

FINAL YEAR PROJECT

“IMPLEMENTATION OF AN E-SHOPPING WEBSITE”

BY

SHUVO SAHA

ID: 151-40-194

This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Multimedia and Creative Technology

Supervised By

Apurba Ghosh

Lecturer

Department of MCT
DaffodilInternationalUniversity

FACULTY OF SCIENCE AND INFORMATION TECHNOLOGY (FSIT)

DEPARTMENT OF MULTIMEDIA AND CREATIVE TECHNOLOGY (MCT)



Daffodil
International
University



APPROVAL

This Project titled ‘**Implementation of An E-shopping Website**’, submitted by Shuvo Saha to the Department of Multimedia and Creative Technology, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Multimedia and Creative Technology and approved as to its style and contents. The presentation has been held on 29 November 2018.

BOARD OF EXAMINERS

Dr. Shaikh Muhammad Allayear

Associate Professor & Head

Department of MCT

Faculty of Science & Information Technology

Daffodil International University

Chairman

Arif Ahmed

Adjunct Associate Professor

Department of MCT

Faculty of Science & Information Technology

Daffodil International University

Internal Examiner

Md. Samaun Hasan

Lecturer

Department of MCT

Faculty of Science & Information Technology

Daffodil International University

Internal Examiner

Professor Dr Mohammad Zahidur Rahman

Professor

Department of CSE

Jahangirnagar University

External Examiner



DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Apurba Ghosh, Lecturer, Department of MCT** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:

Apurba Ghosh

Lecturer

Department of MCT

Daffodil International University

Submitted by:

Shuvo Saha

ID: 151-40-194

Department of MCT

Daffodil International University



ACKNOWLEDGEMENT

First I express my heartiest thanks and gratefulness to almighty God for His divine blessing makes me possible to complete the final year project/internship successfully.

I really grateful and wish my profound my indebtedness to **Apurba Ghosh, Lecturer**, Department of MCT Daffodil International University, Dhaka. Deep Knowledge & keen interest of my supervisor in the field of “*Web Application Development*” to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

I would like to express my heartiest gratitude to Mr. Arif Ahmed, Mr. Md. Samaun Hasan, Dr. Shaikh Muhammad Allayear, Associate Professor and Head, Department of MCT, for his kind help to finish our project and also to other faculty member and the staff of MCT department of Daffodil International University.

I would like to thank my entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, I must acknowledge with due respect the constant support and patients of my parents.



ABSTRACT

After the term World Wide Web was instituted in 1990, web application advancement encountered a colossal blast. Static HTML pages developed into dynamic, complex business applications. The Internet has opened up another skyline for exchange and trade, in particular electronic Commerce (web based business). Web based business involves the utilization of the Internet in the showcasing, distinguishing proof, installment and conveyance of merchandise and enterprises.

There is no lack of best down research disclosing to us that the ecommerce advertise is tremendous, becoming to a great degree quick, and hinting at no backing off. As per sources like "e Marketer", ecommerce is the main trillion-dollar industry developing at a twofold digit rate every year. What's more, with the US Census Bureau assessing that just 7% of retail deals are done on the web, ecommerce still has a great deal of runway for development.

In this project I have created a dynamic **E-shopping Website** by using modern web development framework and also setup it in a live server for further potential testing and developing. Which can allow us to manage the inventory system, advanced shopping cart system, user management system, shop different products through online payment gateway and lots more dynamic functionality. During this project development process, I have done lots of research on existing Ecommerce web applications and businesses. Which allow me to develop and implement a dynamic E-shopping web application and its business aspects.



TABLE OF CONTENTS

CONTENTS	PAGE
Board of Examiners	ii
Declaration	iii
Acknowledgement	iv
Abstract	v
CHAPTER	
CHAPTER 1: INTRODUCTION	10-12
1.1 Background	10
1.2 Motivation	11
1.3 Objectives	12
CHAPTER 2: LITERATURE REVIEW	13-18
2.1 Introduction	13
2.2 Definition of E-commerce	13
2.3 History of Ecommerce	15
2.4 Different types of E-commerce	16
2.5 E-commerce Usage in Developed vs. Developing Countries	18
2.6 E-commerce Usage in Asia	18
CHAPTER 3: WEB APPLICATION DEVELOPMENT PROCESS	19-29
3.1 Introduction	19
3.2 Technology, framework and tools	19
3.3 Number of modules of e-commerce application	20



3.4 Activity Figure of E-commerce web application	21
3.5 DFD Figures of ecommerce web application	24
3.6 Admin Details Data Flow	26
CHAPTER 4: DEPLOY ON DISTRIBUTED NETWORK	30-46
4.1 Introduction	30
4.2 Domain Registration	30
4.3 Hosting the application and database	31
4.4 Live Demonstration	31
CHAPTER 5: COMPARATIVE ANALYSIS	47-49
5.1 Introduction	47
5.2 Worlds top E-commerce Industries	47
5.3 Analysis	49
CHAPTER 6: DISCUSSION	50-51
6.1 Introduction	50
6.2 Limitations and Issues	50
6.3 Security and Firewall	51
6.4 Discussion	51
CHAPTER 7: CONCLUSION	52
REFERENCE	53



LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1: Login Activity	21
Figure 3.2: Registration Activity	22
Figure 3.3: Admin Activity	23
Figure 3.4: User Activity	24
Figure 3.5: Context Level (0th Level)	25
Figure 3.6: Login DFD	25
Figure 3.7: 1st Level DFD	26
Figure 3.8: 2nd Level DFD For Manage Product	27
Figure 3.9: 2nd Level DFD For Manage Order	27
Figure 3.10: User Activities DFD	28
Figure 3.11: DFD for new user registration	28
Figure 3.12: Entity relationship Figure	29
Figure 4.1: Admin Login Page	32
Figure 4.2: Admin Dashboard	32
Figure 4.3: Add Category Page	33
Figure 4.4: View Category Page	33
Figure 4.5: Add Product Page	34
Figure 4.6: View Products Page	35
Figure 4.7: View Specific Product	35
Figure 4.8: Edit Product Page	36



Figure 4.9: Add/Edit Product Attributes Page	36
Figure 4.10: Add Product Alternate Images Page	37
Figure 4.11: Delete Functionality	37
Figure 4.12: Add Coupon Page	38
Figure 4.13: View Coupon Page	38
Figure 4.14: Add Banner Page	39
Figure 4.15: View Banner Page	39
Figure 4.16: Admin Setting Page	40
Figure 4.17: Home Page	41
Figure 4.18: Product Detail Page	42
Figure 4.19: Product Image Zoom	42
Figure 4.20: Add to Cart Page	43
Figure 4.21: User Login/Register Page	43
Figure 4.22: User Account Page	44
Figure 4.23: Checkout Page	44
Figure 4.24: Review and Payment Page	45
Figure 4.25: Search page	46
Figure 4.26: 404 Page	46
Figure 5.1: Overall ratings of the top ecommerce website builder	48



CHAPTER 1

Introduction

1.1 Background

Internet has contacted our lives from such a large number of points. One of the critical zones of day by day lives where it is profoundly influenced is matter of fact. Online business is where Information Technology (IT) and business exercises are merging into one another. It is a plan of action, or fragment of a bigger plan of action, that empowers a firm or individual to direct business over an electronic system, ordinarily the web.

In this virtual time, a relevant online business procedure is the way to long haul sustenance for any business. Today, pretty much each and every errand is done through on the web and shopping is no exemption. Having a web based business site is no more a way to accomplish upper hand. It is a vital basic for business, while customers are now flourishing on the web [5].

Internet based business is quick making progress as an acknowledged and utilized business worldview. More entrepreneurs executing web based business usefulness and online exchange framework into their sites. So it isn't difficult to state that into couple of decades web will be the typical for shopping any sort of item or administrations.

As a student of multimedia and creative technology department I already developed various multimedia based project like graphics design, 3d animation, game etc. Web development is also a part of multimedia.

The goal of this project is to expand a modern dynamic e-commerce internet software as online or digital store on the net. Where one of a kind varieties of product may be offered from the consolation of domestic through the internet.



1.2 Motivation

There has been relatively 15% of the total populace experiencing a type of inability. All individuals can be a piece of the advanced world, in the event that we make applications or sites with keeping up the web benchmarks.

As per an ongoing report by User Study and Experience Research Hub (Userhub) there is no single internet business webpage accessible in Bangladesh that is completely consistent with universally settled web measures. The gathering of specialists who led the examination, which was centered around the commonness of Accessibility Errors, Accessibility Alerts, and Contrast Errors, and HTML and CSS approval. This test has been done on 174 dynamic internet business destinations recorded with the web based business Association of Bangladesh (e-CAB). The specialists utilized W3C prescribed instruments and arbitrarily chosen 3 pages of every site for the testing reason on above issues.

The consequences of the examination demonstrated that, in Bangladesh there were no single internet business locales with zero blunders and alerts. The normal commonness of openness blunders was 60.57, HTML mistakes 49.52, and CSS mistakes 27.16 [8]. This kind of related news inspired me to do the venture.

With the end goal to give an easy to understand involvement, a web based business website needs to pursue the web gauges of the W3C. The web gauges guarantee the nature of code of a site or application.

There are many small and medium sized business owners in Bangladesh who doesn't aware about e-commerce web application. This can help them to grow their business. Also its need maintenance, update security issues and lots of extra functionality.

My motivation is build a secured, easy setup and error free e-commerce web application or platform, where business owners can easily sell their products online.



1.3 Objectives

The objectives of the project are to:

1. Develop and testing a dynamic e-commerce web application with more user friendly functionality.
2. This could assist to shop for, sell products or items online the usage of internet connection. Enables consumers to shop or do other transactions 24 hours a day, all year round from almost any location.
3. Purchasing of goods online, user can choose different products based on categories, online payments, smart inventory management system, advanced shopping cart functionality, coupon code functionality and others dynamic features.
4. Research and analysis of existing ecommerce applications and business models to develop a better ecommerce solution.

The following chapter presents the literature review of the project and included important information about Ecommerce and its related business aspects. The third chapter is the methodology of the development of the Ecommerce web application. The fourth chapter is about deploying the ecommerce web application on a distributed network. Fifth and sixth chapter is all about comparative analysis with existing ecommerce web application and discussion about their securities and issues. At the last chapter based on conclusion and references of this project.



CHAPTER 2

Literature Review

2.1 Introduction

In this chapter, literature from different sources (books, research paper and internet websites) on the ecommerce history, business model and comparative study has been discussed for better application development process. History of ecommerce says that web based shopping just wound up conceivable when the web was opened to general society in 1991. Amazon.com was one of the principal ecommerce destinations in the US to begin offering items on the web and a large number of organizations have pursued since. The tremendous fame of the web as of late has been powered generally by the possibility of performing business on the web. With the quick worldwide development in electronic trade, organizations are endeavoring to pick up an upper hand by utilizing internet business to interface with clients.

2.2 Definition of E-commerce

There are numerous definitions for E-commerce which share a ton for all intents and purpose. By the by E-business has been characterized by researchers and specialists in various ways. Web based business alludes principally to the purchasing and offering exercises over the Internet, which incorporates exchanges, for example, setting orders, making installments, and following conveyance of requests on the Internet (Rodgers, 2002). The web based business is characterized as purchasing and offering of item administration or data through PC organizes mostly the web (Wen et al., 2001) and individuals instantly consider shopper retail buys from organizations, for example, Amazon (Chaffey et al, 2006). Be that as it may, internet business alludes to both monetary and educational electronically intervened exchanges between an association



and any outsider it manages (Chaffey, 2006). Further, Singh (2001) upheld the definition by alluding web based business to an online administration offered to client to help their shopping knowledge over the web.

Online business is exponentially expanding the accessibility of data, giving clients access to more information, of preferable quality and quicker over previously. Mechanical headway drove an unstable improvement in electronic business, the reasons for that are the web end the World Wide Web (WWW), which are making electronic trade considerably more available. Web internet business incorporates electronic exchanging of physical merchandise and of intangibles, for example, data. This incorporates all the exchanging steps, for example, web based promoting, requesting, installment and support for conveyance (Trimmers, 2000.p.4).

Online business is utilized wherever in regular daily existence. Presently a days it is used for everything from Visa approval, travel reservation over a system, wire support exchanges over the world, purpose of offer (POS) exchanges in retailing, electronic managing an account. It helps in create interest for the items and benefits and enhances arrange the executives, installment and other help capacities (Awad, 2004.p.2). Thus, online business diminishes the expense of making, preparing, disseminating and recovering paper based data. Further encourages the advantages which incorporate enhanced picture, enhanced client benefit, streamlined procedures, packed cycle and conveyance time, disposing of printed material and expanded adaptability (Turban et al, 1999, pp.15).

Additionally, online business isn't just about purchasing and offering as it is likewise about electronically imparting, teaming up and finding data (Turban et al, 2004). It can include the Internet, groupware programs, open email systems (Adams, 1994), innovations, for example, electronic information trade (EDI) and electronic supports exchange (EFT) and all the more as of late, administrations related with cell phones and computerized TV (Voss, 1999). E – Business has turned out to be exceptionally well known due to the advantages and accommodation it brings along as it is not any more an option, it is a goal (Wen et al, 2001).E-trade is by and large dependent on financial exchange and e-administrations are the piece of electronic trade [1].



2.3 History of Ecommerce

The historical backdrop of web based business begun 40 years prior and, right up 'til today, keeps on developing with new technological advancements, innovations, and a huge number of organizations entering the online market every year.

Electronic Data Interchanges and mail order shopping during the 1970s made ready for the present day internet business store. The historical backdrop of online business is nearly entwined with the historical backdrop of the web. Web based shopping just ended up conceivable when the web was opened to the general population in 1991.

Web based shopping was designed and spearheaded in 1979 by Michael Aldrich in the United Kingdom. He associated an adjusted local TV by means of a phone line to an ongoing multi-client exchange handling PC. The framework was promoted starting in 1980 and offered fundamentally business-to-business frameworks that were sold in the UK, Ireland, and Spain. One the most punctual purchaser shopping encounters was Book Stacks Unlimited, an online book shop made by Charles M. Stack in 1992. Stack's store started as a dial-up release board two years previously Amazon was established by Jeff Bezos. In 1994, Book Stacks Unlimited moved to the Internet as Books.com and was eventually acquired by Barnes & Noble.

The main online exchange was, by a few reports, marijuana sold by Stanford students to MIT students by means of the Arpanet account at their artificial intelligence lab in 1972. In any case, the primary web based shopping exchange on the Internet occurred exactly 22 years after the fact. With the feature "The Internet is Open", the August 12, 1994, issue of New York Times chronicled the deal between two companions of a Sting CD. The Times said, "The team of young cyberspace entrepreneurs celebrated what was apparently the first retail transaction on the Internet using a readily available version of powerful data encryption software designed to guarantee privacy [4]."

History of online business is unimaginable without Amazon and eBay which were among the principal Internet organizations to permit electronic exchanges. Because of their



originators we presently have an attractive web based business area and appreciate the purchasing and offering points of interest of the Internet.

Amazon is one of the primary web based business organizations to build up a partner promoting system, and these days the organization gets about 40% of its deals from associates and outsider venders who rundown and offer products on the site. In 2008 Amazon entered into the film and is right now supporting the film "The Stolen Child" with twentieth Century Fox.

As per the exploration led in 2008, the space Amazon.com pulled in around 615 million clients consistently. The most well-known component of the site is the audit framework, i.e. the capacity for guests to present their audits and rate any item on a rating scale from one to five stars. Amazon.com is additionally outstanding for its clear and user-friendly advanced search facility which empowers visitors to search for keywords in the full content of numerous books in the database.

2.4 Different types of E-commerce

The E-trade exchanges occur between opposite sides of an exchange. The sides of this exchange can be a customer, a business, inner or the administration. At the point when the transaction is between the business and the consumer, it is called B2C. The transaction between businesses is called B2B E-commerce. For the same reason the when E-commerce happens between business and government, it is called B2G and C2C for consumer to consumer [11].



The following table is a quick demonstration of different types of existed E-commerce/E-businesses.

- Not easy to classify
- Many real models fall into multiple categories

TABLE 2.1: EXAMPLE OF DIFFERENT TYPE OF THE E-COMMERCE

<p>B2B Business to Business</p> <ul style="list-style-type: none"> • PayPal (and B2C, B2B2C) • Optize (and B2C) • Alibaba Group 	<p>B2C Business to consumer</p> <ul style="list-style-type: none"> • Amazon • FreshDirect • Zynga (and C2C) 	<p>B2G Business to Government</p> <ul style="list-style-type: none"> • E-Procurement
<p>C2B Consumer to Business</p> <ul style="list-style-type: none"> • ZonZoo • Fotolia • Google Adsense 	<p>C2C Consumer to Consumer</p> <ul style="list-style-type: none"> • Prosper (P2P) • eBay • Facebook 	<p>C2G Citizen to Government</p> <ul style="list-style-type: none"> • Agencia Tributaria (Tax agency online)
<p>G2B Government to Business</p> <ul style="list-style-type: none"> • E-Government • AEPM • Certificado Digital 	<p>G2C Government to Citizen</p> <ul style="list-style-type: none"> • E-Government • eDNI • USA.gov (also G2B) 	<p>G2G Government to Government</p> <ul style="list-style-type: none"> • Government Gateway • Schengen Information System



2.5 E-commerce Usage in Developed vs. Developing Countries

Online business can possibly enhance proficiency and efficiency in numerous regions and, accordingly, has gotten critical consideration in numerous nations. Be that as it may, there has been some uncertainty about the significance of web based business for developing countries. The nonappearance of satisfactory fundamental infrastructural, financial and the absence of government national ICT systems have made a huge hindrance in the adoption and development of online business in developing countries. For web based business in developing countries, social issues also should be considered [3].

2.6 E-commerce Usage in Asia

IDC detailed that E-commerce incomes in Asia won't approached US or European level. The development of E-commerce will be slower in Asia because of infrastructure, low Internet access, funds, different banking rules, tax structures and different issues. There is a solid enthusiasm of E-business in the locale, however a few specialists proposed that Asia should concentrate more to B2B exchanges. Another investigations noticed that B2C level in Asia-Pacific area stay humble in contrast with B2B exchanges. This would speak to around 10 percent of worldwide B2C online deals. By far most of these volumes were created by Japan, Australia and Korea. In the more powerful economies of the Asia-Pacific district, similar to Singapore and Hong Kong, the appropriation of E-trade is more seen by organizations as the normal fate of business [2]. But recent studies shows that china is creating top level value to their ecommerce industry. A recent study shows that china e-commerce industry will be reach \$1.8tn in 2022.



CHAPTER 3

Web Application Development Process

3.1 Introduction

The project determines not only final development of an E-commerce but also considered research and analysis for further development of the application. There are plenty of tools and resources available for developing a modern E-commerce web application. I have chosen a specific technology and framework for the development process.

In this chapter, I have presented from planning to detailed development process of the application. Also shows number of modules and Figures implemented on this project.

3.2 Technology, framework and tools

For this particular project I have selected specific technologies and framework for better workflow. Some technologies included in this project are:

- HTML
- CSS
- JavaScript
- JQuery and
- PHP

For database design I have used relational database management system (RDBMS) as MySQL. Used XAMPP for local host development.

For framework I have used the latest advanced PHP framework Laravel (Version 5.7) [6].



Tools used in this project:

- Sublime Text as a code editor
- Xampp for local host development environment
- Github for version control system [7]

3.3 Number of modules of e-commerce application

This E-commerce project is divided into 9 modules:

1. Registration Module
2. Products Browse Module
3. Products Search Module
4. Shopping cart Module
5. Shipping & Billing Module
6. Payment Module
7. Admin User Management Module
8. Admin Catalog Management Module
9. Admin Order Management Module

Each of this module activity Figure and data flow Figure (DFD) described in the later section. Also at the last section of this chapter is about entity relationship Figure (ERD) of the application [12].



3.4 Activity Figure of E-commerce web application

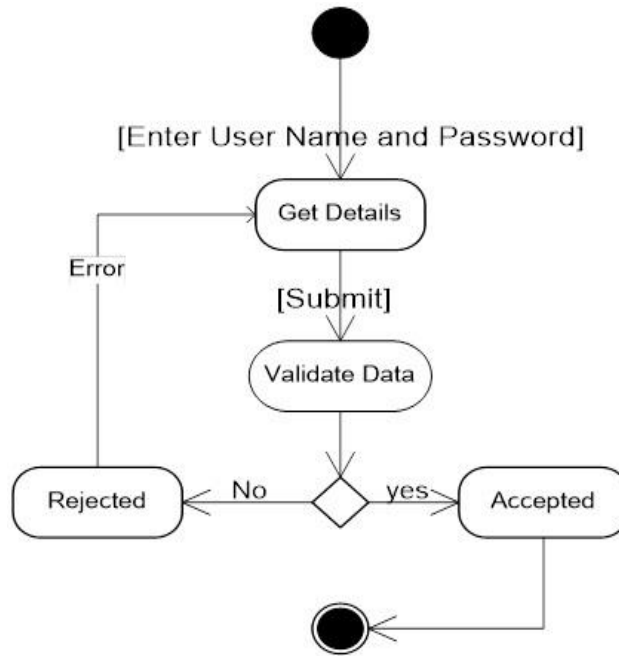


Figure 3.1: Login Activity

In this login activity figure I have shown how user or admin can login into the application. Where user or admin simply need their correct user name and password to login. If the user details are correct the application will allow the user to login and if the user details are not correct the user will be unable to login and get some error messages.

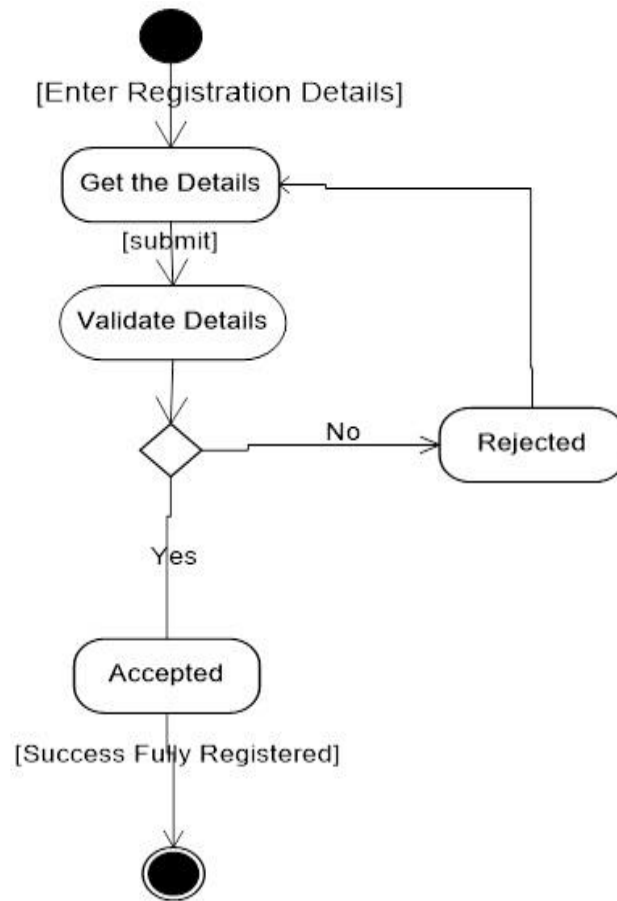


Figure 3.2: Registration Activity

In this registration activity Figure demonstrate how a new user can register in the application. Where new user must input their valid data to register. Later in Figure 3 and 4 is about admin activity and user activity after login with validated user data.

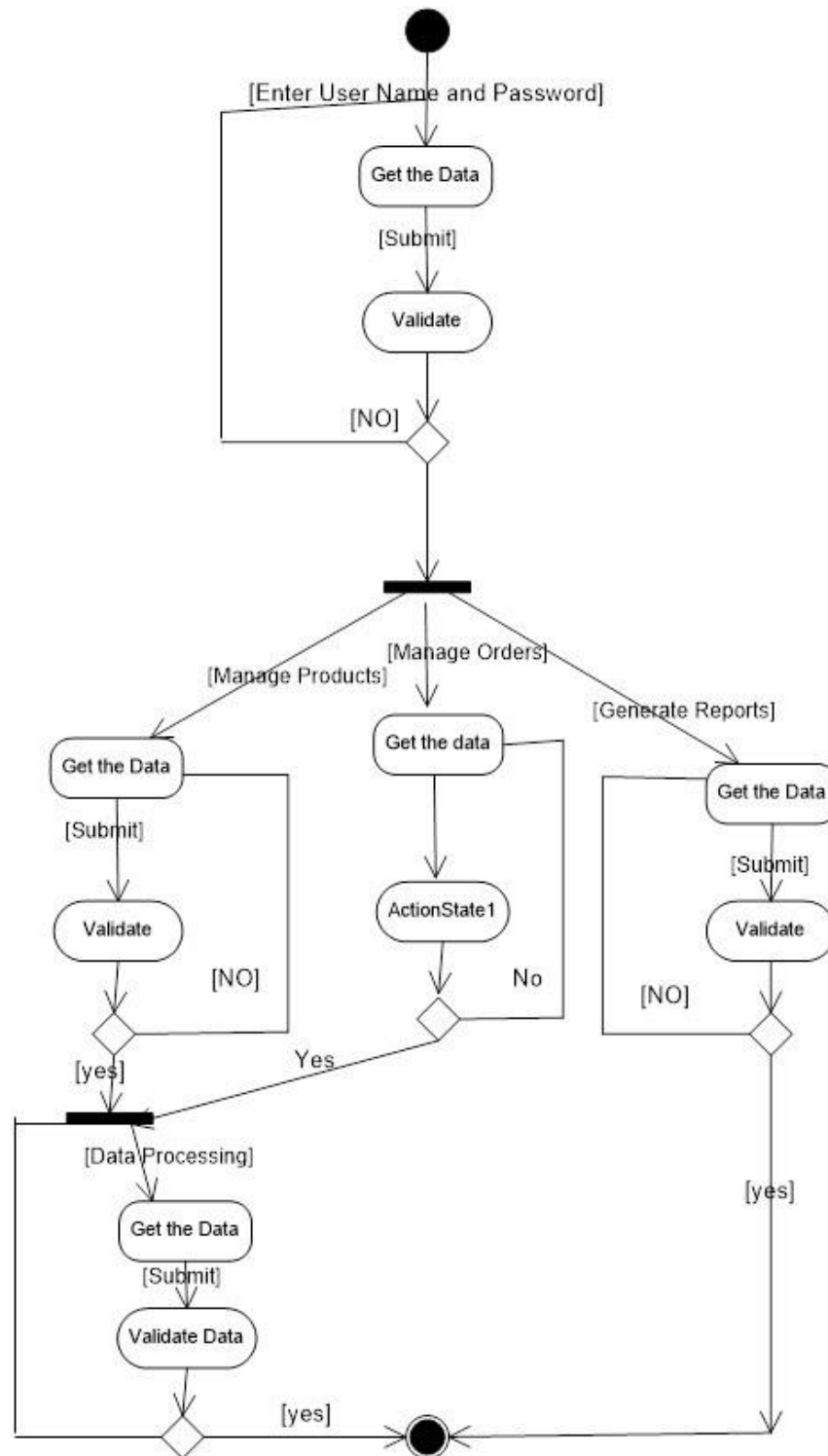


Figure 3.3: Admin Activity

In figure 3 admin activity diagram shows how admin can login and manage products, orders as well as other data processing task.

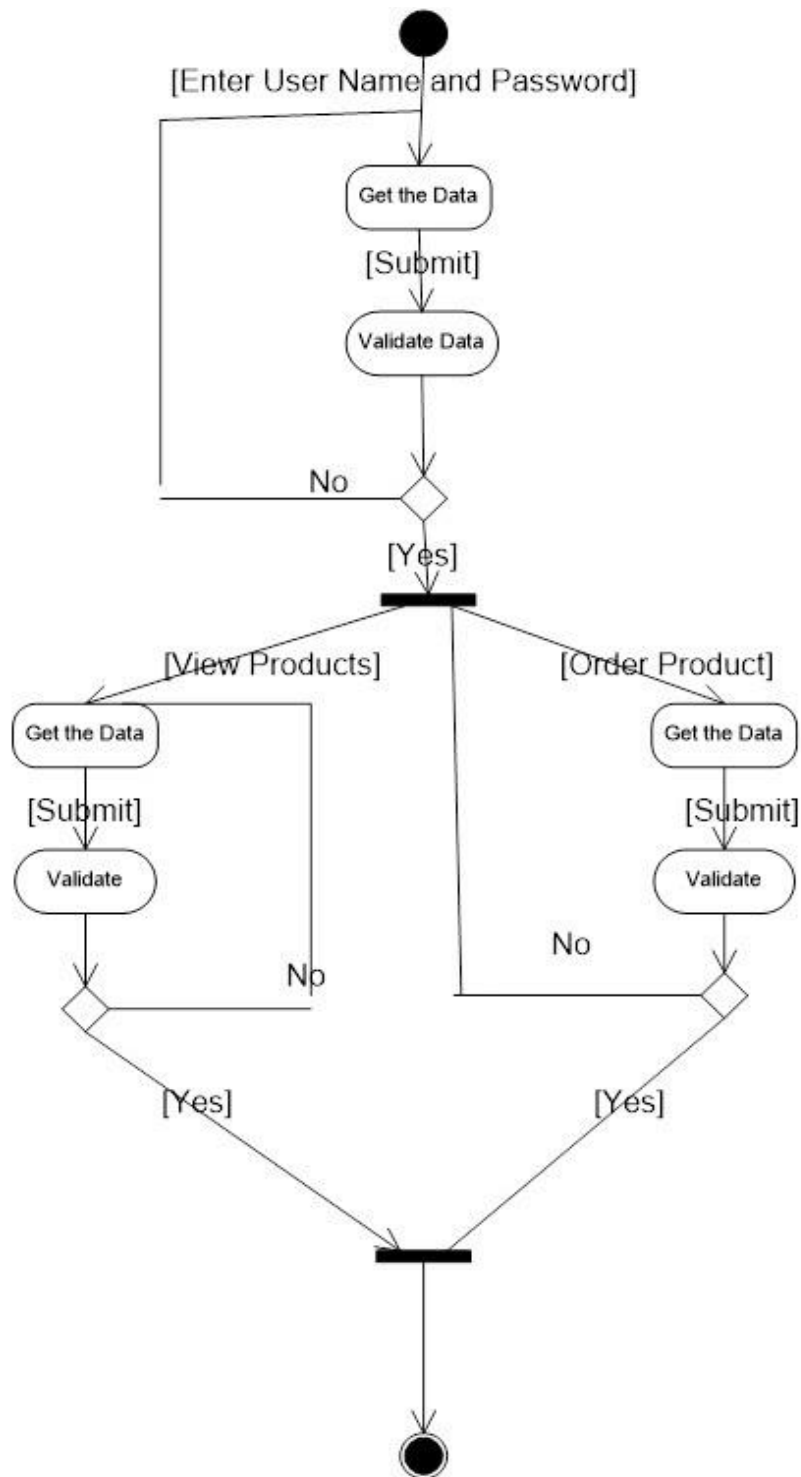


Figure 3.4: User Activity

In user activity section user can order product and view product after proper validation.

3.5 DFD Figures of e-commerce web application

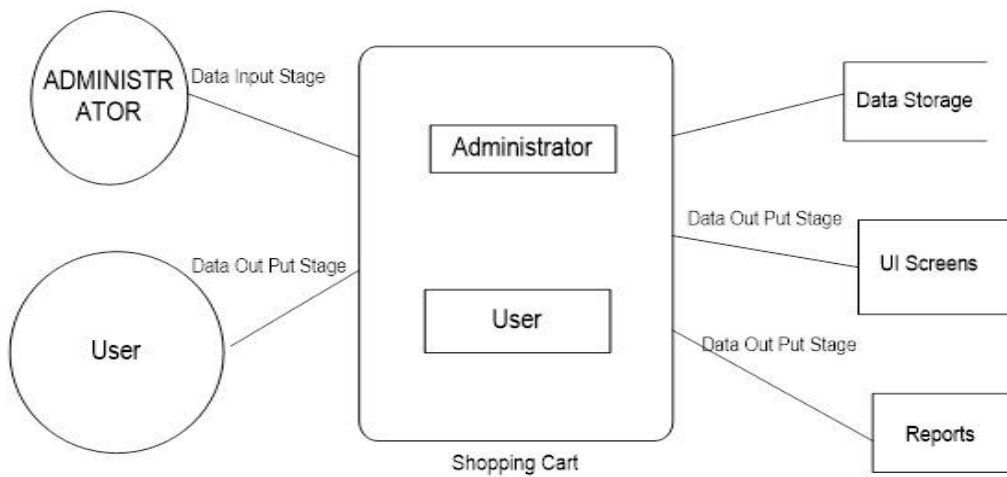


Figure 3.5: Context Level (0th Level)

This is context level at 0th level for admin and user data flow diagram.

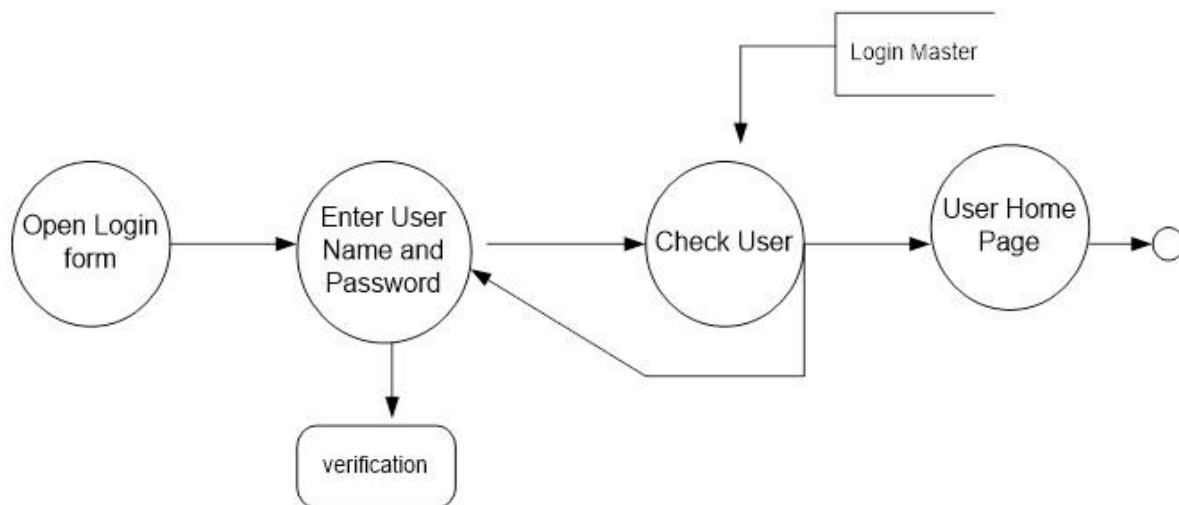


Figure 3.6: Login DFD

In this section we can see data flowing from login form to user home page after proper verification.

3.6 Admin Details Data Flow

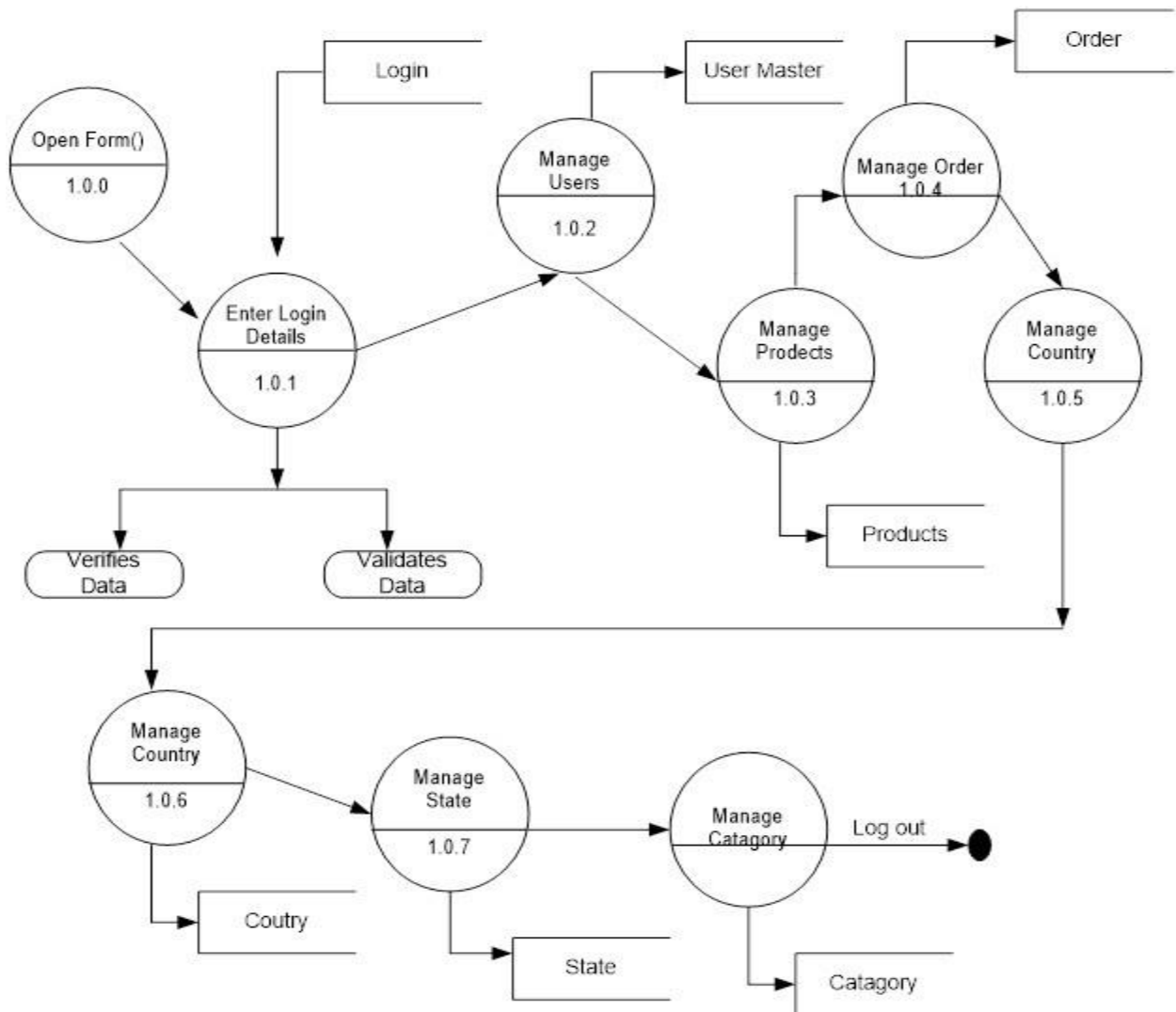


Figure 3.7: 1st Level DFD

In figure 7 at first level data flow diagram or DFD we can see admin login, manage product, order, users and different data flow functionality.

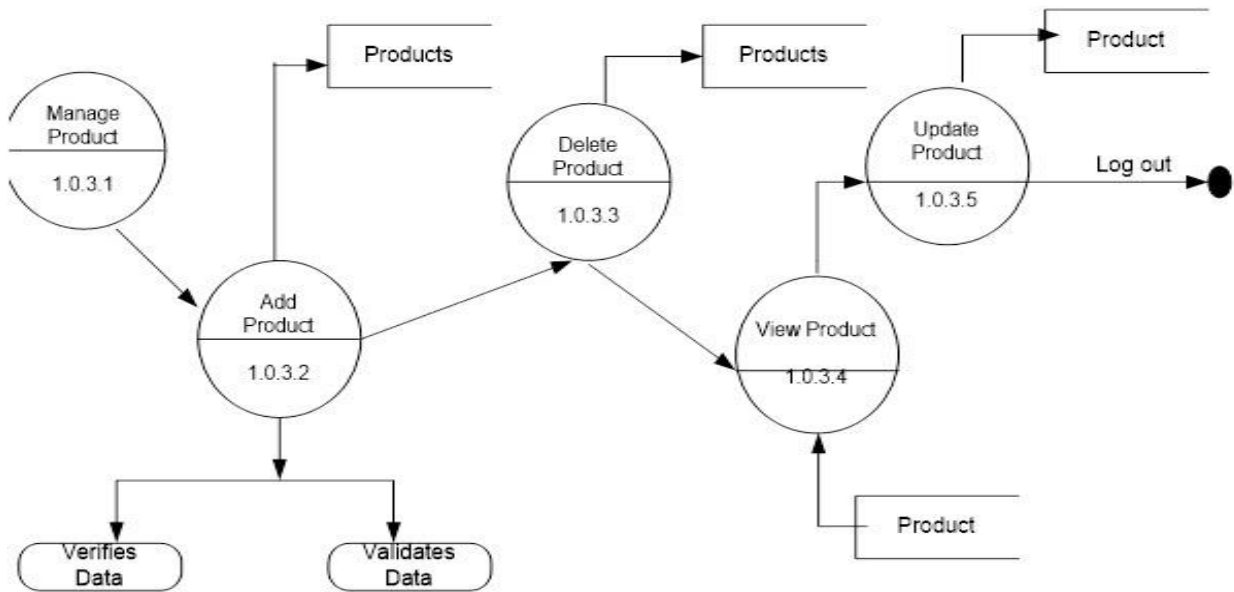


Figure 3.8: 2nd Level DFD For Manage Product

In second level DFD where admin can manage product, add product, delete product, update product and also view products.

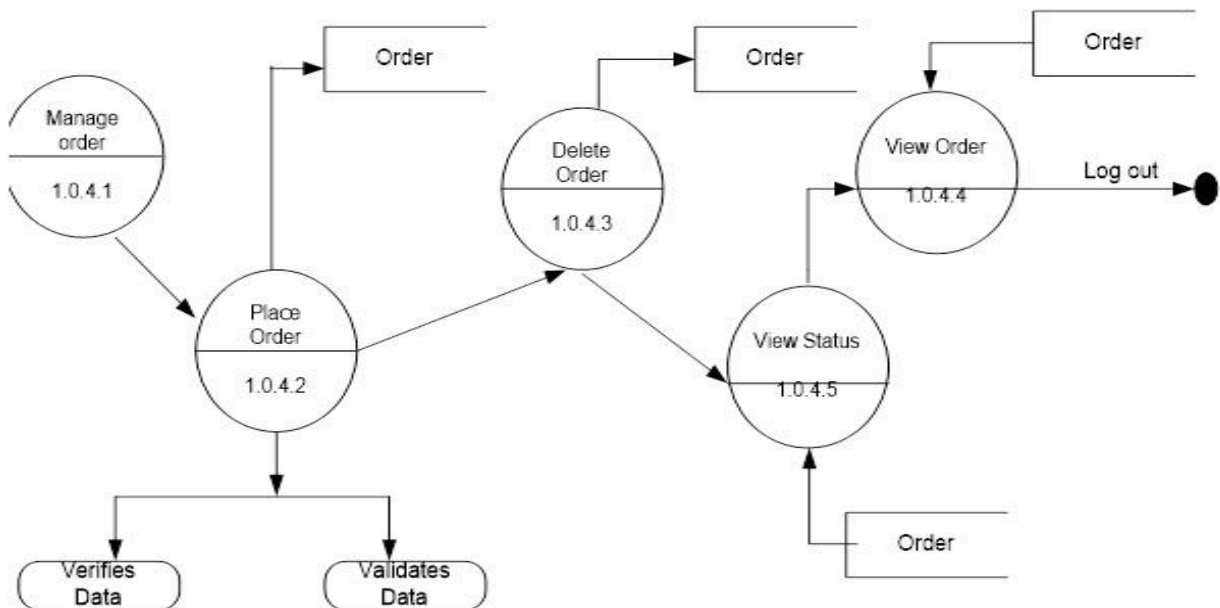


Figure 3.9: 2nd Level DFD For Manage Order

In this section DFD shows how admin can manage orders.

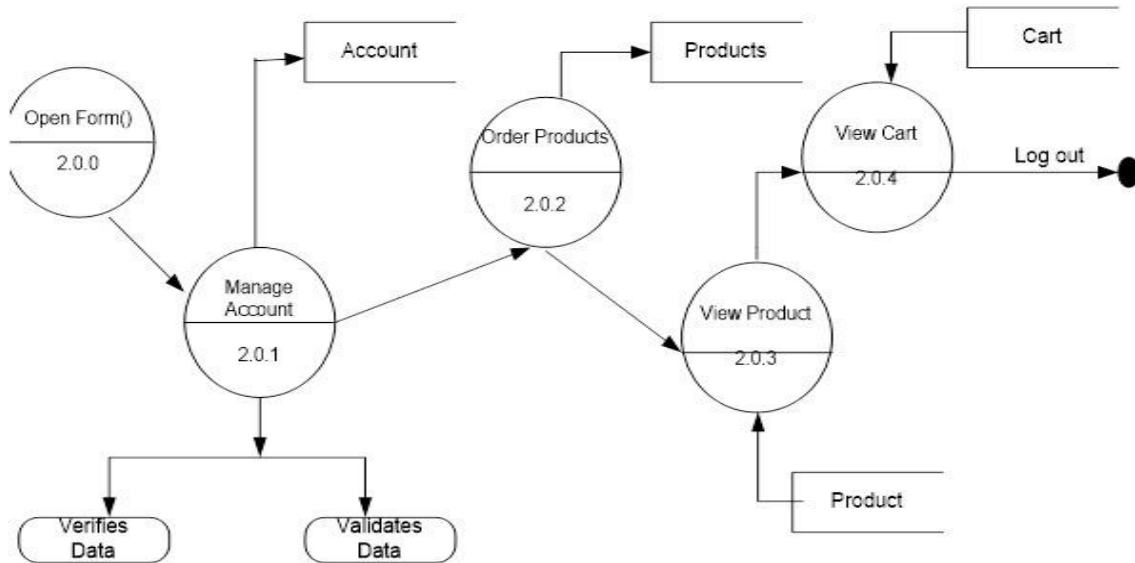


Figure 3.10: User Activities DFD

In figure 10 we can see user activities DFD. Where valid user have all access to manage account, add product to cart, review and order product.

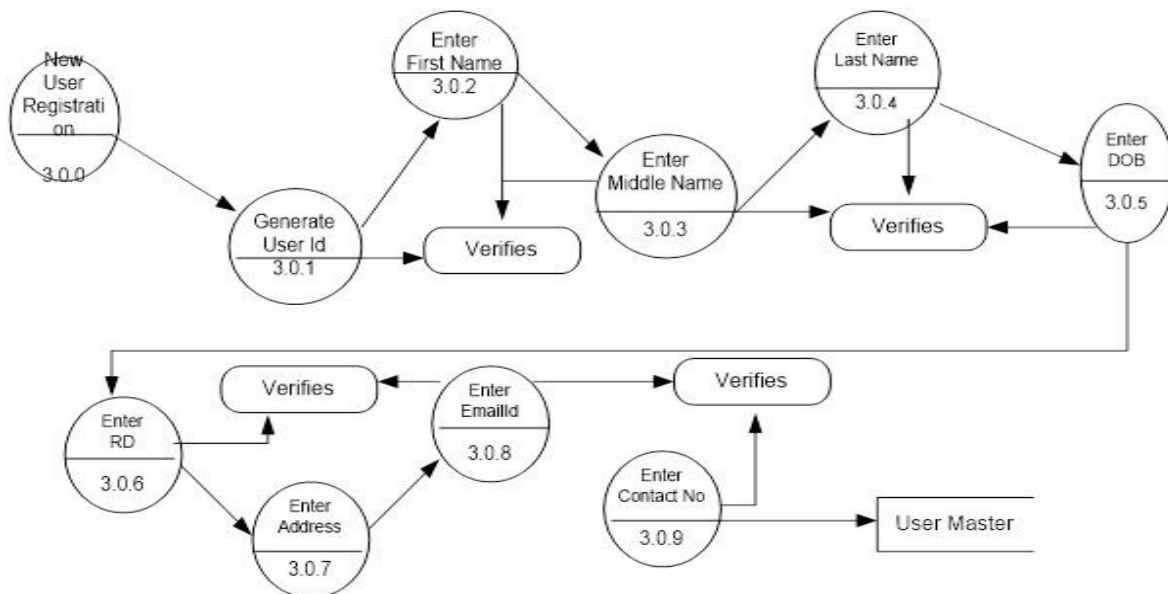


Figure 3.11: DFD for new user registration

Here is the DFD for new user registration. They need to give valid information for registration into the application.

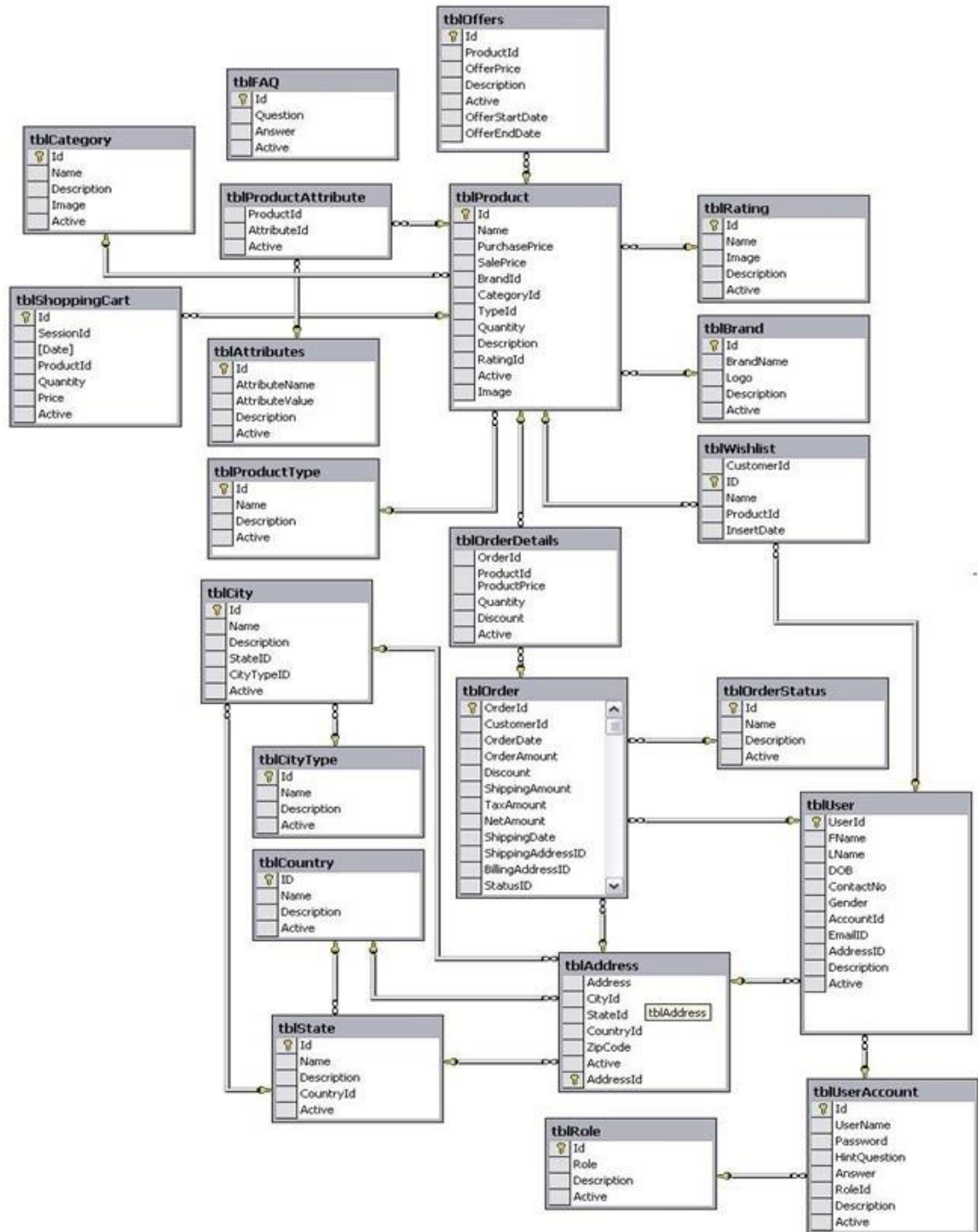


Figure 3.12: Entity relationship Figure

In figure 12 we can see entity relationship diagram among data tables for our web application.



CHAPTER 4

Deploy on distributed network

4.1 Introduction

As it is a web development project, so for proper demonstrating and testing purpose the project need to be setup on a live web server. For those reasons I have setup the whole project into a live server, so that it can be easy to access from anywhere in the world through internet.

E-commerce web application development is a giant project, as it need to consider pretty much all web application development functionality. Also live server hosting and setup is another issue for this type of giant project.

4.2 Domain Registration

For setup in a live web server, at first need to register a domain for the application. There are many domain registration companies out there. All companies' services are pretty much same. The main purpose is search and registers a unique domain name with extension for the application.

As top level domain registration can cost real world money, which can be unbearable for the project. So I found low level domain as a free service for my project. The functionality of the top level domain and low level domain is pretty much same, only difference is domain extension and price.

For testing purpose this type of free domain is perfect. But for business purposes it is not recommended.

After successfully registration of the domain named “www.ebazar.gq” I got the name servers for connect with hosting server.



4.3 Hosting the application and database

When my domain and name servers are ready, it's time to connect with hosting provider. Hosting provider gives space for deploys any application or data, which then need to connect with domain name servers. For hosting purposes I also used a free 1 month hosting service, which I got from an occasion promotion period. Without that it can be more costly.

After registration in the hosting provider, I got 1GB free space which is enough for my full application deployment. After that I uploaded all necessary project files and data to the live server. Also I managed and setup new username and database for the project. I used an existing database which I exported from my local host environment. It could be also modify later on [13].

At last I connect the hosted data with the domain name servers.

4.4 Live Demonstration

For domain and hosting server connection, its take several minutes or hours depends on hosting service provider and the size of application data. Before that I edited all necessary files of my application. Now the application can be access from anywhere in the world through internet.

Some of the snapshot I have taken from my live web application:

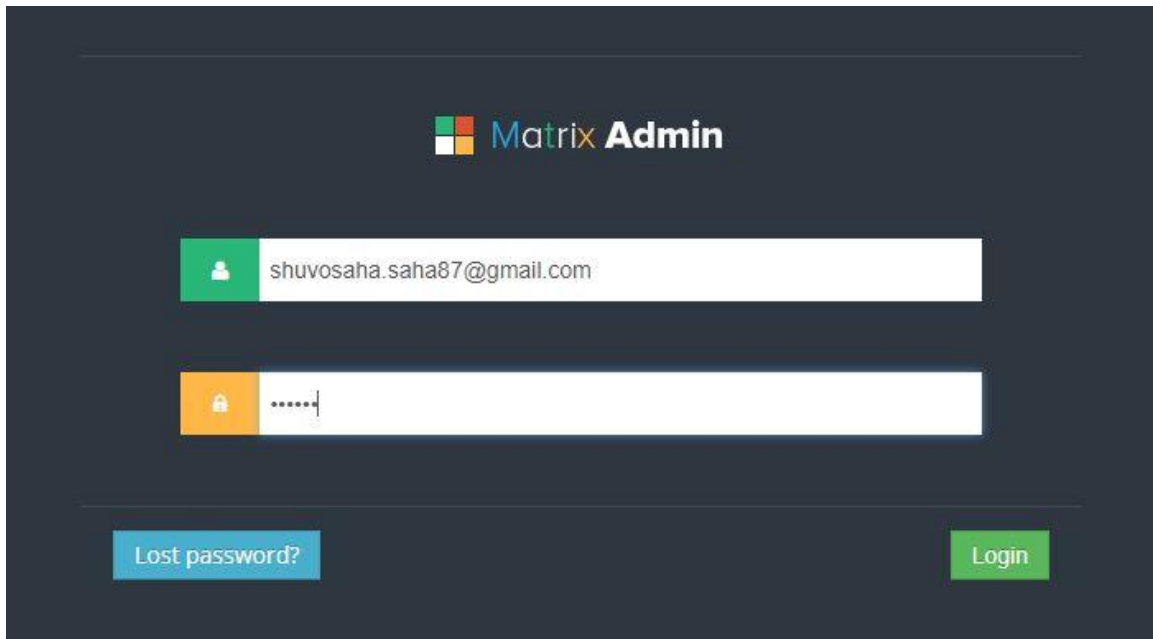


Figure 4.1: Admin Login Page

The figure 13 showing my web application admin panel. Where admin can login by using valid email address and password.

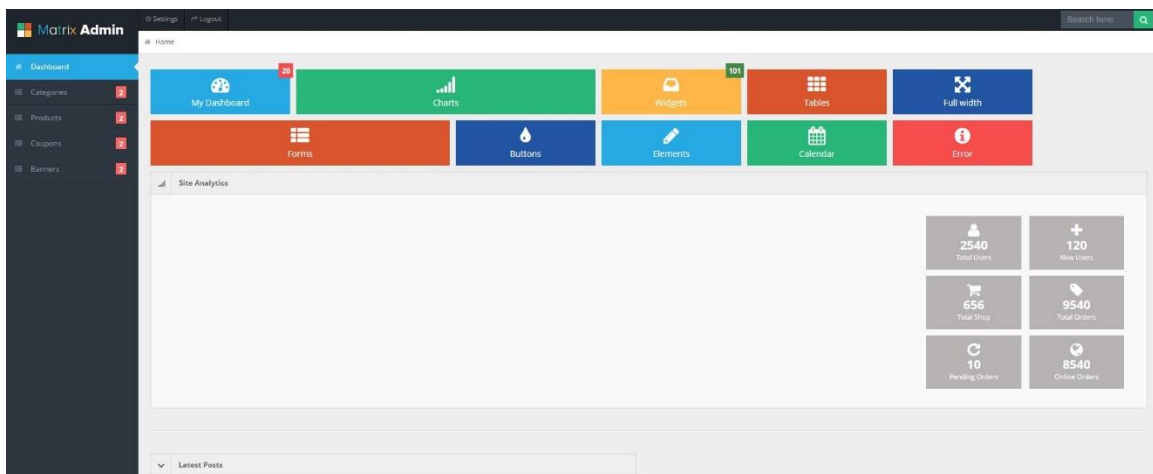


Figure 4.2: Admin Dashboard

This figure showing dashboard of the admin panel after successfully login. From here admin can operate most of the application functionality dynamically.

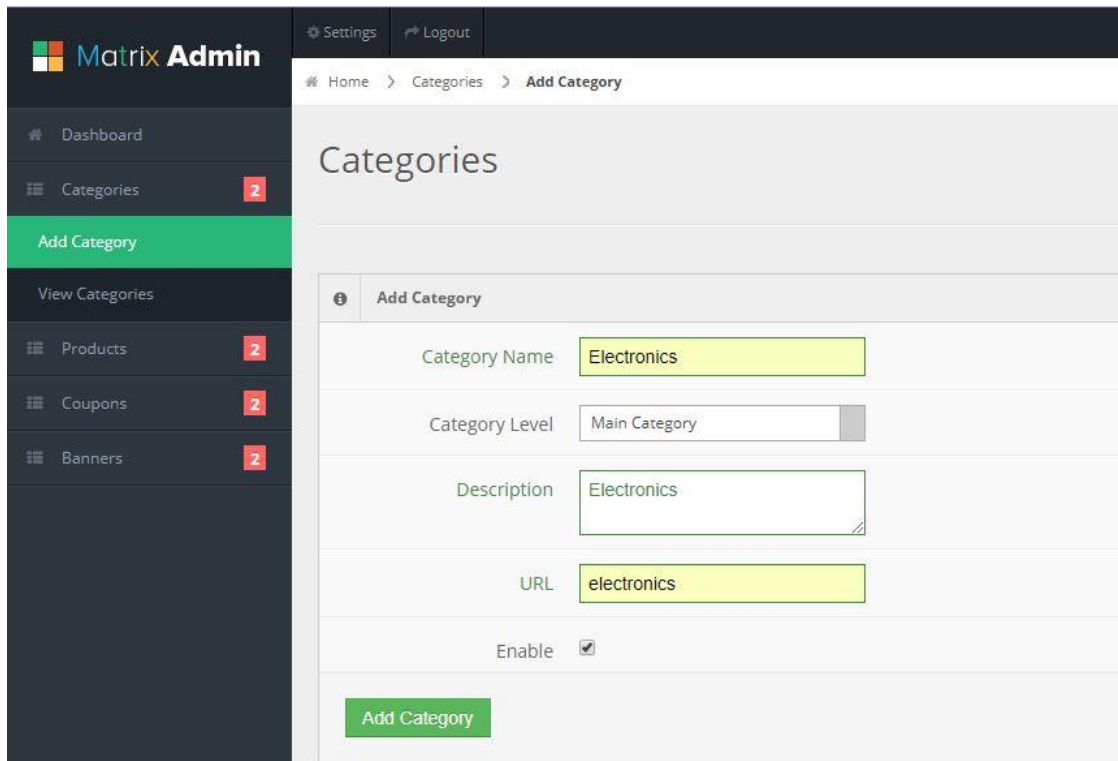


Figure 4.3: Add Category Page

This figure showing how admin can add different types of category and sub-category. Here we can also define the category URL and also enable or disable the category.

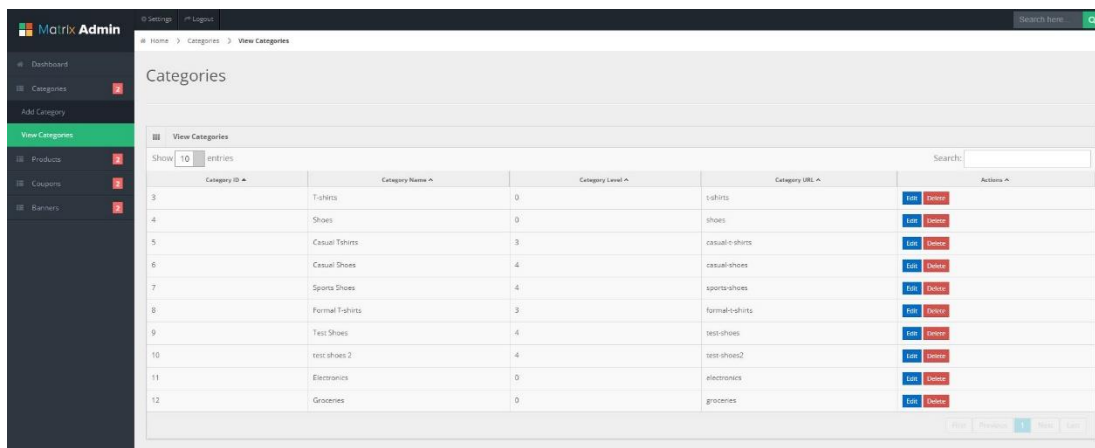


Figure 4.4: View Category Page

In figure 16 we can view category and also edit or delete the category.



Matrix Admin

Settings Logout

Home > Products > Add Product

Products

Add Product

Under Category: T-shirts

Product Name: Orange Casual T-Shirt

Product Code: OCT001

Product Color: Orange

Description:

Material & Care:

Price: 1000

Image: images.jpg

Enable:

Figure 4.5: Add Product Page

In add product section we can add product under category. We can add product code or SKU, color, description, price and image. Also it's allow us to enable or disable the product.

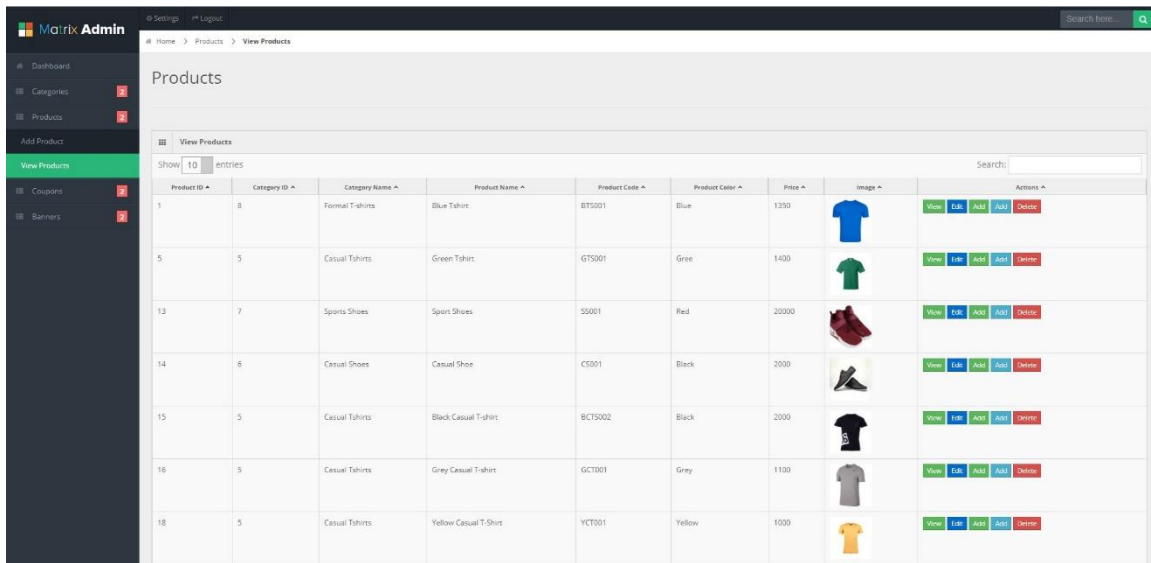


Figure 4.6: View Products Page

In view products page we can view all the products. Also its have search functionality, so we can find specific product in view page.

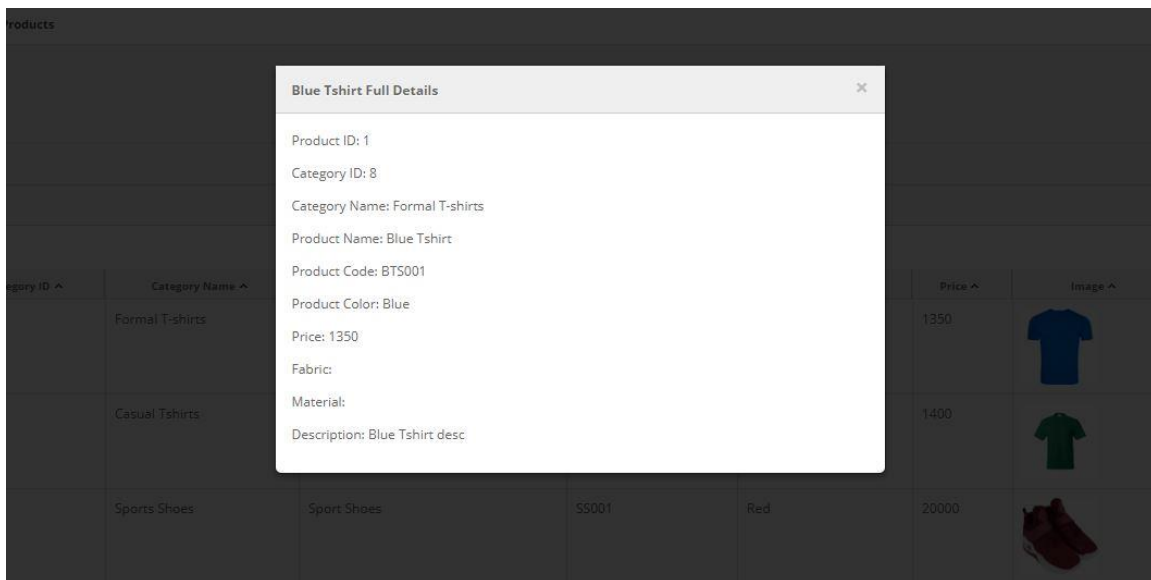


Figure 4.7: View Specific Product

This figure showing how we can view specific product from view products page.

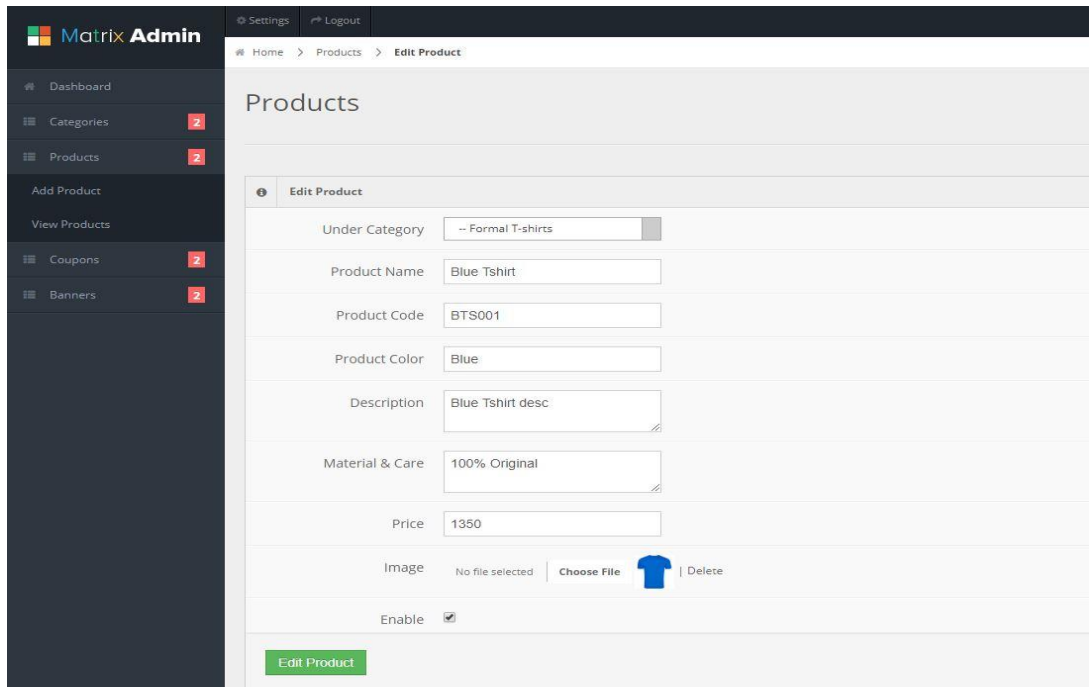


Figure 4.8: Edit Product Page

Figure 20 showing the edit product page. Where we can change or edit all the product details, image and enable or disable functionality.

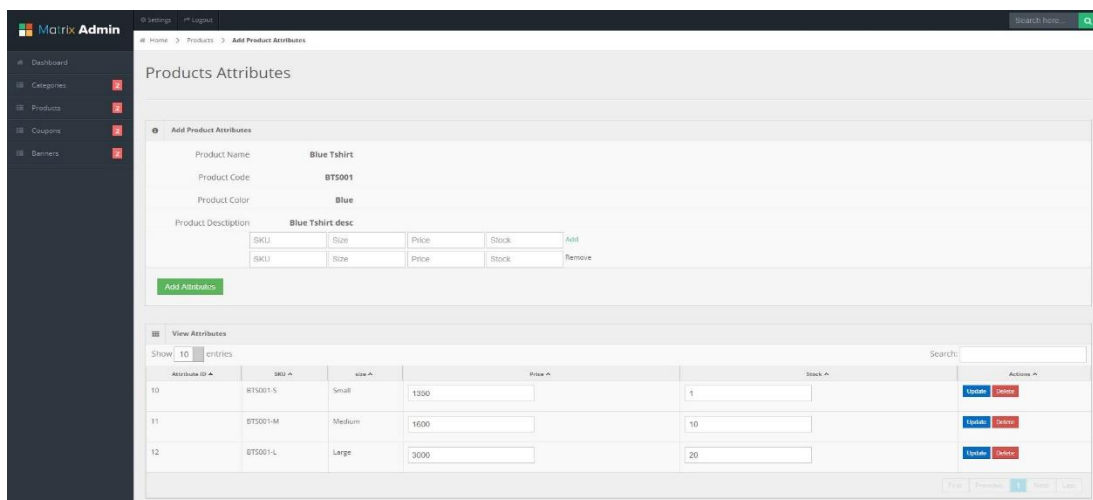


Figure 4.9: Add/Edit Product Attributes Page

In this section we can add or update and also remove or delete different product attributes like product size, price and stock availability.

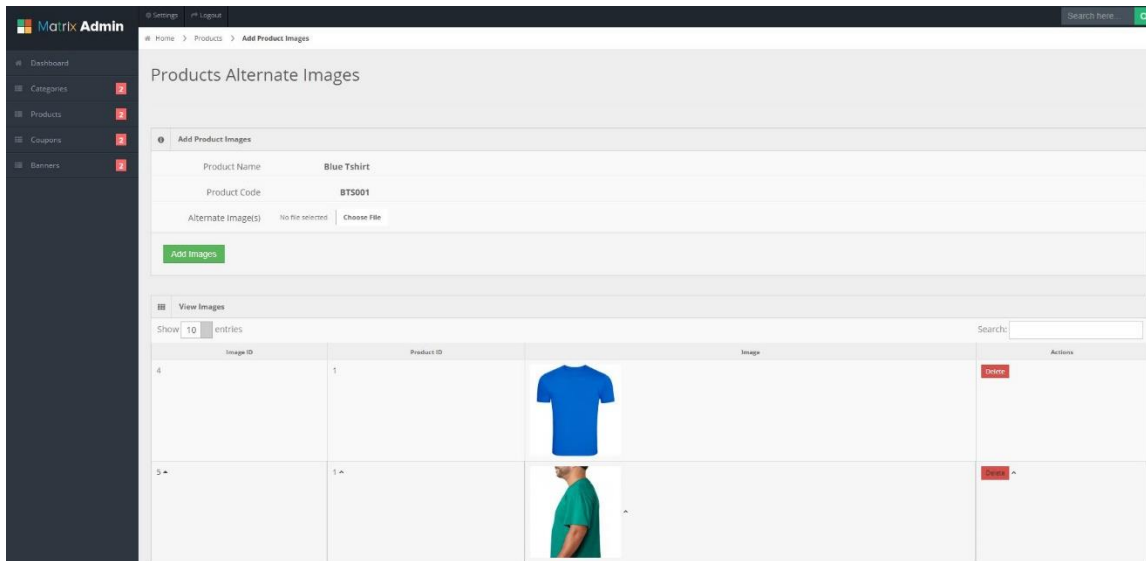


Figure 4.10: Add Product Alternate Images Page

In add product alternate images page we can upload different types of images for same product. Also we can easily delete them.

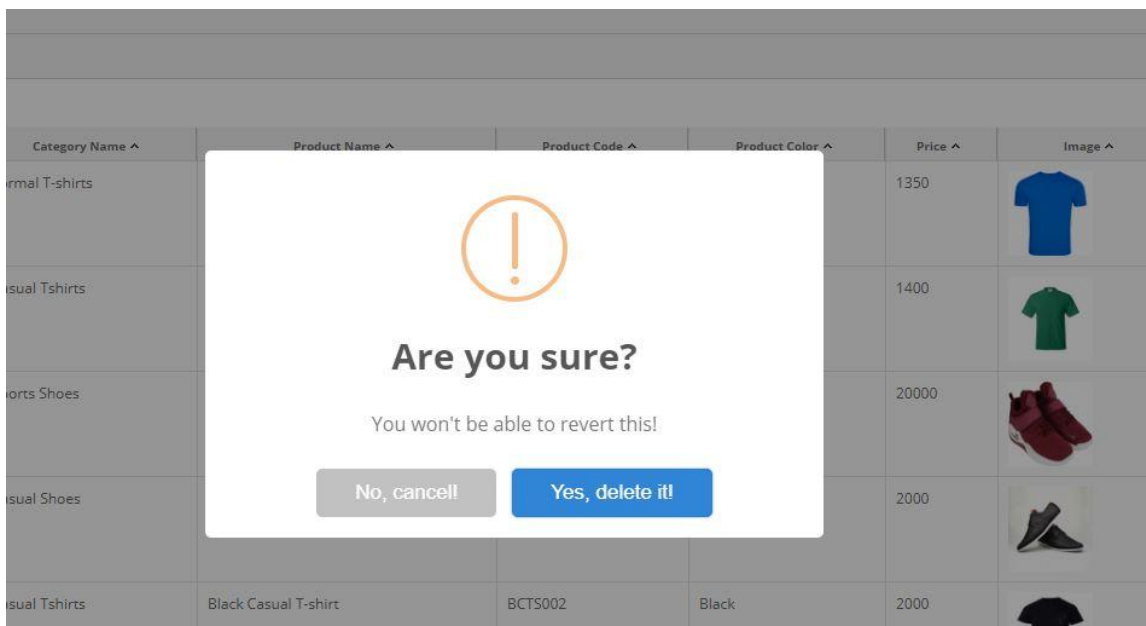


Figure 4.11: Delete Functionality

In figure 23 we can see the delete pop up menu for any product and its related attributes.

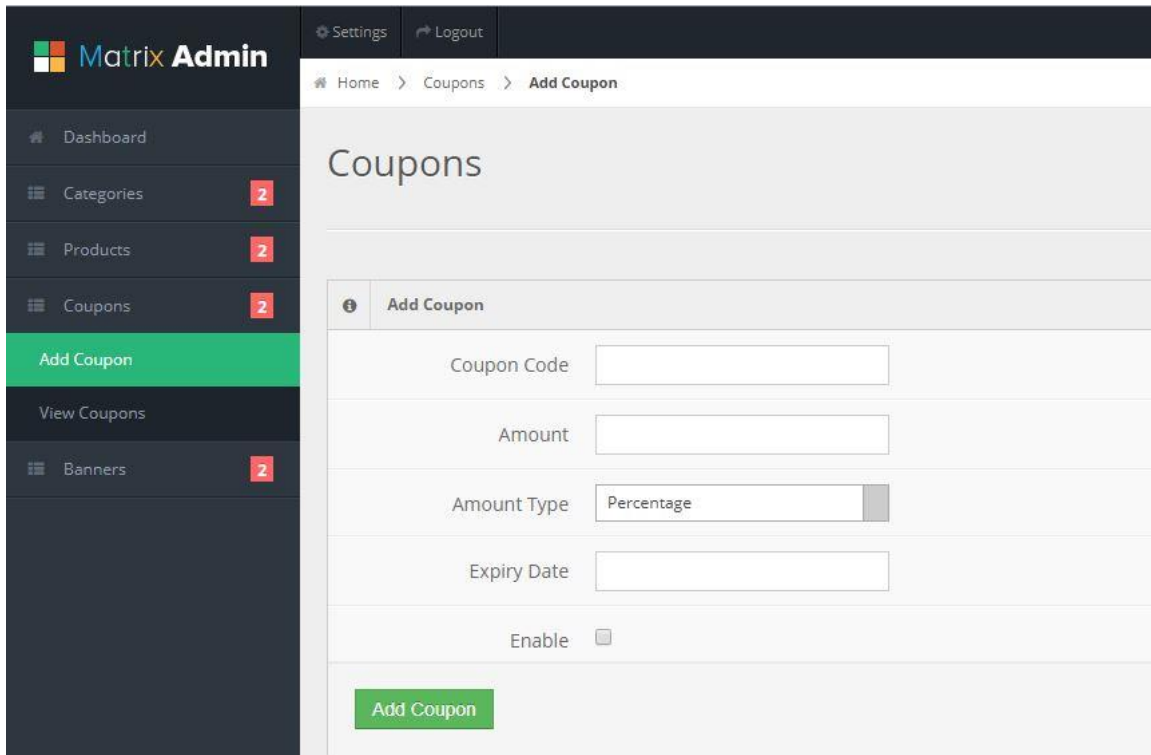
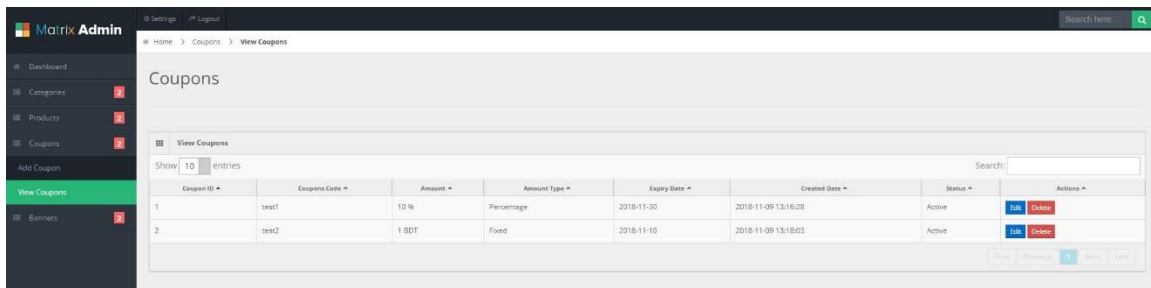


Figure 4.12: Add Coupon Page

In add coupon page we can add discount coupon code, amount, amount type like fixed or percentage, expiry date and enable or disable functionality.



Coupon ID	Coupons Code	Amount	Amount Type	Expiry Date	Created Date	Status	Actions
1	test1	10 %	Percentage	2018-11-30	2018-11-09 13:16:28	Active	Edit Delete
2	test2	1 BDT	Fixed	2018-11-10	2018-11-09 13:18:03	Active	Edit Delete

Figure 4.13: View Coupon Page

In this section we can view, edit and delete discount coupon for shopping.

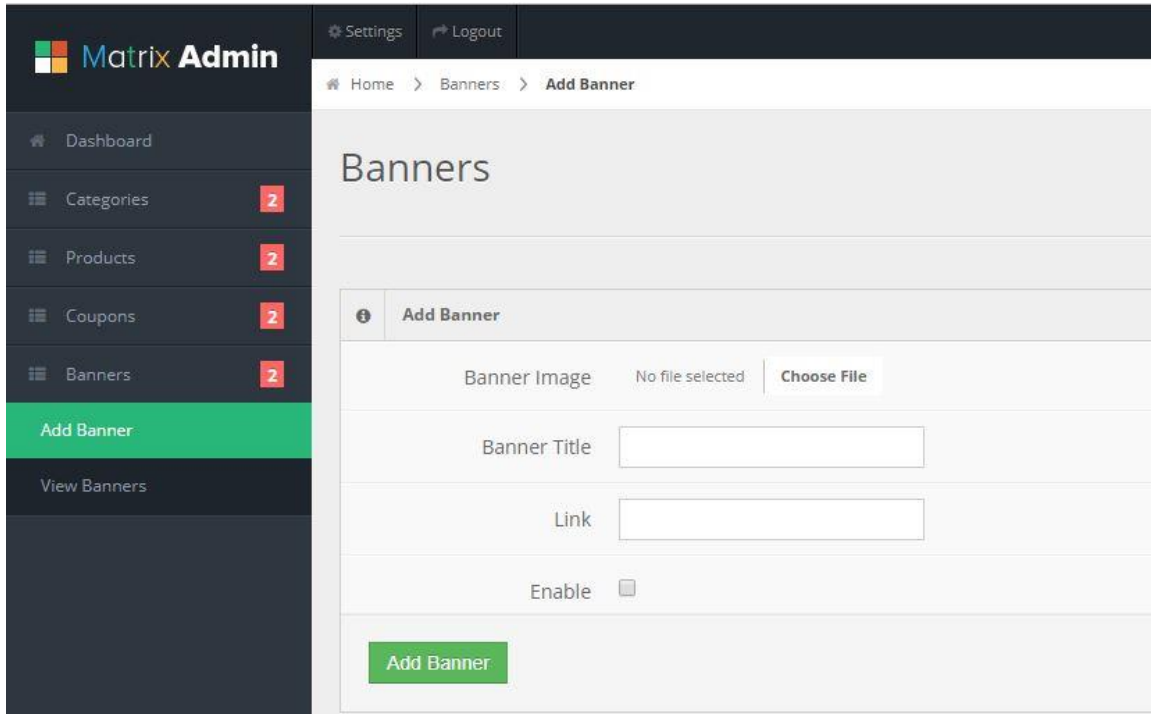


Figure 4.14: Add Banner Page

The figure 26 showing how can we add banner images for our web application frontend slider. Also its have enable or disable functionality.

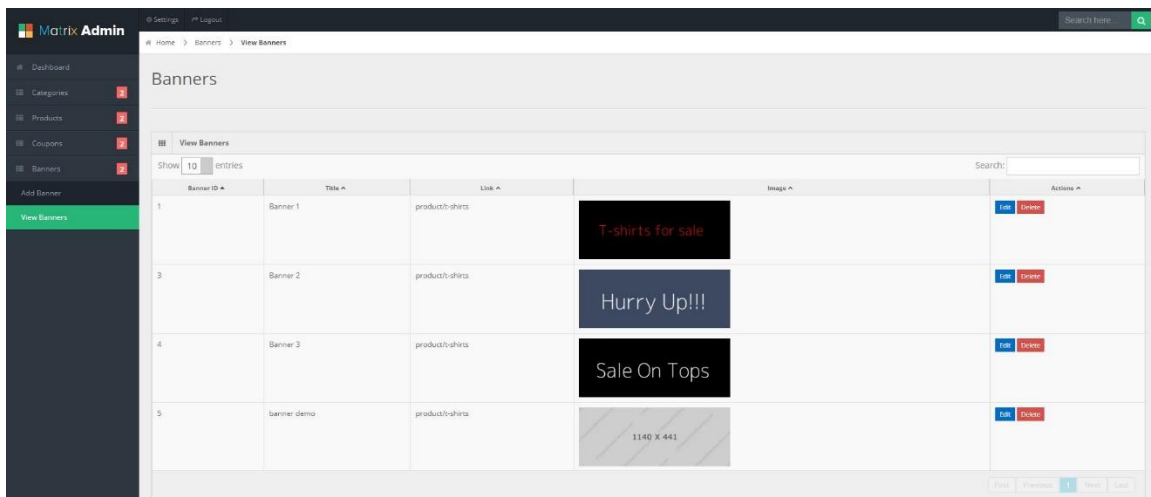


Figure 4.15: View Banner Page

Here we can view, edit or delete banners.

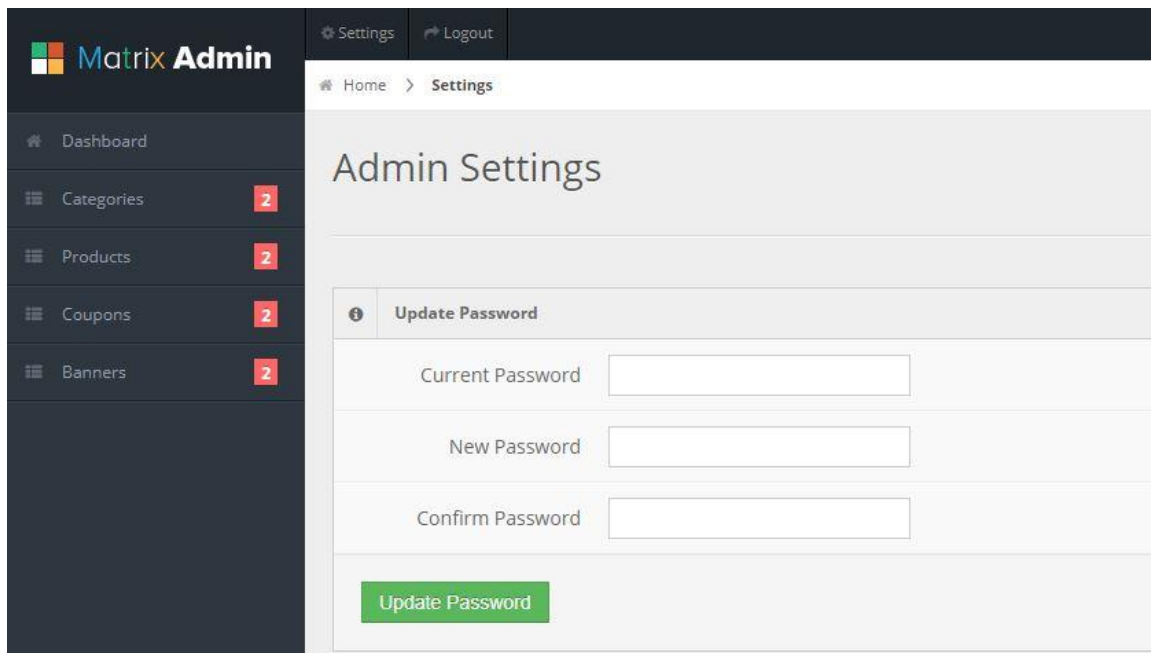


Figure 4.16: Admin Setting Page

At last in admin setting section there have update password functionality for admin login. In future lots of dynamic functionality will added in admin panel for backend operation. After this section we will see our frontend or main web application page for users. Where user can login/register into our application. They can easily search, select specific product and buy from home through this application.

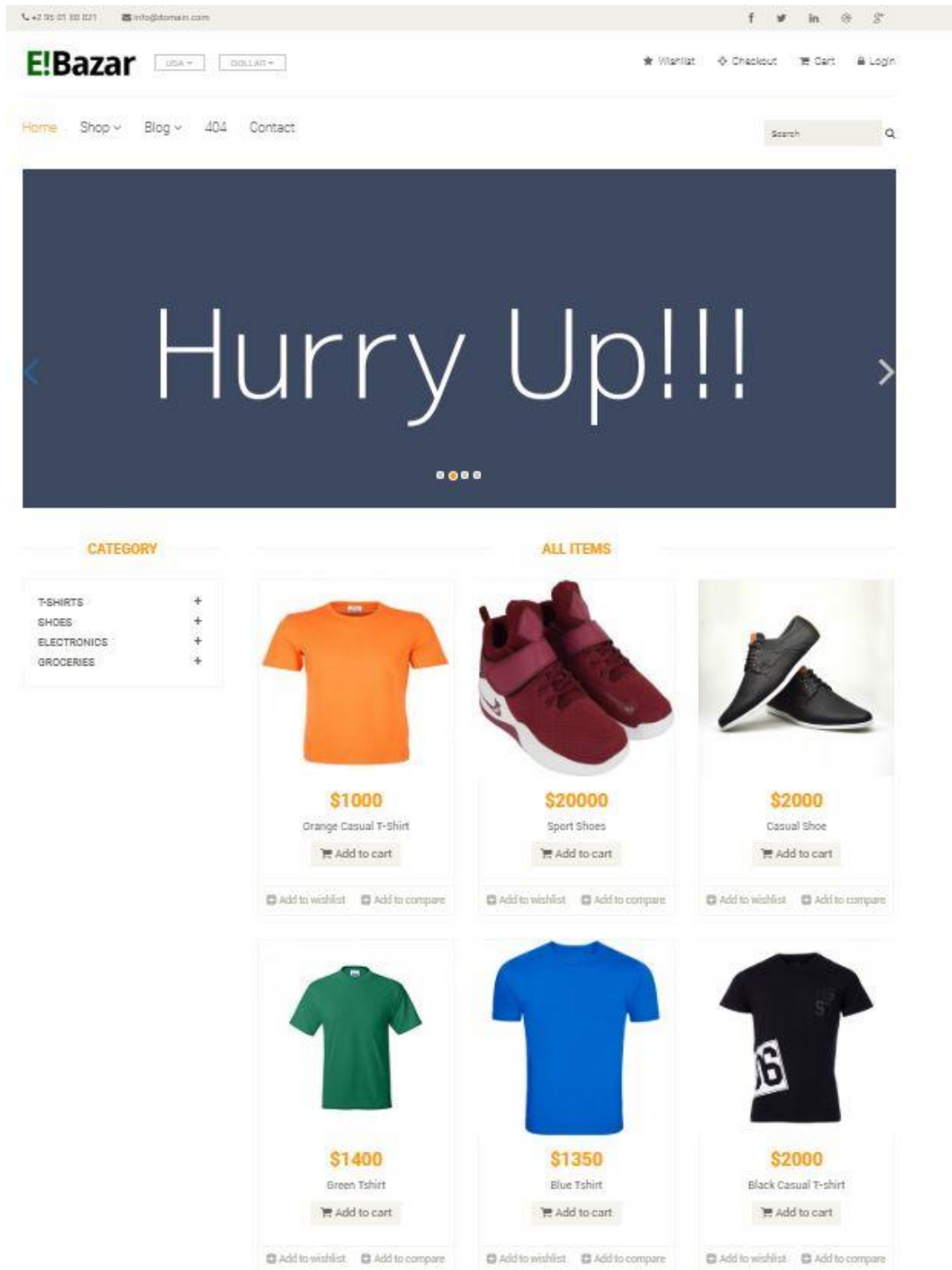


Figure 4.17: Home Page

In figure 29 here showing main frontend home page or index page of the web application. Here we can see different menu for users, products, banner etc.

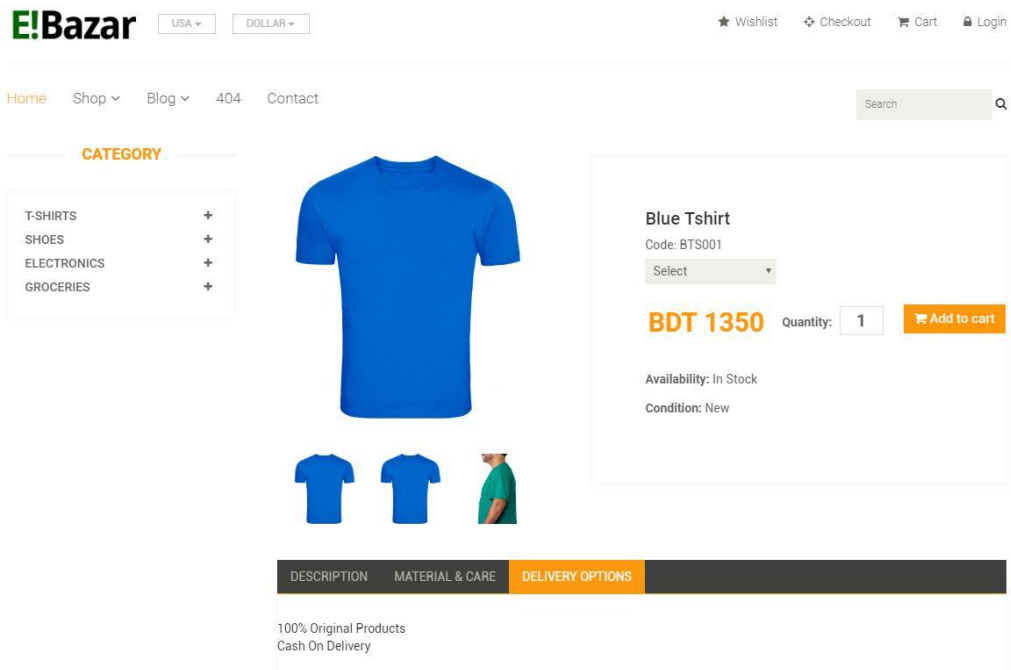


Figure 4.18: Product Detail Page

In product detail page, here user can see the specific product details and also choose different size, quantity for the product. Here price change dynamically based on product size and also its show product stock availability to the user.

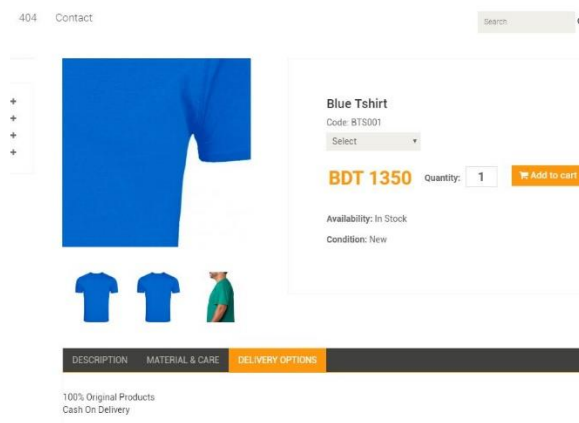


Figure 4.19: Product Image Zoom

In this section this application also have product image zoom functionality.

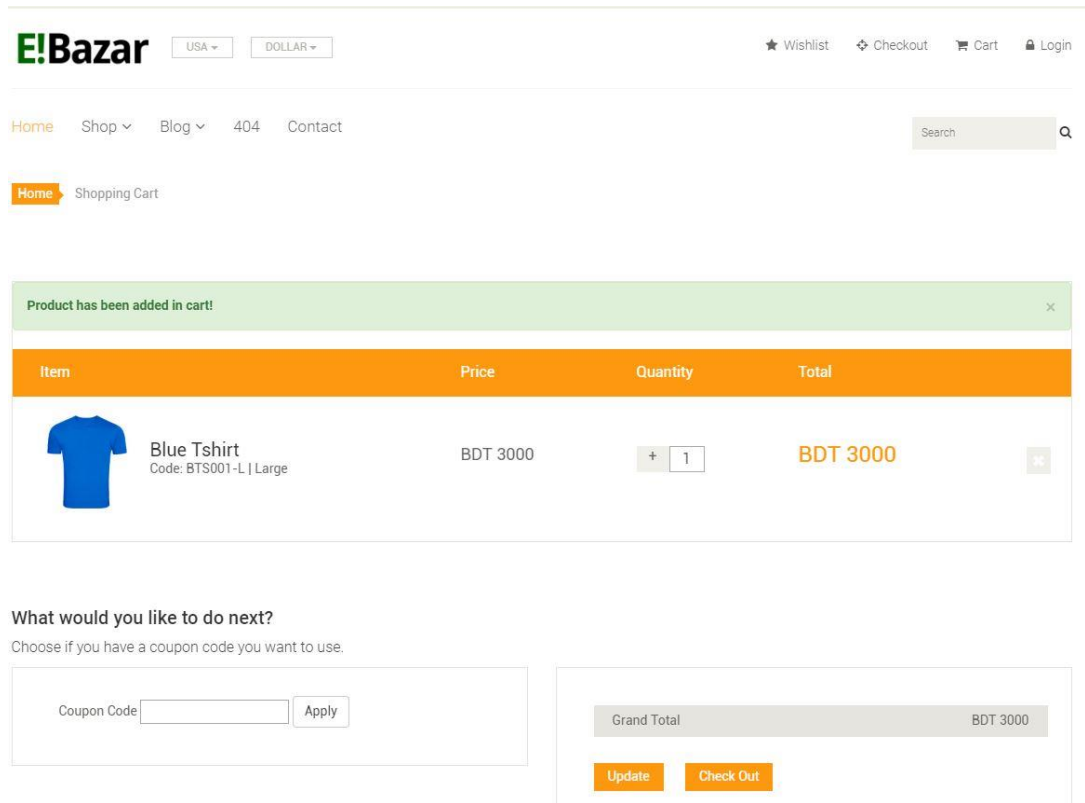


Figure 4.20: Add to Cart Page

In figure 31 we are seeing add to cart page, where user add products in cart and they can also apply any valid coupon for discount.

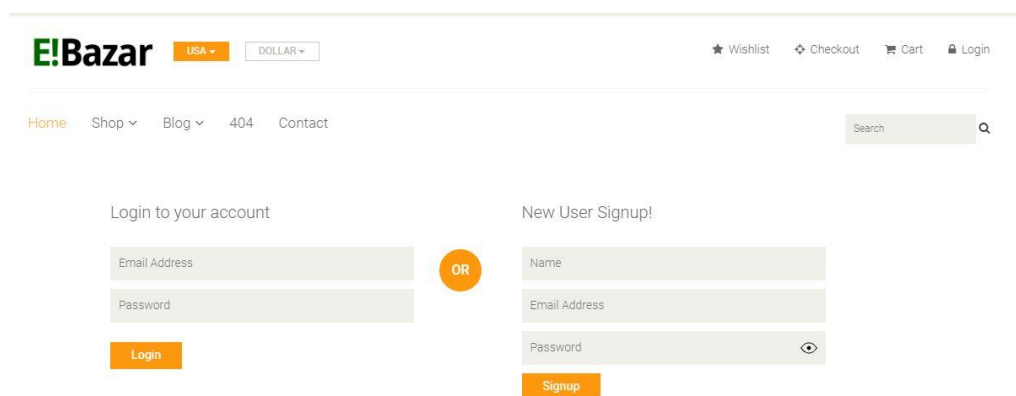


Figure 4.21: User Login/Register Page

In this section, before checkout user need to login or register to the application.



Figure 4.22: User Account Page






In this section user can update their account information and also update their password.

Figure 4.23: Checkout Page

In checkout page after giving proper billing and shipping information user can check out.



Review & Payment

Item	Price	Quantity	Total
 Green Tshirt Code: GTS001-M Medium	BDT 2400	4	BDT 9600
 Grey Casual T-shirt Code: GCT001-S Small	BDT 1100	1	BDT 1100
 Sport Shoes Code: SS001-S Small	BDT 1200	2	BDT 2400
 Green Tshirt Code: GTS001-M Medium	BDT 2400	3	BDT 7200
 Blue Tshirt Code: BTS001-L Large	BDT 3000	2	BDT 6000
			Cart Sub Total BDT 26300
			Shipping Cost (+) BDT 0
			Discount Amount (-) BDT 0
			Grand Total BDT 26300

Select Payment Method Cash On Delivery Paypal

Figure 4.24: Review and Payment Page

In figure 36 we are seeing review and payment page, where user can review all products, grand total after including shopping cost and excluding discount. They can also select payment method before place order.

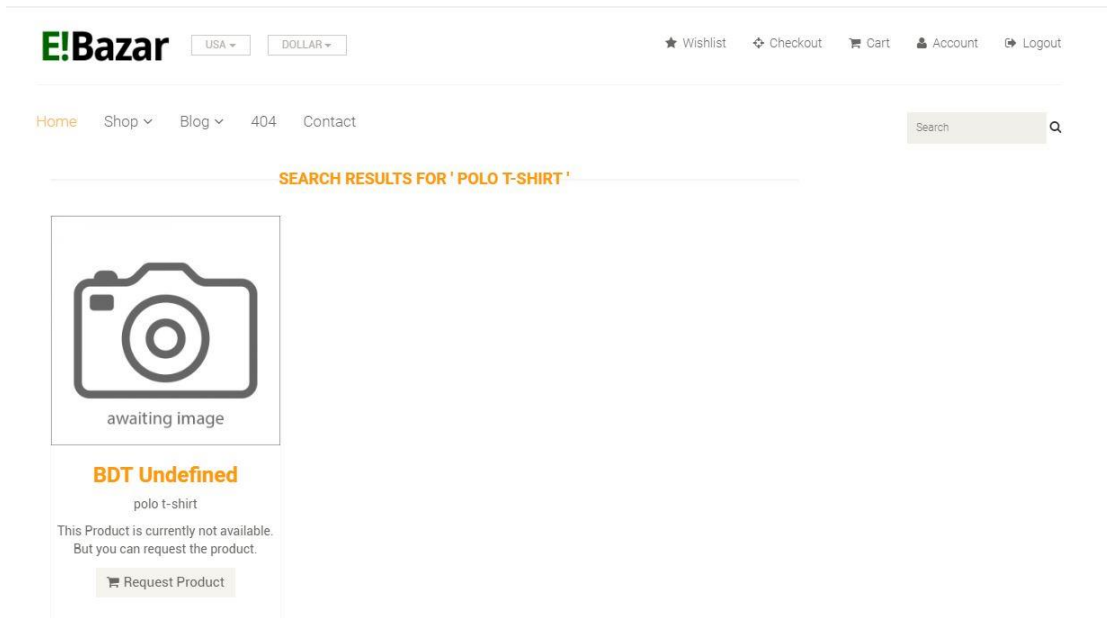


Figure 4.25: Search page

In search page products are showing based on specific keyword. If any specific product are not showing after search, user can request the product.

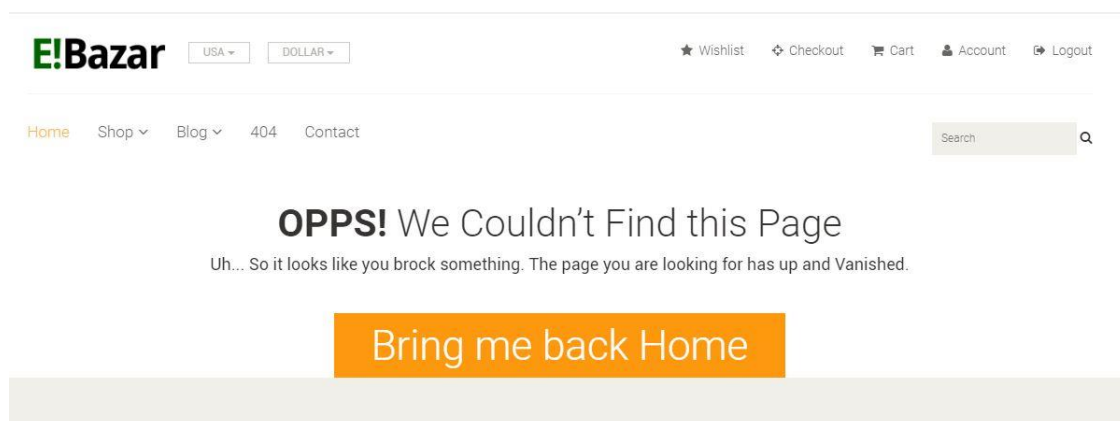


Figure 4.26: 404 Page

At last in this application have 404 page for broken or error links.

In above, I have attached some of the images of my ecommerce web application. Which defines some of major parts of the application. As I deployed the project in a live server, someone can also easily access the whole ecommerce web application through internet.



CHAPTER 5

Comparative Analysis

5.1 Introduction

In this chapter I have made several comparative analysis based on existing web applications and E-business aspects. I have chosen some of world top ecommerce application and also ecommerce website builder.

E-commerce web application development is very costly process. Some of top level ecommerce company give some features so that a novice user can easily setup a shop for him. But the total control maintained by the company itself.

Also some of ecommerce website builder company support with their tools and resources for develop any ecommerce platform. But comparatively their service price rate can be very costly.

5.2 Worlds top E-commerce Industries

With the development of the Internet, the web based business part has seen a noteworthy move in their methodologies and improvements throughout the years to tap however much of the buyer base as could be expected and, obviously, to add to the simplicity of shopping on the web [9].

Here are some of the top 10 ecommerce websites in the world that are ruling the e-commerce platform:

- Taobao
- Amazon
- Walmart

- eBay
- Target
- Alibaba
- Flipkart
- NewEgg
- Overstock
- BestBuy

Here are some of the top ecommerce website builders:

- Shopify
- Squarespace
- Volusion
- BigCommerce
- WooCommerce
- Magento

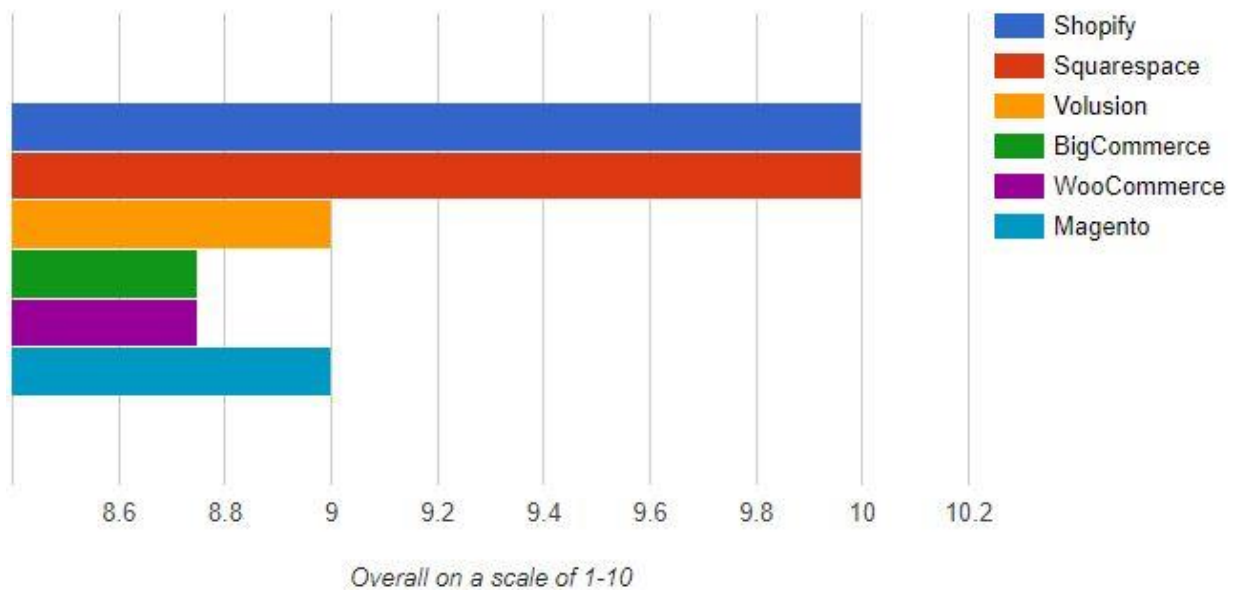


Figure 5.1: Overall ratings of the top ecommerce website builder



5.3 Analysis

Let's put ecommerce website builder on the other hand and focus on world's top most ruling ecommerce websites.

Among them Amazon and eBay is the world oldest ecommerce websites. Hence Amazon plays a vital role in e-commerce industry. This both platform is user friendly and both attracts buyers and sellers online.

Taobao is the china based ecommerce platform, which parent company is Alibaba group. Where Alibaba spreading across all over the world and Taobao is supporting more than 500 million China consumers.

Walmart is the American company and biggest retailer in the world.

Flipkart is the Indian ecommerce company, which is supported by Indian consumers.

Target, Newegg, Overstock, BestBuy are the new champions in the ecommerce industry. Where shopping is ease to use for the consumers.

Let's have a look at the major highlights that will shape and influence ecommerce now and in the future.

- Artificial intelligence
- Customization
- Digital wallets
- Mobile

All top level ecommerce industries web application functionality is pretty much same with no major issue. But the big difference shows on their application design, business model and other internal and external services [10].



CHAPTER 6

Discussion

6.1 Introduction

In this chapter I have made discussion on several e-commerce web application and business model issues. Based on that some web application already solved their problems and some of them keep trying to resolve them. Also changed their business model and logistic supports for more user friendly experience.

6.2 Limitations and Issues

One of the major issue in ecommerce industry is limited stock. Some ecommerce applications already overcome that. But most of them spending very bad time with it. Where buyers order inadequate stockproducts, which ecommerce cannot supply properly.

Another issue is language and demographic area problem in ecommerce. Most of the ecommerce web application based on English language. But in some region in the world it is not very helpful or user friendly. So ecommerce web application also need to design and implement on demographic culture in mind.

Logistics supports is another big issue in ecommerce industry. Many big ecommerce company expanded their logistics support in the main urban areas of the world. But in rural area it is very unexpected still now. Also some of rural areas in the world have no internet connection or low speed internet. Which is hinders in ecommerce industry.

Online payment method is another issue in ecommerce. Though cash on delivery is the most preffered method. But for fully optimized ecommerce application it is the big factor. Still now we are facing security threads for online payment.



Last but not least, bad products supply or services is the major loss factor in ecommerce industry. Also return and refund policy need to be clear to consumers for any ecommerce industry.

6.3 Security and Firewall

For any application security is the biggest issue. Every ecommerce web application need to be update with new technologies. Also need to regular checkup for fraud or security thread. Web application can be hacked by any hackers if he finds somevulnerabilities on the application.

As web application can be accessed by anyone from anywhere in the world, it can be attack by any unusal user or users. Also online payment system still have to many ways to go for tackle fraud or security issues.

So for long run ecommerce business, security checkup, upgrading and updating with new technology and further development for better user friendly experience can give opportunity to survive.

6.4 Discussion

Large number of ecommerce industry doing their business in a very competative market place. Where big fishes are the biggest obstacles for the newcomers. Because most of the market share and consumers are grabed by those big companies. Hence newcomers are coming everyday in the market. For long run survive they need to be understand ecommerce business facts, consumer satisfaction and other unavoidable things.

I have done lots of research on ecommerce web development and its business model. Its very clear that unwanted facts can be happen almost in any ecommerce industry. And still now its have long run to go further.



CHAPTER 7

Conclusion

When we discuss effective organizations, web based business are dependably there on the rundown. The explanation for this is clear: we are living in a virtual era, where pretty much each and every single task is being performed on the web.

Web based business has turned into a trendy expression in digital marketing.

The brilliant side of the web based business industry is that a huge number of entrepreneurs are lifting it up as a profession. Then again, numerous entrepreneurs neglect the significance of web based business site planning and optimization. The optimization of a web based business site is not the same as that of a standard website. Web based business having turned into a tremendous and exceedingly aggressive industry, front line learning is required to remain focused. In this way, it is vital that online business site is appropriately upgraded.

E-commerce can save our most valuable time and money. Also its opened a new door for cross border trading.

This project helps me to do better understanding the development process of modern dynamic ecommerce web application and technologies used to implement it. The design of the project which includes data model and process with real life examples. The building of the project has given me a precise knowledge about the latest technology like “Laravel” to develop an ecommerce web application and better knowledge on ecommerce business industry.



REFERENCE

- [1] *Mahmut Tekin, Mehmet Etlioğlu, Haydar İnce, Özdal Koyuncuoğlu, Ertuğrul Tekin, “A Study About Affecting Factors of Development of E-commerce”, In book: Proceedings of the International Symposium for Production Research 2018, pp.625-642*
- [2] *Alemayehu Mollaa, Paul S. Licker, “eCommerce adoption in developing countries: a model and instrument”, Journal of Operations Management, Information & Management*
Volume 42, Issue 6, September 2005, Pages 877-899
- [3] *Corradolo Storto, “Evaluating ecommerce websites cognitive efficiency: An integrative framework based on data envelopment analysis”, Applied Ergonomics Volume 44, Issue 6, November 2013, Pages 1004-1014*
- [4] <https://www.miva.com/blog/the-history-of-ecommerce-how-did-it-all-begin/>
- [5] <https://blog.getresponse.com/10-challenges-to-tackle-while-optimizing-an-e-commerce-website>
- [6] <https://laravel.com/>
- [7] <https://github.com/>
- [8] <https://www.dhakatribune.com/business/2018/09/29/study-finds-no-e-commerce-site-in-bangladesh-fully-compliant-with-web-standards>
- [9] <https://blog.wsol.com/5-things-to-consider-when-developing-an-ecommerce-website>
- [10] <https://blog.heliossolutions.in/beat-challenges-ecommerce-website-development/>
- [11] <https://www.kartrocket.com/blog/ecommerce-business-models-types-pros-cons/>
- [12] <https://www.lucidchart.com/pages/data-flow-diagram/how-to-make-a-dfd>
- [13] <https://stackoverflow.com/questions/44868393/laravel-shared-hosting-routes-not-working-properly>