E-COMMERCE WEBSITE

A Project Report Submitted

In Partial Fulfillment of the Requirements for the

Degree of

MASTER OF COMPUTER APPLICATIONS

by SWATI RANA (1900290149099)

Under the Supervision of

Dr. Ajay Kumar Shrivastava KIET Group of Institutions, Ghaziabad



to the

FACULTY OF MCA

DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY (Formerly Uttar Pradesh Technical University), LUCKNOW

July, 2021

DECLARATION

I hereby declare that the work presented in this report entitled "E-COMMERCE

WEBSITE", was carried out by me. I have not submitted the matter embodied in this

report for the award of any other degree or diploma of any other University or Institute.

I have given due credit to the original authors/sources for all the words, ideas, diagrams,

graphics, computer programs, experiments, results, that are not my original contribution.

I have used quotation marks to identify verbatim sentences and given credit to the original

authors/sources.

I affirm that no portion of my work is plagiarized, and the experiments and results

reported in the report are not manipulated. In the event of a complaint of plagiarism and

the manipulation of the experiments and results, I shall be fully responsible and

answerable.

Name: Swati Rana

Roll. No: 1900290149099

Signature:-

ii

CERTIFICATE

Certified that **Swati Rana**(1900290149099) has carried out the project work presented in this report entitled "**E** – **COMMERCE WEBSITE**" for the award of **Master of Computer Application** from Dr. A.P.J. Abdul Kalam Technical University, Lucknow under my supervision. The report embodies result of original work, and studies are carried out by the student himself and the contents of the report do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University.

Dr. Ajay Kumar Shrivastava

External Examiner

Professor & Head

Dept. of Computer Applications

KIET Group of Institutions, Ghaziabad

Date:

ABSTRACT

Electronic Commerce is process of doing business through computer networks. A person sitting on his chair in front of a computer can access all the facilities of the Internet to buy or sell the products.

Unlike traditional commerce that is carried out physically with effort of a person to go & get products, ecommerce has made it easier for human to reduce physical work and to save time. E-Commerce which was started in early 1990's has taken a great leap in the world of computers, but the fact that has hindered the growth of e-commerce is security. Security is the challenge facing e-commerce today & there is still a lot of advancement made in the field of security.

The main advantage of e-commerce over traditional commerce is the user can browse online shops, compare prices and order merchandise sitting at home on their PC.

For increasing the use of e-commerce in developing countries the B2B e-commerce is implemented for improving access to global markets for firms in developing countries. For a developing country advancement in the field of e-commerce is essential. The research strategy shows the importance of the e-commerce in developing countries for business applications.

ACKNOWLEDGEMENTS

Success in life is never attained single handedly. My deepest gratitude goes to my Project supervisor, **Dr. Ajay Kumar Shrivastava**, **Professor and Head, Department of Computer Application** for his guidance, help and encouragement throughout my research work. Their enlightening ideas, comments, and suggestions .Words are not enough to express my gratitude for his insightful comments and administrative help at various occasions.

Fortunately, I have many understanding friends, who have helped me a lot on many critical conditions.

Finally, my sincere thanks go to my family members and all those who have directly and indirectly provided me moral support and other kind of help. Without their support, completion of this work would not have been possible in time. They keep my life filled with enjoyment and happiness.

Swati Rana(1900290149099)

Signature:

TABLE OF CONTENTS

	Page No.
Declaration	ii
Certificate	ii
Abstract	iv
Acknowledgement	V
Table of Content	vi-vii
List of figures	viii
List of Table	ix
CHAPTER 1: INTRODUCTION	1
1.1 Objective	
CHAPTER 2 : Literature Review	2-9
2.1 Abstract	
2.1 E-Commerce Facilitators	
2.3 E-Commerce Trend	
2.4 Underlying Factors	
CHAPTER 3: Web Development	10-12
3.1 WEB DEVELOPMENT	
3.2 Web Site	
3.3 Web-Page	
CHAPTER 4 : The Steps to Create a Web site	13-24
4.1 UI development	
4.2 Scripting	
4.3 Database	
4.4SQL	

4.5Queries

CHAPTER 5 : Scripting Languages	25-29
5.1 PHP	
5.2 Java Script	
5.3 JQuery	
5.4 JSON	
5.5 XAMPP	
5.6 Features	
5.7 Uses	
CHAPTER 6: Software Requirement Specification (SRS)	30
6.1 Hardware Requirement	
6.2 Software Requirement	
CHAPTER 7 : Data Flow Diagram	31-34
671DFD	
CHAPTER 8 : Challenges Facing E-Commerce	35-36
8.1 Technological breakthroughs	
CHAPTER 9: Project	37-38
9.1 Project	
9.2 Technologies Used	
9.3 Technical details	
CHAPTER 10: Screenshots	39-42
CHAPTER 11 : Maintenance	43
CHAPTER 12: Future scope and Conclusion	45-46

REFRENCE 47-48

List of figures

		Page no.
Figure 41	Login form without CSS	17
Figure 4.1.2	Login form without CSS.	17
Figure 4.2.1	Programming language popularity.	21
Figure 5.2.2	Scripting	22
Figure 5.1	PHP & XAMPP	26
Figure 7.1	DFD	32
Figure 7.2	DFD-1	32
Figure 7.3	DFD-2	33
Figure 7.4	DFD-3	34
Figure 10.1	Front Page	39
Figure 10.2	Front Page products	40
Figure 10.3	Single Product	40
Figure 10.4	Login Page	41
Figure 10.5	Sign up Page	41
Figure 10.6	Check out	42
Figure 10.7	Sell Request	42

List of Table

		Page no.
Table 5.1	PHP	27
Table 6.1	Software Requirement.	30
Tabe 6.2	Hardware Requirement	30

Project Completion Certificate

TO WHOM IT MAY CONCERN

This is to certify that Swati Rana Student of MCA from KIET Group of

Institutions has Successfully completed her 3 Months Summer Industrial

Internship Training in our Software Development Training Department on "Core

Java" From 08/12/2020 to 08/03/2021 at our organization "Amazing Training

Basket Pvt. Ltd. Noida"

During the training period she did project on "E-Commerce(EKART)" and her

project was found satisfactory.

During the training period, she has been found sincere and hard working we wish her

all success in her future endeavors.

For Amazing Training Basket Pvt. Ltd.

Training Manager

Amazing Training Basket Private Limited

Registered Office: Plot No. A-40, Unit: A -207, 2nd Floor, I- Thum IT Tower, Sec 62, Noida 201309

e-mail: <u>support@trainingbasket.in</u> Website: www.trainingbasket.in Contact us on: Tel- 01202405511, Helpline: 9015-887-887

CIN No. U80101UP2017PTC097992

CHAPTER 1

INTRODUCTION

1.1 PROJECT DESCRIPTION

Electronic commerce or ecommerce is a term for any type of business, or commercial transaction, that involves the transfer of information across the Internet. It covers a range of different types of businesses, from consumer based retail sites, through auction or music sites, to business exchanges trading goods and services between corporations. It is currently one of the most important aspects of the Internet to emerge.

1.2 OBJECTIVE

Ecommerce business drives profitable growth with reduction is cost-to-customer, developing customer-reach, and providing a unique customer experience. It has become more than essential for B2B as well as other businesses to make the right use of ecommerce. Now, ecommerce is evolving or better say evolved into digital commerce that implies to the entire business journey from buying to delivery with an online experience. Below are the few objectives of ecommerce:

- i. Reduce management costs
- ii. Developing business relations
- iii. Providing a unique customer experience
- iv. Increasing the number of loyal customers
- v. Boosting the efficiency of services
- vi. Developing relevant target

CHAPTER 2

LITERATURE REVIEW

2.1 Abstract

E-commerce is a boom in the modern business. E-commerce means electronic commerce. Ecommerce (Electronic commerce) involves buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, predominantly the Internet.

E-commerce (Electronic commerce) is a paradigm shift influencing both marketers and the customers. Rather e-commerce is more than just another way to boost the existing business practices. It is leading a complete change in traditional way of doing business. This significant change in business model is witnessing a tremendous growth around the globe and India is not an exception. A massive internet penetration has added to growth of E-commerce and more particularly start-ups have been increasingly using this option as a differentiating business model.

Moreover E-Commerce has significant influences on the environment. Although the model is highly used in current business scenario but the option has not been explored at its fullest.

The current research has been undertaken to describe the scenario of E-Commerce, analyze the trends of E-Commerce. The study further examines the key variables imperative for the success of E-commerce business models.

Objective:

The objectives of present study are:

- 1. To understand the present status and trends of E-Commerce; and
- 2. To reveal the key variables influencing the increased usage of E-Commerce.

What is E-Commerce?

E-commerce means electronic commerce. It means dealing in goods and services through the electronic media and internet. E-commerce involves carrying on a business with the help of the internet and by using the information technology like Electronic Data Interchange (EDI). ECommerce relates to a website of the vendor on the Internet, who trades products or services directly to the customer from the portal. The portal uses a digital shopping cart or digital shopping basket system and allows payment through credit card, debit card or EFT (Electronic fund transfer) payments.

A more complete definition is: E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals (C. Nisha and G. Sangeeta, 2012).

The main types of electronic commerce are: business-to-business (B2B); business to-consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C); and mobile commerce (mcommerce).

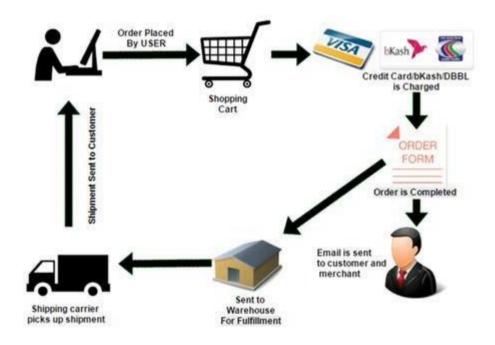


Fig 2.1

2.2 E-Commerce Facilitators:

(1) Internet:

A massive internet penetration has added to growth of E-commerce. Internet and smart phones are becoming an integral part of every life. Internet is no more a source of

information but has become an important tool for shopping, learning, communicating and even getting service from plumbers, carpenters, doctors etc. Supply chain is also becoming leaner and smarter as digital platforms are helping to better connect with the customers which significantly reduces the waste and supporting to green businesses.

Over the past 15 years the ICT revolution has driven global development in an unprecedented way. With an immense progress in technology, internet and its services have led to creation of new markets (D'silva et al., 2010).

The internet user population was small during the 1980s, experiencing a slow but steady growth until 1994 due to an increasing number of text-based users (eg, those using email and file transfer functions). Then, with the introduction of the World Wide Web and subsequent multimedia content expansion, the number of net users exploded. Infact, the internet has grown much more quickly than any other medium in history (Strauss et al., 2007).

The International Telecommunication Union (ITU), a United Nations body, recently predicted in 2015 that 3.2 billion people will be online. The population in May 2015 stood at 7.2 billion. In the year 2000 there were just 400 million internet users worldwide.

Internet in India took more than a decade to move from 10 million to 100 million and 3 years from 100 to 200 million, it took only a year to move from 300 to 400 million users. Clearly, Internet is mainstream in India today. This number is expected to further surge to 462 million by June this year as more people come online, especially through their mobile devices. The total Internet user base stood at over 300 million in December 2014, which grew to 375 million by October last year. Currently, India has the second largest Internet user base in the world recently overtaking the US (now the third largest user base). China currently leads with more than 600 million Internet users. Mobile Internet user base in 2015 in urban India has grown 65 per cent over 2014 to reach 197 million, while the rural user base surged 99 per cent to 80 million by October 2015. This is expected to grow to 219 million (urban) and 87 million (rural), respectively (IAMAI and IMRB, 2015).

(2) Payment Gateways:

A payment gateway is an e-commerce application service provider service that authorizes credit card payments for e-businesses, online retailers, bricks and clicks, or traditional brick and mortar. The life blood of online business is the payment routes which comprises credit card, debit card, online banking payments, electronic funds transfer. The world is transforming from cash to digital money and thus there is a need of payment gateways for sustainable future ecommerce.

(3) Analytics:

Analytics is the scientific process of transforming data into insight for making better

decisions. Analytics helps businesses to gather, organize, analyze, and report on everything their customers do. The massive increase in the volume of data has forced the businesses to focus on analytics to understand the behavior of the customer. E-tailor need to have real time access to information to measure return on online investments and optimize the channel mix. There are basic analytics capabilities available with the ecommerce players like basket size analysis, average order value, conversion ratio but we need deeper analytics solution for actionable insights of the consumer.

(4) Social Media

Businesses are increasingly making use of social media in order to market their goods and services. Social media refers to websites and computer programs that allow people to communicate and share information on the internet using a computer or mobile phone.

Social media has played a great role in brand building and informing various offers to the customers. It also helps in getting the feedback about the product or service. It provides a platform for brand building, advertisements, developing a community of trusted users, spreading word of mouth etc.

(5) Autonomous Vehicles

An autonomous vehicle is a motor vehicle that uses artificial intelligence, sensors and global positioning system, coordinates to drive itself without the active intervention of a human operator.

The age of the autonomous car is coming, and it's coming fast. Purchasers of autonomous vehicles will have more time to view emails, search the web, buy new products, and see advertisements all around them. With autonomous cars, vast digital marketing experience will present itself. These purchases and search patterns can be tracked to help companies tailor their marketing campaign to capture this new segment.

The scope of big data just got much bigger, but will become so tailored and predictive in the years to come that we may never have to manually adjust anything again.

(6) 3D Printing

A 3D printer is a device that's capable of making a three-dimensional object from a digital design. It uses something called "additive manufacturing" -- a layered process that bears some similarity to the way an ink-jet printer sequentially layers its colors on a flat piece of paper.

It is expected that 3D printing, might one day blow away manufacturing of the kind we've been used to since the Industrial Revolution shook up agrarian life in the early 19th century. 3D printing is creating a market in designs that are meant to be printed by the buyer -- or a third-party manufacturer unrelated to the designer. The end product isn't sold -- it's the design that's sold, along with a license for it to be printed. Buried in

corners of the Internet are marketplaces where budding designers are selling their plans for printing at home or in the workplace. Customers can use their own printers or they can buy the design and have it printed on the marketplace's printer and then delivered.

2.3 E-Commerce Trends -A New Business Revolution in India:

E-commerce is a boom in the modern business. It is a paradigm shift influencing both marketers and the customers. Rather e-commerce is more than just another way to boost the existing business practices. It is leading a complete change in traditional way of doing business. This significant change in business model is witnessing a tremendous growth around the globe and India is not an exception. Moreover, E-Commerce has every potential to curb the pollution and thus producing significant influences on the environment.

Buying goods and services via E-Commerce allows consumers the freedom to choose when and where to shop and the opportunity to research the product, the seller, and any other available options. Shopping has been revolutionized through the availability of online information. Just about anything that can be bought in a merchandise store can be bought via E-commerce, even perishables like groceries. And consumers have embraced these possibilities around the globe.

The effects of e-commerce are already appearing in all areas of business, from customer service to new product design. It facilitates new types of information based business processes for reaching and interacting with customers like online advertising and marketing, online order taking and online customer service. In now days E-commerce uses the WWW at least some point in transaction lifecycle. It can also reduce costs in managing orders and interacting with a wide range of suppliers and trading partners, areas that typically add significant overheads to the cost of products and services. For developing countries like India, e-commerce offers considerable opportunity. In India it is still in nascent stage, but even the most-pessimistic projections indicate a boom. There has been a rise in the number of companies' taking up e-commerce in the recent past. Major Indian portal sites have also shifted towards e-commerce instead of depending on advertising revenue. Many sites are now selling a diverse range of products and services from flowers, greeting cards, and movie tickets to groceries, electronic gadgets, and computers, etc. (Mitra Abhijit, 2013). E-commerce has reached to an extent that the cow dung patties are also selling like hot cakes online in India.

India's e-commerce market is likely to touch \$38 billion mark in 2016, a massive jump over the \$23 billion revenues clocked by the industry in 2015, according to an Assocham study. Increasing internet and mobile penetration, growing acceptability of online payments and favourable demographics have provided the unique opportunity to companies to connect with their customers. On the other hand, mobile commerce (m-commerce) is growing rapidly as a stable and secure supplement to the e-commerce industry. Shopping online through smartphones is proving to be a game changer. It is believed that m-commerce could contribute up to 70 per cent of their total revenues.

2.4 Underlying Factors in E-Commerce :

ASSOCHAM Study (2015) found the highest growth rate in the apparel segment, almost 69.5 per cent over 2014, followed by electronic items, up 62 per cent, baby care products, up 53 per cent, beauty and personal care products at 52 per cent and home furnishings at 49 per cent. Rapid growth of digital commerce in India is mainly due to increased use of smartphones. Mobiles and mobile accessories have taken up the maximum share of the digital commerce market in India, noted the study. Moreover, almost 45 per cent online shoppers reportedly preferred cash on delivery over credit cards (16 per cent) and debit cards (21 per cent). Only 10 per cent opted for internet banking and a scanty 7 per cent preferred cash cards, mobile wallets, and other such modes of payment. The 18-25 years of age group has been the fastest growing age segment online with user growth being contributed by both male and female segments. The survey highlights that 38 per cent of regular shoppers are in 18-25 age group, 52 per cent in 26-35, 8 per cent in 36-45 and 2 per cent in the age group of 45-60. Nearly 65 per cent online shoppers are male and 35 per cent female.

Mitra Abhijit (2013) suggests E-Commerce has unleashed yet another revolution, which is changing the way businesses buy and sell products and services. New methodologies have evolved. The role of geographic distances in forming business relationships is reduced. E-Commerce is the future of shopping. With the deployment of 3G and 4G wireless communication technologies, the internet economy will continue to grow robustly. In the next 3 to 5 years, India will have 30 to 70 million internet users which will equal, if not surpass, many of the developed countries. Internet economy will then become more meaningful in India. With the rapid expansion of internet, Ecommerce is set to play a very important role in the 21st century, the new opportunities that will be thrown open, will be accessible to both large corporations and small companies. The role of government is to provide a legal framework for E-Commerce so that while domestic and international trade are allowed to expand their horizons, basic rights such as privacy, intellectual property, prevention of fraud, consumer protection etc are all taken care of.

Chanana Nisha and Goele Sangeeta (2012) propose that the future of E-Commerce is difficult to predict. There are various segments that would grow in the future like: Travel and Tourism, electronic appliances, hardware products and apparel. There are also some essential factors which will significantly contribute to the boom of the E-Commerce industry in India i.e. replacement guarantee, M-Commerce services, location based services, multiple payment option, right content, shipment option, legal requirement of generating invoices for online transactions, quick Service, T & C should be clear & realistic, the product quality should be same as shown on the portal, dedicated 24/7 customer care centre should be there.

Awais Muhammad and Samin Tanzila (2012) indicate that use of internet has made the world a global village. The use of Internet has reduced the distances and brought the people together. A nation's back bone is commerce and it will be strengthened if backed by electronic tools in which e-commerce plays a vital role. The important feature in ecommerce is privacy which not only increases competitive advantage but confidence level also. E-commerce brings sellers and potential buyers at the distance of one click and it saves time as it is cost effective, as **E-commerce is**

becoming key to success

Internet banking, one among the innovative and significant internet based services has experienced explosive growth and led to transformation of traditional banking practice. Online banking or net banking in today's dynamic age of banking has made things much easier for the people and saves a lot of time for its customers. The traditional way of standing in the queues and filling up all the forms are well solved and now it is no hassle for making any transaction with the banks by virtue of internet banking. The financial institutions which operated traditionally are now able to lower their operational costs and increase the consumer retention by virtue of technology.

Internet banking as a latest and potential means for banking now holds a similar importance as that of ATM's, phone banking and traditional bank branches. The works by ABA, 2004; Fox, 2005 suggest that an internet banking strategy may be effective, with reports of more profitable, loyal and committed consumers compared with traditional banking consumers (D'silva et al., 2010).

Dutta and Dutta, (2009) found tangibles have the highest impact on overall customer satisfaction. The largest discrepancy between the customer expectations and perceptions is in terms of empathy which includes Bank locations and ATM machines in convenient places and telebanking and internet banking facility. The study regards this a major source of concern for Indian banking industry as a huge service quality gap exists for all the banks in this category.

Kumar and Rajesh (2009) suggest that the facilities of the banks should be made more convenient for customer comforts. The ATM services should be extended with few more cabins.

The work also concludes that with sincere efforts and positive attitude, the needs of many customers can be satisfied when banks aim at 'customer delight'.

Blasio (2008), in his study does not find the support for the argument that the Internet reduces the role of distance. Internet usage is much more frequent among urban consumers than among their non-urban counterparts. The use of e-commerce is basically unaffected by the size of the city where the household lives. Geographically remote consumers are discouraged from purchasing goods by the fact that they cannot inspect them beforehand. Leisure activities and cultural items (i.e., books, CDs, and tickets for museums and theaters) are the only goods and services for which e-commerce is used more in isolated areas. Finally, e-banking bears no relationship to city size. In choosing a bank, non-urban customers give more importance to personal acquaintance than do urban clients, partly because bank account holders in remote areas are more likely to have taken out a loan from their bank.

Ozok et al (2007) identified ten items contributing to overall consistency in ecommerce customer relationship management. These items are consistency of transaction steps, consistency of Web site design, consistency of navigation, consistency of promotions, consistency of in-stock indications, consistency of product variety, consistency of fraud protection, consistency of product guarantees, consistency of overall site fairness, and consistency of return policies. This list of consistency items includes three usability items. It can be concluded that sites with good usability have a better chance of having successful CRM implementation in their business. Consistency of promotions, in-stock indications, product variety, fraud protection, guarantees, fairness, and return policies indicate mainly that customers in fact demand a high level of security-related information as well as trustworthiness and high ethics on the shopping site to become regular customers of evendors. Customers demand equal and consistent treatment concerning products and productrelated services. The findings indicate that the level of security and guarantees presented to customers has a significant positive effect on customer retention and customer acquisition.

Singh and Lalwani (2007) in their work on internet banking suggest that internet banking has facilitated the banking relationships with the customers. It is now widely accepted in the country because of the fact that it is the cheapest source of providing banking services. As more and more banks will succeed in online banking, a day will come when it will reach a common place as ATM's. It has not only increased the banking transactions but also has reduced the time and cost factor. It has brought revolution in the banking industry.

Rust and Chung, (2006) suggests to know not just what customers do in any particular ecommerce contact but also what they do (and how they perceive and feel) across multiple contacts. The work also suggests to investigate the kinds of online services that promote growth of the customer relationship, and the most effective ways to combine the online relationship with the offline relationship, with the idea that the full relationship with the customer is not complete without considering both online and offline, as well as how they interact.

Hsieh (2005) examined what a firm should consider in order to encourage customers to at least try, and eventually adopt, the SST offered by a firm into the customer's regular routine. The result suggests that before a firm makes the leap into adding SST to their product/service line, they need to invest the time in seeing if they are ready themselves. Customers want what they have always wanted. They want reliable, affordable, quality service that is convenient and easy to acquire. If firm can't provide an SST that is at least as reliable, if not more so, than no-technology customer service, then firms isn't prepared to properly implement SST.

Devashish Pujari, (2004) explored the issues relating to service recovery in case of SST failure and effects of favorable/ unfavorable SST encounters on business relationships. The key findings of the study show that key sources of satisfaction are different for B2B clients than for end consumers, as evidenced in previous studies by Meuter et al. (2000) and Srijumpa et al. (2002). The study shows that in the event of SST failures, service recovery is very critical to clients. In a situation where service personnel are not involved in the service encounter, clients needs a quick and complete recovery after reporting the failure. Clients may also expect that SST delivery should have the capability to transmit the failure to their service provider on a real time basis. The results of this study also echo that satisfying SST incidents will lead to future behaviors such as word of mouth and repurchase intentions.

CHAPTER 3

WEB DEVLOPMENT

3.1 WEB DEVOPMENT

E COMMERCE WEBSITE is a broad term for the work involved in developing a web site for the Internet (World Wide Web) or an intranet (a private network). Web development can range from developing the simplest static single page of plain text to the most complex web-based internet applications, electronic businesses, and social network services. A more comprehensive list of tasks to which web development commonly refers, may include web engineering, web design, web content development, client liaison, client-side/side scripting, web server and network security configuration, and e-commerce development. Among web professionals, "web development" usually refers to the main non-design aspects of building web sites: writing markup and coding. Most recently Web development has come to mean the creation of content management systems or CMS. These CMS can be made from scratch, proprietary or open source. In broad terms the CMS acts as middleware between the database and the user through the browser. A principle benefit of a CMS is that it allows non-technical people to make changes to their web site without having technical knowledge.

For larger organizations and businesses, web development teams can consist of hundreds of people (web developers) and follow standard methods like Agile methodologies while developing websites. Smaller organizations may only require a single permanent or contracting developer, or secondary assignment to related job positions such as a graphic designer or information systems technician. Web development may be a collaborative effort between departments rather than the domain of a designated department. There are three kind of web developer specialization: frontend developer, back-end developer, and full-stack developer.

3.2 WEB-SITE

A website is a collection of related web pages, including multimedia content, typically identified with a common domain name, and published on at least one web server. A website may be accessible via a public Internet Protocol (IP) network, such as the Internet, or a private local area network (LAN), by referencing a uniform resource locator (URL) that identifies the site.

Websites have many functions and can be used in various fashions; a website can be a personal website, a commercial website for a company, a government website or a non-profit organization website. Websites are typically dedicated to a particular topic or purpose, ranging from entertainment and social networking to providing news and education. All publicly accessible websites collectively constitute the World Wide Web, while private websites, such as a company's website for its employees, and are typically a part of an intranet. Web pages, which are the building blocks of websites, are documents, typically composed in plain text interspersed with formatting instructions of Hypertext Markup

Language (HTML, XHTML). They may incorporate elements from other websites with suitable markup anchors. Web pages are accessed and transported with the Hypertext Transfer Protocol (HTTP), which may optionally employ encryption (HTTP Secure, HTTPS) to provide security and privacy for the user. The user's application, often a web browser, renders the page content according to its HTML markup instructions onto a display terminal.

Hyperlinking between web pages conveys to the reader the site structure and guides the navigation of the site, which often starts with a home page containing a directory of the site web content. Some websites require user registration or subscription to access content. Examples of subscription websites include many business sites, news websites, academic journal websites, gaming websites, file-sharing websites, message boards, web-based email, social networking websites, websites providing real-time stock market data, as well as sites providing various other services. As of 2016 end users can access websites on a range of devices, including desktop and laptop computers, tablet computers, smartphones and smart TVs.

A web site consists of web pages which are interconnected to each other and contain various data and functionalities.

3.3WEB-PAGE

A web page, or webpage, is a document that is suitable for the World Wide Web and web browsers. A web browser displays a web page on a monitor or mobile device. The web page is what displays, but the term also refers to a computer file, usually written in HTML or comparable markup language. Web browsers coordinate the various web resource elements for the written web page, such as style sheets, scripts, and images, to present the web page.

Typical web pages provide hypertext that includes a navigation bar or a sidebar menu to

other web pages via hyperlinks, often referred to as links.

On a network, a web browser can retrieve a web page from a remote web server. On a higher level, the web server may restrict access to only a private network such as a corporate intranet or it provides access to the World Wide Web. On a lower level, the web browser uses the Hypertext Transfer Protocol (HTTP) to make such requests.

A static web page is delivered exactly as stored, as web content in the web server's file system, while a dynamic web page is generated by a web application that is driven by serverside software or client-side scripting. Dynamic website pages help the browser (the client) to enhance the web page through user input to the server.

<u>retrieval information</u> before accessing the actual file content, therefore, deteriorating the access efficiency.[9]

CHAPTER 4

THE STEPS TO CREAT WEBSITE

4.1 UI DEVELOPMENT

HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a webserver or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects, such as interactive forms, may be embedded into the rendered page. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <imp /> and <input /> introduce content into the page directly. Others such as ... surround and provide information about document text and may include other tags as subelements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript which affect the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), maintainer of both the HTML and the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.

HTML markup consists of several key components, including those called tags (and their attributes), character-based data types, character references and entity references. HTML tags most commonly come in pairs like <h1> and </h1>, although some represent empty elements and so are unpaired, for example

. The first tag in such a pair is the start tag, and the second is the end tag (they are also called opening tags and closing tags).

Another important component is the HTML document type declaration, which triggers standards mode rendering.

The following is an example of the classic Hello world program, a common test employed for comparing programming languages, scripting languages and markup languages. This example is made using 9 lines of code:

```
General Syntax of HTML

<!DOCTYPE html>

<html>

<head>

<title>This is a title</title>

</head>

<body>

Hello world!
</body>

</html>
```

(The text between <html> and </html> describes the web page, and the text between <body> and </body> is the visible page content. The markup text "<title>This is a title</title>" defines the browser page title.)

The Document Type Declaration <!DOCTYPE html> is for HTML5. If a declaration is not included, various browsers will revert to "quirks mode" for rendering.

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging

webpages, user interfaces for web applications, and user interfaces for many mobile applications.

CSS is designed primarily to enable the separation of presentation and content, including aspects such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content makes it possible to present the same markup page in different styles for different rendering methods, such as onscreen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. It can also display the web page differently depending on the screen size or viewing device. Readers can also specify a different style sheet, such as a CSS file stored on their own computer, to override the one the author specified.

Changes to the graphic design of a document (or hundreds of documents) can be applied quickly and easily, by editing a few lines in the CSS file they use, rather than by changing markup in the documents. The CSS specification describes a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities (or weights) are calculated and assigned to rules, so that the results are predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/css is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

Types of CSS:

- Inline CSS:
- In this CSS is applied in between the tags

Eg: <tag style="styling">Hello World</tag>

•	Internal CSS:	
In this HTML	Thecss code is defined inside the style tag in the head section of page.	tŀ
Genera	Syntax:	
<html></html>		
<head></head>		
<style></td><td></td><td></td></tr><tr><td></td><td>15</td><td></td></tr></tbody></table></style>		

```
<! -- CSS STYLING -- >
</style>
</head>
</html>
```

• External CSS:

In this the CSS code is written on another page and is linked to the HTML page. It is advantageous to use this type of styling as we can use the same file to style various HTML pages.

External CSS uses the extension .css and is applied using the following syntax

```
<html>
<head>
kead>
kead>
kead>
</head>
</html>
```

All the CSS style types are important but can be used in different situations.

- Inline CSS is used when only small changes are to be done to the HTML tag and the changes are to be reflected only to that specific tag
- Internal CSS is used when the individual HTML pages have to be designed differently. This also slows the page load system if the internal styling is long.
- External CSS files are maintained to design multiple pages and use common styles over various pages. It is useful as it helps in managing the resources in an easy manner.

Both HTML and CSS are used to create a UI but CSS behaves like a makeup on the face of an actress which makes her look even more beautiful than she is in reality.

And here is the difference:

Before using CSS in HTML page:

Enter your account details to login!

×	
Email	
Password	
Login	

Fig 4.1

After using CSS in HTML Page:



Fig 4.2

• <u>Bootstrap</u>

Bootstrap is a free and open-source front-end web framework for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface

components, as well as optional JavaScript extensions. Unlike many web frameworks, it concerns itself with front-end development only.

Bootstrap is the second most-starred project on GitHub, with more than 107,000 stars and 48,000 forks.

Bootstrap, originally named Twitter Blueprint, was developed by Mark Otto and Jacob Thornton at Twitter as a framework to encourage consistency across internal tools. Before Bootstrap, various libraries were used for interface development, which led to inconsistencies and a high maintenance burden. According to twitter developer Mark Otto:

"A super small group of developers and I got together to design and build a new internal tool and saw an opportunity to do something more. Through that process, we saw ourselves build something much more substantial than another internal tool. Months later, we ended up with an early version of Bootstrap as a way to document and share common design patterns and assets within the company."

After a few months of development by a small group, many developers at Twitter began to contribute to the project as a part of Hack Week, a hackathon-style week for the Twitter development team. It was renamed from Twitter Blueprint to Bootstrap, and released as an open source project on August 19, 2011. It has continued to be maintained by Mark Otto, Jacob Thornton, and a small group of core developers, as well as a large community of contributors.

On January 31, 2012, Bootstrap 2 was released, which added a twelve-column responsive grid layout system, inbuilt support for Glyphicons, several new components, as well as changes to many of the existing components.

On August 19, 2013, Bootstrap 3 was released, which redesigned components to use flat design, and a mobile first approach.

On October 29, 2014, Mark Otto announced that Bootstrap 4 was in development. The first alpha version of Bootstrap 4 was released on August 19, 2015.

Bootstrap 3 supports the latest versions of the Google Chrome, Firefox, Internet Explorer, Opera, and Safari (except on Windows). It additionally supports back to IE8 and the latest Firefox Extended Support Release (ESR).

Since 2.0, Bootstrap supports responsive web design. This means the layout of web pages adjusts dynamically, taking into account the characteristics of the device used (desktop, tablet, mobile phone).

Starting with version 3.0, Bootstrap adopted a mobile-first design philosophy, emphasizing responsive design by default.

The version 4.0 alpha release added Sass and flexbox support.

Installing and linking bootstrap to the HTML page:

Install bootstrap from https://getbootstrap.com/

- Copy the bootstrap.min.css file to your CSS folder and link it to the HTML page in the similar manner to how any other CSS file is linked.
- Link the bootstrap.min.js file which is present in the JS folder of the bootstrap. It can be linked using script tag.

Eg: <script src="url to bootstrap.min.js"></script>

• Now use bootstrap classes to reduce the work of designing which was earlier done through CSS.

4.2 SCRIPTING

• Server Side Scripting

Server-side scripting is a technique used in web development which involves employing scripts on a web server which produce a response customized for each user's (client's) request to the website. The alternative is for the web server itself to deliver a static web page. Scripts can be written in any of a number of server-side scripting languages that are available (see below). Server-side scripting is distinguished from client-side scripting where embedded scripts, such as JavaScript, are run client-side in a web browser, but both techniques are often used together.

Server-side scripting is often used to provide a customized interface for the user. These scripts may assemble client characteristics for use in customizing the response based on those characteristics, the user's requirements, access rights, etc. Server-side scripting also enables the website owner to hide the source code that generates the interface, whereas with client-side scripting, the user has access to all the code received by the client. A down-side to the use of server-side scripting is that the client needs to make further requests over the network to the server in order to show new information to the user via the web browser. These requests can slow down the experience for the user, place more load on the server, and prevent use of the application when the user is disconnected from the server.

When the server serves data in a commonly used manner, for example according to the HTTP or FTP protocols, users may have their choice of a number of client programs (most modern web browsers can request and receive data using both of those protocols). In the case of more specialized applications, programmers may write their own server, client, and communications protocol that can only be used with one another.

Programs that run on a user's local computer without ever sending or receiving data over a network are not considered clients, and so the operations of such programs would not be considered client-side operations.

> Server Side scripting Languages

There are several languages that can be used for server-side programming:

- o PHP
- o ASP.NET (C# OR Visual Basic)
- \circ C++
- Java and JSP
- Python
- o Ruby on Rails and so on.

• Client Side Scripting

Client-side scripting is changing interface behaviors within a specific web page in response to mouse or keyboard actions, or at specified timing events. In this case, the dynamic behavior occurs within the presentation. The client-side content is generated on the user's local computer system.

Such web pages use presentation technology called rich interfaced pages. Client-side scripting languages like JavaScript or ActionScript, used for Dynamic HTML (DHTML) and Flash technologies respectively, are frequently used to orchestrate media types (sound, animations, changing text, etc.) of the presentation. Client-side scripting also allows the use of remote scripting, a technique by which the DHTML page requests additional information from a server, using a hidden frame, XML Http Requests, or a Web service.

The first widespread use of JavaScript was in 1997, when the language was standardized as ECMAScript and implemented in Netscape 3.

Example:

The client-side content is generated on the client's computer. The web browser retrieves a page from the server, then processes the code embedded in the page (typically written in JavaScript) and displays the retrieved page's content to the user.

The most popularly used client side scripting languages is Java Script. Flow of request from browser to server:

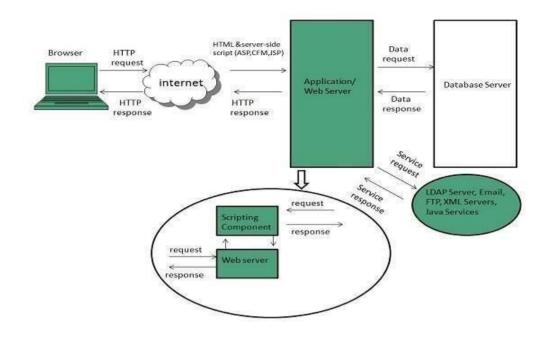


Fig 4.2.1

Programming Language Popularity By Github Projects

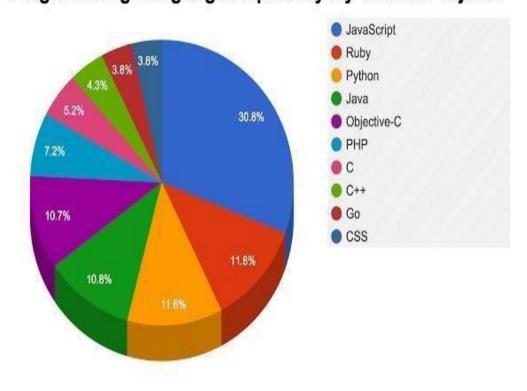


Fig 4.2.2

4.3 Database

A database is an organized collection of data. It is the collection of schemas, tables, queries, reports, views, and other objects. The data are typically organized to model aspects of reality in a way that supports processes requiring information, such as modelling the availability of rooms in hotels in a way that supports finding a hotel with vacancies.

A database management system (DBMS) is a computer software application that interacts with the user, other applications, and the database itself to capture and analyze data. A general-purpose DBMS is designed to allow the definition, creation, querying, update, and administration of databases. Well-known DBMSs include MySQL, PostgreSQL, MongoDB, MariaDB, Microsoft SQL Server, Oracle, Sybase, SAP HANA, MemSQL and IBM DB2. A database is not generally portable across different

DBMSs, but different DBMS can interoperate by using standards such as SQL and ODBC or JDBC to allow a single application to work with more than one DBMS. Database management systems are often classified according to the database model that they support; the most popular database systems since the 1980s have all supported the relational model as represented by the SQL language. Sometimes a DBMS is loosely referred to as a "database".

4.4 SQL

Originally based upon relational algebra and tuple relational calculus, SQL consists of a data definition language, data manipulation language, and data control language. The scope of SQL includes data insert, query, update and delete, schema creation and modification, and data access control. Although SQL is often described as, and to a great extent is, a declarative language (4GL), it also includes procedural elements.

SQL was one of the first commercial languages for Edgar F. Codd'srelational model, as described in his influential 1970 paper, "A Relational Model of Data for Large Shared Data Banks." Despite not entirely adhering to the relational model as described by Codd, it became the most widely used database language.

SQL became a standard of the American National Standards Institute (ANSI) in 1986, and of the International Organization for Standardization (ISO) in 1987. Since then, the standard has been revised to include a larger set of features. Despite the existence of such standards, most SQL code is not completely portable among different database systems without adjustments

4.5 QUERIES

The most common operation in SQL, the query, makes use of the declarative SELECT statement. SELECT retrieves data from one or more tables, or expressions. Standard SELECT statements have no persistent effects on the database. Some non-standard implementations of SELECT can have persistent effects, such as the SELECT INTO syntax provided in some databases.

Queries allow the user to describe desired data, leaving the database management system (DBMS) to carry out planning, optimizing, and performing the physical operations necessary to produce that result as it chooses.

A query includes a list of columns to include in the final result, normally immediately following the SELECT keyword. An asterisk ("*") can be used to specify that the query should return all columns of the queried tables. SELECT is the most complex statement in SQL, with optional keywords and clauses that include:

o The FROM clause, which indicates the table(s) to retrieve data from. The

- FROM clause can include optional JOINsubclauses to specify the rules for joining tables.
- The WHERE clause includes a comparison predicate, which restricts the rows returned by the query. The WHERE clause eliminates all rows from the result set where the comparison predicate does not evaluate to True.
- The GROUP BY clause projects rows having common values into a smaller set of rows. GROUP BY is often used in conjunction with SQL aggregation functions or to eliminate duplicate rows from a result set. The WHERE clause is applied before the GROUP BY clause.
- The HAVING clause includes a predicate used to filter rows resulting from the GROUP BY clause. Because it acts on the results of the GROUP BY clause, aggregation functions can be used in the HAVING clause predicate.
- The ORDER BY clause identifies which column[s] to use to sort the resulting data, and in which direction to sort them (ascending or descending).
 Without an ORDER BY clause, the order of rows returned by an SQL query is undefined.
- o The DISTINCT keyword eliminates duplicate data.

CHAPTER 5

SCRIPTING LANGUAGES

5.1 PHP

PHP is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language. Originally created by RasmusLerdorf in 1994, the PHP reference implementation is now produced by The PHP Development Team. PHP originally stood for Personal Home Page, but it now stands for the recursive acronym PHP: Hypertext Preprocessor.

PHP code may be embedded into HTML or HTML5 markup, or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server software combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalonegraphical applications. The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge. The PHP language evolved without a written formal specification or standard until 2014, leaving the canonical PHP interpreter as a de facto standard. Since 2014 work has gone on to create a formal PHP specification.

• Installing PHP

- Step 1: download the files. Download the latest PHP 5 ZIP package from www.php.net/downloads.php. ...
- O Step 2: extract the files. ...
- o Step 3: configure php.ini. ...
- O Step 4: add C: php to the path environment variable. ...

- Step 5: configure PHP as an Apache module. ...
- o Step 6: test a PHP file.

Or we can install **Xampp** which have inbuilt php,mysql,apache server We have used xampp to run the php files.

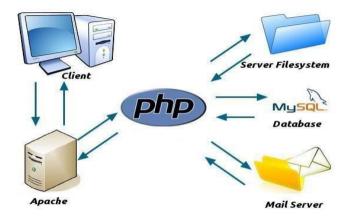


Fig 5.1

Paradigm	Imperative, functional, object-oriented, procedural, reflective
Designed by	RasmusLerdorf
Developer	The PHP Development Team, Zend Technologies
First appeared	June 8, 1995; 21 years ago ^[1]
Stable release	7.1.5 / May 11, 2017; 16 days ago
Typing discipline	Dynamic, weak, gradual (as of PHP 7.0.0)
Implementation language	C (primarily; some components C++)
os	Unix-like, Windows
License	PHP License (most of Zend Engine under Zend Engine License&
	The TSRM License)
Filename extensions	.php, .phtml, .php3, .php4, .php5, .php7, .phps
Website	php.net
Major implementations	
Zend Engine, HHVM, Phalanger, Quercus, Project Zero, Parrot	
Influenced by	
C, C++, Java, Perl, Tcl ^[1]	
Influenced	
Falcon, Hack	

Table 5.1

5.2 JavaScript

JavaScript, often abbreviated as "JS", is a high-level, dynamic, untyped, and interpreted run-time language. It has been standardized in the ECMAScript language specification. Alongside HTML and CSS, JavaScript is one of the three core technologies of World Wide Web content production; the majority of websites employ it, and all modern Web browsers support it without the need for plug-ins. JavaScript is prototype-based with first-class functions, making it a multi-paradigm language,

supporting object-oriented, imperative, and functional programming styles. It has an API for working with text, arrays, dates and regular expressions, but does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

Although there are strong outward similarities between JavaScript and Java, including language name, syntax, and respective standard libraries, the two are distinct languages and differ greatly in their design. JavaScript was influenced by programming languages such as self and Scheme.

JavaScript is also used in environments that are not Web-based, such as PDF documents, site-specific browsers, and desktop widgets. Newer and faster JavaScript virtual machines (VMs) and platforms built upon them have also increased the popularity of JavaScript for server-side Web applications. On the client side, developers have traditionally implemented JavaScript as an interpreted language, but more recent browsers perform just-in-time compilation. Programmers also use JavaScript in videogame development, in crafting desktop and mobile applications, and in server-side network programming with run-time environments such as Node.js.

5.3 JSON

In computing, **JavaScript Object Notation** or **JSON** (/ˈdʒeɪsən/**JAY**-sən), is an openstandardfile format that uses human-readable text to transmit data objects consisting of attribute—value pairs and array data types (or any other serializable value). It is a very common data format used for asynchronous browser/server communication, including as a replacement for XML in some AJAX-style systems.

JSON is a language-independent data format. It was derived from JavaScript, but as of 2017 many programming languages include code to generate and parse JSON-format data. The official Internet media type for JSON is application/json. JSON filenames use the extension .json. Douglas Crockford originally specified the JSON format in the early 2000s; two competing standards, RFC 7159 and ECMA-404, defined it in 2013. The ECMA standard describes only the allowed syntax, whereas the RFC covers some security and interoperability considerations. A restricted profile of JSON, known as **I-JSON** (short for "Internet JSON"), seeks to overcome some of the interoperability problems with JSON. It is defined in RFC 7493.

5.4 XAMPP

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 and deployment 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.

5.5 FEATURES

XAMPP is regularly updated to the latest releases of Apache, MariaDB, PHP and Perl. It also comes with a number of other modules including OpenSSL, phpMyAdmin, MediaWiki, Joomla, WordPress and more. Self-contained, multiple instances of XAMPP can exist on a single computer, and any given instance can be copied from one computer to another. XAMPP is offered in both a full and a standard version (Smaller version).

5.6 USAGE

XAMPP's designers intended it for use only as a development tool, to allow website designers and programmers to test their work on their own computers without any access to the Internet. To make this as easy as possible, many important security features are disabled by default. XAMPP has the ability to serve web pages on the World Wide Web. A special tool is provided to password-protect the most important parts of the package.

XAMPP also provides support for creating and manipulating databases in MariaDB and SQLite among others. Once XAMPP is installed, it is possible to treat a localhost like a remote host by connecting using an FTP client. Using a program like FileZilla has many advantages when installing a content management system (CMS) like Joomla or WordPress. It is also possible to connect to localhost via FTP with an HTML editor.

REQUIREMENT SPECIFICATION

6.1 Hardware Requirement

The selection of hardware is very important in the existence and proper working of any software. When selecting hardware, the size and requirements are also important.

Processor	Intel CORE i5
RAM	4.0 GB
Hard Disk Drive	500

Table 6.1

6.2 Software Requirement

Number	Description
1	Windows 7,8,10
2	HTML/Css/Ajax/JavaScript/ Bootstrap.
3	Apache server/ XAMPSERVER
4	PHP 5.5.38
5	MySQL
6	Apache version: Apache/2.4.23 (Win32) OpenSSL/1.0.2h PHP/5.5.38

Table 6.2

Data flow Diagram

7.1 DFD

Data Flow Diagrams show the flow of data from external entities into the system, and from one process to another within the system. There are four symbols for drawing a DFD:

- i. Rectangles representing external entities, which are sources or destinations of data.
- ii. Ellipses representing processes, which take data as input, validate and process it and output it.
- iii. Arrows representing the data flows, which can either, be electronic data or physical items.
- iv. Open-ended rectangles or a Disk symbol representing data stores, including electronic stores such as databases or XML files and physical stores such as filing cabinets or stacks of paper.

Figures below are the Data Flow Diagrams for the current system. Each process within the system is first shown as a Context Level DFD and later as a Detailed DFD. The Context Level DFD provides a conceptual view of the process and its surrounding input, output and data stores. The Detailed DFD provides a more detailed and comprehensive view of the interaction among the sub-processes within the system.

CONTEXT LEVEL D I AGRAM



Fig 7.1

First Level DFD

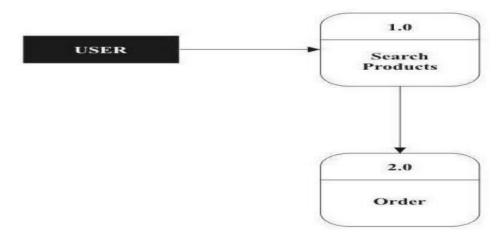


Fig 7.2

SECOND LEVEL DFD

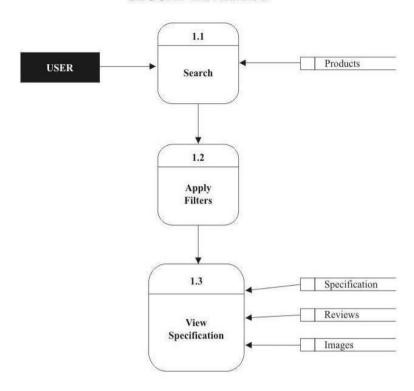


Fig 7.3

Use Case Diagram

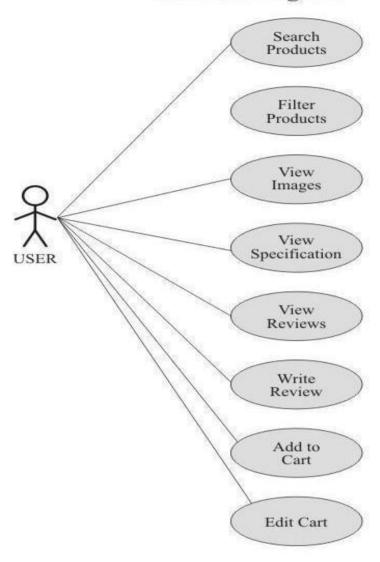


Fig 7.4

CHALLEGES FACING E-COMMERCE

Speaking of obstacles, there are a lot of them that need to be uprooted before ecommerce can compete with traditional commerce. The biggest obstacle in the course of advancement of e-commerce is that the consumer's senses are limited to seeing and hearing the product. The second largest problem that e-commerce has been facing over the past few years is that of security. Traditional buyers and sellers are still paranoid about conducting business online. According to Hal Loevy, vice president of Global Marketing and Partnerships for SGSonSITE, "Despite all the noise about e-commerce, which is significant, companies still have to keep their old business practices: Can I trust who I am buying from? Who am I doing business with? What is their trading history? Am I obeying the law? Will I receive the goods as specified on screen and who do I approach if I have a problem?". According to emarketer.com, "70% of US consumers are concerned about online security; this discourages consumers from using credit cards to shop online (PaymentOne)". Also according to e-marketer.com, in December 2001, 91% of websites collected personal information and in April-May 2001, 68% of US Internet users were concerned that transactions may not be secure and other companies and individuals might gain access to their personal information.

8.1 Some recent technological breakthroughs

Finally, in order to make the online shopping experience even more better, there are a lot of new technologies like Verifi, DigiScent's iSmell and TouchSense that have emerged over the last couple of years. Even though iSmell and TouchSense are very new technologies and they haven't been adopted by the majority of internet shoppers yet, they promise a consumer-friendly future. Verifi is one technology that has been widely adopted today, and for good reason. According to a recent BizRate study, over 50% of online shoppers stated that they would not make further purchases from a Web

merchant that delivered an item in a colour that wasn't what they expected. This is the problem that Imation have designed their Verifi system to solve. Here's how it works. When a shopper visits a Verifi-enabled Web site for the first time they are invited to take a Web based survey that establishes how their monitor, computer, operating system and browser handle color. This information in then stored as a cookie in the shopper's browser. Then, when they view a product image, the Verifi system reads the information in the cookie and combines this with the profile of the scanner (or digital camera etc.) that the merchant used to produce the image to generate a color-accurate image in the shopper's browser.

PROJECT

9.1 PROJECT

Name:- E-Commerce Website

9.2 Technologies Used

- o HTML
- o CSS
- Bootstrap
- o Core PHP
- o Java Script
- o Jquery
- o AJAX

Server: Apache (XAMPP)

Database: MySql

Operating System: Windows7/8/8.1/10

Wire framing tool: Balasmiq

Team Size: 3

9.3 TECHNICAL DETAILS:

- Front end is designed using HTML, CSS and Bootstrap. Ajax used to perform behind the screen requests and JavaScript used to perform client side scripting Backend is based on PHP + MySql based RDB(Relational Data Base) model.
- The SQL queries are run using the CI SQL library functions
- Backend online host includes a centralized database resident on the server, the script which is built in PHP used to SQL query the database on user's request for transaction of data
- The forms are made using the HTML, Bootstrap for designing and Php, sql for back-end
- JavaScript, AJAX and JQuery used for client side scripting and PHP for the server side development

SCREENSHOT

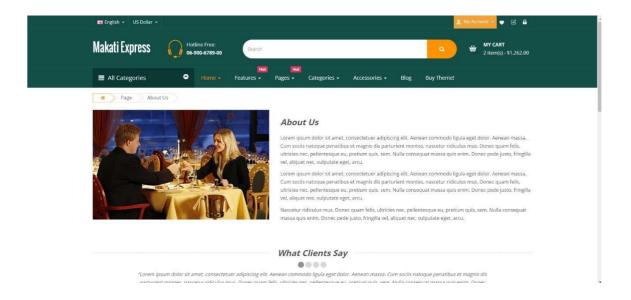


Fig 10.1

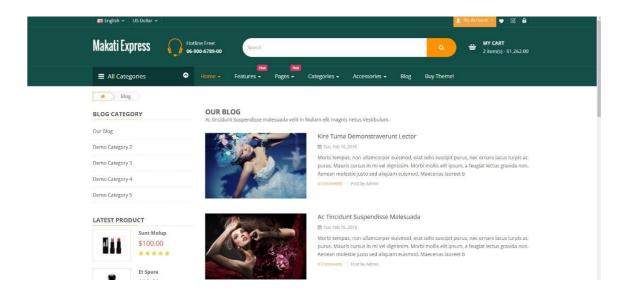


Fig 10.2

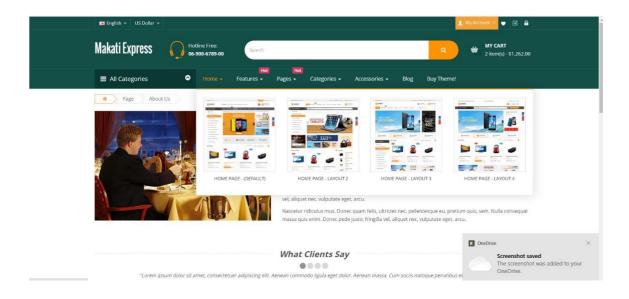


Fig 10.3



Fig 10.4

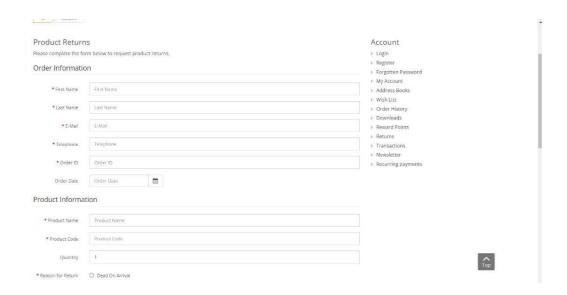


Fig 10.5

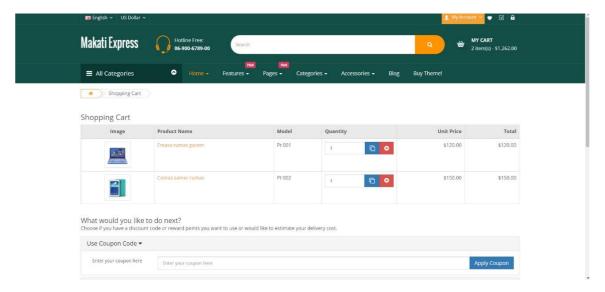


Fig 10.6

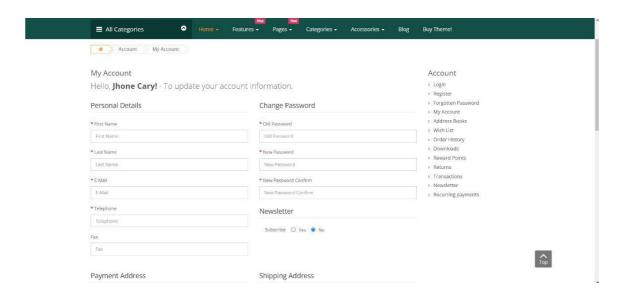


Fig 10.7

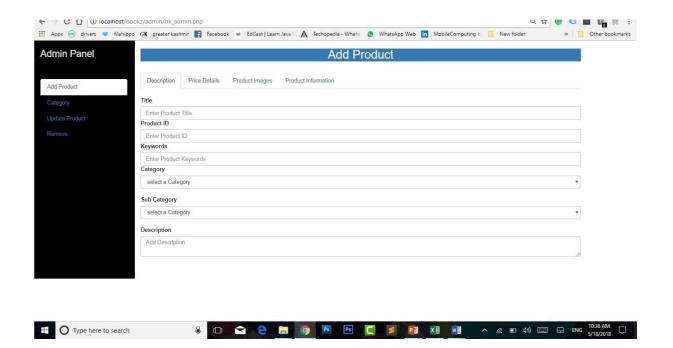


Fig 10.8

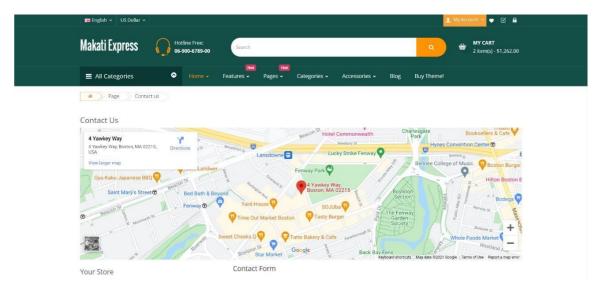


Fig 10.9

MAINTENANCE

The maintenance phase involves making changes to hardware, software, and documentation to support its operational effectiveness. It includes making changes to improve a system's performance, correct problems, enhance security, or address user requirements. To ensure modifications do not disrupt operations or degrade a system's performance or security, organizations should establish appropriate change management standards and procedures.

Routine changes are not as complex as major modifications and can usually be implemented in the normal course of business. Routine change controls should include procedures for requesting, evaluating, approving, testing, installing, and documenting website modifications. Maintaining accurate, up-to-date hardware and software inventories is a critical part of all change management processes. Management should carefully document all modifications to ensure accurate system inventories. Management should coordinate all technology related changes through an oversight committee and assign an appropriate party responsibility for administering software patch management programs. Quality assurance, security, audit, regulatory compliance, network, and end-user personnel should be appropriately included in change management processes. Risk and security review should be done whenever a system modification is implemented to ensure controls remain in place. For maintenance of the website:

- The database has to be updated regularly according to new available information.
- Redundant and false information must be removed from the database.
- Newer version of PHP and MYSQL can be used for up gradation of website and to improve the overall performance of the system

FUTURE SCOPE AND CONCLUSION

Electronic commerce or ecommerce is a term for any type of business, or commercial transaction, that involves the transfer of information across the Internet. It covers a range of different types of businesses, from consumer based retail sites, through auction or music sites, to business exchanges trading goods and services between corporations. It is currently one of the most important aspects of the Internet to emerge.

12.1 Working of E-COMMERCE

The consumer moves through the internet to the merchant's web site. From there, he decides that he wants to purchase something, so he is moved to the online transaction server, where all of the information he gives is encrypted. Once he has placed his order, the information moves through a private gateway to a Processing Network, where the issuing and acquiring banks complete or deny the transaction. This generally takes place in no more than 5-7seconds..

There are many different payment systems available to accommodate the varied processing needs of merchants, from those who have a few orders a day to those who process thousands of transactions daily. With the addition of Secure Layer Technology, E-C0 mmerce is also a very safe way to complete transaction

12.2 CONCLUSION

Choosing the right ecommerce solutions is extremely important for business development. Consider investing your time and research in builderfly.com. It is a complete ecommerce solution that lets you take any offline business online, create a fully customizable online store, and create a personalized mobile app. The 14-day free

trial lets a user explore the extensive features of Builderfly and once upgraded to a suitable plan, they can even connect an already existing domain name. To choose an online platform or to not, completely depends on your business requirements and company revenue. Your ecommerce store should not limit selling online due to lack of efficiency.

REFRENCES

- [1] Albert H., Judd, Rivers, (2006) "Creating a winning E-Business", Wagner Course Technology Thomson Learning, pp. 37-255
- [2] Alawneh A., and Hattab E, (2007) "E-Business Value Creation: An Exploratory Study, Proceedings of the Seventh International Conference on Electronic Business", Taipei, pp. 181-188.
- [3] Alawneh A., and Hattab E (2009). "International Arab Journal of eTechnology", Vol. 1, No. 2, pp. 1-8
- [4] Amit B. and Steve M. (2007), "How to Plan E-Business Initiatives in Established Companies", Vol. 49, No. 1, pp. 11-22
- [5] Aranda-M., G. and Stewart, P. (2005), "Barriers to E-Business Adoption in construction international literature review", pp. 33-49
- [6] Ayo, Charles K. (2006). "The Prospects of e-Commerce Implementation in Nigeria, Journal of Internet Banking and Commerce", Vol. 11, No.3, pp. 68-75
- [7] Amar. K., Sohani, (2009), "Technology and Banking Sector", ICFAI University Press, pp. 1-39
- [8] Brahm C., (2009) "E-Business and Commerce Strategic Thinking and Practice", Houghton Mifflin, pp. 114-312.
- [9] Chiemeke, S. C., Evwiekpaefe, A. and Chete, F. (2006), "The Adoption of Internet Banking in Nigeria: An Empirical Investigation, Journal of Internet Banking and Commerce", vol. 11, No.3, pp 33-49
- [10] David W, (2001) "E-Commerce Strategy, Technologies and Applications", Tata McGraw Hill, pp. 3-143.
- [11] Daft, Richard L. (1982), "Bureaucratic Versus Nonbureaucratic Structure and the process of Innovation and Change", pp. 129-166
- [12] Earl, M. (2000), "Evolving the E-Business, Business Strategy Review", pp. 33-38
- [13] Eben.O (2003) "A Systematic Approach to E-Business Security", pp. 87-103 Hackbarth, G. & Kettinger W. J. (2000), "Building an E-Business Strategy: Information Systems Management" pp. 78-90.
- [14] Kalakota, R. and Robinson M. (1999), "E-Business: Roadmap for success", Addison-Wesley, 112-149 19
- [15] Karjaluoto H., Mattila M. (2002). "Electronic Banking in Finland: Consumer Beliefs and Reactions to a New Delivery Channel, Journal of Financial Services Marketing", Vol. 6, No. 4, 2002, pp. 346–361
- [16] Laudon, K. and Traver, C. (2008), "E-Commerce: Business, Technology, Society", 4th Edition, Prentice Hall, pp.48-67
- [17] Melao, N. (2008), "E-Business Processes and E-Business Process Modeling: A State-of-the-Art Overview", pp. 54-89

- [18] Mendo, F. and Fitzgerald, G. (2005), "Theoretical Approaches to Study SMEs E-Business Progression", Journal of Computing and Information Technology, Vol. 13, No. 02, pp. 123-136
- [19] Namita.R (2011). "Global Journal of Enterprise Information System", Vol. 3, No. 1, pp. 17-31
- [20] Peterson O,(2009), "Communications of the IBIMA", Vol. 8, Issue No. 3, pp. 175-190