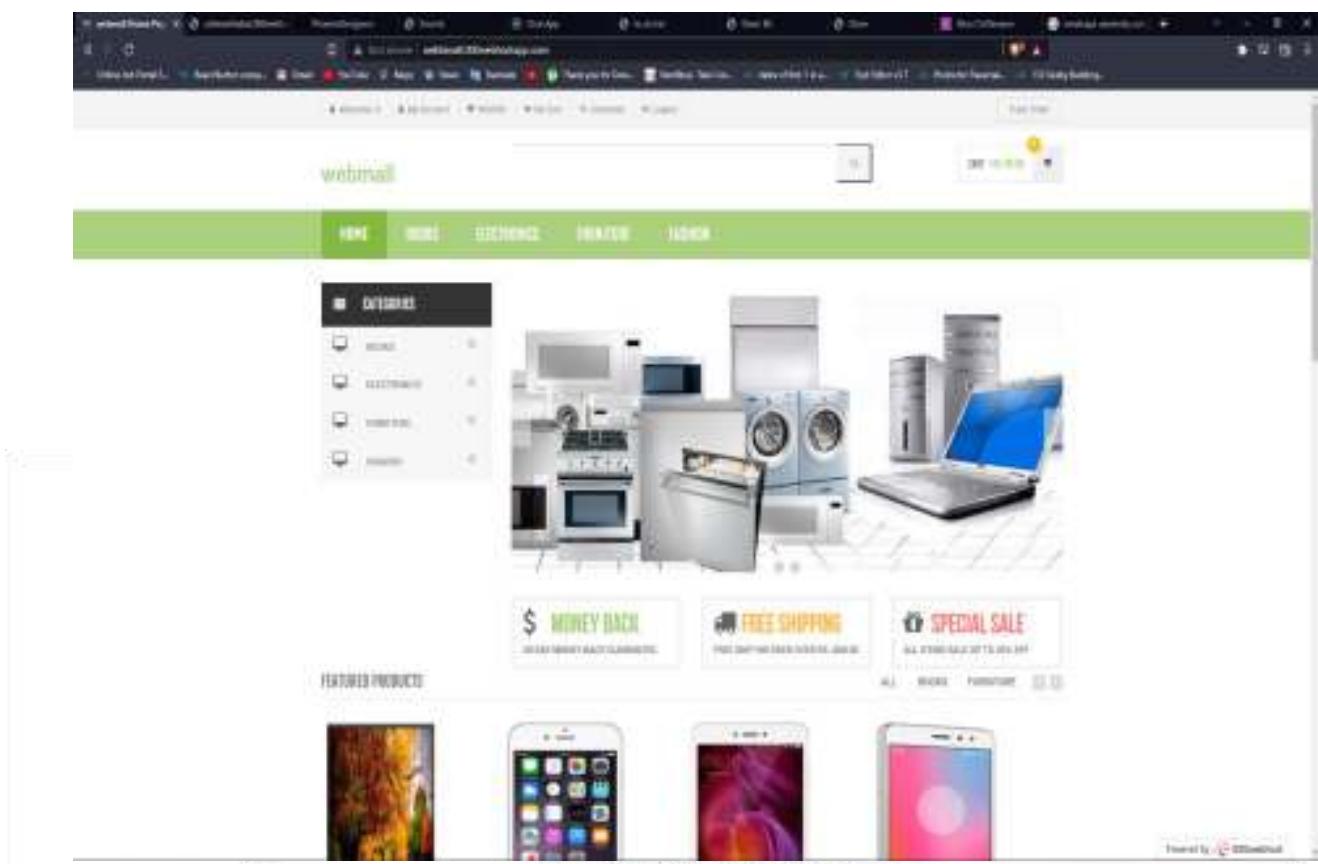


Figure: 3. 1 Home page

3.1.2 CUSTOMER LOGIN AND REGISTRATION PAGE

Customer have to login before adding product in cart. In this page existing customer can login to buy product and new user can create an account for buying the product.

Figure of user login and registration page given below:

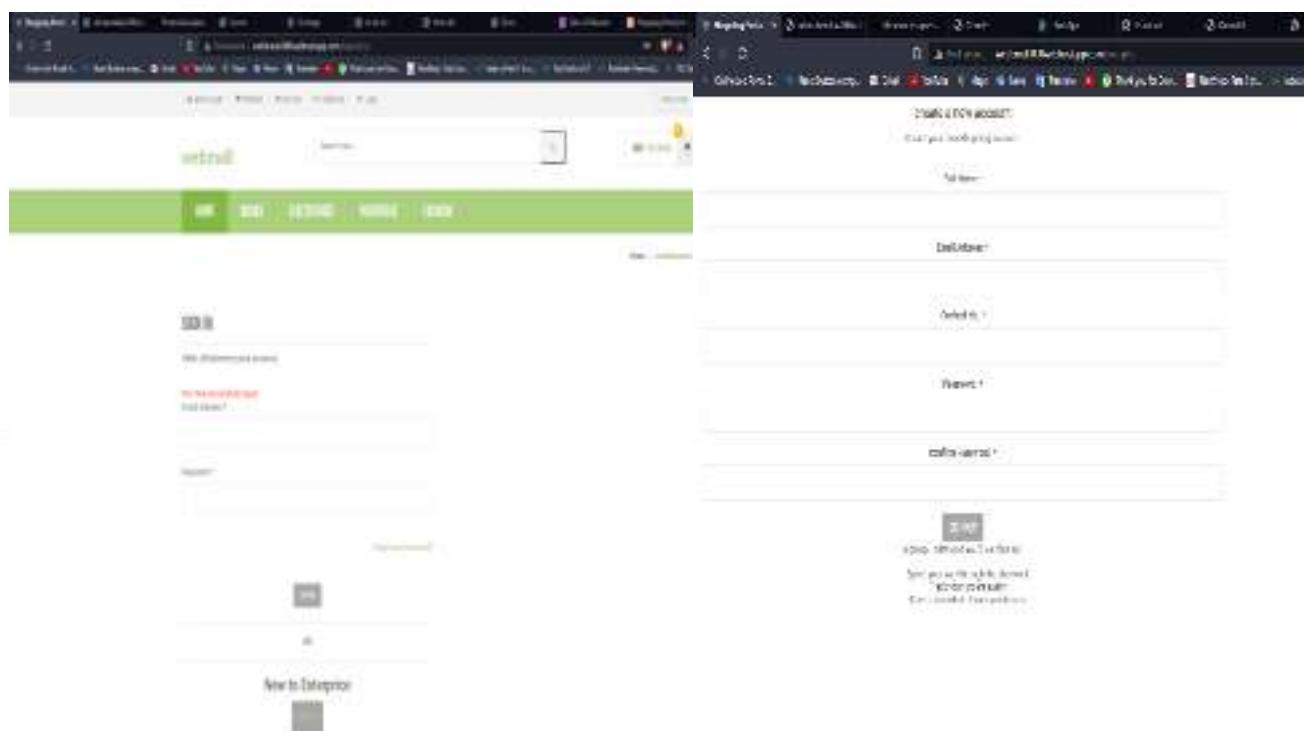


Figure: 3.2 user login and registration

3.1.3 ADD TO CART PAGE

To buy a product the customer have to add product to cart. Also customer can view the product details, as well as large view by putting the cursor over the product image. The figure of adding product to cart given



Figure: 3.3 add to cart

3.1.4 CART PRODUCT BEFORE CHECK OUT

The customer can view the product, update number of product, delete product from cart and send request to check out and given figure below:

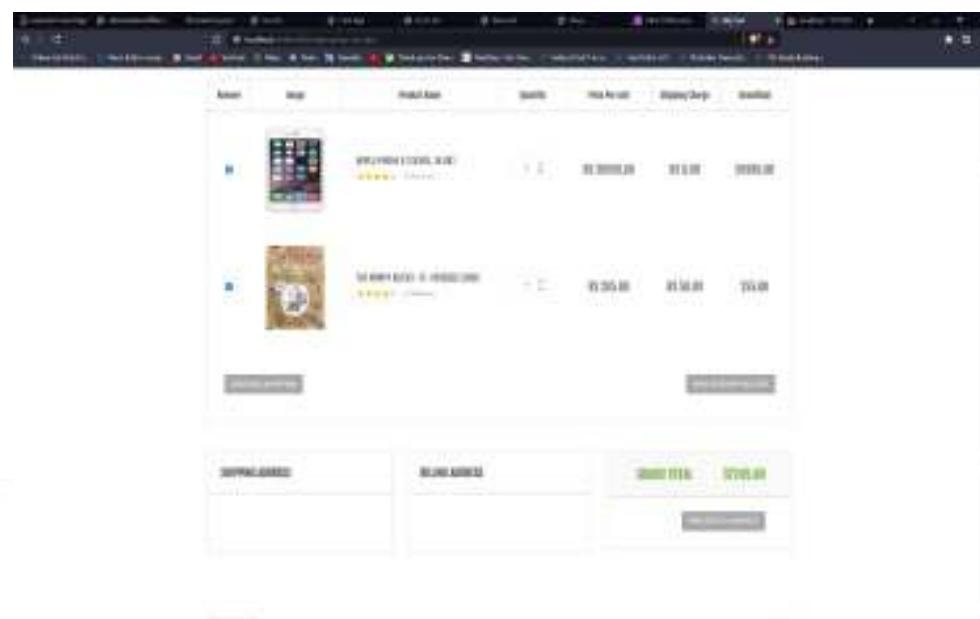


Figure: 3.4 Cart Product before check out

3.1.5 FINAL CHECKOUT AND ADD SHIPPING INFORMATION

From the customer panel before adding shipping information he can see the product details, also have to add.

Shipping information. The figure of Final Checkout and Add Shipping Information method given below:

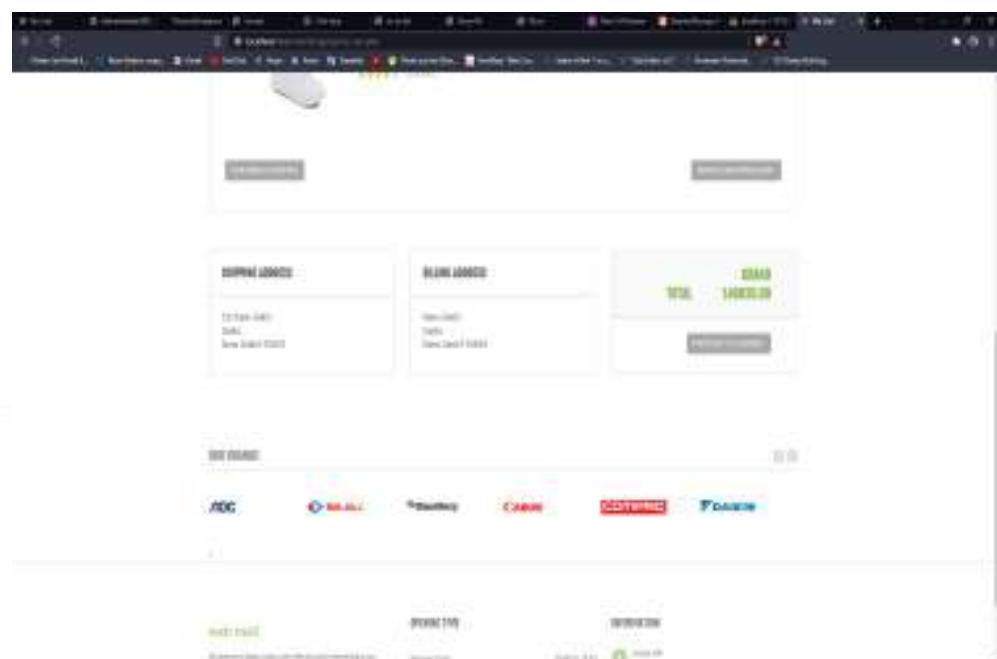


Figure: 3.5 Final Checkout and Add Shipping Information

3.1.6 SELECT PAYMENT METHOD

There are several method of payment to pay to product cost, customer select any of them. After selecting the payment method customer have to confirm the order. The figure of payment method given below:

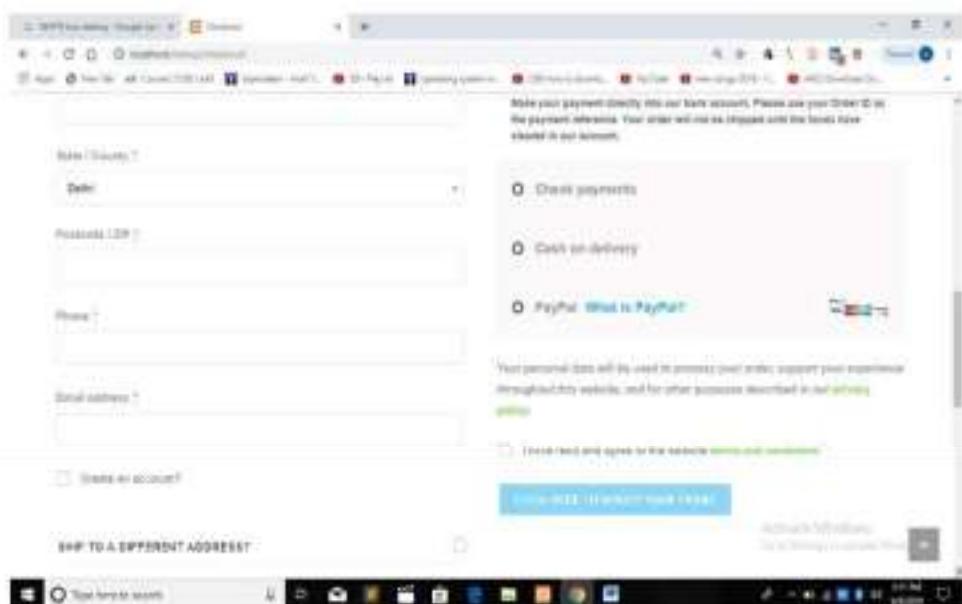


Figure: 3.6 Payment Method

3.1.7 CUSTOMER SHOPPING NOTIFICATION

After selecting the payment method by the customer, then confirming the order he will redirect to home page of the website, a notification will display in the top part of the website as for the confirmation that his order submitted successfully. The order submitted by the customer will show at admin panel, and admin will take steps to deliver the product. The notification message will be like below:

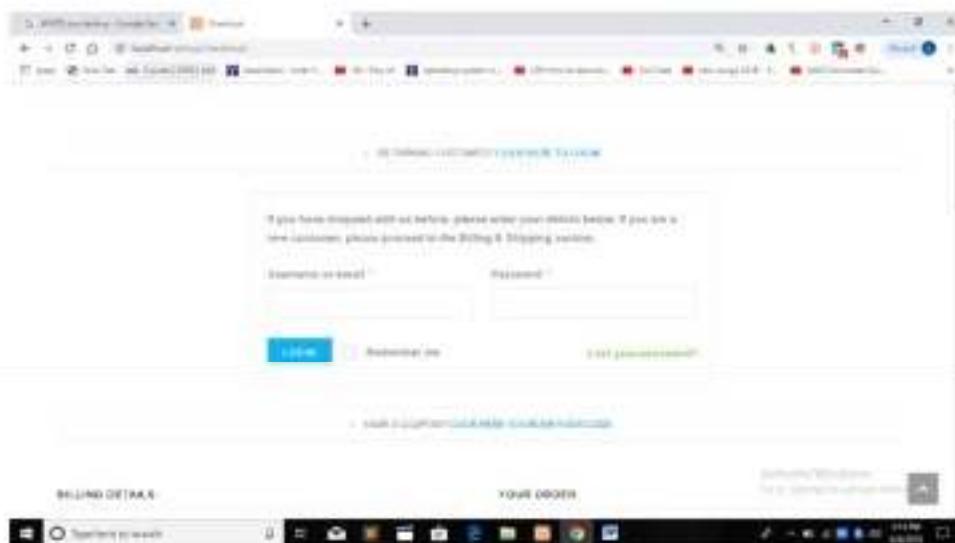


Figure: 3.7 Customer Invoice

3.2 ADMIN INTERFACE

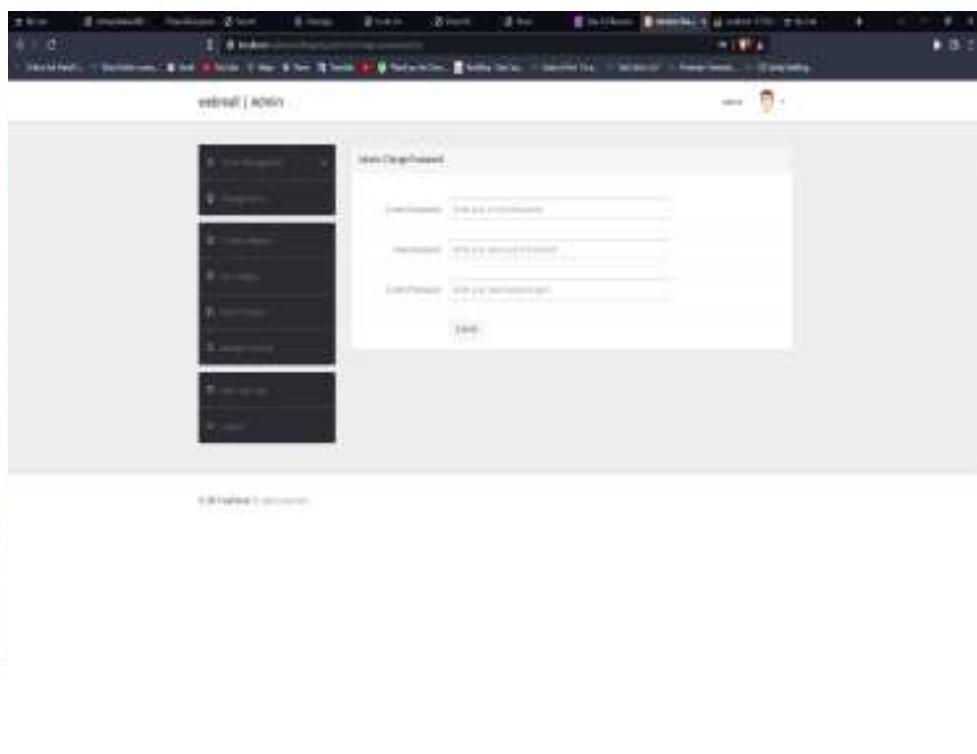


Figure: 3.8 Admin Interface

3.2.1 ADMIN LOGIN PAGE

Admin part is so important part of the system and he takes care all the parts of the shopping system. When the system developed an admin user created and using admin user email id and password he can login to the system figure given below:

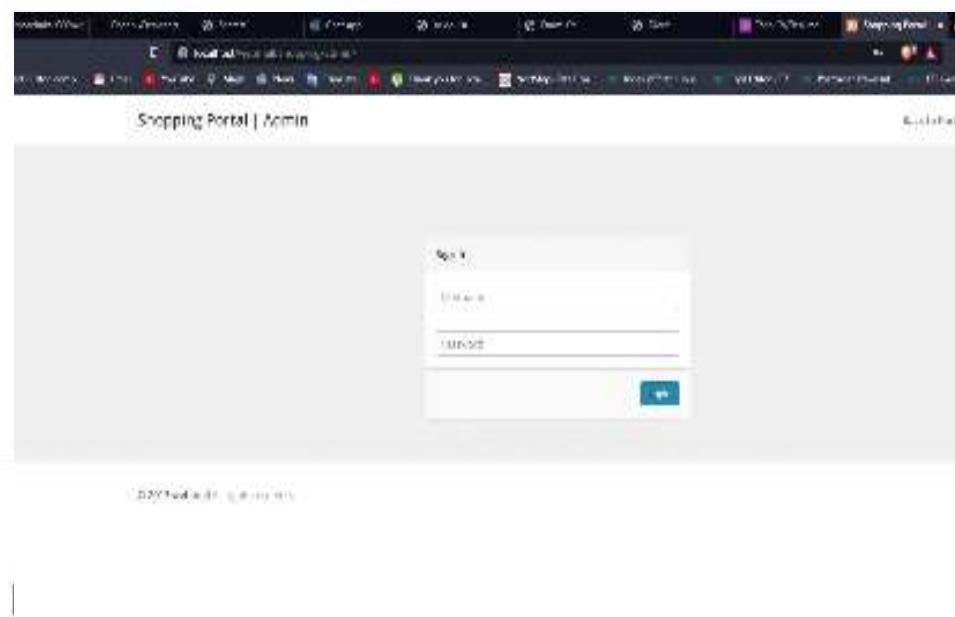


Figure: 3.9 Admin Login Page

3.2.2.ADMIN HOME PAGE

Admin will get different menu in his panel after login with valid user id and password. The menu admin will get are Category, under category will get submenu Add Category, Manage Category and Archive Category. He will also get Manufacturer menu, under Manufacturer menu will get submenu Add Manufacturer, Manage Manufacturer. He will get Add product, Manage Product and Archive Product submenu under product menu. The customer request for product will show on Manager Order menu.

Figure of Admin Home Page is given below:

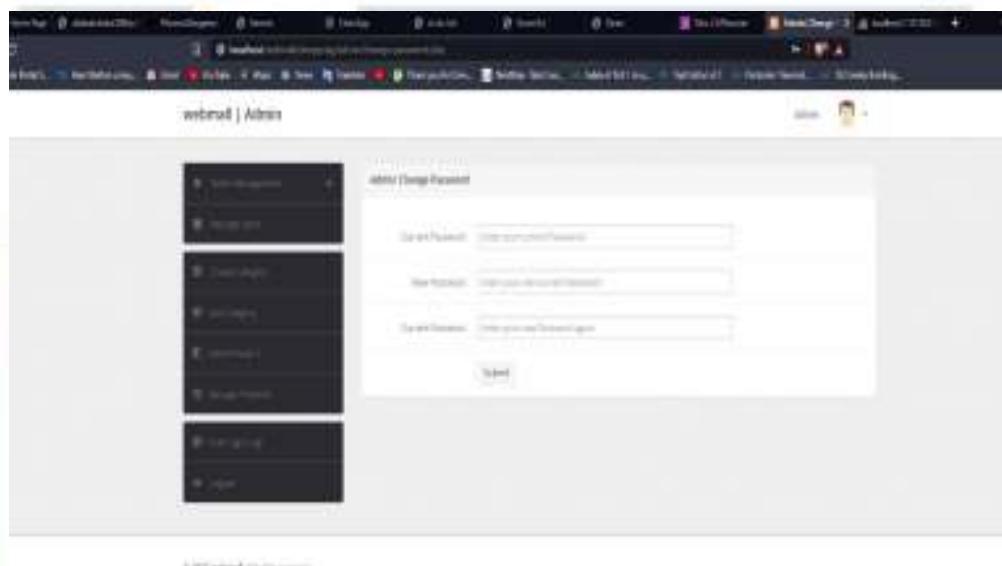


Figure: 3.10 Admin Home Page

3.2.3 ADD CATEGORIES

From admin panel admin add category that will show in home page if admin select the publication status as published, and will not show if he select publication status as unpublished. Figure of Add Category given below;

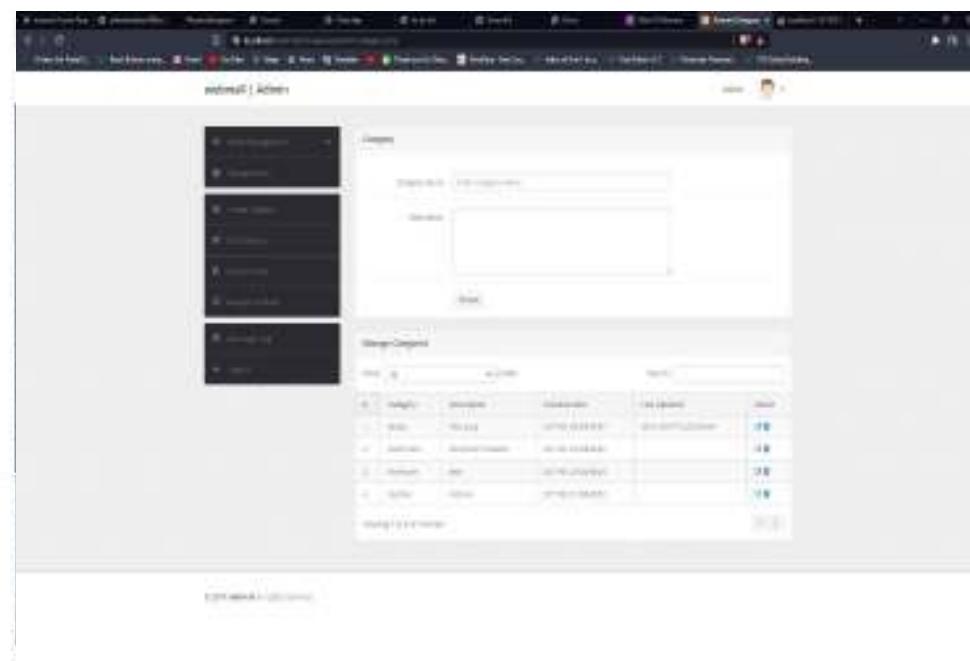


Figure: 3.11. Add Category

3.2.4 MANAGE CATEGORY

Manage category is an important part of admin panel, for set status that the category will show or not in home page admin can select this. He can view, edit and delete the category from Manage Category menu. Figure of Manage category given below;

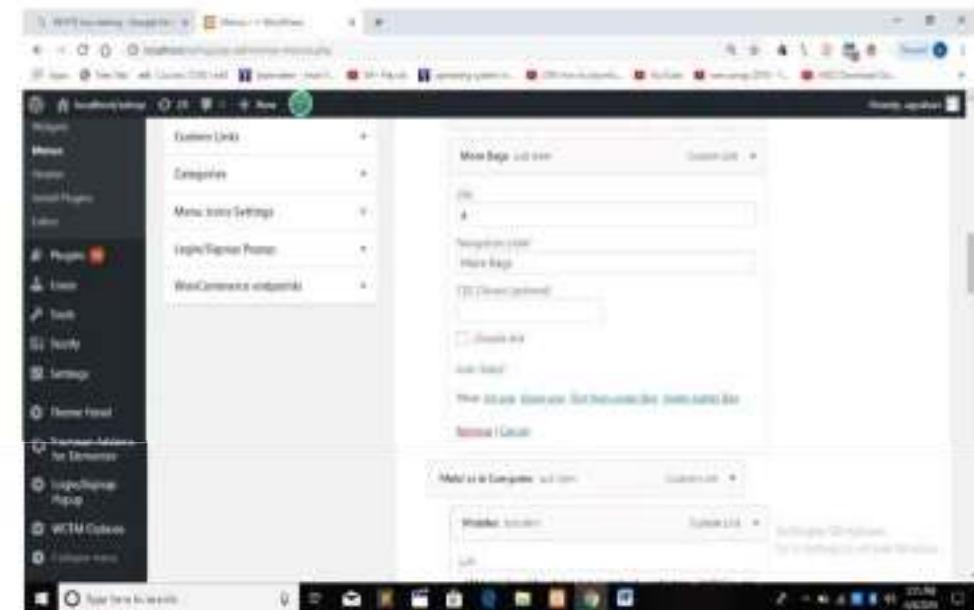


Figure: 3.12 Manage Category

3.2.5 VIEW CATEGORY

In view category submenu customer can show the details of the category. Figure of View Category given below:

ID	Category	Description	Status	Last Updated
1	Home Decor	Decorative items for the home.	Active	2023-10-05
2	Kitchenware	Cooking and dining utensils.	Active	2023-10-05
3	Furniture	Tables, chairs, and other furniture pieces.	Active	2023-10-05
4	Electronics	Computers, mobile phones, and other electronic devices.	Active	2023-10-05
5	Clothing	Apparel and accessories for wear.	Active	2023-10-05
6	Shoes	Footwear for different occasions.	Active	2023-10-05
7	Books	Reading materials in various formats.	Active	2023-10-05
8	Toys	Playthings for children and adults.	Active	2023-10-05
9	Sports Goods	Equipment for sports and fitness.	Active	2023-10-05
10	Personal Care	Products for skincare, makeup, and hygiene.	Active	2023-10-05

Figure: 3.13 View Category

3.2.6 EDIT CATEGORY

If mistake done when added category, by editing the page admin can correct the information that updated when it created. Figure of edit category given below;

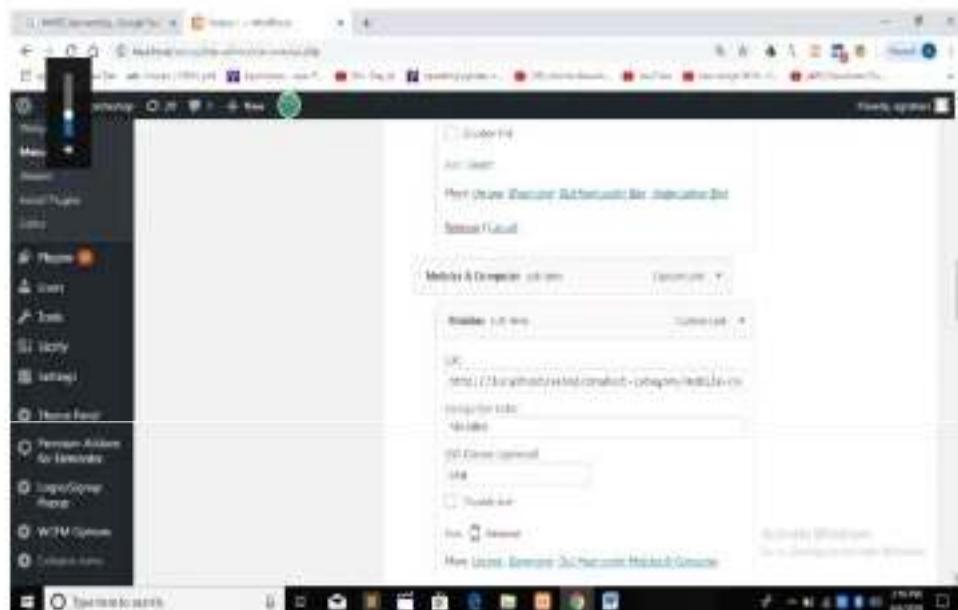


Figure: 3.14 Edit Category

3.2.7 DELETE CATEGORY

Unused category or the product category the company decided to stop sell permanently can delete, before deleting it, a notification will come to reconfirm that admin sure he wants to delete it. Figure of Delete category given below:

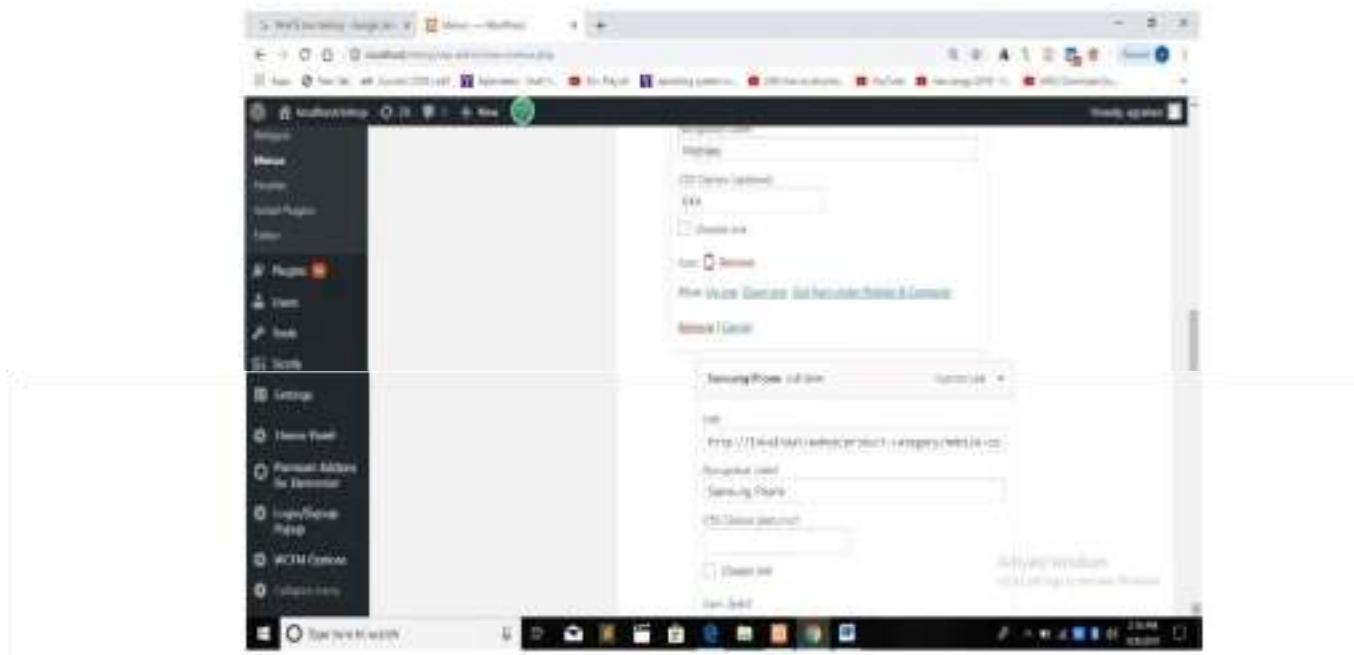


Figure: 3.15 Delete Category

3.2.8 ADD PRODUCT

From admin panel admin Add Product that will show in home page if admin select the publication status as published, and will not show if he select publication status as unpublished. Figure of Add Product given below:

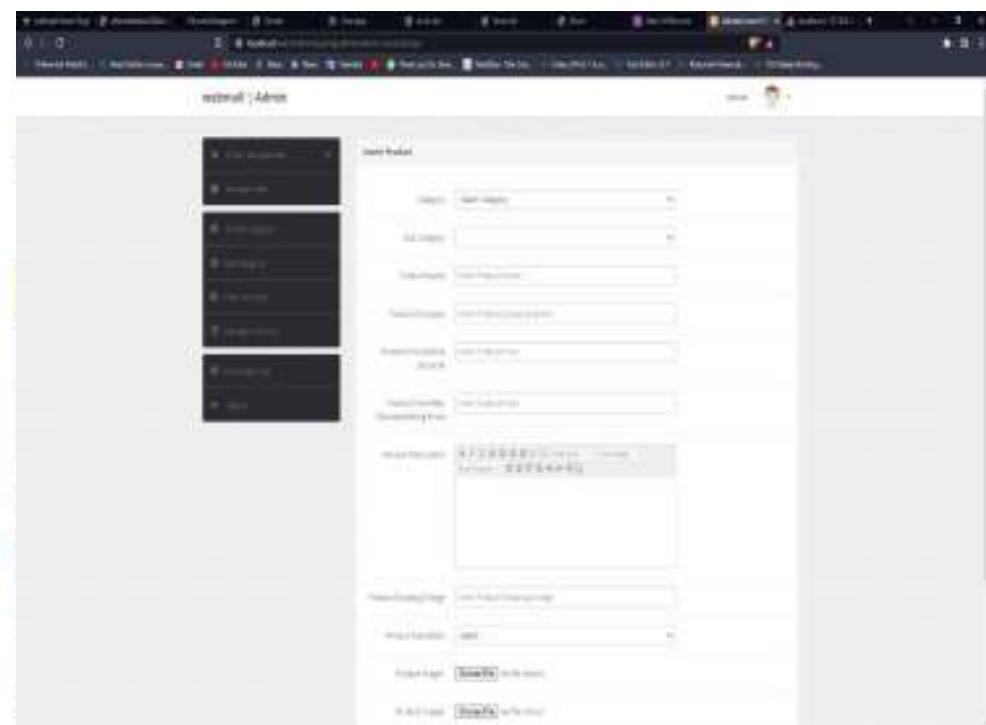


Figure: 3.16 Add Product

3.2.9 MANAGE PRODUCT

Manage Product is an important part of admin panel, for setting status that the Product will show or not in home page. admin can select this. He can view, edit and delete the product from Manage Product submenu. Figure of Manage Product given below :

ID	Product Name	Status	Description	Availability Date	Order Date
1	Woolen Cap	Enabled	Woolen Cap	2023-09-01	2023-09-01
2	The Legend of Zelda Hat	Enabled	The Legend of Zelda Hat	2023-09-01	2023-09-01
3	Marvel Iron Man Mask	Enabled	Marvel Iron Man Mask	2023-09-01	2023-09-01
4	DC Comics Batman Mask	Disabled	DC Comics Batman Mask	2023-09-01	2023-09-01
5	Superhero Mask - Red	Enabled	Superhero Mask - Red	2023-09-01	2023-09-01
6	Superhero Mask - Blue	Enabled	Superhero Mask - Blue	2023-09-01	2023-09-01
7	Cartoon Character Mask	Enabled	Cartoon Character Mask	2023-09-01	2023-09-01
8	Avengers Captain America Mask	Enabled	Avengers Captain America Mask	2023-09-01	2023-09-01
9	Star Wars Darth Vader Mask	Enabled	Star Wars Darth Vader Mask	2023-09-01	2023-09-01
10	Marvel Thor Mask	Enabled	Marvel Thor Mask	2023-09-01	2023-09-01

Figure: 3.17 Manage Product

3.2.10 VIEW PRODUCT

In view option customer can show the details of the product. Figure of View Product given below:



Figure: 3.18 View Product

3.2.11 EDIT PRODUCT

If mistake done when added product, by editing the page admin can correct the information that updated when it created. Figure of Edit Product given below:

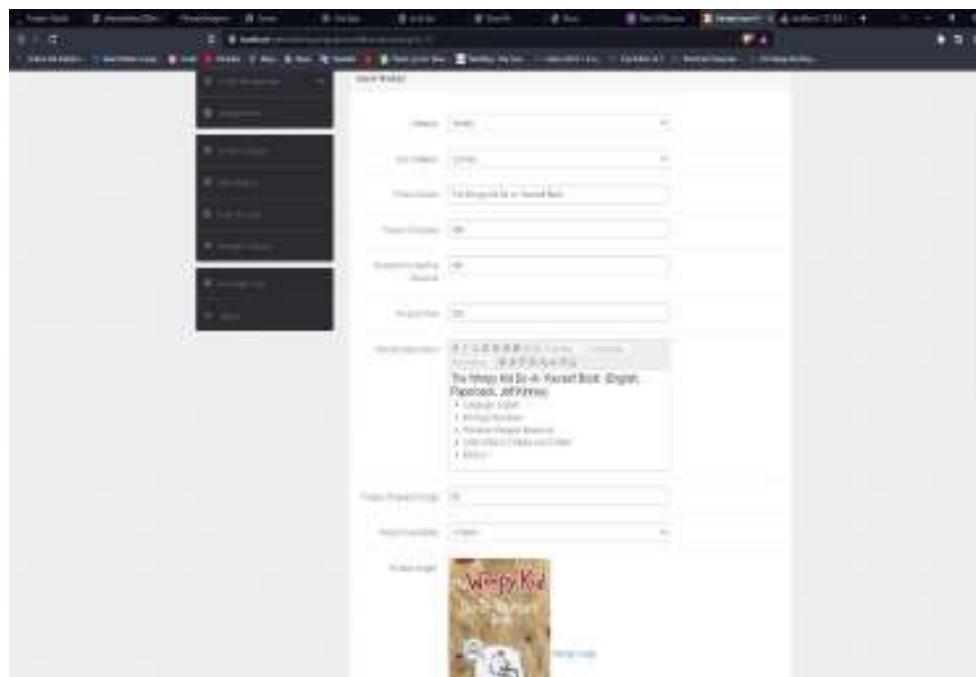


Figure: 3.19 Edit Product

3.2.12 DELETE PRODUCTS

Unused Product or the product the company decided to stop sell permanently can delete, before deleting it, a notification will come to reconfirm that admin sure he wants to delete it. Figure of Delete Product given below:

ID	Name	Description	Status	Created Date
1	Apple iPhone	Latest iPhone model.	Active	2023-09-15
2	Samsung Galaxy S24	Latest Samsung smartphone.	Active	2023-09-15
3	Google Pixel 7 Pro	Latest Google smartphone.	Active	2023-09-15
4	Huawei P60 Pro	Latest Huawei smartphone.	Active	2023-09-15
5	Sony Xperia 1 VI	Latest Sony smartphone.	Active	2023-09-15
6	Microsoft Surface Book 3	Laptop with latest Microsoft software.	Active	2023-09-15
7	Dell XPS 15 (2023)	Laptop with latest Dell hardware.	Active	2023-09-15
8	Acer Predator Helios 300	Gaming laptop with high-end components.	Active	2023-09-15
9	Lenovo Legion 5	Gaming laptop with high-end components.	Active	2023-09-15
10	HP Pavilion	Standard laptop for general use.	Active	2023-09-15

Showing 10 of 10 items

Figure: 3.20 Delete Product

3.2.13 MANAGE ORDER

The product which were ordered by the customer can manage from this menu. When a product delivered to the customer, and customer paid for this, then need to change product order status to delivered and paid, that can be done from this menu. Figure of Manage Order given below:

The screenshot shows a web-based administration interface for managing orders. On the left, there is a sidebar titled "Order Management" containing several menu items: "Today's Orders" (3), "Pending Orders" (4), "Delivered Orders" (1), "Manage Order" (selected), "View Logins", "Search Order", "Create Product", and "Logout". The main content area is titled "Pending Orders" and displays a table with two rows of data. The columns are labeled "Name", "Email/Contact No.", and "Shipping Address". The first row shows "Pankaj Kumar" with email "pankajput@gmail.com" and shipping address "GJ New Dwarka Dlf Phase 11C". The second row shows "Raju Kumar" with email "rajujput@gmail.com" and shipping address "GJ New Dwarka Dlf Phase 11C".

Name	Email/Contact No.	Shipping Address
Pankaj Kumar	pankajput@gmail.com	GJ New Dwarka Dlf Phase 11C
Raju Kumar	rajujput@gmail.com	GJ New Dwarka Dlf Phase 11C

Figure: 3.21 Manage Order

3.2.14 VIEW ORDER

In view category submenu customer can show the details of the category. Figure of View Order given below:



Figure: 3.22 View Order

3.2.15 EDIT ORDER STATUS

The product that delivered the customer have to change the product deliver status as delivered and as a result the product will not display at admin panel.

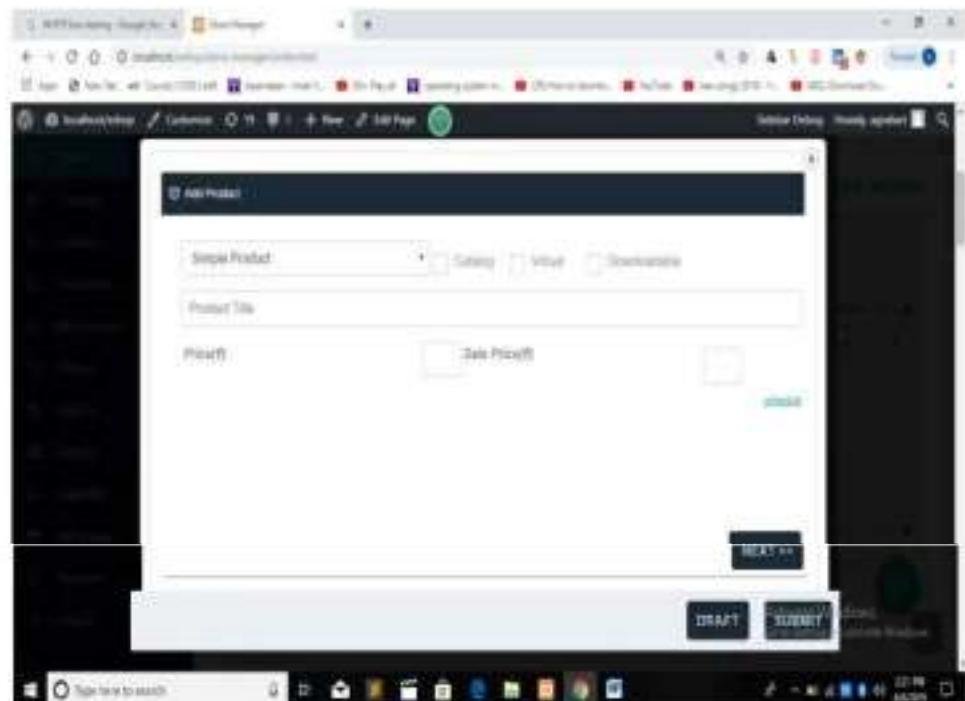


Figure: 3.23 Edit Order Status.

3.3 FOOTER PAGE



Figure: 3.24 Footer Page

CHAPTER NO 4.0

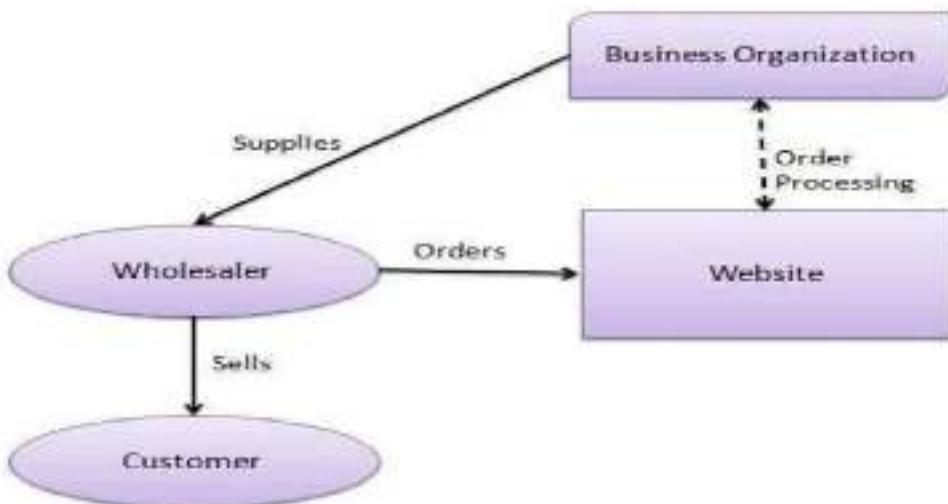
4.1 MODELS OF E-COMMERCE:-

E-commerce business models can generally be categorized into the following categories.

- Business - to - Business (B2B)
- Business - to - Consumer (B2C)
- Consumer - to - Consumer (C2C)
- Consumer - to - Business (C2B)
- Business - to - Government (B2G)
- Government - to - Business (G2B)
- Government - to - Citizen (G2C)

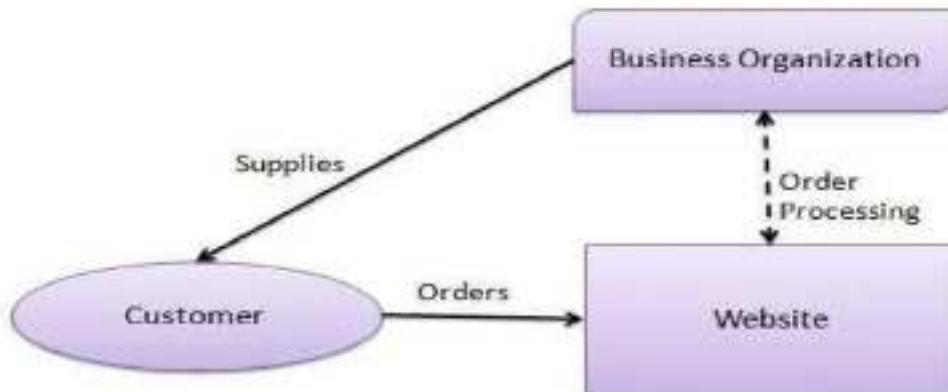
4.1.1 BUSINESS-TO-BUSINESS:-

A website following the B2B business model sells its products to an intermediate buyer who then sells the product to the final customer. As an example, a wholesaler places an order from a company's website and after receiving the consignment, sells the endproduct to the final customer who comes to buy the product at one of its retail outlets.



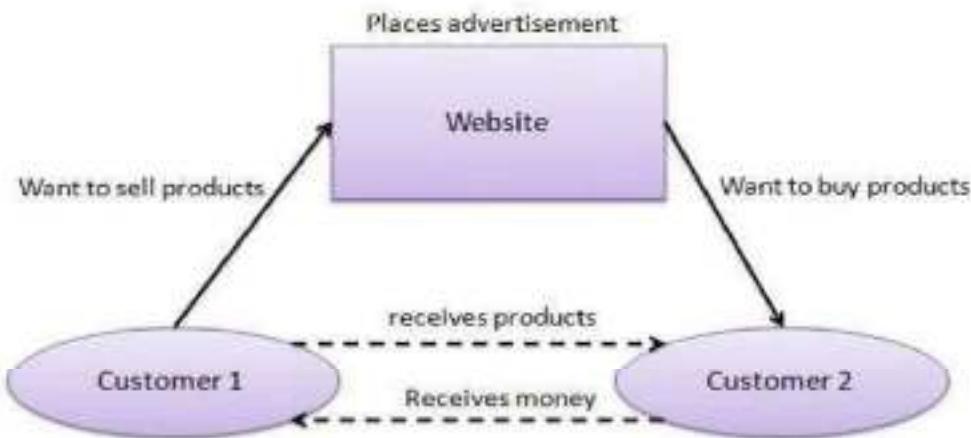
4.1.2 BUSINESS-TO-CONSUMERS:-

A website following the B2C business model sells its products directly to a customer. A customer can view the products shown on the website. The customer can choose a product and order the same. The website will then send a notification to the business organization via email and the organization will dispatch the product/goods to the customer.



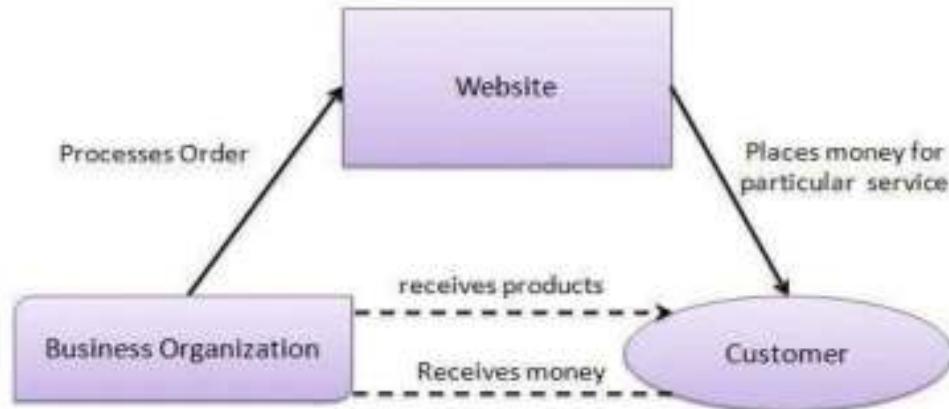
4.1.3 CONSUMER-TO-CONSUMER:-

A website following the C2C business model helps consumers to sell their assets like residential property, cars, motorcycles, etc., or rent a room by publishing their information on the website. Website may or may not charge the consumer for its services. Another consumer may opt to buy the product of the first customer by viewing the post/advertisement on the website.



4.1.4 CUSTOMER-TO-BUSINESS:-

In this model, a consumer approaches a website showing multiple business organizations for a particular service. The consumer places an estimate of amount he/she wants to spend for a particular service. For example, the comparison of interest rates of personal loan/car loan provided by various banks via websites. A business organization who fulfills the consumer's requirement within the specified budget, approaches the customer and provides its services.



4.1.5 BUSINESS-TO-GOVERNMENT:-

B2G model is a variant of B2B model. Such websites are used by governments to trade and exchange information with various business organizations. Such websites are accredited by the government and provide a medium to businesses to submit application forms to the government.



4.1.6 GOVERNMENT-TO-BUSINESS:-

Governments use B2G model websites to approach business organizations. Such websites support auctions, tenders, and application submission functionalities.



4.1.7 GOVERNMENT-TO-CITIZEN:-

Governments use G2C model websites to approach citizen in general. Such websites support auctions of vehicles, machinery, or any other material. Such website also provides services like registration for birth, marriage or death certificates. The main objective of G2C websites is to reduce the average time for fulfilling citizen's requests for various government services.



4.2 E-COMMERCE PROCESS:-

E-commerce refers to the process of buying or selling products or services over the Internet.

E-commerce activities such as selling online can be directed at consumers or other businesses. Business to Consumer (B2C) involves the online sales of goods, services and provision of information directly to consumers.



4.3 E-COMMERCE PAYMENT PROCESS:-

E-commerce sites use electronic payment, where electronic payment refers to paperless monetary transactions. Electronic payment has revolutionized the business processing by reducing the paperwork, transaction costs, and labor cost. Being user friendly and less time-consuming than manual processing, it helps business organization to expand its market reach/expansion. Listed below are some of the modes of electronic payments .

- Credit Card
- Debit Card
- Smart Card
- E-Money
- Electronic Fund Transfer (EFT)

4.3.1 CREDIT CARD:-

Payment using credit card is one of most common mode of electronic payment. Credit card is small plastic card with a unique number attached with an account. It has also a magnetic strip embedded in it which is used to read credit card via card readers. When a customer purchases a product via credit card, credit card issuer bank pays on behalf of the customer and customer has a certain time period after which he/she can pay the credit card bill. It is usually credit card monthly payment cycle. Following are the actors in the credit card system.

- **The card holder** – Customer
- **The merchant** – seller of product who can accept credit card payments.
- **The card issuer bank** – card holder's bank
- **The acquirer bank** – the merchant's bank
- **The card brand** – for example , visa or Mastercard.

4.3.2 CREDIT CARD PAYMENT PROCESS:-

Step	Description
Step 1	Bank issues and activates a credit card to the customer on his/her request.
Step 2	The customer presents the credit card information to the merchant site or to the merchant from whom he/she wants to purchase a product/service.
Step 3	Merchant validates the customer's identity by asking for approval from the card brand company.
Step 4	Card brand company authenticates the credit card and pays the transaction by credit. Merchant keeps the sales slip.
Step 5	Merchant submits the sales slip to acquirer banks and gets the service charges paid to him/her.
Step 6	Acquirer bank requests the card brand company to clear the credit amount and gets the payment.
Step 7	Now the card brand company asks to clear the amount from the issuer bank and the amount gets transferred to the card

4.3.3 DEBIT CARD:-

Debit card, like credit card, is a small plastic card with a unique number mapped with the bank account number. It is required to have a bank account before getting a debit card from the bank. The major difference between a debit card and a credit card is that in case of payment through debit card, the amount gets deducted from the card's bank account immediately and there should be sufficient balance in the bank account for the transaction to get completed; whereas in case of a credit card transaction, there is no such compulsion.

Debit cards free the customer to carry cash and cheques. Even merchants accept a debit card readily. Having a restriction on the amount that can be withdrawn in a day using a debit card helps the customer to keep a check on his/her spending.

4.3.4 SMART CARD:-

Smart card is again similar to a credit card or a debit card in appearance, but it has a small microprocessor chip embedded in it. It has the capacity to store a customer's work-related and/or personal information. Smart cards are also used to store money and the amount gets deducted after every transaction.

Smart cards can only be accessed using a PIN that every customer is assigned with. Smart cards are secure, as they store information in encrypted format and are less expensive/provides faster processing. Mondex and Visa Cash cards are examples of smart cards.

4.3.5 E-MONEY:-

E-Money transactions refer to situation where payment is done over the network and the amount gets transferred from one financial body to another financial body without any involvement of a middleman. E-money transactions are faster, convenient, and saves a lot of time.

Online payments done via credit cards, debit cards, or smart cards are examples of emoney transactions. Another popular example is e-cash. In case of e-cash, both customer and merchant have to sign up with the bank or company issuing e-cash.

4.3.6 ELECTRONIC FUND TRANSFER:-

It is a very popular electronic payment method to transfer money from one bank account to another bank account. Accounts can be in the same bank or different banks. Fund transfer can be done using ATM (Automated Teller Machine) or using a computer.

Nowadays, internet-based EFT is getting popular. In this case, a customer uses the website provided by the bank, logs in to the bank's website and registers another bank account. He/she then places a request to transfer certain amount to that account. Customer's bank transfers the amount to other account if it is in the same bank, otherwise the transfer request is forwarded to an ACH (Automated Clearing House) to transfer the amount to other account and the amount is deducted from the customer's account. Once the amount is transferred to other account, the customer is notified of the fund transfer by the bank.

4.4 E-COMMERCE SELLING PROCESS:-

Selling online has become easily possible nowadays. In fact, it has become one the most popular platforms people prefer buying from.

If you plan to start a business of your own, and wondering how to go about it, then this post will help you learn the complete e-Commerce Selling Process.

Follow the steps as mentioned, and to the end, you'll be done.

Step #1: Give your business a name – Register it

The first and foremost requirement is to give your business an identity in terms of a name. The name is something your audience will recognize your business with. Thus, choosing a good name is imperative.

Once you select a name, make sure you register it.

Why is registration important?

This is because if someday someone else comes up in the market with the same name, you will stand nowhere since you do not have proof that you own that title.

Moreover, one needs to comply with the registration as mandatory per law. Thus, it is essential to get your business registered. Each state may have its own policies; therefore, you may refer to your respective state policies for registration.

Step #2: Create a domain name and a website – Register as a seller:-

Once you are registered, either create your own website using a hosting platform or register as a seller. There are two different possibilities you might want to opt, i.e.

1. Register as a seller on popular websites like Amazon, and eBay OR start your own e-commerce business by buying space at popular sites such as Shopify, BigCommerce, etc.
2. The other possibility that arises when you want to set your own e-commerce store is to build a website using web hosting platforms and register your domain.

For example, buy a domain for the e-commerce platform through the WordPress and install plugins that help you set up your business and sell online.

Registering as a seller on e-commerce platforms is the easiest way to start selling.

The complexity level increases when you opt for platforms to open up your own store. However, the primary benefit here is that you have your own store where you can sell unlike being just a seller on other e-commerce platforms.

You actually tend to build your own brand here. The most complicated method is to create a new website altogether to start a business.

However, if you plan to do a business on a massive scale, it is the optimum choice to make.



Step #3; Upload Products:-

Once you've chosen where you want to sell and have a space to upload your stock, you may now start uploading high-quality images of your products.

Give them a **name** and mention their price.

If you are into selling various categories of products, make sure to categorize them. This makes the website look neater and easy to use for the customer.

Give the products a **suitable description** that is easy to understand and explains each and every feature of the product.

When doing a business online, your interaction with the customers is not direct. The customer cannot touch and feel the product physically. Thus, in order to succeed despite the demerit, it is important to explain each and everything about the product through descriptions.

Step #4; Use SEO:-

In order to get your website or listed products to rank on top of the Google search results, it is essential to have relevant keywords in the content.

For example, if a person is looking out for a juicer, and you have it as one of your products, then make sure your product title has the word juicer. This will help the search engines identify that you have the same thing that the buyer is looking for and will list your products on the top.

Similarly, make sure that the description along with being informative and easy to read, is also **SEO optimized**.

Step #5; Choose your shipping method:-

The next and the most important thing is to choose a shipping strategy. Make sure you connect with only famous shipping companies who can make sure that they will deliver your product timely without any damage.

Final words:-

You are all set to start selling. You have an e-commerce store, have your shipping planned and the products are listed. Now the buyers will simply have to click on the buy now option, make payments through the payment gateway you've opted for and buy your product. In order to attract more customers, use all the digital marketing tactics and take your business to greater heights.

CHAPTER NO 5.0

5.1 SUCCESS FACTORS IN E-COMMERCE:-

As an entrepreneur, getting into ecommerce is a significant step towards growing a business and increasing profits. For those who are just starting a business, ecommerce can potentially be the foundation of a profitable company. Whichever you are, know that ecommerce is not simply putting up your products online and hoping for the best.

There is a good bit of strategy that goes into making it work. Understanding how ecommerce can affect a business is crucial in making it a success.

Before you dig deeper into the strategy, here's a great read, if you want to learn how to use email marketing for ecommerce.

What is today ecommerce?

Ecommerce is now ubiquitous to business in developed countries, but developing countries have yet to catch up with its adoption. However, things have been coming along as ecommerce has started to grow in a big way throughout Asia, especially in China.

In the meantime, mobile has pretty much become the biggest thing in ecommerce these days. However, a lot of businesses aren't converting to m-commerce fast enough to make the most of the mobile user base. With the ecommerce market becoming more competitive than ever before, this may change down the line, as businesses continue to find new ways to gain an edge. years.

There is also a future in subscription-based business models. Presently, there are already a number of online services that offer monthly subscriptions for a variety of things. Expect this business model to grow even more in the coming

5.2 SIX FACTORS IN E-COMMERCE SUCCESS:-

5.2.1. REGULATION OF PRODUCT PRICING:-

It's natural for customers to compare prices between brands. It's expected of entrepreneurs, as well, to be aware of how much competitors are charging for their goods. Fortunately, there are different tools available to easily see and compare prices of competing ecommerce websites, such as DataCrops and Import.io.

Various pricing strategies are employed to get the sweet spot in attractiveness and earnings, depending on the market and the kind of products being priced. For instance, one of the most common pricing strategies is keystone pricing, which is basically the doubling of wholesale price.

That usually works, but consider additional factors so the price is just right, not too high or too low. There is also discount pricing, psychological pricing, competitive pricing, value-based pricing, and so on.

5.2.2. MAINTAINING HIGH QUALITY PRODUCTS:-

For a long time, people had the notion that products from ecommerce sites were inferior quality when compared to products from physical stores. While much of that myth no longer exists these days, there is still a lot that must be done to convince customers that your products are comparable in quality as those found in malls and other stores.

Make sure you procure your products from well-known and trusted suppliers of high quality goods as well.

You must uphold your standards consistently across the board. If you ever ship a subpar product to a customer, it will definitely be a blow to your business even if you have a return/replacement policy in place. Overall customer satisfaction is crucial to the business' continued survival, and bad product quality can break your business down.

Keep System feedback transparent to the changes in input, and corrective action must be taken as soon as possible. This is a continuing process as there are always other ways to improve.

5.2.3. IMPROVING STORE ACCESSIBILITY:-

The design of your ecommerce website (online store) must accommodate all types of customers. The online store is your main tool of communicating and transacting with them. It must be able to relay information fast and concisely to evoke the trustworthiness of your business to your customers.

Accessibility is of utmost importance as it helps your business be within reach to all sorts of customers; i.e. people of different cultures, people with disabilities, etc. Being able to have your online store set to other languages can potentially widen your customer base, as long as they are a significant part of your audience. It may also be accessible to people with visual disabilities like color blindness and impaired vision, by using high-contrast visual theme and a larger font size for text. There are also things you can do to make the online store viewed better by mobile devices, such as using responsive design and optimizing your images so they can load faster. The more you improve your website's accessibility, the more people can potentially view it.

5.2.4. MAKING A WONDERFUL FIRST IMPRESSION:-

Users know if they like a website or not by just a glance, and that first impression usually lasts. Making a good first impression is imperative in getting more customers in your online store. Make the best, eye-catching design possible, in order to entice people into coming in and making use of your ecommerce website.

Good web design has principles you can follow that will help you convince people to take a look at what you have. It should not be too loud nor too barren. Everything on it should be easy to understand, yet maintains its own personality.

5.2.5. SECURING YOUR SHIPMENTS:-

One of the main concerns with ecommerce for both entrepreneurs and consumers is the issue of security. With personal and financial information being handled online, there is

always the potential for ecommerce websites being compromised and customer data stolen for nefarious purposes. This is especially true for credit card information that gets entered online every single day.

Make use of SSL to secure your customers' online shopping experience. SSL ensures that transactions and data are encrypted so that there is less of a chance for them to be compromised. Two-factor authentication is also a good way to further secure your online store, and adding other verification methods (without making it too hard for your customers) should help as well.

5.2.6. TACKING ADVANTAGES OF M-COMMERCE:-

The mobile user base has grown exponentially over the last few years, thereby the need for online stores to become mobile commerce ready has become virtually mandatory at this point. If your online store is not optimized for mobile devices, then you are missing out on a lot of business.

Some of the things that make an online store optimized for m-commerce are things like responsive design with easy-to-use navigation menus, solid mobile search features, and easy checkout and payment, all done over mobile. You don't need to have a mobile app to do it, just have your website optimized for mobile if possible.

CONCLUSION:-

If you're looking to get into ecommerce, there is certainly no better time than now. With a public that has been getting more and more familiar with the use of ecommerce to avail of various products and services, we are going to see more amazing things through ecommerce for both entrepreneurs and consumers.

CHAPTER NO 6.0

6.1 E-COMMERCE TECHNOLOGIES:-

6.1.1.THE MOBILE SHIFT:-

E-commerce has recently shifted to mobile platforms to increase its prominence; as a result, e-commerce has emerged. Failing to provide a mobile-oriented shopping experience may lead to avoiding state; therefore, businesses should concentrate on equipping technologies with mobile-friendly virtues.

E-commerce Mobile Apps:- Apps that offer the ability to continually engage with customers and familiarize themselves with new and relevant purchase options.

Location-based Marketing:- Businesses can know the geographical whereabouts of a customer to market products to them that are oriented to a specific location.

VR/AR Guidance:- Integrating VR and AR technologies provides an immersive and guided shopping experience to mobile users which allow customers to emotionally connect with the brand.

Internet of Things (IOT) :- IOT stems from the need to better understand consumer trends with a range of connectivity-enabled devices. The scope for delivering customized mobile shopping experiences is augmented.

6.1.2.CONVERSATIONAL MARKETING:-

The traditional marketing channels flow as a one-way directive, while a new concept of conversational marketing has arisen. Opening two-way communication mediums have brought many advantages to achieving e-commerce success.

Hearing directly from customers makes more sense than predicting behaviors and issues they face because businesses can establish a personalized, real-time, one-on-one conversation with customers to understand their needs and problems.

Below are some of the most-efficient technologies:-

Chat bots – Chat bots are excellent conversational marketing tools. They provide customers with answers using conversations taken from multiple channels, matching the brand's tenor, and capable of handling multiple conversations at a time.

Live Chat - A prominent conversational feature where the support team can communicate with customers through chats. It also allows for businesses to initiate a preemptive chat invitation to particular customers having certain issues.

Mobile Messaging - Smartphones are another way for businesses to reach out to their customers. While people are fatigued from the swarming promotional emails, businesses can talk with them through mobile messaging apps.

6.1.3 AUTOMATION AND CHAT BOTS FOR CUSTOMER COMMUNICATIONS:-

Artificial Intelligence plays an important role in our life, having a major impact on how we live, work etc. There are several examples of AI and automation tools we use from customer service application to voice-powered assistants such as Apple's Siri, Google's home & Amazon Echo. As per research, 40% of millennials are already using voice search for online shopping. Businesses are integrating Chatbots in their system to delight their customers and to improve brand image. Chatbots and virtual assistants are the future of any business. With the help of Chatbots you can order food, checking luggage at the airport, booking a hotel room, schedule flight and can get many recommendations regarding anything you can think of.

Starbucks makes it easy for their customers to place an order for your favorite drink or snack. The Chatbot will give you details regarding the status of your order, payment details etc. Install Starbucks app and to find Starbucks Chat bot.

6.1.4. IMAGE SEARCH:-

Today e-commerce businesses are using various technologies to offer best services to their customers. E-commerce businesses are integrating Image Search Technology on their websites so customers can easily take the photo of products around them and can find similar products on a different website in best deal.

Imagine that you are in a store and you see a beautiful couch but you found it costly, so in this case, you take a picture and use image search to find similar products at a reasonable rate. Integrating image search on your website will boost your revenue.

6.1.5. FAST & EASY CHECKOUT PROCESS:-

Cart abandonment is the most painful reason for losing a sale because it means that despite all the marketing endeavors, the customer was considering buying the product, but then changed their mind. Data-wise, the first quarter of this year has marked a 75.6% global cart abandonment rate. One of the primary factors affecting cart abandonment is the checkout procedure. Despite the accuracy the lead generation and nurturing metrics are excellent, the efficiency of the checkout process can delineate the cart abandonment privation.

Therefore, an e-commerce venture must embrace technology with fast and easy checkout solutions, like:

- Speedy mobile payment solutions, including Apple Pay and Android Pay.
- Offering to save card details, to hasten iterative purchases.
- Providing one-page, hassle-free checkouts.
- Designating a range of payment options.

Adorned with technology, alleviating the difficulties that customers can potentially go through during checkouts has become possible.

Conclusion:-

The technological revitalizations discussed throughout this article sum up the capabilities that they can realize. Many successful e-commerce ventures invest in these technologies because it helps them to strategically heighten their businesses' success.

CHAPTER NO 7.0

7.1 E-COMMERCE STANDARDS:-

7.1.1 ELECTRONIC DATA INTERCHANGE (EDI):- EDI is the electronic interchange of business information using a standardized format; a process which allows one company to send information to another company electronically rather than with paper. Business entities conducting business electronically are called trading partners.

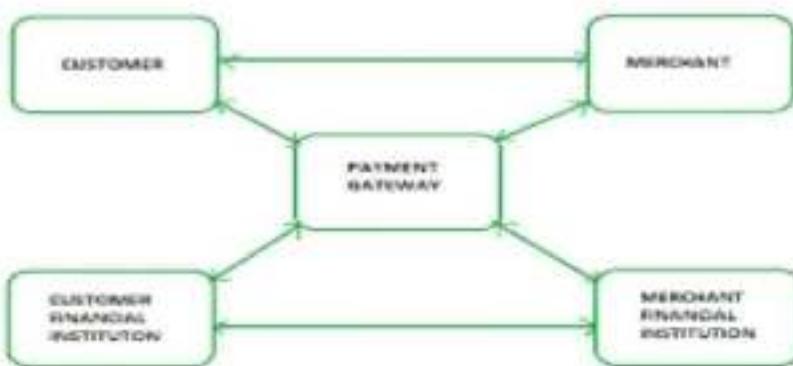
7.1.2 OPEN BUYING ON THE INTERNET (OBI):- OBI (Open Buying on the Internet) is a proposed standard for business-to-business purchasing on the Internet, aimed particularly at high-volume, low-cost-per-item transactions. OBI uses a number of security technologies such as the digital certificate to allow orders to be placed and filled securely.

7.1.3 THE OPEN TRANING PROTOCOL (OTP):- It is intended to standardize a variety of payments related activities including purchases agreements. Receipts for purchases, and payments . It was created as a computing standard to OBI by a group of companies AT&T, Cyber cash, Hitachi, IBM, Oracal, Sun Micro Systems, and British Telecome.

7.1.4 THE OPEN PROFILING STANDARD (OPS):- Open Profiling Standard (OPS) is a proposed standard for how Web users can control the personal information they share with Web sites. OPS has a dual purpose.

7.1.5 SECURE SOCKET LAYER (SSL):- SSL (Secure Sockets Layer) is the standard security technology for establishing an encrypted link between a web server and a browser. This link ensures that all data passed between the web server and browsers remain private and integral. SSL is an industry standard and is used by millions of websites in the protection of their online transactions with their customers.

7.1.6 SECURE ELECTRONIC TRANSACTION (SET):- Secure Electronic Transaction or SET is a system which ensures security and integrity of electronic transactions done using credit cards in a scenario. SET is not some system that enables payment but it is a **security protocol** applied on those payments.



7.1.7 TRUST:- The partnership of companies seeks to build public trust in e-commerce by putting a Good Housekeeping-style seal of approval on sites that do not violate consumer privacy.

7.2 ELECTRONIC STOCK TRADING:-

Electronic commerce creates threats and opportunities for brokers and intermediaries of all kinds—not only travel agents, but insurance brokers, loan brokers, stockbrokers, and brokers of food and mechanical parts as well. The threat to these intermediaries is that their customers will bypass them by obtaining information and meeting their purchasing needs through new, online channels. The opportunity for intermediaries is to use electronic commerce to create one of those new channels. Thereby providing better service than a customers could otherwise obtain.

By 1997 Web-based information and transaction capabilities spanned most of the customers involvement cycle for buying and selling stocks and bonds. Private investors could obtain readily available data and analysis software to identify stocks they wanted to home pages of companies providing search engines and other services not specifically related to finance. Investors, could make the purchases through Web transaction, touch tone phones, or human agents. Their stock and bond holdings and transaction could be tracked. They could obtain customers services information about the status of buy and sell orders. How the traditional brokerages would respond and whether they could maintain their much higher cost structure remained to be seen.

7.3 ELECTRONIC BANKING:-

Electronic banking has many names like e banking, virtual banking, online banking, or internet banking. It is simply the use of electronic and telecommunications network for delivering various banking products and services. Through e-banking, a customer can access his account and conduct many transactions using his computer or mobile phone. In this article, we will look at the importance and types of e-banking services.

7.4 TYPES OF E- BANKING

Banks offer various types of services through electronic banking platforms. These are of three types:



Level 1 – This is the basic level of service that banks offer through their websites. Through this service, the bank offers information about its products and services to customers. Further, some banks may receive and reply to queries through e-mail too.

Level 2 – In this level, banks allow their customers to submit instructions or applications for different services, check their account balance, etc. However, banks do not permit their customers to do any fund-based transactions on their accounts.

Level 3 – In the third level, banks allow their customers to operate their accounts for funds transfer, bill payments, and purchase and redeem securities, etc. Most traditional banks offer e banking services as an additional method of providing service. Further, many new banks deliver banking services primarily through the internet or other electronic delivery channels. Also, some banks are ‘internet only’ banks without any physical branch anywhere in the country.

Therefore, banking websites are of two types:

1. **Informational Websites** – These websites offer general information about the bank and its products and services to customers.
2. **Transactional Websites** – These websites allow customers to conduct transactions on the bank’s website. Further, these transactions can range from a simple retail account balance inquiry to a large business-to-business funds transfer. The following table lists some common retail and wholesale e-banking services offered by banks and financial institutions:

Common E-Banking Services

Retail Services	Wholesale Services
Account management	Account management
Bill payment	Cash management
New account opening	Small business loan applications, approvals, or advances
Consumer wire transfers	Commercial wire transfers
Investment / Brokerage services	Business-to-business payments
Loan application and approval	Employee benefits / pension administration
Account aggregation	

7.5 IMPORTANCE OF E-BANKING:-

We will look at the importance of electronic banking for banks, individual customers, and businesses separately.

7.5.1 BANKS:-

- 1. Lesser transaction costs** – electronic transactions are the cheapest modes of transaction
- 2. A reduced margin for human error** – since the information is relayed electronically, there is no room for human error
- 3. Lesser paperwork** – digital records reduce paperwork and make the process easier to handle. Also, it is environment-friendly.
- 4. Reduced fixed costs** – A lesser need for branches which translates into a lower fixed cost.
- 5. More loyal customers** – since e-banking services are customer-friendly, banks experience higher loyalty from its customers.

7.5.2 CUSTOMERS:-

- 1. Convenience** – a customer can access his account and transact from anywhere 24x7x365.
- 2. Lower cost per transaction** – since the customer does not have to visit the branch for every transaction, it saves him both time and money.
- 3. No geographical barriers** – In traditional banking systems, geographical distances could hamper certain banking transactions. However, with e-banking, geographical barriers are reduced.

7.5.3 BUSINESSES:-

- 1. Account reviews** – Business owners and designated staff members can access the accounts quickly using an online banking interface. This allows them to review the account activity and also ensure the smooth functioning of the account.
- 2. Better productivity** – Electronic banking improves productivity. It allows the automation of regular monthly payments and a host of other features to enhance the productivity of the business.
- 3. Lower costs** – Usually, costs in banking relationships are based on the resources utilized. If a certain business requires more assistance with wire transfers, deposits, etc., then the bank charges it higher fees. With online banking, these expenses are minimized.
- 4. Lesser errors** – Electronic banking helps reduce errors in regular banking transactions. Bad handwriting, mistaken information, etc. can cause errors which can prove costly. Also, easy review of the account activity enhances the accuracy of financial transactions.
- 5. Reduced fraud** – Electronic banking provides a digital footprint for all employees who have the right to modify banking activities. Therefore, the business has better visibility into its transactions making it difficult for any fraudsters to play mischief.

7.6 E-BANKING IN INDIA

In India, since 1997, when the ICICI Bank first offered internet banking services, today, most new-generation banks offer the same to their customers. In fact, all major banks provide e-banking services to their customers.

Popular services under e-banking in India

- ATMs (*Automated Teller Machines*)
- Telephone Banking
- Electronic Clearing Cards
- Smart Cards
- EFT (*Electronic Funds Transfer*) System
- ECS (*Electronic Clearing Services*)
- Mobile Banking
- Internet Banking
- Telebanking
- Door-step Banking.

Further, under Internet banking, the following services are available in India:

1. **Bill payment** – Every bank has a tie-up with different utility companies, service providers, insurance companies, etc. across the country. The banks use these tie-ups to offer online payment of bills (electricity, telephone, mobile phone, etc.). Also, most banks charge a nominal one-time registration fee for this service. Further, the customer can create a standing instruction to pay recurring bills automatically every month.

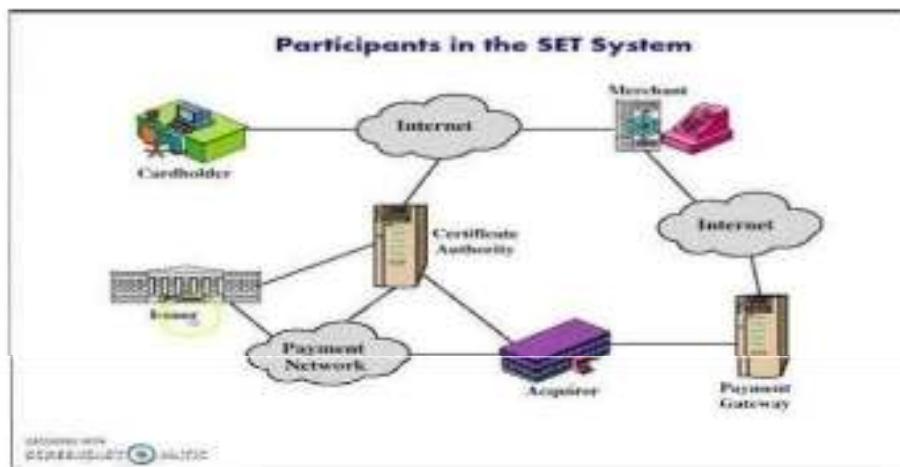
2. **Funds transfer** – A customer can transfer funds from his account to another with the same bank or even a different bank, anywhere in India. He needs to log in to his account, specify the payee's name, account number, his bank, and branch along with the transfer amount. The transfer is effected within a day or so.
3. **Investing** – Through electronic banking, a customer can open a fixed deposit with the bank online through funds transfer. Further, if a customer has a demat account and a linked bank account and trading account, he can buy or sell shares online too. Additionally, some banks allow customers to purchase and redeem mutual fund units from their online platforms as well.
4. **Shopping** – With an e-banking service, a customer can purchase goods or services online and also pay for them using his account. Shopping at his fingertips,

7.7 SECURE ELECTRONIC TRANSACTION:-

Secure Electronic Transaction (SET) is a system for ensuring the security of financial transactions on the Internet. It was supported initially by Master card, Visa, Microsoft, Netscape, and others. With SET, a user is given an electronic wallet (digital_certificate) and a transaction digital_signatures is conducted and verified using a combination of digital certificates and among the purchaser, a merchant, and the purchaser's bank in a way that ensures privacy and confidentiality. SET makes use of Netscape's Secure Sockets Layer (SSL), Microsoft's Secure Transaction Technology (STT), and Terisa System's Secure Hypertext Transfer Protocol (S-HTTP). SET uses some but not all aspects of a public key infrastructure (PKI).

1. The customer opens a Mastercard or Visa bank account. Any issuer of a credit card is some kind of bank.
2. The customer receives a digital_certificate. This electronic file functions as a credit card for online purchases or other transactions. It includes a public_key with an expiration date. It has been through a digital_switch to the bank to ensure its validity.
3. Third-party merchants also receive certificates from the bank. These certificates include the merchant's public key and the bank's public key.
4. The customer places an order over a Web page, by phone, or some other means.
5. The customer's browser receives and confirms from the merchant's certificate that the merchant is valid.
6. The browser sends the order information. This message is encrypted with the merchant's public key, the payment information, which is encrypted with the bank's public key (which can't be read by the merchant), and information that ensures the payment can only be used with this particular order.
7. The merchant verifies the customer by checking the digital signature on the customer's certificate. This may be done by referring the certificate to the bank or to a third-party verifier.

8. The merchant sends the order message along to the bank. This includes the bank's public key, the customer's payment information (which the merchant can't decode), and the merchant's certificate.
9. The bank verifies the merchant and the message. The bank uses the digital signature on the certificate with the message and verifies the payment part of the message.
10. The bank digitally signs and sends authorization to the merchant, who can then fill the order.



CHAPTER NO 8.0

Implementation and User Feedback

8.1 IMPLEMENTATION

While there are number of software tools to develop and implement the web based online shopping system, I have chosen those are open source, so that it will reduce the developing cost of the project. For designing the project HTML, CSS, Bootstraps, Apache server as web server, PHP for making the system dynamic. MySQL as database server. All of the tools are open source.

8.1.1 HTML

In this project HTML used for design the structure. HTML is a markup language for describing web documents and stands for Hyper Text Markup Language, a markup language is a set of markup tags. HTML documents are described by HTML tags. Each HTML tag describes different document content. HTML used because:

- Easy to learn.
- Easy to use.
- Supported by all browser.

8.1.2 PHP

In this project making the web page content dynamic and for interconnecting with database coding done by PHP. PHP stands for Hypertext Preprocessor. The reason of using PHP are:

- PHP can generate dynamic page content.
- PHP can create, open, read, write, delete, and close files on the server..
- PHP can send and receive cookies.
- PHP can add, delete, and modify data in database.

- PHP can be used to control user-access.
- PHP can encrypt data.

With PHP we cannot limited to output HTML. We can output images, PDF files, and even flash movies. We can also output any text, such as XHTML and XML.

8.1.3 MySQL

MySQL is a database system used for the web application and it runs that runs on a server. The reason of using MySQL are:

- MySQL is ideal for both small and large applications.
- MySQL is very fast, reliable, and easy to use.
- MySQL uses standard SQL.
- MySQL compiles on a number of platforms.
- MySQL is free to download and use.

8.1.4 XAMPP server

XAMPP is a free and open source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing purposes. Everything needed to set up a web server - server application (Apache), database (MariaDB), and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server extremely easy as well.

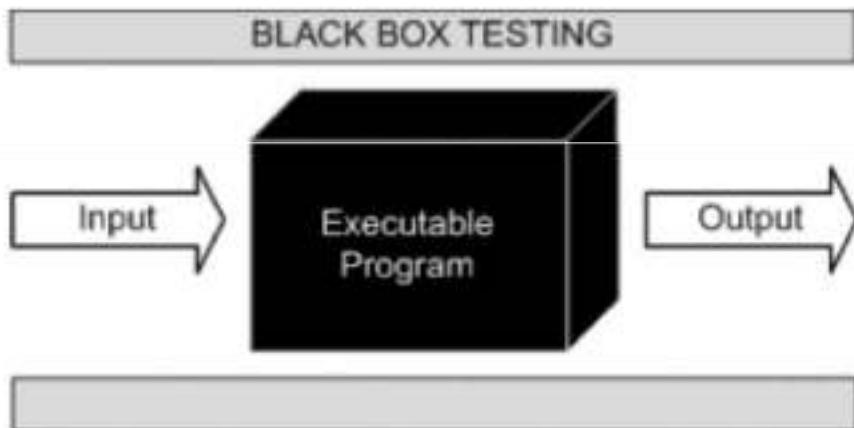
8.2 TESTING

Exhaustive testing for the project is not possible. Some testing strategies and stage designed manually. For this project Black box and White box testing are chosen. This two type testing applied different part of the project.

8.2.1 BLACK BOX TESTING

Black Box Testing, also known as Behavioral Testing, is a software testing method in which the internal structure/ design/ implementation of the item being tested is not known to the tester.

These tests can be functional or non-functional, though usually functional. This method is named so because the



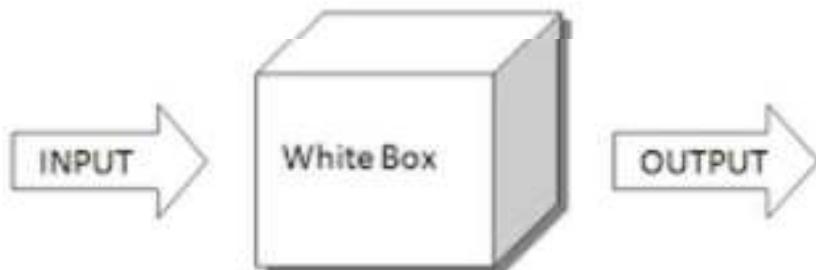
Software program, in the eyes of the tester, is like a black box; inside which one cannot see. This method attempts to find errors in the following categories:

- Incorrect or missing functions
- Interface errors
- Errors in data structures or external database access

- Behavior or performance errors
- Initialization and termination errors

8.2.2 WHITE BOX TESTING

White Box Testing also known as Clear Box Testing, Open Box Testing, Glass Box Testing, Transparent Box Testing, Code-Based Testing or Structural Testing is a software testing method in which the internal structure/ design/ implementation of the item being tested is known to the tester. The tester chooses inputs to exercise paths through the code and determines the appropriate outputs. Programming know-how and the implementation knowledge is essential. White box testing is testing beyond the user interface. The white box testing perform normally in this project different part.



8.3 USER FEEDBACK

Topic: Web Based Application for Online Shopping System This survey is done for a study on 'Web Based Application for Online Shopping System' for a project in M.Sc. in C.S.E. Your answers will be strictly confidential and used only for the purpose of the project. Thank you for your help.

Participants' Information

Status: In-service of Web Based Online Shopping System

Name (optional):_____

Years of experience_____

Please answer the following questions:

1. What is the purpose of the project?

- To tell the product
- To promote the services
- To collect email address
- To build a brand/community

3. Use words to describe the outlook of the site ?

- Yes
- no

4. Do you have idea to improve the system?

- Yes
- No

5. Do you prefer the website photos?

- Yes
- No

6. Is the site useful to you?

* Yes

* No

7. Quality of different parts of the site:

Name of the Topics	Very Good	Good	Average	Poor
Home Page				
Services				
Quality				
Product				
Delivery Method				
About				
Contacts				

User feedback is one of the important part of a product, this survey is done by one of the authority of the company employee, evaluate the feedback and take initiative to make the system more convenient to the user as well as it will be a part of great satisfactory of developing the system.

CHAPTER NO 9.0

9.1 COADING PAGE

9.1.1 MAIN PAGE (INDEX)

```
<?php
get_header(); ?>

<?php do_action( 'ocean_before_content_wrap' ); ?>
<div id="content-wrap" class="container clr">
<?php do_action( 'ocean_before_primary' ); ?>
<div id="primary" class="content-area clr">
<?php do_action( 'ocean_before_content' ); ?>
<div id="content" class="site-content clr">
<?php do_action( 'ocean_before_content_inner' ); ?>
<?php
// Check if posts exist
if ( have_posts() ) :
// Elementor 'archive' location
if ( ! function_exists( 'elementor_theme_do_location' ) || !
elementor_theme_do_location( 'archive' ) ) {
// Add Support For EDD Archive Pages
if ( ( is_post_type_archive( 'download' ) || is_tax(
array( 'download_category', 'download_tag' ) ) ) (
do_action(
'ocean_before_archive_download' ); ?>
<div class="oceanwp-row <?php echo
esc_attr( oceanwp_edd_loop_classes() ); ?>">
<?php
// Archive Post Count for clearing
float
```

```

$oceanwp_count = 0;
while ( have_posts() ) : the_post();
    $oceanwp_count++;
    get_template_part(
        'partials/edd/archive');
    if ( $oceanwp_edd_entry_columns() == $oceanwp_count ) {
        $oceanwp_count=0;
    }
endwhile; ?>
</div>

<?php
do_action( 'ocean_after_archive_download'
);
} else { ?>
<div id="blog-entries" class="<?php
oceanwp_blog_wrap_classes(); ?>>
<?php
// Define counter for clearing floats
$oceanwp_count = 0; ?>
<?php
// Loop through posts
while ( have_posts() ) : the_post(); ?>
<'?php
// Add to counter
$oceanwp_count++; ?>

<'?php

```

```

        // Get post entry content
        get_template_part(
            'partials/entry/layout', get_post_type() );
    >
    <?php
        // Reset counter to clear floats
        if ( ! oceanwp_blog_entry_columns()
        == $oceanwp_count ) {
            $oceanwp_count=0;
        } ?>
    <?php endwhile; ?>

</div><!-- #blog-entries -->
<?php
    // Display post pagination
    oceanwp_blog_pagination();
}>
<?php
// No posts found
else : ?>
<?php
// Display no post found notice
get_template_part( 'partials/none' ); ?>

<?php endif; ?>

<?php do_action( 'ocean_after_content_inner' ); ?>
</div><!-- #content --

```

9.1.1.1 HEADER

```
<!DOCTYPE html>

<html class=<?php echo esc_attr( oceanwp_html_classes() ); ?>> <?php
language_attributes(); ?><?php oceanwp_schema_markup('html'); ?>>

<head>
    <meta charset='<?php bloginfo('charset'); ?>'>
    <link rel='profile' href='http://gmpg.org/xfn/11'>
    <?php wp_head(); ?>
</head>

<body <?php body_class(); ?>>
    <?php do_action('ocean_before_outer_wrap'); ?>
    <div id='outer-wrap' class='site clr'>
        <?php do_action('ocean_before_wrap'); ?>
        <div id='wrap' class='clr'>
            <?php do_action('ocean_top_bar'); ?>
            <?php do_action('ocean_header'); ?>
            <?php do_action('ocean_before_main'); ?>
            <main id='main' class='site-main clr'><?php oceanwp_schema_markup(
'main'); ?>>
                <?php do_action('ocean_page_header'); ?>
```

9.1.1.2 FOOTER

```
<?php
</main><!-- #main -->
<?php do_action('ocean_after_main'); ?>
<?php do_action('ocean_before_footer'); ?>
<?php
// Elementor 'footer' locatio
```

```

        if ( ! function_exists( 'elementor_theme_do_location' ) || !
elementor_theme_do_location( 'footer' ) ) { ?>

            <?php do_action( 'ocean_footer' ); ?>
        </?php ?>
        <?php do_action( 'ocean_after_footer' ); ?>
    </div><!-- #wrap -->
    <?php do_action( 'ocean_after_wrap' ); ?>
</div><!-- #outer-wrap -->
<?php do_action( 'ocean_after_outer_wrap' ); ?>
<?php

// If is not sticky footer
if ( ! class_exists( 'Ocean_Sticky_Footer' ) ) {
    get_template_part( 'partials/scroll-top' );
} ?>

<?php
// Search overlay style
if ( 'overlay' === oceanwp_menu_search_style() ) {
    get_template_part( 'partials/header/search-overlay' );
} ?>

<?php
// If sidebar mobile menu style
if ( 'sidebar' === oceanwp_mobile_menu_style() )
    // Mobile panel close button
    if ( get_theme_mod( 'ocean_mobile_menu_close_btn', true ) ) {
        get_template_part( 'partials/mobile/mobile-sidr-close' );
    } ?>

```

```
<?php

// Mobile Menu (if defined)
get_template_part( 'partials/mobile/mobile-nav' ); ?>

<?php
// Mobile search form
if ( get_theme_mod( 'ocean_mobile_menu_search', true ) ) {
    get_template_part( 'partials/mobile/mobile-search' );
}
?>
<?php
// If full screen mobile menu style
if ( 'fullscreen' === oceanwp_mobile_menu_style() ) {
    get_template_part( 'partials/mobile/mobile-fullscreen' );
}
?>
<?php wp_footer(); ?>
</body>
</html>
```

9.1.2 SEARCH

```
get_header(); ?>
<?php do_action( 'ocean_before_content_wrap' ); ?>
<div id="content-wrap" class="container clr">
<?php do_action( 'ocean_before_primary' ); ?>
<div id="primary" class="content-area clr">
<?php do_action( 'ocean_before_content' ); ?>
<div id="content" class="site-content clr">
<?php do_action( 'ocean_before_content_inner' ); ?>
<'php if ( have_posts() ) : ?>
<?php while ( have_posts() ) : the_post(); ?>
<'ph                                     get_template_part(
'partials/search/layout'); ?>
<?php endwhile; ?>
<?php oceanwp_pagination(); ?>
<'php else : ?>
<?php
// Display no post found notice
get_template_part( 'partials/none' ); ?>
<'php endif; ?>
<?php do_action( 'ocean_after_content_inner' ); ?>
</div><!-- #content -->
<?php do_action( 'ocean_after_content' ); ?>
</div><!-- #primary -->
<?php do_action( 'ocean_after_primary' ); ?>
</div><!-- #content-wrap -->
<?php do_action( 'ocean_after_content_wrap' ); ?>
<'php get_footer(); ?>
```

9.1.3 ADMIN BAR

```
<?php

$admin_bar_class = apply_filters( 'wp_admin_bar_class', 'WP_Admin_Bar' );

if ( class_exists( $admin_bar_class ) )

    $wp_admin_bar = new $admin_bar_class;

else

    return false;

$wp_admin_bar->initialize();

$wp_admin_bar->add_menus();

return true;

}

function wp_admin_bar_wp_menu( $wp_admin_bar ) {

if ( current_user_can( 'read' ) ) {

    $about_uri = self_admin_url( 'about.php' );

} elseif ( is_multisite() ) {

    $about_url = get_dashboard_url( get_current_user_id(), 'about.php' );

} else {

    $about_url = false;

}

$wp_logo_menu_args = array(

    'id' => 'wp-logo',

    'title' => '<span class="ab-icon"></span><span class="screen-reader-text">' . __(
        'About WordPress' ) . '</span>',

    'href' => $about_url,

);

// Set tabindex='0' to make sub menus accessible when no URL is available.
```

```

if( ! $about_url ) {

    $wp_logo_menu_args['meta'] = array(
        'tabindex' => 0,
    );
}

$wp_admin_bar->add_menu( $wp_logo_menu_args );

if( $about_url ) {
    // Add 'About WordPress' link

    $wp_admin_bar->add_menu( array(
        'parent' => 'wp-logo',
        'id'      => 'about',
        'title'   => __('About WordPress'),
        'href'    => $about_url,
    ) );
}

// Add WordPress.org link

$wp_admin_bar->add_menu( array(
    'parent'  => 'wp-logo-external',
    'id'      => 'wporg',
    'title'   => __('WordPress.org'),
    'href'    => __('https://wordpress.org/'),
) )

// Add codex link

$wp_admin_bar->add_menu( array(
    'parent'  => 'wp-logo-external',
    'id'      => 'documentation',
    'title'   => __('Documentation'),
    'href'    => __('https://codex.wordpress.org/');

)

```

```

// Add forums link

$wp_admin_bar->add_menu( array(
    'parent' => 'wp-logo-external',
    'id'     => 'support-forums',
    'title'  => __('Support Forums'),
    'href'   => __('https://wordpress.org/support/'),
) );

// Add feedback link

$wp_admin_bar->add_menu( array(
    'parent' => 'wp-logo-external',
    'id'     => 'feedback',
    'title'  => __('Feedback'),
    'href'   => __('https://wordpress.org/support/forum/requests-and-feedback'),
) );
}

function wp_admin_bar_sidebar_toggle( $wp_admin_bar ) {

    if ( is_admin() ) {

        $wp_admin_bar->add_menu( array(
            'id'     => 'menu-toggle',
            'title'  => '<span class="ab-icon"></span><span class="screen-reader-text">' . __( 'Menu' ) . '</span>',
            'href'   => '#',
        ) );
    }
}

function wp_admin_bar_my_account_item( $wp_admin_bar ) {

```

```

$user_id = get_current_user_id();
$current_user = wp_get_current_user();
if( ! $user_id )
    return;
if( current_user_can( 'read' ) ) {
    $profile_url = get_edit_profile_url( $user_id );
} elseif( is_multisite() ) {
    $profile_url = get_dashboard_url( $user_id, 'profile.php' );
} else {
    $profile_url = false;
}

$avatar = get_avatar( $user_id, 26 );
/* translators: %s: current user's display name */
>Showdy = sprintf( __( 'Howdy, %s' ), '<span class="display-name">' .
$current_user->display_name . '</span>' );
$class = empty( $avatar ) ? '' : 'with-avatar';

$wp_admin_bar->add_menu( array(
    'id' => 'my-account',
    'parent' => 'top-secondary',
    'title' => Showdy . $avatar,
    'href' => $profile_url,
    'meta' => array(
        'class' => $class,
    ),
));
}

```

```

function wp_admin_bar_my_account_menu( $wp_admin_bar ) {
    $user_id = get_current_user_id();
    $current_user = wp_get_current_user();

    if ( ! $user_id )
        return;

    if ( current_user_can( 'read' ) ) {
        $profile_url = get_edit_profile_url( $user_id );
    } elseif ( is_multisite() ) {
        $profile_url = get_dashboard_url( $user_id, 'profile.php' );
    } else {
        $profile_url = false;
    }

    $wp_admin_bar->add_group( array(
        'parent' => 'my-account',
        'id'     => 'user-actions',
    ));

    $user_info = get_avatar( $user_id, 64 );
    $user_info .=      "<span class='display-name'>{$current_user->display_name}</span>";
    if ( $current_user->display_name !== $current_user->user_login )
        $user_info .= "<span class='username'>{$current_user->user_login}</span>";

    $wp_admin_bar->add_menu( array(
        'parent' => 'user-actions',
        'id'     => 'user-info',
        'title'  => $user_info,
        'href'   => $profile_url,
        'meta'   => array(

```

```

        'tabindex' => -1,
    ),
));
if ( false === $profile_url ) {
    $wp_admin_bar->add_menu( array(
        'parent' => 'user-actions',
        'id'    => 'edit-profile',
        'title' => __( 'Edit My Profile' ),
        'href'  => $profile_url,
    ));
}
$wp_admin_bar->add_menu( array(
    'parent' => 'user-actions',
    'id'    => 'logout',
    'title' => __( 'Log Out' ),
    'href'  => wp_logout_url(),
));
}

function wp_admin_bar_site_menu( $wp_admin_bar ) {
    // Don't show for logged out users.
    if ( ! is_user_logged_in() )
        return;
    // Show only when the user is a member of this site, or they're a super admin.
    if ( ! is_user_member_of_blog() && ! current_user_can( 'manage_network' ) ) {
        return;
    }
    $blogname = get_bloginfo('name');
}

```

```

if( ! $blogname ) {
    $blogname = preg_replace( '#^https?:\/\/(www.)?#', "", get_home_url() );
}

if( is_network_admin() ) {
    /* translators: %s: site name */
    $blogname = sprintf( __( 'Network Admin: %s' ), esc_html( get_network()
->site_name ) );
}

elseif( is_user_admin() ) {
    /* translators: %s: site name */
    $blogname = sprintf( __( 'User Dashboard: %s' ), esc_html( get_network()
->site_name ) );
}

$title = wp_html_excerpt( $blogname, 40, '&hellip;' );

Swp_admin_bar->add_menu( array(
    'id' => 'site-name',
    'title' => $title,
    'href' => ( is_admin() || ! current_user_can( 'read' ) ) ? home_url( '?' ) :
admin_url(),
));
// Create submenu items.

if( is_admin() ) {
    // Add an option to visit the site.

    Swp_admin_bar->add_menu( array(
        'parent' => 'site-name',
        'id' => 'view-site',
        'title' => __( 'Visit Site' ),
        'href' => home_url( '?' ),
    ));
}

```

```
if ( is_blog_admin() && is_multisite() && current_user_can( 'manage_sites' ) ) {
    $wp_admin_bar->add_menu( array(
        'parent' => 'site-name',
        'id'      => 'edit-site',
        'title'   => __( 'Edit Site' ),
        'href'     => network_admin_url( 'site-info.php?id=' .
get_current_blog_id() ),
    ) );
}

// If we're on the front end, link to the Dashboard.
else if ( current_user_can( 'read' ) ) {
    $wp_admin_bar->add_menu( array(
        'parent' => 'site-name',
        'id'      => 'dashboard',
        'title'   => __( 'Dashboard' ),
        'href'   => admin_url(),
    ) );
}

// Add the appearance submenu items.
wp_admin_bar_appearance_menu( $wp_admin_bar );
}

}
```

9.1.4 BOOKMARK

```
<?php

function get_bookmark($bookmark, $output = OBJECT, $filter = 'raw') {

    global $wpdb;
    if( empty($bookmark) ) {
        if( isset($GLOBALS['link']) )
            $_bookmark = & $GLOBALS['link'];
        else
            $_bookmark = null;
    } elseif( is_object($bookmark) ) {
        wp_cache_add($bookmark->link_id, $bookmark, 'bookmark');
        $_bookmark = $bookmark;
    } else {
        if( !isset($GLOBALS['link']) && (isset($GLOBALS['link'])->link_id == $bookmark) )
        {
            $_bookmark = & $GLOBALS['link'];
        } elseif( !$_bookmark = wp_cache_get($bookmark, 'bookmark') ) {
            $_bookmark = $wpdb->get_row($wpdb->prepare("SELECT * FROM
$wpdb->links WHERE link_id = %d LIMIT 1", $bookmark));
            if( $_bookmark ) {
                $_bookmark->link_category = array_unique(
wp_get_object_terms( $_bookmark->link_id, 'link_category', array( 'fields' => 'ids' ) ) );
                wp_cache_add( $_bookmark->link_id, $_bookmark, 'bookmark' );
            }
        }
    }
    if( !$_bookmark )
        return $_bookmark;
}
```

```

$_bookmark = sanitize_bookmark($bookmark, $filter);

if( $output == OBJECT ) {
    return $_bookmark;
} elseif( $output == ARRAY_A ) {
    return get_object_vars($_bookmark);
} elseif( $output == ARRAY_N ) {
    return array_values(get_object_vars($_bookmark));
} else {
    return $_bookmark;
}

}

function get_bookmark_field( $field, $bookmark, $context = 'display' ) {
    $bookmark = (int) $bookmark;
    $bookmark = get_bookmark( $bookmark );
    if( is_wp_error($bookmark) )
        return $bookmark;
    if( !is_object($bookmark) )
        return '';
    if( !isset($bookmark->$field) )
        return '';
    return sanitize_bookmark_field($field, $bookmark->$field, $bookmark->link_id,
        $context);
}

function get_bookmarks( $args = '' ) {
    global $wpdb;
    $defaults = array(
        'orderby' => 'name', 'order' => 'ASC',
        'limit' => -1, 'category' => '',

```

```

'category_name' => '', 'hide_invisible' => 1,
'show_updated' => 0, 'include' => '',
'exclude' => '', 'search' => ''
);
$sr = wp_parse_args( $args, $defaults );
$key = md5( serialize( $sr ) );
$cache = false;
if ( 'rand' !== $sr['orderby'] && $cache = wp_cache_get( 'get_bookmarks',
'bookmark' ) ) {
    if ( is_array( $cache ) && isset( $cache[ $key ] ) ) {
        $bookmarks = $cache[ $key ];
        return apply_filters( 'get_bookmarks', $bookmarks, $sr );
    }
}
if ( ! is_array( $cache ) ) {
    $cache = array();
}
$inclusions = '';
if ( ! empty( $sr['include'] ) ) {
    $sr['exclude'] = ''; //ignore exclude, category, and category_name params if using
    include
    $sr['category'] = '';
    $sr['category_name'] = '';
    $inlinks = preg_split( '/[\s,]+/', $sr['include'] );
    if ( count( $inlinks ) ) {
        foreach ( $inlinks as $inlink ) {
            if ( empty( $inclusions ) ) {

```

```

    $inclusions = 'AND ( link_id = '.intval( $inlink ).' ';
} else {
    $inclusions .= ' OR link_id = '.intval( $inlink ).' ';
}
}

if (!empty( $inclusions )) {
    $inclusions .= ')';
}

$exclusions = '';
if ( !empty( $r['exclude'] ) ) {
    $sexlinks = preg_split( '/[s]+/', $r['exclude'] );
    if ( count( $sexlinks ) ) {
        foreach ( $sexlinks as $sexlink ) {
            if ( empty( $exclusions ) ) {
                $exclusions = ' AND ( link_id <> '.intval( $sexlink ).' ';
            } else {
                $exclusions .= ' AND link_id <> '.intval( $sexlink ).' ';
            }
        }
    }
    if ( !empty( $exclusions ) ) {
        $exclusions .= ')';
    }
}

if ( !empty( $r['category_name'] ) ) [

```

```

if ( $r['category'] = get_term_by('name', $r['category_name'], 'link_category') ) {
    $r['category'] = $r['category']->term_id;
} else {
    $cache[ $key ] = array();
    wp_cache_set( 'get_bookmarks', $cache, 'bookmark' );
    /** This filter is documented in wp-includes/bookmark.php */
    return apply_filters( 'get_bookmarks', array(), $r );
}
}

$search = '';
if ( ! empty( $r['search'] ) ) {
    $like = '%' . $wpdb->esc_like( $r['search'] ) . '%';
    $search = $wpdb->prepare( " AND ( link_url LIKE %s ) OR ( link_name LIKE %s ) OR ( link_description LIKE %s ) ", $like, $like, $like );
}
$category_query = '';
$join = '';
if ( ! empty( $r['category'] ) ) {
    $incategories = preg_split( '/[s,]+', $r['category'] );
    if ( count($incategories) ) {
        foreach ( $incategories as $incat ) {
            if ( empty( $category_query ) ) {
                $category_query = ' AND ( tt.term_id = ' . intval( $incat ) . '
';
            } else {
                $category_query .= ' OR tt.term_id = ' . intval( $incat ) . ';
';
            }
        }
    }
}

```

```

        }
    }

    if( !empty( $category_query ) ) {
        $category_query .= " AND taxonomy='link_category'";

        $join = " INNER JOIN $wpdb->term_relationships AS tr ON ($wpdb->links.link_id = tr.object_id) INNER JOIN $wpdb->term_taxonomy as tt ON tt.term_taxonomy_id = tr.term_taxonomy_id";
    }

    if( $r['show_updated'] ) {
        $recently_updated_test = ", IF (DATE_ADD(link_updated, INTERVAL 120 MINUTE) >= NOW(), 1,0) as recently_updated ";
    } else {
        $recently_updated_test = '';
    }

    $get_updated = ( $r['show_updated'] ) ? ', UNIX_TIMESTAMP(link_updated) AS link_updated_f' : '';

    $orderby = strtolower( $r['orderby'] );
    $length = '';
    switch ( $orderby ) {
        case 'length':
            $length = ", CHAR_LENGTH(link_name) AS length";
            break;
        case 'rand':
            $orderby = 'rand()';
            break;
        case 'link_id':
    }

```

```

        $orderby = "Swpdb->links.link_id";
        break;

    default:
        $orderparams = array();
        $keys = array( 'link_id', 'link_name', 'link_url', 'link_visible', 'link_rating',
        'link_owner', 'link_updated', 'link_notes', 'link_description' );
        foreach ( explode( ',', $orderby ) as $ordparam ) {
            $ordparam = trim( $ordparam );
            if ( in_array( 'link_', $ordparam, $keys ) ) {
                $orderparams[] = 'link_' . $ordparam;
            } elseif ( in_array( $ordparam, $keys ) ) {
                $orderparams[] = $ordparam;
            }
        }
        $orderby = implode( ',', $orderparams );
    }

    if ( empty( $orderby ) ) {
        $orderby = 'link_name';
    }

    $order = strtoupper( $r['order'] );
    if ( " != $order && ! in_array( $order, array( 'ASC', 'DESC' ) ) ) {
        $order = 'ASC';
    }

    $visible = '';

```

```

if( $r['hide_invisible'] ) {
    $visible = "AND link_visible = 'Y'";
}

$query = "SELECT * $length $recently_updated_text $get_updated FROM $wpdb->links
JOIN $join WHERE 1=1 $visible $category_query";
$query .= " $exclusions $inclusions $search";
$query .= " ORDER BY $orderby $order";
if( $r['limit'] != -1 ) {
    $query .= ' LIMIT ', $r['limit'];
}
$results = $wpdb->get_results( $query );
if( 'rand()' !== $orderby ) {
    $cache[ $key ] = $results;
    wp_cache_set( 'get_bookmarks', $cache, 'bookmark' );
}
/** This filter is documented in wp-includes/bookmark.php */
return apply_filters( 'get_bookmarks', $results, $r );
}

function sanitize_bookmark($bookmark, $context = 'display') {
    $fields = array('link_id', 'link_url', 'link_name', 'link_image', 'link_target',
    'link_category',
    'link_description', 'link_visible', 'link_owner', 'link_rating', 'link_updated',
    'link_rel', 'link_notes', 'link_rss', );
    if( is_object($bookmark) ) {
        $is_object = true;
        $link_id = $bookmark->link_id;
    } else {

```

```

    $do_object = false;
    $link_id = $bookmark['link_id'];
}

foreach ( $fields as $field ) {
    if ( $do_object ) {
        if ( !isset($bookmark->$field) )
            $bookmark->$field = sanitize_bookmark_field($field, $bookmark-
>$field, $link_id, $context);
    } else {
        if ( !isset($bookmark[$field]) )
            $bookmark[$field] = sanitize_bookmark_field($field,
$bookmark[$field], $link_id, $context);
    }
}

return $bookmark;
}

function sanitize_bookmark_field( $field, $value, $bookmark_id, $context ) {
    switch ( $field ) {
        case 'link_id':// ints
        case 'link_rating':
            $value = (int) $value;
            break;
        case 'link_category':// array( ints )
            $value = array_map('absint', (array) $value);
            // We return here so that the categories aren't filtered.
            // The 'link_category' filter is for the name of a link category, not an array of a
            link's link categories
            return $value;
    }
}

```

```

case 'link_visible' : // bool stored as Y|N
    $value = preg_replace('/[^YNyn]/', "", $value);
    break;

case 'link_target' : // "enum"
    $targets = array('_top', '_blank');
    if ( ! in_array($value, $targets) )
        $value = "";
    break;
}

if ( 'raw' == $context )
    return $value;

if ( 'edit' == $context ) [
    /** This filter is documented in wp-includes/post.php */
    $value = apply_filters( "edit_{$field}", $value, $bookmark_id );

    if ( 'link_notes' == $field ) {
        $value = esc_html( $value ); // textarea_escaped
    } else {
        $value = esc_attr( $value );
    }
} elseif ( 'db' == $context ) {
    /** This filter is documented in wp-includes/post.php */
    $value = apply_filters( "pre_{$field}", $value );
} else {

```

```

        return $value;
    }

    function clean_bookmark_cache( $bookmark_id ) {
        wp_cache_delete( $bookmark_id, 'bookmark' );
        wp_cache_delete( 'get_bookmarks', 'bookmark' );
        clean_object_term_cache( $bookmark_id, 'link' );
    }
}

```

9.1.5.CATEGORY

```

<?php
function get_categories( $args = '' ) {
    $defaults = array( 'taxonomy' => 'category' );
    $args = wp_parse_args( $args, $defaults );
    $taxonomies = $args['taxonomy'];
    $taxonomies = apply_filters( 'get_categories_taxonomy', $taxonomies, $args );
    // Back compat.
    if ( !isset($args['type']) && 'link' == $args['type'] ) {
        _deprecated_argument( __FUNCTION__, '3.0.0',
            /* translators: 1: "type => link", 2: "taxonomy => link_category" */
            sprintf( __( '%1$s is deprecated. Use %2$s instead.' ),
                '<code>type => link</code>',
                '<code>taxonomy => link_category</code>' )
    }
    $taxonomies = $args['taxonomy'] = 'link_category';
}
$categories = get_terms( $taxonomies, $args );

```

```

if( is_wp_error( $categories ) ) {
    $categories = array();
} else {
    $categories = (array) $categories;
    foreach ( array_keys( $categories ) as $k ) {
        _make_cat_compat( $categories[ $k ] );
    }
}

return $categories;
}

/**
 * Retrieves category data given a category ID or category object.
 */
function get_category( $category, $output = OBJECT, $filter = 'raw' ) {
    $category = get_term( $category, 'category', $output, $filter );

    if( is_wp_error( $category ) )
        return $category;

    _make_cat_compat( $category );

    return $category;
}

function get_category_by_path( $category_path, $full_match = true, $output = OBJECT
) {
    $category_path = rawurlencode( urldecode( $category_path ) );
    $category_path = str_replace( '%2F', '/', $category_path );
}

```

```

$category_path = str_replace( '%20', '', $category_path );
$category_paths = '/' . trim( $category_path, '/' );
$leaf_path = sanitize_title( basename( $category_paths ) );
$category_paths = explode( '/', $category_paths );
$full_path = '';
foreach ( (array) $category_paths as $pathdir ) {
    $full_path .= ( $pathdir != '' ? '/' : '' ) . sanitize_title( $pathdir );
}
$categories = get_terms( 'category', array( 'get' => 'all', 'slug' => $leaf_path ) );

if ( empty( $categories ) ) {
    return;
}

foreach ( $categories as $category ) {
    $path = '/' . $leaf_path;
    $curcategory = $category;

    while ( ( $curcategory->parent != 0 ) && ( $curcategory->parent != $curcategory->term_id ) ) {
        $curcategory = get_term( $curcategory->parent, 'category' );
        if ( is_wp_error( $curcategory ) ) {
            return $curcategory;
        }
        $path = '/' . $curcategory->slug . $path;
    }

    if ( $path == $full_path ) {
        $category = get_term( $category->term_id, 'category', $output );
        _make_cat_compat( $category );
        return $category;
    }
}

```

```

        }
    }

    // If full matching is not required, return the first cat that matches the leaf.
    if( ! $full_match ) {
        $category = get_term( reset( $categories )->term_id, 'category', $output );
        _make_cat_compat( $category );
        return $category;
    }
}

function get_cat_name( $cat_id ) {
    $cat_id = (int) $cat_id;
    $category = get_term( $cat_id, 'category' );
    if( ! $category || is_wp_error( $category ) )
        return '';
    return $category->name;
}

function cat_is_ancestor_of( $cat1, $cat2 ) {
    return term_is_ancestor_of( $cat1, $cat2, 'category' );
}

function sanitize_category( $category, $context = 'display' ) {
    return sanitize_term( $category, 'category', $context );
}

function get_tags( $args = '' ) {
    $tags = get_terms( 'post_tag', $args );
    if( empty( $tags ) ) {

```

```
$return = array();
return $return;
}

function _make_cat_compat( &$category ) {
    if ( is_object( $category ) && ! is_wp_error( $category ) ) {
        $category->cat_ID = $category->term_id;
        $category->category_count = $category->count;
        $category->category_description = $category->description;
        $category->cat_name = $category->name;
        $category->category_nicename = $category->slug;
        $category->category_parent = $category->parent;
    } elseif ( is_array( $category ) && isset( $category['term_id'] ) ) {
        $category['cat_ID'] = &$category['term_id'];
        $category['category_count'] = &$category['count'];
        $category['category_description'] = &$category['description'];
        $category['cat_name'] = &$category['name'];
        $category['category_nicename'] = &$category['slug'];
        $category['category_parent'] = &$category['parent'];
    }
}
```

9.1.6 LOG-IN

```
<?php
require( dirname( __FILE__ ) . '/wp-load.php' );

// Redirect to https login if forced to use SSL
if ( force_ssl_admin() && ! is_ssl() ) {
    if ( 0 === strpos($_SERVER['REQUEST_URI'], 'http') ) {
        wp_safe_redirect( set_url_scheme( $_SERVER['REQUEST_URI'], 'https' ) );
        exit();
    } else {
        wp_safe_redirect( 'https://'. $_SERVER['HTTP_HOST'] .
$_SERVER['REQUEST_URI'] );
        exit();
    }
}

function login_header( $title = 'Log In', $message = "", $wp_error = null ) {
    global $error, $interim_login, $action;

    // Don't index any of these forms
    add_action( 'login_head', 'wp_sensitive_page_meta' );
    add_action( 'login_head', 'wp_login_viewport_meta' );
    if ( ! is_wp_error( $wp_error ) ) {
        $wp_error = new WP_Error();
    }
    // Shake it!
    $shake_error_codes = array( 'empty_password', 'empty_email', 'invalid_email',
'invalidcombo', 'empty_username', 'invalid_username', 'incorrect_password' );
}
```

```

$login_title = apply_filters( 'login_title', $login_title, $title );

?><!DOCTYPE html>

<!--[if IE 8]>
<html xmlns="http://www.w3.org/1999/xhtml" class="ie8" <?php
language_attributes(); ?>>
<![endif]-->
<!--[if !(IE 8)]><!-->
<html xmlns="http://www.w3.org/1999/xhtml" <?php language_attributes(); ?>>
<!--<![endif]-->
<head>

<meta http-equiv="Content-Type" content="<?php bloginfo('html_type'); ?>";
charset=<'?php bloginfo('charset'); ?>" />

<title><?php echo $login_title; ?></title>

<?php

wp_enqueue_style( 'login' );
do_action( 'login_head' );
if ( is_multisite() ) {
    $login_header_url = network_home_url();
    $login_header_title = get_network()->site_name;
} else {
    $login_header_url = __( 'https://wordpress.org/' );
    $login_header_title = __( 'Powered by WordPress' );
}
if ( is_multisite() ) {
    $login_header_text = get_bloginfo( 'name', 'display' );
} else {
    $login_header_text = $login_header_title;
}

```

}

```
$classes = array( 'login-action-' . $action, 'wp-core-ui' );
if( is_rtl() )
    $classes[] = 'rtl';
if( $interim_login ) {
    $classes[] = 'interim-login';
}
<style type="text/css">html{background-color: transparent;}</style>
<?php
if( 'success' === $interim_login )
    $classes[] = 'interim-login-success';
}
$classes[] = 'locale-' . sanitize_html_class( strtolower( str_replace( '_', '-', get_locale() ) ) );
do_action( 'login_header' );
?
<div id="login">
<h1><a href="<?php echo esc_url( $login_header_url ); ?>" title="<?php echo esc_attr( $login_header_title ); ?>" tabindex="-1"><?php echo $login_header_text; ?></a></h1>
<?php
unset( $login_header_url, $login_header_title );
$message = apply_filters( 'login_message', $message );
if( !empty( $message ) )
    echo $message . "\n";
```

```

// In case a plugin uses $error rather than the $wp_errors object
if( !empty( $error ) ) {
    $wp_error->add('error', $error);
    unset($error);
}

if( $wp_error->get_error_code() ) {
    $errors = '';
    $messages = '';
    foreach ( $wp_error->get_error_codes() as $code ) {
        $severity = $wp_error->get_error_data( $code );
        foreach ( $wp_error->get_error_messages( $code ) as $error_message ) {
            if ( 'message' == $severity )
                $messages .= $error_message . "<br />\n";
            else
                $errors .= $error_message . "<br />\n";
        }
    }
    if ( ! empty( $errors ) ) {

        echo '<div id="login_error">' . apply_filters( 'login_errors', $errors ) .
        "</div>\n";
    }
    if ( ! empty( $messages ) ) {

        echo '<p class="message">' . apply_filters( 'login_messages', $messages ) .
        "</p>\n";
    }
}

```

```
}

} // End of login_header()

function login_( $input_id = "" ) {

    global $interim_login;

    // Don't allow interim logins to navigate away from the page.

    if( ! $interim_login ): ?>
        <p id='backtoblog'><a href=<?php echo esc_url( home_url( '/' ); ?>><?php
            /* translators: %s: site title */
            printf( __( '&larr; Back to %s', 'site' ), get_bloginfo( 'title', 'display' ) );
        ?></a></p>
        <?php the_privacy_policy_link( '<div class="privacy-policy-page-link">', '</div>' );
    ); ?>
        <?php endif; ?>

    </div>

    <?php if( !empty($input_id) ): ?>
        <script type="text/javascript">
            try{document.getElementById(<?php echo $input_id; ?>).focus();}catch(e){}
            if(typeof wpOnload=='function')wpOnload();
        </script>
        <?php endif; ?>

    <?php

        do_action( 'login_footer' );
        <div class="clear"></div>
```

```

</body>
</html>
<?php

}

function wp_shake_js() {
?>
<script type="text/javascript">

addLoadEvent = function(func){if(typeof
jQuery!="undefined")jQuery(document).ready(func);else
wpOnload!=function(){| wpOnload=func; | else{ var
oldonload=wpOnload;wpOnload=function(){oldonload();func();}}};

function s(id,pos){g(id).left=pos+'px';}

function g(id){return document.getElementById(id).style;}

function
shake(id,a,d){c=a.shift();s(id,c);if(a.length>0){setTimeout(function(){shake(id,a,d);},d);}
else{try{g(id).position='static';wp_attempt_focus();}catch(e){}}}

addLoadEvent(function(){ var p=new Array(15,30,15,0,-15,-30,-
15,0);p=p.concat(p.concat(p));var
i=document.forms[0].id:g(i).position='relative';shake(i,p,20);});

</script>
<?php
}

function wp_login_viewport_meta() {
?>
<meta name="viewport" content="width=device-width" />
<?php
}

function retrieve_password() {
$errors = new WP_Error();

```

```

if( empty( $_POST['user_login'] ) || ! is_string( $_POST['user_login'] ) ) {
    $errors->add('empty_username', __( '<strong>ERROR</strong>: Enter a
username or email address.' ));

} elseif ( strpos( $_POST['user_login'], '@' ) ) {

    $user_data = get_user_by( 'email', trim( wp_unslash( $_POST['user_login'] ) ) );
    if( empty( $user_data ) )

        $errors->add('invalid_email', __( '<strong>ERROR</strong>: There is no
user registered with that email address.' ));

} else {

    $login = trim($_POST['user_login']);

    $user_data = get_user_by('login', $login);
}

do_action( 'lostpassword_post', $errors );

if( $errors->get_error_code() )
    return $errors;

if( !$user_data ) {

    $errors->add('invalidcombo', __( '<strong>ERROR</strong>: Invalid username or
email.' ));

    return $errors;
}

// Redefining user_login ensures we return the right case in the email.
$user_login = $user_data->user_login;
$user_email = $user_data->user_email;
$key = get_password_reset_key( $user_data );
if( is_wp_error( $key ) )

    return $key;

```

```

        }

        if( is_multisite() ) {
            $site_name = get_network() >site_name;
        } else {

            $site_name = wp_specialchars_decode( get_option( 'blogname' ), ENT_QUOTES
        );
    }

    $message = __( 'Someone has requested a password reset for the following
account:' ) . "\n\n";
/* translators: %s: site name */
$message .= sprintf( __( 'Site Name: %s'), $site_name ) . "\n\n";
/* translators: %s: user login */
$message .= sprintf( __( 'Username: %s'), $user_login ) . "\n\n";
$message .= __( 'If this was a mistake, just ignore this email and nothing will
happen.' ) . "\n\n";
$message .= __( 'To reset your password, visit the following address:' ) . "\n\n";
$message .= '<' . network_site_url( "wp-login.php?action=rp&key=$key&login=" .
rawurlencode( $user_login ), 'log in' ) . ">\n";
/* translators: Password reset email subject. %s: Site name */
$title = sprintf( __( '[%s] Password Reset'), $site_name );
$message = apply_filters( 'retrieve_password_message', $message, $key,
$user_login, $user_data );

if ( $message && !wp_mail( $user_email, wp_specialchars_decode( $title ),
$message ) )

```

```

wp_die( __('The email could not be sent.') . "<br />\n" . __('Possible reason: your
host may have disabled the mail() function.'));

return true;
}

$action = isset($_REQUEST['action']) ? $_REQUEST['action'] : 'login';
$errors = new WP_Error();

if ( !isset($_GET['key']) )
    $action = 'resetpass';

// validate action so as to default to the login screen
if ( !in_array( $action, array( 'postpass', 'logout', 'lostpassword', 'retrievepassword',
    'resetpass', 'rp', 'register', 'login', 'confirmaction' ), true ) && false === has_filter(
    'login_form_' . $action ) )
    $action = 'login';

nocache_headers();

header('Content-Type: ' . get_bloginfo('html_type'); charset=' . get_bloginfo('charset'));

if ( defined( 'RELOCATE' ) && RELOCATE ) { // Move flag is set
    if ( !isset( $_SERVER['PATH_INFO'] ) && ( $_SERVER['PATH_INFO'] != $_SERVER['PHP_SELF'] ) )
        $_SERVER['PHP_SELF'] = str_replace( $_SERVER['PATH_INFO'], '', $_SERVER['PHP_SELF'] );

    $url = dirname( set_url_scheme( 'http://', $_SERVER['HTTP_HOST'], $_SERVER['PHP_SELF'] ) );
    if ( $url != get_option( 'siteurl' ) )

```

```

        update_option( 'siteurl', $url );
    }

//Set a cookie now to see if they are supported by the browser.

$secure = ( 'https' === parse_url( wp_login_url(), PHP_URL_SCHEME ) );

setcookie( 'TEST_COOKIE', 'WP Cookie check', 0, COOKIEPATH,
COOKIE_DOMAIN, $secure );

if ( SITECOOKIEPATH != COOKIEPATH )

    setcookie( 'TEST_COOKIE', 'WP Cookie check', 0, SITECOOKIEPATH,
COOKIE_DOMAIN, $secure );

$lang      = ! empty( $_GET['wp_lang'] ) ? sanitize_text_field( $_GET['wp_lang'] ) :
'';

do_action( 'login_init' );

do_action( "login_form_( $action )");

if( $http_post = ( 'POST' == $_SERVER['REQUEST_METHOD'] ) );
{
    $interim_login = isset( $_REQUEST['interim-login'] );
    $login_link_separator = apply_filters( 'login_link_separator', ' ' );
    switch ( $action ) {
        case 'postpass' :
            if( ! array_key_exists( 'post_password', $_POST ) ) {
                wp_safe_redirect( wp_get_referer() );
                exit();
            }
    }
}

require_once ABSPATH . WPINC . '/class-phpass.php';

```

```

Shasher = new PasswordHash( 8, true );
$expire = apply_filters( 'post_password_expires', time() + 10 * DAY_IN_SECONDS );
$referer = wp_get_referer();
if( $referer ) {
    $secure = ( 'https' === parse_url( $referer, PHP_URL_SCHEME ) );
} else {
    $secure = false;
}
setcookie( 'wp-postpass_'.COOKIEHASH, $shasher->HashPassword( wp_unslash( $_POST['post_password'] ) ), $expire, COOKIEPATH, COOKIE_DOMAIN, $secure );

if( $switched_locale ) {
    restore_previous_locale();
}
wp_safe_redirect( wp_get_referer() );
exit();

case 'logout':
    check_admin_referer('log-out');
    $user = wp_get_current_user();
    wp_logout();
    if( ! empty( $_REQUEST['redirect_to'] ) ) {
        $redirect_to = $requested_redirect_to = $_REQUEST['redirect_to'];
    } else {
        $redirect_to = 'wp-login.php?loggedout=true';
        $requested_redirect_to = '';
    }
}

```

```

if ( $switched_locale ) {
    restore_previous_locale();
}

$redirect_to = apply_filters( 'logout_redirect', $redirect_to, $requested_redirect_to,
$user );

wp_safe_redirect( $redirect_to );
exit();

case 'lostpassword':
case 'retrievepassword':
if ( $http_post ) {
    $errors = retrieve_password();
    if ( !is_wp_error($errors) ) {
        $redirect_to = !empty( $_REQUEST['redirect_to'] ) ? $_REQUEST['redirect_to'] : 'wp-login.php?checkemail=confirm';
        wp_safe_redirect( $redirect_to );
        exit();
    }
}

if ( isset( $_GET['error'] ) ) {
    if ( 'invalidkey' == $_GET['error'] ) {
        $errors->add( 'invalidkey', __( 'Your password reset link appears to be
invalid. Please request a new link below.' ) );
    } elseif ( 'expiredkey' == $_GET['error'] ) {
        $errors->add( 'expiredkey', __( 'Your password reset link has expired.
Please request a new link below.' ) );
    }
}

```

```

    $lostpassword_redirect = ! empty( $_REQUEST['redirect_to'] ) ? 
    $_REQUEST['redirect_to'] : '';

    do_action( 'lost_password' );

    login_header__( 'Lost Password' ), '<p class="message">' . __( 'Please enter your
username or email address. You will receive a link to create a new password via email.' ) .
'</p>', $errors);

    $user_login = '';
    if ( isset( $_POST['user_login'] ) && is_string( $_POST['user_login'] ) ) {
        $user_login = wp_unslash( $_POST['user_login'] );
    }
?>

<form name="lostpasswordform" id="lostpasswordform" action="<?php echo esc_url(
network_site_url( 'wp-login.php?action=lostpassword', 'login_post' ) ); ?>" 
method="post">

<p>
    <label for="user_login"><?php _e( 'Username or Email Address' ); ?><br />
    <input type="text" name="user_login" id="user_login" class="input"
value="<?php echo esc_attr($user_login); ?>" size="20" /></label>
</p>
<?php
    do_action( 'lostpassword_form' );
    <input type="hidden" name="redirect_to" value="<?php echo esc_attr( $redirect_to
); ?>" />
    <p class="submit"><input type="submit" name="wp-submit" id="wp-submit"
class="button button-primary button-large" value="<?php esc_attr_e('Get New
Password'); ?>" /></p>
</form>

<p id="nav">
```

```

<a href=<?php echo esc_url( wp_login_url() ); ?>><?php _e('Log in') ?></a>
<?php
if ( get_option( 'users_can_register' ) ) :
    $registration_url = sprintf( '<a href="%s">%s</a>', esc_url( wp_registration_url() ),
        __( 'Register' ) );
    echo esc_html( $login_link_separator );
    /* This filter is documented in wp-includes/general-template.php */
    echo apply_filters( 'register', $registration_url );
endif;
?>
</p>
<?php
login_footer('user_login');
if ( $switched_locale ) {
    restore_previous_locale();
}
break;
case 'resetpass':
case 'rp':
list( $rp_path ) = explode( '?', wp_unslash( $_SERVER['REQUEST_URI'] ) );
$rp_cookie = 'wp-resetpass-' . COOKIEHASH;
if ( isset( $_GET['key'] ) ) {
    $value = sprintf( '%s;%s', wp_unslash( $_GET['login'] ), wp_unslash(
        $_GET['key'] ) );
    setcookie( $rp_cookie, $value, 0, $rp_path, COOKIE_DOMAIN, is_ssl(), true );
    wp_safe_redirect( remove_query_arg( array( 'key', 'login' ) ) );
    exit;
}

```

```

    if( isset( $_COOKIE[ $rp_cookie ] ) && 0 < strpos( $_COOKIE[ $rp_cookie ], '=' ) )
    {
        list( $rp_login, $rp_key ) = explode( '=', wp_unslash( $_COOKIE[ $rp_cookie ] ), 2 );
        $user = check_password_reset_key( $rp_key, $rp_login );
        if( isset( $_POST['pass1'] ) && ! hash_equals( $rp_key, $_POST['rp_key'] ) ) {
            $user = false;
        }
    } else {
        $user = false;
    }
    if( ! $user || is_wp_error( $user ) ) {
        setcookie( $rp_cookie, ' ', time() - YEAR_IN_SECONDS, $rp_path,
        COOKIE_DOMAIN, is_ssl(), true );
        if( $user && $user->get_error_code() === 'expired_key' )
            wp_redirect( site_url( 'wp-login.php?action=lostpassword&error=expiredkey' ) );
        else
            wp_redirect( site_url( 'wp-login.php?action=lostpassword&error=invalidkey' ) );
        exit;
    }
    $errors = new WP_Error();
    if( isset($_POST['puss1']) && $_POST['pass1'] != $_POST['pass2'] )
        $errors->add( 'password_reset_mismatch', __( 'The passwords do not match.' ) );
    do_action( 'validate_password_reset', $errors, $user );
}

```

```

if ( ( ! $errors->get_error_code() ) && isset( $_POST['pass1'] ) && !empty(
$_POST['pass1'] ) ) {

    reset_password($user, $_POST['pass1']);

    setcookie( $rp_cookie, ' ', time() - YEAR_IN_SECONDS, $rp_path,
COOKIE_DOMAIN, is_ssl(), true );

}

if( isset( $_REQUEST['redirect_to'] ) ) {

    $redirect_to = $_REQUEST['redirect_to'];

    // Redirect to https if user wants ssl

    if ( $secure_cookie && false !== strpos($redirect_to, 'wp-admin') )

        $redirect_to = preg_replace( ^http://|, https://, $redirect_to);

} else {

    $redirect_to = admin_url();

}

$reauth = empty($_REQUEST['reauth']) ? false : true;

$user = wp_signon( array(), $secure_cookie );

if( empty( $_COOKIE[ LOGGED_IN_COOKIE ] ) ) {

    if( headers_sent() ) {

        /* translators: 1: Browser cookie documentation URL, 2: Support forums
URL */

        $user = new WP_Error( 'test_cookie', sprintf( __(
'<strong>ERROR</strong>: Cookies are blocked due to unexpected output. For help,
please see <a href="%1$s">this documentation</a> or try the <a href="%2$s">support
forums</a>.' ), __( 'https://codex.wordpress.org/Cookies' ), __( 'https://wordpress.org/support/' ) );

    } elseif( isset( $_POST['testcookie'] ) && empty( $_COOKIE[ TEST_COOKIE ] ) ) {

        // If cookies are disabled we can't log in even with a valid user+pass

        /* translators: 1: Browser cookie documentation URL */

```

```

        $user = new WP_Error( 'test_cookie', sprintf( __(
'<strong>ERROR</strong>: Cookies are blocked or not supported by your browser. You
must <a href="%s">enable cookies</a> to use WordPress.' ),
__( 'https://codex.wordpress.org/Cookies' ) ) );
}

}

$requested_redirect_to = isset( $_REQUEST['redirect_to'] ) ?
$_REQUEST['redirect_to'] : '';

$redirect_to = apply_filters( 'login_redirect', $redirect_to, $requested_redirect_to,
$user );

if( !is_wp_error($user) && !$reauth ) {
    if( $interim_login ) {
        $message = '<p class="message">' . __( 'You have logged in successfully.' )
, '</p>';
        $interim_login = 'success';
        login_header( $message );
    }
    </div>
    <?php
    /** This action is documented in wp-login.php */
    do_action( 'login_footer' );
    <?php if( $customize_login ) : ?>
        <script type="text/javascript">setTimeout( function() { new
wp.customize.Messenger({ url: '<?php echo wp_customize_url(); ?>', channel: 'login'
}).send('login') }, 1000 );</script>
        <?php endif; ?>
    </body></html>
<?php exit;
}

```

```

if ( ( empty( $redirect_to ) || $redirect_to == 'wp-admin' || $redirect_to ==
admin_url() ) ) {

    // If the user doesn't belong to a blog, send them to user admin. If the user
    can't edit posts, send them to their profile.

    if ( is_multisite() && !get_active_blog_for_user($user->ID) &&
!is_super_admin( $user->ID ) )

        $redirect_to = user_admin_url();

    elseif ( is_multisite() && !$user->has_cap('read') )

        $redirect_to = get_dashboard_url( $user->ID );

    elseif ( !$user->has_cap('edit_posts') )

        $redirect_to = $user->has_cap('read') ? admin_url( 'profile.php' ) :
home_url();

        wp_redirect( $redirect_to );

        exit();

    }

    wp_safe_redirect($redirect_to);

    exit();
}

$errors = $user;

// Clear errors if loggedout is set.

if ( !empty($_GET['loggedout']) || $reauth )

    $errors = new WP_Error();

if ( $interim_login ) {

    if ( ! $errors->get_error_code() )

        $errors->add( 'expired', __( 'Your session has expired. Please log in to
continue where you left off.' ), 'message' );

} else {

    // Some parts of this script use the main login form to display a message
}

```

```

if      ( !isset($_GET['loggedout']) && true == $_GET['loggedout'] )
    $errors->add('loggedout', __("You are now logged out."), 'message');
elseif ( !isset($_GET['registration']) && 'disabled' == $_GET['registration'] )
    $errors->add('registerdisabled', __("User registration is currently not allowed."), 'message');
elseif ( !isset($_GET['checkemail']) && 'confirm' == $_GET['checkemail'] )
    $errors->add('confirm', __("Check your email for the confirmation link."), 'message');
elseif ( !isset($_GET['checkemail']) && 'newpass' == $_GET['checkemail'] )
    $errors->add('newpass', __("Check your email for your new password."), 'message');
elseif ( !isset($_GET['checkemail']) && 'registered' == $_GET['checkemail'] )
    $errors->add('registered', __("Registration complete. Please check your email."), 'message');
elseif ( strpos( $redirect_to, 'about.php?updated' ) )
    $errors->add('updated', __( '<strong>You have successfully updated WordPress!</strong> Please log back in to see what's new.' ), 'message');
}

$errors = apply_filters( 'wp_login_errors', $errors, $redirect_to );
// Clear any stale cookies.
if( $reauth )
    wp_clear_auth_cookie();
login_header__( 'Log In' );
if( !empty( $_POST['log'] ) )
    $user_login = ( 'incorrect_password' == $errors->get_error_code() || 'empty_password' == $errors->get_error_code() ) ? esc_attr( wp_unslash( $_POST['log'] ) ) : '';
$rememberme = ! empty( $_POST['rememberme'] );

if( !empty( $errors->errors ) ) {

```

```

        $aria_describedby_error = ' aria-describedby="login_error"';
    } else {
        $aria_describedby_error = '';
    }
?>

<form name="loginform" id="loginform" action="php echo esc_url( site_url( 'wp-login.php', 'login_post' ) ); ?" method="post">

<p>
    <label for="user_login"><?php _e( 'Username or Email Address' ); ?><br />
    <input type="text" name="log" id="user_login"<?php echo $aria_describedby_error; ?> class="input" value=<?php echo esc_attr( $user_login ); ?>" size="20" /></label>
</p>

<p>
    <label for="user_pass"><?php _e( 'Password' ); ?><br />
    <input type="password" name="pwd" id="user_pass"<?php echo $aria_describedby_error; ?> class="input" value="" size="20" /></label>
</p>

<?php

        do_action( 'login_form' );
    ?>

    <p class="forgetmenot"><label for="rememberme"><input name="rememberme" type="checkbox" id="rememberme" value="forever" <?php checked( $rememberme ); ?> <?php esc_html_e( 'Remember Me' ); ?></label></p>

    <p class="submit">
        <input type="submit" name="wp-submit" id="wp-submit" class="button button-primary button-large" value='<?php esc_attr_e( "Log In" ); ?>' />
    <?php if ( $interim_login ) ( ?>
        <input type="hidden" name="interim-login" value="1" />

```

```

<?php } else { ?>
    <input type="hidden" name="redirect_to" value="<?php echo
esc_attr($redirect_to); ?>" />
<?php } ?>
<?php if ( $customize_login ) : ?>
    <input type="hidden" name="customize-login" value="1" />
<?php endif; ?>
    <input type="hidden" name="testcookie" value="1" />
</p>
</form>

<?php if ( ! $interim_login ) { ?>
<p id="nav">
<?php if ( ! isset( $_GET['checkemail'] ) || ! in_array( $_GET['checkemail'], array(
'confirm', 'newpass' ) ) ) {
    if ( get_option( 'users_can_register' ) ) {
        $registration_url = sprintf( '<a href="%s">%s</a>', esc_url( wp_registration_url() ),
        __( 'Register' ) );
        /* This filter is documented in wp-includes/general-template.php */
        echo apply_filters( 'register', $registration_url );
        echo esc_html( $login_link_separator );
    }
    ?>
        <a href="<?php echo esc_url( wp_lostpassword_url() ); ?>"><?php _e( 'Lost your
password?' ); ?></a>
    <?php endif; ?>
</p>

```

```
<?php ) ?>

<script type="text/javascript">
function wp_attempt_focus(){
setTimeout( function(){ try{
<?php if ( $user_login ) | ?>
d = document.getElementById('user_pass');
d.value = "";
<?php } else { ?>
d = document.getElementById('user_login');
<?php if ( 'invalid_username' == $errors->get_error_code() ) | ?>
if( d.value != "" )
d.value = "";
<?php
}
|?>
d.focus();
d.select();
} catch(e){}
}, 200);
}

<?php
if ( apply_filters( 'enable_login_autofocus', true ) && ! $error ) { ?>
wp_attempt_focus();
<?php } ?>
if(typeof wpOnload=='function')wpOnload();
```

```
<?php if ( $interim_login ) { ?>
(function(){
try {
    var i, links = document.getElementsByTagName('a');
    for ( i in links ) {
        if ( links[i].href )
            links[i].target = '_blank';
    }
} catch(e){}
}());
<?php } ?>
</script>

<?php
login_footer();

if ( $switched_locale ) {
    restore_previous_locale();
}

break;
} // end action switch
```

9.1.7 MAIL

```
require(dirname(__FILE__). '/wp-load.php');

/** This filter is documented in wp-admin/options.php */
if ( !apply_filters( 'enable_post_by_email_configuration', true ) )

    wp_die(__( 'This action has been disabled by the administrator.'), 403);

$mailserver_url = get_option('mailserver_url');

if ('mail.example.com' === $mailserver_url || empty($mailserver_url)) {

    wp_die(__( 'This action has been disabled by the administrator.'), 403);

}

if ( !defined('WP_MAIL_INTERVAL') )

    define('WP_MAIL_INTERVAL', 300); // 5 minutes

$last_checked = get_transient('mailserver_last_checked');

if ( $last_checked )

    wp_die(__('Slow down cowboy, no need to check for new mails so often.'));

set_transient('mailserver_last_checked', true, WP_MAIL_INTERVAL);

$time_difference = get_option('gmt_offset') * HOUR_IN_SECONDS;

$phone_delim = ':';

$pop3 = new POP3();

if ( !$pop3->connect( get_option('mailserver_url'), get_option('mailserver_port') ) ||

!$pop3->user( get_option('mailserver_login') ) )

    wp_die( esc_html($pop3->ERROR) );
```

```

$count = $pop3->pass( get_option('mailserver_pass') );

if( false === $count )
    wp_die( esc_html( $pop3->ERROR ) );

if( 0 === $count ) {
    $pop3->quit();
    wp_die( __( 'There doesn't seem to be any new mail.' ) );
}

for ( $i = 1; $i <= $count; $i++ ) {

    $message = $pop3->get($i);

    $bodysignal = false;
    $boundary = '';
    $charset = '';
    $content = '';
    $content_type = '';
    $content_transfer_encoding = '';
    $post_author = 1;
    $author_found = false;

    foreach ($message as $line) {
        // Body signal.
        if ( strlen($line) < 3 )
            $bodysignal = true;
        if ( $bodysignal ) {

```

```

    $content .= $line;
} else {
    if ( preg_match('/Content-Type: /i', $line) ) {
        $content_type = trim($line);
        $content_type = substr($content_type, 14, strlen($content_type) - 14);
        $content_type = explode(';', $content_type);
        if ( ! empty( $content_type[1] ) ) {
            $charset = explode('=', $content_type[1]);
            $charset = ( ! empty( $charset[1] ) ) ? trim($charset[1]) : '';
        }
        $content_type = $content_type[0];
    }
    if ( preg_match('/Content-Transfer-Encoding: /i', $line) ) {
        $content_transfer_encoding = trim($line);
        $content_transfer_encoding = substr($content_transfer_encoding, 27, strlen($content_transfer_encoding) - 27);
        $content_transfer_encoding = explode(';', $content_transfer_encoding);
        $content_transfer_encoding = $content_transfer_encoding[0];
    }
    if ( ( $content_type == 'multipart/alternative' ) && ( false !== strpos($line, 'boundary="")' ) && ( " == $boundary ) ) {
        $boundary = trim($line);
        $boundary = explode('"', $boundary);
        $boundary = $boundary[1];
    }
    if (preg_match('/Subject: /i', $line)) {
        $subject = trim($line);
    }
}

```

```

$subject = substr($subject, 9, strlen($subject) - 9);
// Captures any text in the subject before $phone_delim as the
subject

if ( function_exists('iconv_mime_decode') ) {

    $subject      =      iconv_mime_decode($subject,      2,
get_option('blog_charset'));

} else {

    $subject = wp_iso_desrambler($subject);

}

$subject = explode($phone_delim, $subject);
$subject = $subject[0];

if ( ! $author_found && preg_match( '/^From|Reply-To: /', $line ) ) {

    if ( preg_match( '[a-zA-Z_-]+@[a-zA-Z_-]+\.(?!.*<)li', $line,
$matches) )

        $author = $matches[0];

    else

        $author = trim($line);

    $author = sanitize_email($author);

    if ( is_email($author) ) {

        /* translators: Post author email address */
        echo '<p>' . sprintf__( 'Author is %s', $author ) . '</p>';

        $userdata = get_user_by('email', $author);

        if ( ! empty( $userdata ) ) {

            $post_author = $userdata->ID;

            $author_found = true;

        }

    }

}

}

```

```

        }

        if ( preg_match( '/Date: /i', $line ) ) { // of the form '20 Mar 2002 20:32:37
+0100'

            $ddate = str_replace( 'Date: ', '', trim( $line ) );

            $ddate = preg_replace( '/^([^\s]+)([^\s]+)$/', '$1', $ddate ); // remove
parenthesised timezone string if it exists, as this confuses strtotime

            $ddate_U = strtotime( $ddate );

            $post_date = gmdate( 'Y-m-d H:i:s', $ddate_U + $time_difference
);

            $post_date_gmt = gmdate( 'Y-m-d H:i:s', $ddate_U );
        }

    }

}

// Set $post_status based on $author_found and on author's publish_posts capability
if ( $author_found ) {

    $user = new WP_User($post_author);

    $post_status = ( $user->has_cap('publish_posts') ) ? 'publish' : 'pending';

} else {

    // Author not found in DB, set status to pending. Author already set to admin.

    $post_status = 'pending';
}

$subject = trim($subject);

if ( $content_type == 'multipart/alternative' ) {

    $content = explode('--'.boundary, $content);
}

```

```

$content = $content[2];

// Match case-insensitive content-transfer-encoding.

if ( preg_match( '/Content-Transfer-Encoding: quoted-printable/i', $content,
$delim ) ) {
    $content = explode($delim[0], $content);
    $content = $content[1];
}

$content = strip_tags($content,
'<img><p><br><i><b><u><em><strong><strike><font><span><div>');
);

$content = trim($content);
$content = apply_filters( 'wp_mail_original_content', $content );

if ( false === stripos($content_transfer_encoding, "quoted-printable") ) {
    $content = quoted_printable_decode($content);
}

if ( function_exists('iconv') && ! empty( $charset ) ) {
    $content = iconv($charset, get_option('blog_charset'), $content);
}

// Captures any text in the body after $phone_delim as the body
$content = explode($phone_delim, $content);
$content = empty( $content[1] ) ? $content[0] : $content[1];

$content = trim($content);
$post_content = apply_filters( 'phone_content', $content );

```

```

Spost_title = xmlrpc_getposttitle($content);

if ($post_title == '') $post_title = $subject;

$post_category = array(get_option('default_email_category'));

$post_data =
compact('post_content','post_title','post_date','post_date_gmt','post_author','post_category',
'post_status');

$post_data = wp_sslash($post_data);

$post_ID = wp_insert_post($post_data);

if ( is_wp_error($post_ID) )
echo "\n" . $post_ID->get_error_message();

// We couldn't post, for whatever reason. Better move forward to the next email.

if ( empty($post_ID) )
continue;

do_action( 'publish_phone', $post_ID );

echo "\n<p><strong>" . __( 'Author:' ) . '</strong>' . esc_html($post_author) .
'</p>';

echo "\n<p><strong>" . __( 'Posted title:' ) . '</strong>' . esc_html($post_title) .
'</p>';

if (!$pop3->delete($i)) {
echo '<p>', sprintf(
/* translators: %s: POP3 error */
```

```
    __( 'Oops: %s' ),
    esc_html( $pop3->ERROR )
), '</p>';
$pop3->reset();
exit;
} else {
echo '<p>', sprintf(
    /* translators: %s: the message ID */
    __( 'Mission complete. Message %s deleted.' ),
    '<strong>' . $i . '</strong>'
), '</p>';
}
$pop3->quit();
```

CHAPTER NO 10.0

Bibliography

1) BOOKS:

- a) [PHP & MySQL Web Development – by Luke Welling & Laura Thompson](#)
- b) [PHP & MySQL: The Missing Manual – by Brett McLaughlin](#)
- c) [Learn PHP & MySQL – Zero to Hero Programming Crash Course – by Paul Madoff](#)

2) WEBSITES

- a) [www.w3schools.com/](#)
- b) [https://developer.mozilla.org/en-US/docs/Web/JavaScript](#)
- c) [https://getbootstrap.com/docs/4.3/getting-started/introduction/](#)

3) HOSTING

- a) [https://www.000webhost.com/](#)

CHAPTER NO 11.0

11.1 FUTURE EXPECTATION ABOUT THE E-COMMERCE:-

The Retail world is undergoing an extreme change, most of the influencing features are technology development and New trends. It's not only about technology improvement. A successful retailer must also take into consideration the new business model affecting business activities, consumer behavior, as well as changing consumer expectations. This article would really help every successful retailer to gain magnificent knowledge as well as changing consumer Expectation pattern, with relevant implications of these evolutionary changes of both merchants and users of their service.

11.1.1 The Internet is crushing department stores:-

In earlier days, people used to visit Retail outlet or departmental stores when they are in need of different products at the same time in one place. This practice is highly decreasing with Recent generations. Since the world speeds up every day, young generation always looks forward to reducing time consumption as well as to reduce energy consumption. It's obvious that in current days the internet can offer millions of products at a click. Hence in the next few decades, people who are going to departmental stores might seem to be an old-fashioned hobby rather than being a part of everyday life. Online retail will Lessen the need for offline stores

In present days, it is the must for all Retailers to have an online presence. Indeed, even today it is difficult to locate a fruitful best retail outlet without an online nearness. It's Estimated in up and coming years individuals would question your reality on the off chance that you don't have an online gateway, the online retail is relied upon to win clients considering. Although, most of the offline stores are offering most of the options and items online for customers. Building an online gateway is a lot less demanding, less complex, progressively advantageous for the two purchasers and vendors. In Upcoming decades are in all probability expected to be Online Era.

11.1.2 Mobile is the Internet:-

Mobile Technology makes the web increasingly sensible and shortsighted, while everything is getting a quicker and quicker everyday life except gadgets are getting littler, lighter just as compact. Mobile Phone is one of the Exclusionary gadgets with whom everybody conveys, look through the web, just as to do shopping. In these ongoing ages, everybody gets shocked on the off chance that anything recently propelled without a versatile application. In forthcoming years, everyone will change to use notebooks and computers to do some serious technical tasks. In 2016 over \$100 billion sales were made on mobile and desktop devices only and these figures are expected to continue in growing successfully with Recent Mobile Technology.

11.1.3 Social media is a key driver E-commerce:-

Advertising is one of the fantastic instruments to make mindfulness among a wide group of onlookers, when you publicize utilizing Social Media it makes a huge measure of traffic to your gateway just as to pronounce your reality. In Current days, individuals needed to find out about the items, item Reviews, dependability just as thoughts and feelings. Henceforth Social Media is the major device and the key driver to speak with brands and clients, it takes brands and client closer to one another. It is prudent to adequately build social sharing and online nearness to change over more guests to important clients and to take a respectable offer of the online business later on.

11.1.4 E-commerce while messaging:-

E-commerce while informing is one of the amazing apparatuses to drive compelling deals like individuals inclining toward brands to progressively open and act increasingly human, informing is one of the crucial E-commerce tool. A Retailer can send a message personally about sales, special offers, some personal set of items based on customer preferences and okier purchase. This is one of the active ways to be in trend is to apply this tool into your business and makes it as personal as possible.