A Complete Solution on Easy Shop Easy Life Save Your Valuable Time

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
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ABSTRACT

This web application is a great innovation to make people's life easier in shopping. The days of going out for shopping are over. you can buy everything from clothes to electronic products staying at home. This will save you time and money. Likewise, you will get rid from huge unnecessary hassles of come out from home. Technological advances have made people very comfortable. Online shopping is a big part of advanced technology. Most importantly, In the next few years, people will become completely dependent on online. We already known that several leaves of people are fond of buying anything from online shop. In this project we have shown you how an e-commerce website can make our life easier. We have also studied its future possibilities. The good news is this e-commerce website will have included new innovative features in the future. Everything has its downsides. So, there are some difficulties with online shopping. We also discuss about the downsides, However, the disadvantages are negligible compared to the advantages. Overall, online -based Shopping is a blessing for all of us.

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LIST OF ABBREVIATIONS

SWOT	Strengths, Weaknesses, Opportunities and Threats
SAP	Systems Applications and Products
POS	Point of Sale
HTML	Hyper Text Markup Language.
CSS	Cascading Style Sheets
PHP	Hypertext Preprocessor
SQL	Structured Query Language
SHTTP	Secure Hypertext Transfer Protocol
SEO	Search Engine Optimization
CPU	Central Processing Unit

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CHAPTER 1

INTRODUCTION

1.1 Project overview:

The activity for electronic commerce are both technological (under the tremendous pressure of innovation) and business oriented. This paper will highlight some guidelines for us to create an E-commerce Site based on E-commerce strategy.

E-Commerce is now seen as a reality for many businesses and a normal part of a business plan. The immediate benefits, in terms of cost savings, efficiencies and enhanced profitability are clear at every stage in the supply chain. (Zwass, 2001)

First of all we need to design a ER-Diagram for our website so that we can make our goal vary Clearly. Because executives of successful E-commerce companies need to be focusing on customers, markets, and competitive positioning, as well as on internal operations. Determination of a suitable E-commerce strategy begins with identification of the opportunities and risks. The task of tracking the changing environments, understanding customer groups, requires formulating strategies and planning their implementation.

So if we want to create a successful E-commerce site need to be focusing on customers, markets, and competitive positioning, as well as on internal operations and determination of a suitable E-commerce strategy begins with identification of the opportunities and risks. The task of tracking the changing environments, understanding customer groups, requires formulating strategies and planning their implementation.

The paper follows a structure of exploration of ideas about online presence, planning and defining the business goal setting and finally implementation and evaluation. Which help us to learn from mistakes, improve and set new goals as needed.

1.2 Project Background:

Nowadays, Most of the people depend on Internet. So they are trying to solve their problem using internet. Especially in shopping, because it is one of the major problems in realistic cities. . By e-Commerce, we mean buying and selling of products or services over electronic systems such as the Internet and other computer networks.

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more

business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace. (E. Turban, 1999)

The objective of this project is to develop a general-purpose e-commerce store where any product (such as books, CDs, computers, mobile phones, electronic items, and home appliances) can be bought from the comfort of home through the Internet. However, for implementation purposes, this paper will deal with an online book store.

An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction.

Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as a credit card number. An email notification is sent to the customer as soon as the order is placed.

1.3 Problem Domain:

E-commerce has grown fast in past few years and because of increasing security concerns in e-commerce space, e-commerce security has become one big component of information security framework. In the digital space, attackers kept on building new strategies to compromise e-commerce portals such as malicious code injection to steal sensitive credit cards data. There are several dimensions of e-commerce that can be compromised by security attacks such as authenticity, integrity, non-repudiation, availability, privacy, and confidentiality. Constant change in e-commerce technologies, as well as the attacker's strategies, have posted a demand for enhanced security solutions that are better able to protect E-Commerce users.

The purpose of this paper is to explore the latest trends and innovations in the field of E-Commerce security. E-commerce security being a major area of concern today with increasing adoption of the technology all over the world, an exploration of what security technologies or advances are happening to protect E-Commerce from security threats would be an essential area of study. In the UK, the number of E-Commerce users has grown to 92% of the population and which puts a huge number of people at risk if E-Commerce platforms are not well protected. (Timmers, 2000)

1.4 Project 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. (Computers in Industry, 2008) 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:

The goal of the business is to reduce expenses to improve their income. Automating the ecommerce business can help in reducing the management cost significantly. Moreover, the right use of digital marketing can help in reducing the cost spent on driving customers to such an extent that businesses can bring customers for free of cost.

ii. Developing business relations:

With ecommerce as the primary use, business development can be easily achieved. The direct communication between a company and the customer, the business relationship can be boosted. Eventually, the ecommerce market shall be expanded.

iii. Providing a unique customer experience:

Uncountable ecommerce businesses are functioning out there in the market. When a customer searches for a certain product (for instance, shampoo), they will probably click on the first three links that are shown on the Google Search Engine Results Page. All the rest links are either avoided, never seen, or are visited by a few. This itself shows the competition in the ecommerce market. One of the best ways to stand out from the crowd is by providing a unique customer experience. This includes giving a personalized experience to each customer or visitor of your online store, website, or mobile app. Some other pointers to consider are round the clock customer service, immediate responses to the queries rose, engaging with the customers, and so on.

iv. Increasing the number of loyal customers:

Customers are the core of all business strategies. Therefore, ensuring the great customer experience is of prime importance for the growth of the business. You need to meet your customers where they spend their time. More than 60% of consumers look for purchasing goods and services online. If you meet your customers where they are already active, the chances of them, interacting with your business increases two folds. You can increase the number of loyal

customers by giving the best experience to your already existing customers as well as bring in newer customers.

v. Boosting the efficiency of services:

With the continually evolving technology, we need to enhance the efficiency of our services. By choosing an online ecommerce platform to create an online store, we can efficiently reduce the cost of managing and selling online. we have various opportunities to boost the efficiency of our service that eventually enhances the revenue earned. By reducing the delivery time, we can witness happy customers getting back to our business two times faster. Another way is to provide our customers with automated services such as status update, invoice creating, chat support, etc. When we update our efficiency of delivering products or services to our customers, we are creating a strong online presence that helps us sell more.

vi. Developing relevant target:

Developing relevant traffic for an ecommerce business is a common objective. Whether an ecommerce website or an online store, building traffic is one of the most important objectives. However, we should know that not all traffic is useful for our business. If we are successfully creating traffic for our ecommerce site or store, but most of the people in the traffic do not require the products or services we provide, the traffic is not causing any good to your business. For instance, our marketing strategies were attractive enough for teenagers; our business would not be receiving any boost in sales. Therefore, along with boosting our traffic, we need to analyze our traffic. Here comes the need for collecting customer data. Collecting customer data include demographics such as age, location, and gender, customer interests, browsing history, browser history, and so on. By saving these data, we can aim in targeting the relevant market.

vii. Making responsive ecommerce website:

With the increasing use of smart phones for shopping online, it has become more than mandatory for ecommerce businesses to go mobile. Apart from creating a native mobile app, like the one offered from Builder fly, you need to create a responsive ecommerce website. It is one of the major objectives of all leading ecommerce businesses. By responsive, it means to create a website that can be viewed from any devices of varying screen size, equally. Studies say that Google may next rank a website based on its mobile website. It means that any website that has a responsive design would be ranked on top of the website that does not have one. Making your ecommerce website responsive can help you optimize it. A mobile-friendly website earns more traffic than the rest.

viii. Increasing sales:

The objective of increasing sales will always remain continuous and constant for an ecommerce business. In order to thrive in the ecommerce industry, we need to boost our sales, constantly. All other objectives are zeroed down to make this objective happen. However, we also need to look into our past store analytics and figure out the marketing tactics that have worked well for us to increase sales. Although these objectives could help us in gaining sales, nothing can beat the tried and tested marketing tactics for our business. For instance, the products that are sold the most, ideally the best seller can be used for remarketing and grab more attention. Any marketing strategy we used earlier including the email targeting and traffic boosting tactics must be revisited and worked upon to increase sales. Based on the above-mentioned objectives and the marketing tactics that actually worked for us, we need to design our marketing plan. Only we can decide what is perfect for our business and what is not.

1.5 Project Scopes

The role of internet in modern marketing is an aspect of great importance. Our lives have become a lot dependent on the WORLD WIDE WEB as it comes in use from the very small need of sending a mail to large business applications. As the modern technologies have shown a fast development, so is the need of people for a more comfortable and luxurious life style. The internet has played an important role in this case as now anything and everything is available at the fingertip anytime, anywhere. A most common example of technological advancement in business world is the online marketing. Day by day a wide number of online business firms are coming up that offer attractive deals at a fair price. They are becoming a great success too. How these companies make their way in the business world is a question of great interest .Of course hard work and sincerity definitely lies behind any successful company. Rather another key factor that deserves the credit of this success goes to the way a company represents itself in the online marketing platform or in other words the ecommerce web design.

The prime factor behind ecommerce website design process is the team of talented designing and developing personnel, who are completely dedicated to the course of web development and marketing. Some standard methodologies and techniques are to be followed to obtain a better performance. The whole process of developing is divided into different cycles. It helps to determine the software and hardware tools required and to form the proper team of designers. The scope of this ecommerce website design is really high. With a website there is no limit for your

reach. You can reach audience around the globe without taking any extra effort. Your website remains alive and alert all the time and even if your physical shop is left closed, it is the matter of least concern. If the website is designed perfectly, even from search engines you will get lots of visitors and a well designed website is surely more lovable by the search engines. The impact of websites is huge on business and it reciprocates the reputation of your business. It is vital that your ecommerce web design is accordingly to your business nature as else it will seem weird. You can increase the effectiveness of your business website by adding features which suits your business and avails leverage to it. To exploit the scope to maximum, your service provider must be expert in analyzing your business and implementing techniques which help you to override your competitors.

Ecommerce web design is really a great boon for those who know to utilize it to the maximum. In the online world you will be explored to many service providers. But the point is in hiring the best one. For this you may seek the opinion from an expert on whom you can rely. Make proper inquires and comparisons. Also visit their websites and check their portfolio before making the final decision regarding your selection.

CHAPTER 2

RELEVANT LITERATURE

2.1 e-Commerce:

Electronic commerce is dramatically changing the traditional way of doing business and moreover, the growth of the Internet is creating new business opportunities. Today many products, processes and organizations are complex systems that have to be designed in order to meet specific customer requirements. In this paper, axiomatic design is used to provide a framework for the e-commerce applications in electronic retailing. The high level goals and strategies form the roots of the decomposition tree for the e-commerce strategy, and the process continues to zigzag back and forth between the goal domain and the strategy domain until the design is completely decomposed. The structured design and decomposition method assures that the decisions made in the strategy development are made in proper sequence. The model developed in this paper can be used in the strategy formulation of an Internet business, as well as in the organizational analysis of an e-commerce strategy in order to identify goals without corresponding strategies or strategies that have no corresponding goals. (MARTIN, 2002)

2.2 SWOT Analysis:

A SWOT analysis is a technique to find out the internal and external factors that make a company successful or not. The objectives of a SWOT analysis are to build on your strengths and minimize our weaknesses. You will want to quickly take advantage of opportunities that present themselves and try to mitigate outside threats. In a market that changes as fast as ecommerce, such an analysis should occur at least once a year. If you take some time to carry out a SWOT analysis of your business and the competition, you'll be able to come up with a strategy to set you apart from the rest of the shops in your market niche. But there's more to SWOT than just that. You can also:

Spot opportunities to give your business a boost in the right time by making optimal decisions. Identify your own weaknesses before they jeopardize the profitability of your business. Locate threats in order to minimize or even neutralize them. (Hassan, 2014)

2.3 e-Commerce Model

Creating an e-commerce solution mainly involves creating and deploying an e-commerce site. The first step in the development of an e-commerce site is to identify the ecommerce model.

Depending on the parties involved in the transaction, e-commerce can be classified into main 4 models. (tutorialspoint.com)Business-to-Business (B2B) Model, Business-to-Consumer (B2C) Model, Consumer-to-Consumer (C2C) Model, Consumer-to-Business (C2B) Model. These are discuss as follows:

i. Business-to-Business (B2B) Model

This is said to be the fastest growing sector of e-commerce. The B2B model is predicted to become the largest value sector of the industry within a few years. The B2B model involves electronic transactions for ordering, purchasing, as well as their administrative tasks between houses. It includes trading goods, such as business subscriptions, professional services, manufacturing, and wholesale dealings. Sometimes in the B2B model, business may exist between virtual companies, neither of which may have any physical existence. In such cases, business is conducted only through the Internet. The main two advantages of the B2B model such as it can efficiently maintain the movement of the supply chain and the manufacturing and procuring processes, and it can automate corporate processes to deliver the right products and services quickly and cost-effectively.

ii. Business-to-Consumer (B2C) Model

The B2C model involves transactions between business organizations and consumers. It applies to any business organization that sells its products or services to consumers over the Internet. These sites display product information in an online catalog and store it in a database. The B2Cmodel also includes services online banking, travel services, and health information. The B2C model of e-commerce is more prone to the security threats because individual consumers provide their credit card and personal information n the site of a business organization. In addition, the consumer might doubt that his information is secured and used effectively by the business organization. This is the main reason why the B2C models not very widely accepted. Therefore, it becomes very essential for the business organizations to provide security mechanisms that can guarantee a consumer for securing business information.

iii. Consumer-to-Consumer (C2C) Model

The C2C model involves transaction between consumers. Here, a consumer sells directly to another consumer. Online auction Web sites that provide a consumer to advertise and sell their products online to another consumer. However, it is essential that both the seller and the buyer must register with the auction site. While the seller needs to pay a fixed fee to the online auction

house to sell their products, the buyer candid without paying any fee. The site brings the buyer and seller together to conduct deals. Any buyer can now browse the site of www.ebay.com to search for the product he interested in. If the buyer comes across such a product, help aces an order for the same on the Web site of eBay. EBay now purchase the product from the seller and then, sells it to the buyer. In this way, though the transaction is

between two customers, an organization acts as an interface between the two organizations.

iv. Consumer-to-Business (C2B) Model

The C2B model involves a transaction that is conducted between a consumer and a business organization. It is similar to the B2C model, however, the difference is that in this case the consumer is the seller and the business organization is the buyer. In this kind of a transaction, the consumers decide the price of a particular product rather than the supplier. This category includes individuals who sell products and services to organizations. In addition to the models discussed so far, five new models are being worked on that involves transactions between the government and other entities, such as consumer, business organizations, and other governments. All these transactions that involve government as one entity are called e-governance.

v. The various models in the E-Governance scenario are:

a) **Government-to-Government (G2G) model:** This model involves transactions between 2 governments. For example, if the Indian government wants to by oil from then Arabian government, the transaction involved are categorized in the G2G model.

b) **Government-to-Consumer (G2C) model:** In this model, the government transacts within individual consumer. For example, a government can enforce laws pertaining to tax payments on individual consumers over the Internet by using the G2C model.

c) **Consumer-to-Government (C2G) model:** In this model, an individual consumer interacts with the government. For example, a consumer can pay his income tax or house tax online. The transactions involved in this case are C2G transactions.

d) **Government-to-Business (G2B) model:** This model involves transactions between government and business organizations. For example, the government plans to build a flyover. For this, the government requests for tenders from various contractors. Government can do this over the Internet by using the G2B model.

CHAPTER 3

METHODOLOGY

3.1 Proposed Methodology

The software methodology that chosen to develop this System is Throwaway Prototyping. Throwaway Prototyping Model is especially useful when the project needs are vaguely and poorly laid out. It functions by providing proof that something can indeed be done in terms of systems and strategies. Throwaway Prototyping Model is used for certain projects and will eventually be discarded after the project has been completed. It is also known as Close-Ended Prototyping. Throwaway Prototyping Model is implemented through the creation of prototypes and thereafter gathering feedback from end users to check if they find it good or not. This is valuable to get a better understanding of the actual needs of customers before a product or service is developed and delivered. The reason to choose Throwaway Prototyping to develop this system is due to it can develop a new system in a short time compare with other software methodology. Other than that, user might not clearly understand what they really require in the system.

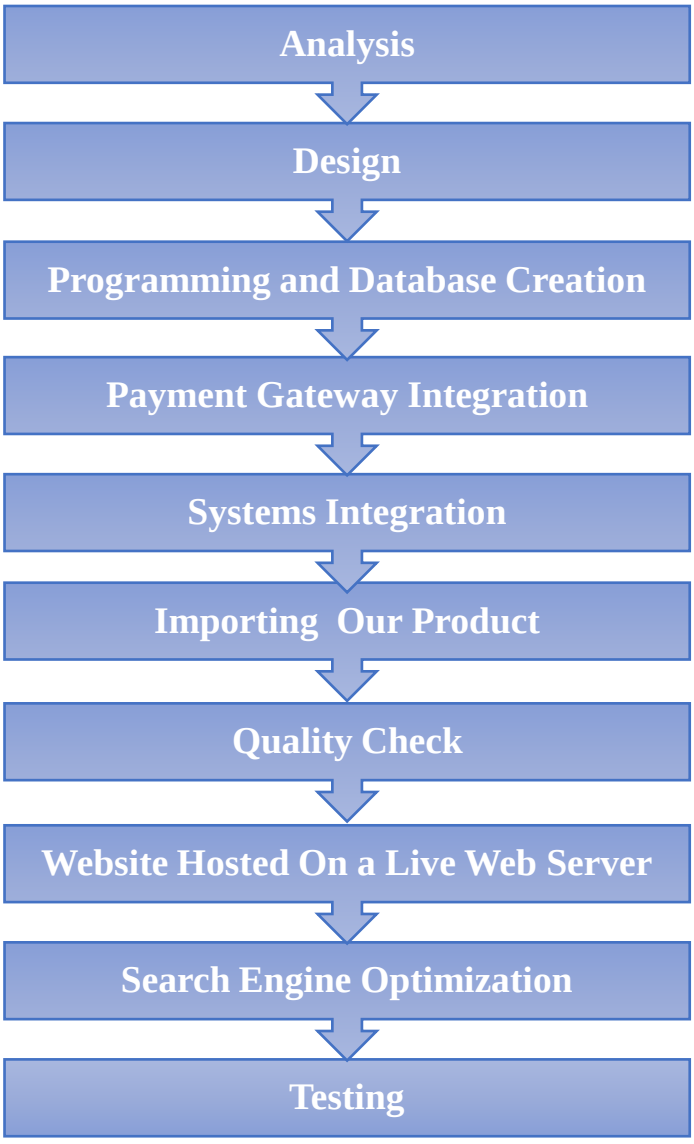


Figure3. 1:- Diagram of Throwaway Prototyping processes

Therefore, Throwaway Prototyping is where the objective to develop the system rapidly and to

understand the user's requirements and hence develop a better requirements definition for the system. (Maswera, 2007)

3.2 Analysis

After a thorough study of our specific business needs, our Sales and Marketing team will work together with us to review our business requirements, execute an analysis our competitors, explore technology options, and then will recommend what will be needed to best fulfill our business needs. This phase presents findings that include recommended features, order flow and guidance on overall site structure.

3.3 Design

Our UI designers review the site analysis document and create storyboards for the complete system starting from the home page, the storyboard pays special attention to product presentation, checkout process and access to support. At this stage we begin to see what our Ecommerce site will look like. This is the best time to suggest changes to the system as this stage can accommodate any and every change needed.

3.4 Programming and Database Creation

In this stage of the project, coding of all the processes is done and the backend database management tools are created. Here is where all the mock-ups are changed into real dynamic database-driven pages. Our programmers follow the guidelines that have been established in all of the previous steps, so their job is now much easier and goes quicker. This is one of the reasons behind our excellent cost-effectiveness and our higher quality.

3.5 Payment Gateway Integration

We can support all major payment gateways, including Secure Trading, World pay, PayPal and PayPal Pro, Sage pay, Google Checkout, Authorize.Net and others. We can assist us in setting up our payment gateway account with whichever gateway we choose to use, by using a 256 bit encrypted data channel.

3.6 Systems integration

Pulse offers automated bookkeeping software and ERP integration that will work well with several other systems, like Sage, QuickBooks, SAP, and Visual Manufacturing. POS systems are

provided to take care of a variety of tasks such as inventory management, invoicing, payroll, and even a few aspects of Customer Relationship Management. Full integration of these systems has an advantage of protecting our system from the errors that usually come from manual data transfer and entries. To integrated the system we need the following this procedure

3.6.1 System Planning

First of all, in planning phase the system for development will be identified and selected in order to solve the problem that discuss in chapter 1. Several studies are needed to have more clearly understanding about the system requirement. In addition, the SWOT analysis techniques will be used interpret the strength, weakness, opportunities and limitations of the basic requirement for the propose solution. Next, a project timeline will be created to have a clearly understanding of what should do according to the project life cycle. The project timeline typically is a graphic design showing a long bar labeled with dates alongside itself and usually events labeled on points where they would have In this semester, the Documentation for Final Year Project will be complete in seven week. The Documentation include of the design of the system, this will serve as a reference that allow me to develop the prototype of the proposed project more efficiency. Start from week 8, the prototype of the proposed project will start develop. After that, the full project development will start in the new coming semester and continue until the testing phase. The system will being test and the system will be debug to solve any error that found during testing. The feedback get from the system tester will collect and use as the reference in the system.

3.6.2 System Analysis

In system analysis phase, interview will carry out with potential user of the propose solution to gather and collect useful information for the propose system. Next, system requirement such as user requirement, software and hardware requirement will be generated and based on the system requirement, project scope and objective is defined.

3.6.3 System Specification

A System requirements specification document describes our ecommerce website in detail —

including who will do what,

how they will do it, &

what the business goals are.

It also serves as an agreement between you and the development agency, ensuring both sides are

on the same page. There are two main sets of requirements: **functional and non-functional.** Functional refers to the technical functionality of the website — what the website is supposed to do. Non-functional requirements describe how the website is supposed to perform a certain function. (Blossom, 1998)

3.6.4 Functional Requirements

In a nut shell, functional requirements describe what the software / website should do (the functions). Think about the core operations.

Because the "functions" are established before development, functional requirements should be written in the future tense. In developing the web application for the auto

car shop, some of the functional requirements could include:

The web application shall accept customer orders

The web application shall be able to cash a sale

The web application shall produce a receipt detailing a customers' purchase information and include name of customer, items purchased, cost of each item and total cost

The web application shall be able to produce weekly, monthly and yearly reports about sales

Notice that each requirement is directly related to what we expect the web application to do. They represent some of the core functions.

3.6.5 Non-Functional Requirements

Non-functional requirements are not concerned with the functions of the system. Instead, they look at the criteria to which the software or website is expected to conform to. Non-functional requirements can include things like response time and reliability. It can also be closely tied to user satisfaction.

Some non-functional requirements for the auto shop application could include:

The web application shall be easy to use by all employees including sales representatives and managers

The web application shall be available in several languages

The web application shall allow several sales to be made at the same time without downgrading performance

Notice how each requirement is not related to an operation or what the application should do. Instead, the main focus in this case is the ease of use and performance. That's the idea of non-functional requirements.

Without realizing it, developers always establish requirements before any coding begins. Whether it was a website for a client, or one for your own personal needs, identifying requirements was important. By establishing the functional and non-functional requirements, you have a guide to follow in ensuring that a website meets it specifications.

3.6.6 System Features Requirement

Customer feedback:- Customer can enter the feedback about the service. This helps the website owner to analyze the service and make necessary changes if needed. This also helps the Customer's to decide a particular item with a positive feedback.

Searching Item:- Customer can search a particular item according to name, price, category etc. This saves a lot of time of customer to order an item.

Offers for Customer:-The website owner can post various offers on the website. This will help the customer as well as the website owners.

Attractive Presentation:-The Menu is organized in an attractive way. There are images of every item which will make the view of customers more clear about how the item will look like after delivery. here is an attractive use of Various themes and color schemes.

Sorting an Item:-The food items will be sorted according to price, season and user ratings. This helps the customer to find or select an item which has a good rating and which is liked by a many customers. This also helps the website owner to make changes in a particular item if it has low ratings which improves the quality of food.

Time to Serve:-The menu includes the approximate time to be served of a particular food item. This will help the customer to select the food item accordingly.

3.6.7 Hardware & Software Requirements

Hardware

1.Intel ® Core i3 CPU 3.0 GHz or above

2. 8GM RAM

3. 500GB Hard Disk Drive (HDD))

4. Camera

6. Server

7. Mobile Device

In this project, a computer with sufficient processing power is needed. The computer is require for the developer to have project development such as coding for the website design, database creation

and modification. For the complete system to work, several hardware requirements must be met. On the other hand we need software to active Hardware. So we need to open our a server where we create a database in local host then we need to write our code so that we use any notepad and after complete the written code we need to show visual presentation of website which can done by the help of browser. So the following software are require for this project:

Software:

1. Browser
2. Notepad ++
3. Xampp
4. Internet
5. MySQL Server
6. Operating System : Window 8/Window 10
7. Programming Language :HTML, CSS, Java Script, PHP , SQL

3.6.8 DB Requirements:-

The database required for this system is MySQL database for storing details on the tablet itself. It also needs a database on the server which is handled by SQL. So the question is what is MySQL? MySQL is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language **(**SQL**).**SQL is the most popular language for adding, accessing and managing content in a database. It is most noted for its quick processing, proven reliability, ease and flexibility of use**.** MySQL is an essential part of almost every open source PHP application. Good examples for PHP & MySQL-based scripts are WordPress, Joomla!, and Drupal.

One of the most important things about using MySQL is to have MySQL specialized host. Here are some of the things Site Ground can offer:

i. We have long experience in providing technical support for MySQL-based web sites. Thanks to it our servers are perfectly optimized to offer the best overall performance for most MySQL applications.

ii. We offer a lot of free MySQL tools including CMS systems, forums, galleries, blogs, shopping carts and more.

iii.We support MySQL 5 and we provide unlimited MySQL databases on all our hosting plans.

3.7 Quality Check

Before we make our site live, our quality assurance engineers will put your system through a meticulous set of rules that includes usability and performance criterion. Final adjustments are made that prepare for a formal QC sign off and then our site is ready for live hosting.

3.8 Importing our Products

Our products can be seamlessly imported into the E-commerce system whenever needed. This can be done through the admin backend or by emailing us and asking us to set this up during the development stages at no additional cost. Customized imports and data migration from external systems can be handled through the tailored upgrades category.

3.9 Website Hosted on a live web server

Pulse Solutions has good working relations with many PCI compliant web hosting companies, so we can choose the hosting company you want. Following your selection, we will set up your account and upload your website for going live. During this process your domain name will be moved from your registrar.(css-tricks.com)

3.10 Search Engine Optimization

Our highly skilled SEO specialists will make specialized Meta tag rules for our products so we can actively compete against our industry category. we will receive a free listing with Google and Google Products, with Yahoo, and with Bing (which used to be MSN Live). The inbuilt Google submission tools will automate your weekly listing of all our sites products with all important Google Products. A Google analytics account will be set up for us and we will get a weekly email reporting on your site's activity stats.(https://searchengineland.com/)

3.11 Training

Pulse will continue to provide us with support and training after our site is live. If your site has a full-featured backend, we will be able to modify any and all aspects of our system as you wish. The interface is very intuitive and quite easy to use and fully understand. The Pulse consultants will guide you through the various features and give us appropriate training to empower us to do both basic and advanced adaptations to our shopping cart.

3.11.1 How to Start our e-Commerce Business?

There is a logical order in how you would go about building an e-Commerce online store. Although setting up an actual online store would probably take less than a day, researching, building, launching and growing a profitable e-Commerce business is a multi-layered process involving a number of steps and decisions.(www.ecommerceceo.com)

i. Choosing and Sourcing a product: The first step to starting an e-Commerce business is deciding what products you're going to sell. Finding a profitable idea can be hard Work, so be prepared to do some serious digging and thinking. It's essential that you choose products with healthy margins that will to sell, You'll need to decide how and where you're going to source the products. The four main methods of sourcing products and inventory are making, manufacturing, Wholesale and drop shipping.

ii. Conducting research and planning ahead : Our product idea will dictate which aspects of the market you need to research, but Some of the most important areas to look into will be your competition pricing strategy, and your unique value proposition. At this point, it is also a good idea to draft a business plan that will help us visualize our growth strategy and identify any potential threats or obstacles.

iii. Getting our brand right : Now that we have a promising product idea and a clear overview of the market, it's time to start thinking about the key elements of our store, such as our brand name domain name, brand guidelines, and our logo. Getting our brand right from the start can help accelerate the growth and conquer the hearts of potential customers, Before turning our attention to building the store, we should spend some time studying the basics of SCO, so that our business gets off to a good start.

3.11.2 Deciding How We will Sell

The actual setting up of our online shop can be achieved in two ways:

a) We can create an ecommerce store from scratch - this means either helping to develop it yourself or hiring a freelancer to it for us. It can take longer and cost more, But building a custom online store will guarantee 100% customization and give us all the decision making power. But building a custom online store will guarantee 100% customization and give us all the decision making power.

b) We can use an off-the -shelf e-Commerce platform like Shopify, which makes building an online store a quick and easy process. However, it will also mean less customization, as you will

need to choose from an existing pool of themes and tools provided by the platform. If you opt to run a drops hipping business, c-Commerce solution like Oberlo will allow us to get the store off the ground and start selling in as little as few hours.

v. Before Launching: At this stage, we will be interested in accessing the store on the World Wide Web. However, our key performance indicators upfront will help us track our progress and performance and fix any issues as they emerge. Other important things to take care of includes setting up our social media profiles, getting our email marketing ready, installing Google Analytics, doing keyword plan. Yes, that's a lot of work, but a good start is half the job done. When we complete the checklist, try running our store through the "Shopify store grader" to catch error if there are any.

vi. After launching. Welcome to the grind! This is where the real work begins. Having launched our online store, we should immediately move on to the promotion phase. Marketing our store and optimizing conversions will be our daily bread and butter from now on. We should experiment with regularly expanding or refreshing our inventory. It is a particularly easy thing to do for drop shippers, as they can import new drop shipping products in minutes, but it should remain a priority even if you're manufacturing or making the products yourself. Staying ahead of the curve will take some testing.

3.12 Benefits of e-Commerce

Indeed, with the internet becoming an essential requirement of everyday life, businesses are learning to take advantage of the numerous benefits of e-Commerce, the most notable benefits are explain in bellow:

Global marker: A physical store will always be limited by a geographical area it can serve, An online store, or any other type of e-Commerce business for that matter, has the whole world as its market. Going from a local customer base to a global market at no additional cost is really one of the greatest advantages of trading online. In 2018, 11.9% of global retail sales came from online purchases and this is only set to increase year on year. (Wikipedia, 2018)

Around -the clock availability: Another great benefit of running an online business is that it is always open. For a merchant, it's a dramatic increase in sales opportunities ; for a customer, it's a convenient and immediately available option. Unrestricted by the working hours, e-Commerce businesses can serve customers 24-7-365.

Reduced Costs. e-Commerce businesses benefit from significantly lower running costs. As there's

no need to hire sales staff or maintain a physical storefront, the major e-Commerce costs go to warehousing and product storage. And those running a drop shipping business enjoy even lower upfront investment requirements. As merchants are able to save on operational costs, they can offer better deals and discounts to their customers.

Inventory Management. e-Commerce businesses can automate their inventory management by using electronic tools to accelerate ordering, delivery and payment procedures. It's saving businesses billions in operational and inventory costs.

Targeted marketing. With access to such a wealth of customer data and an opportunity to keep an eye on customer buying habits as well as the emerging industry trends, e-Commerce businesses can stay agile and shape their marketing efforts to provide a better tailored experience and find more new customers. Just consider for a moment that you have a chance to address thousands of your customers by their first name; that is something already. (Wikipedia, 2020)

Serving niche markets. Running a niche brick-and-mortar business can be tough. Sealing a niche product to become popular is effortful. By tapping into a global market, on the other hand, e-Commerce retailers can build a highly profitable niche business without any further investment. Using online search capabilities, customers from any corner of the world can find and purchase our products.

Working from anywhere. Often, running an e-Commerce busines means that you don't need to sit in an office from 9 to 5 or suffer through a commute day- in and day-out. A laptop and a good internet connection is all it takes to manage your business from anywhere in the world.

CHAPTER- 4

SYSTEM DESIGN ON EASY SHOP EASY LIFE

4.1 Project Design

At the end of the system requirements collection, several relevant diagrams have been generated in order for the preparation of system model design. The design phase activities include the design of project architecture and graphical user interfaces. So we must need to Select a business model for our project Design.

In our project we are trying to use Business - to - Consumer (B2C) model. This model works like the following figure.

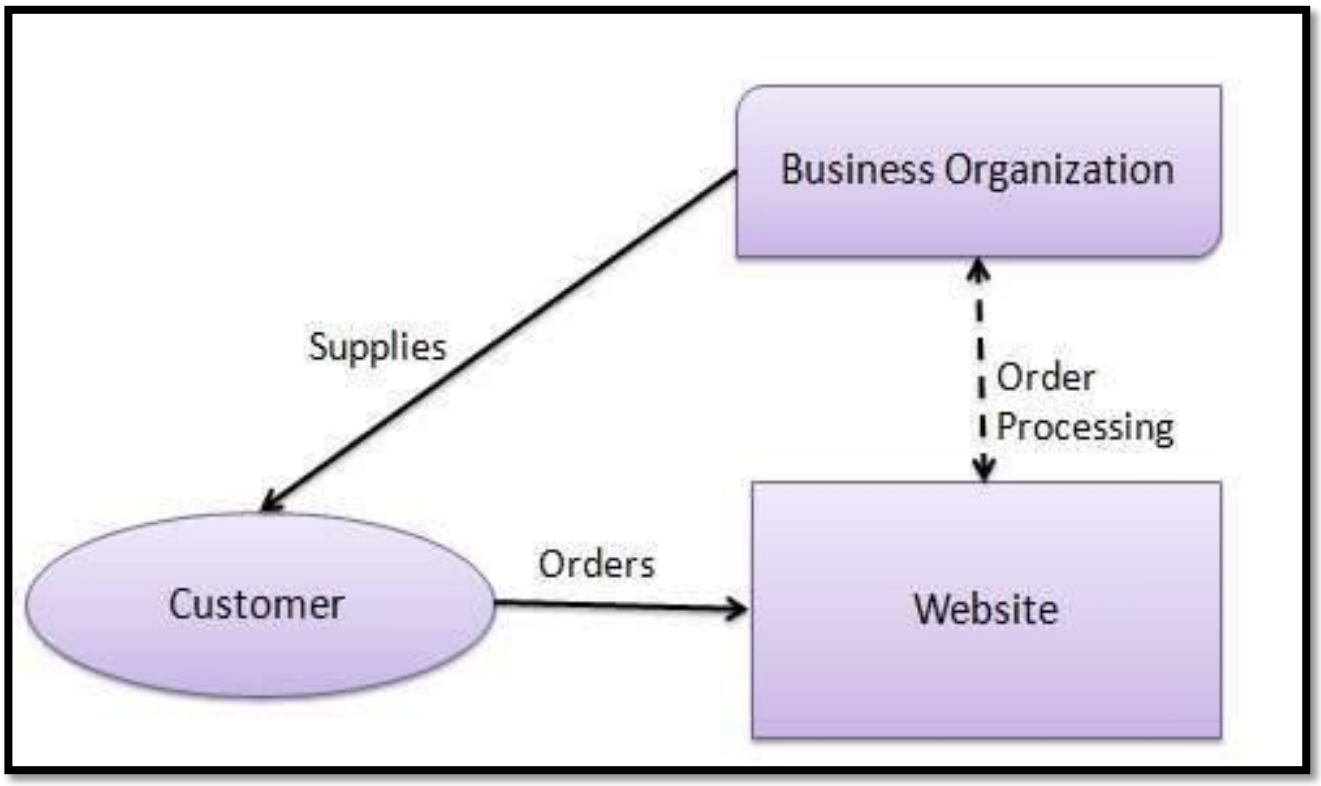


Figure 4. 1: Business- To- Customer(B2C)

Consumer Shopping Procedure

Following are the steps used in B2C e-commerce

A consumer −

determines the requirement.

searches available items on the website meeting the requirement.

compares similar items for price, delivery date or any other terms.

places the order.

pays the bill.

receives the delivered item and review/inspect them.

4.2 Project Gale:

In Our website we are try to provide the following features :

i. 24x7 Service availability − e-Commerce automates the business of enterprises and the way they provide services to their customers. It is available anytime, anywhere.

ii. Non-Cash Payment − e-Commerce enables the use of credit cards, debit cards, smart cards, electronic fund transfer via bank's website, and other modes of electronics payment. e-Commerce enables the use of credit cards, debit cards, smart cards, electronic fund transfer via bank's website, and other modes of electronics payment

iii. Advertising / Marketing − e-Commerce increases the reach of advertising of products and services of businesses. It helps in better marketing management of products/services. e-Commerce increases the reach of advertising of products and services of businesses. It helps in better marketing management of products/services.

iv. Improved Sales − Using e-Commerce, orders for the products can be generated anytime, anywhere without any human intervention. It gives a big boost to existing sales volumes.

v. Support − E-commerce provides various ways to provide pre-sales and post-sales assistance to provide better services to customers.

vi. Inventory Management − e-Commerce automates inventory management. Reports get generated instantly when required. Product inventory management becomes very efficient and easy to maintain. e-Commerce automates inventory management. Reports get generated instantly when required. Product inventory management becomes very efficient and easy to maintain.

vii. Communication improvement − e-Commerce provides ways for faster, efficient, reliable communication with customers and partners.

4.3 Project ER Diagram:

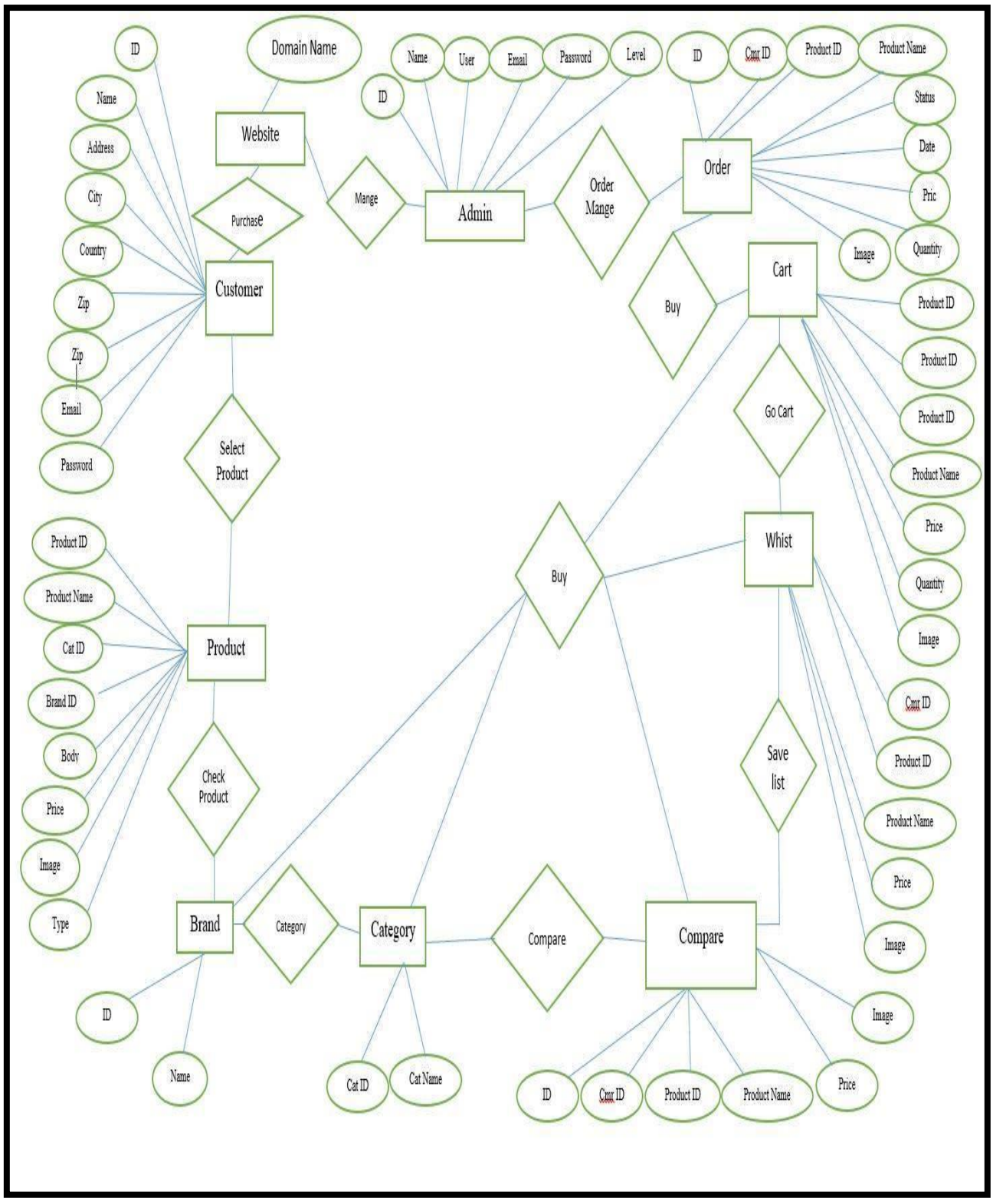


Figure 4. 2: Project ER Diagram

4.4 Use Case Diagram:

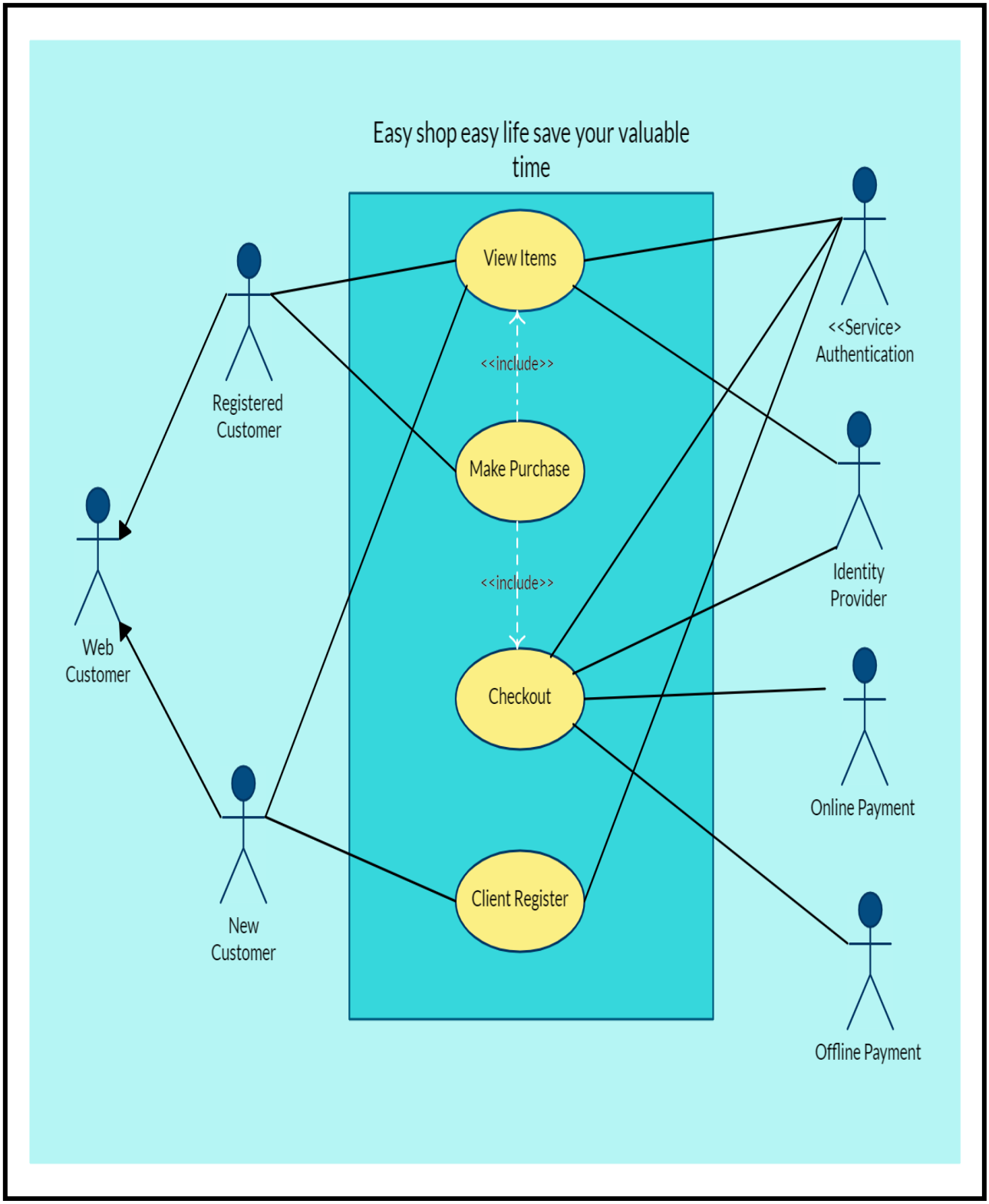


Figure 4. 3:**Use Case Diagram**

4.5 Login Form:

"Easy Shop Easy life Save a valuable Time" is a e-Commerce website where Login is used for define user. Where a user need to register a account to complete the login. after authorized a user can use this website for Shopping.. Otherwise user will not allow using this website for Shopping. Every user has to a unique password which will grant from authority, provide from this website.

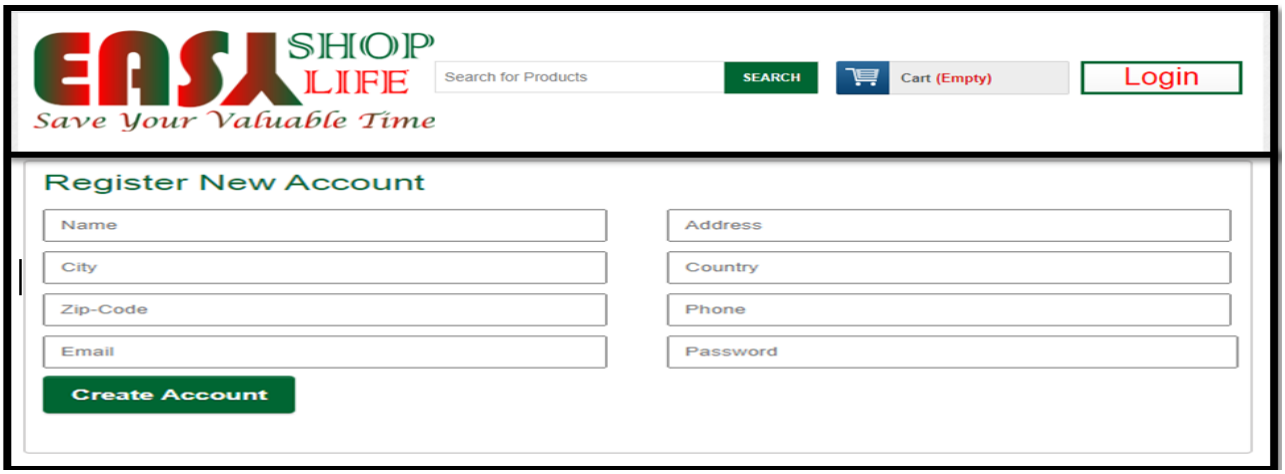


Figure 4. 4: Login Form

After registration a profile will Create for any Customer. This Profile Can be updated as necessary. Which looks like the image below:

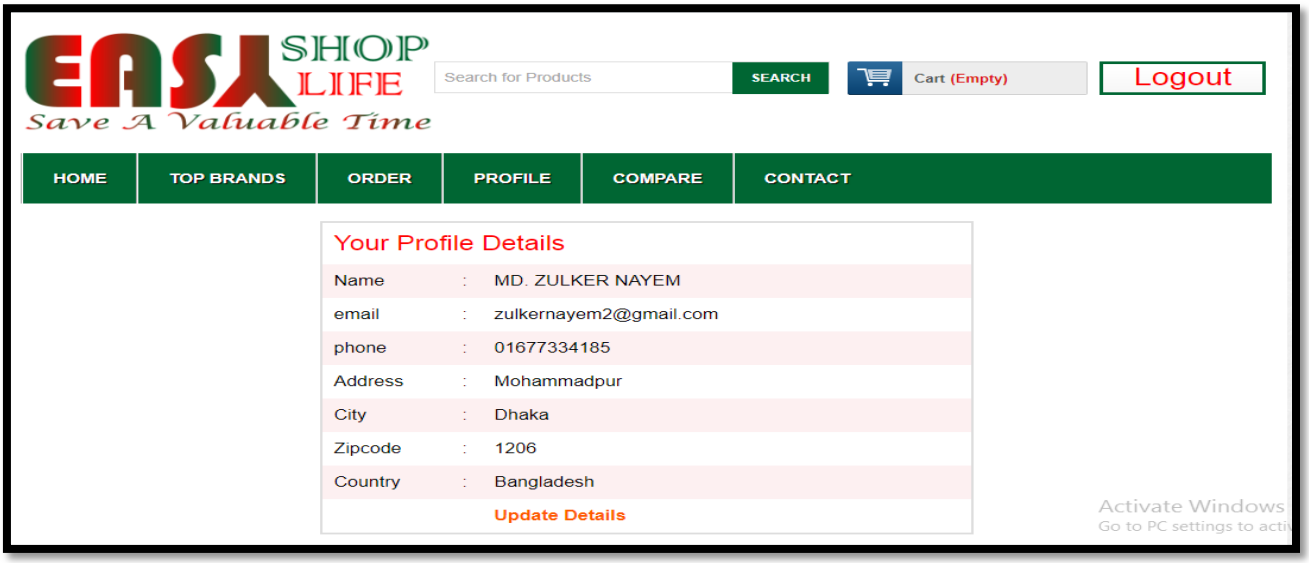


Figure 4. 5: Customer Profile

4.6 Sign up form:



Figure 4. 6: Sign up form

If anyone register an account in our website. Then they can easily sign in in our website. In this Case Email address and password are required for Sign In. If anyone register an account in our website. Then they can easily sign in in our website. In this Case Email address and password are required for Sign In. If anyone register an account in our website. Then they can easily sign in in our website. In this Case Email address and password are required for Sign In. If anyone register an account in our website. Then they can easily sign in in our website. In this Case Email address and password are required for Sign In. If anyone register an account in our website. Then they can easily sign in in our website. In this Case Email address and password are required for Sign In. The email address and password which is used during the website account registration must be used here.

4.7 Home Page:

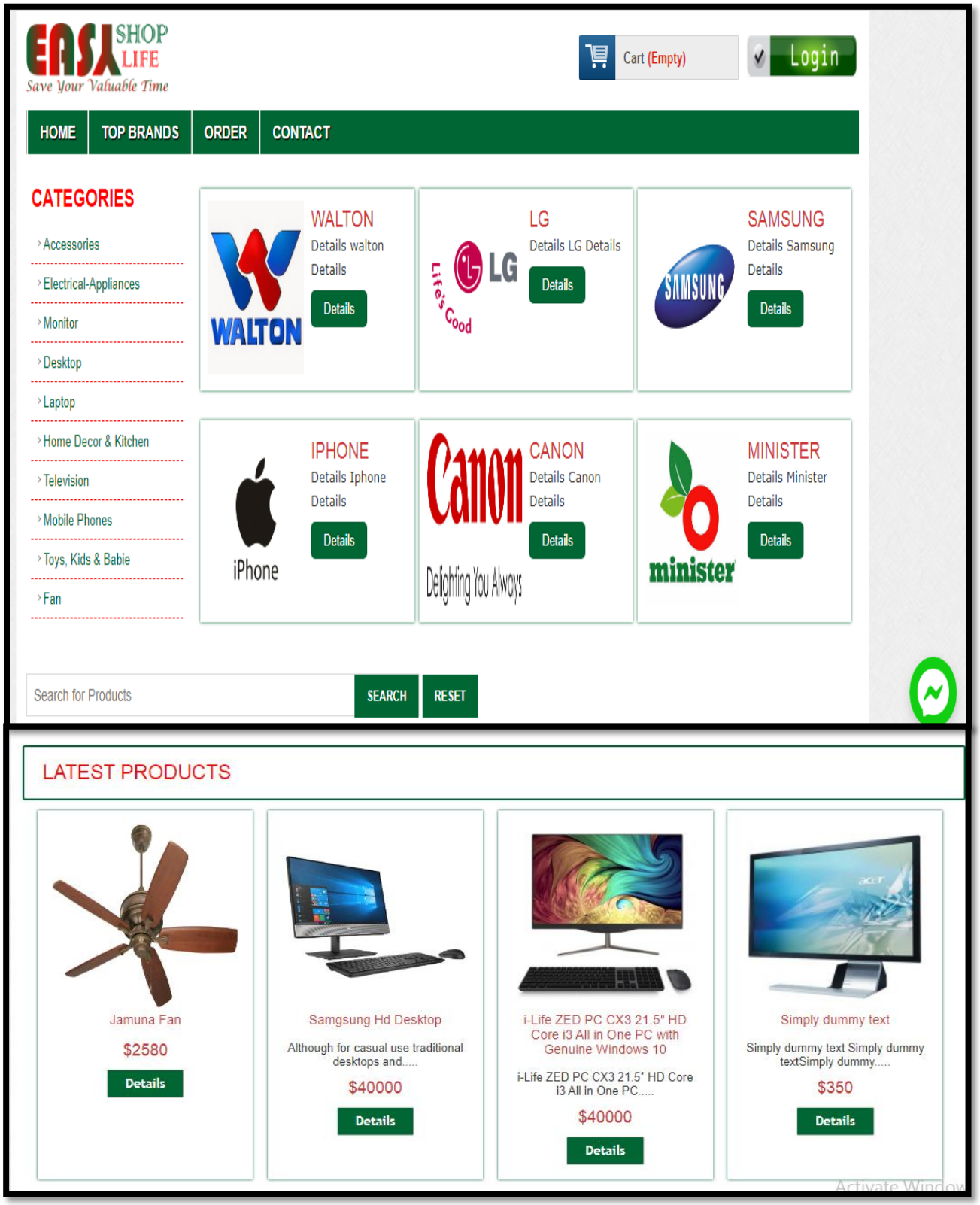


Figure 4. 7: Home Page

This is our website home page. The homepage of a website where visitors can find hyperlinks to other pages on the site. By default, the homepage on all web servers is Shope .Sadi.xyz. Anyone can search necessary product from this website and got detail information about the product. We are trying to make this page user friendly. Here anyone can Easily identify their necessary products by their Categories . On the other hand we are trying to show latest and Top Brand Product in this page which are More in demand. So anyone can easily find there necessary brand and latest product from this page and they can buy it with a few second. Which looks like the image below:

4.8 Search Product:

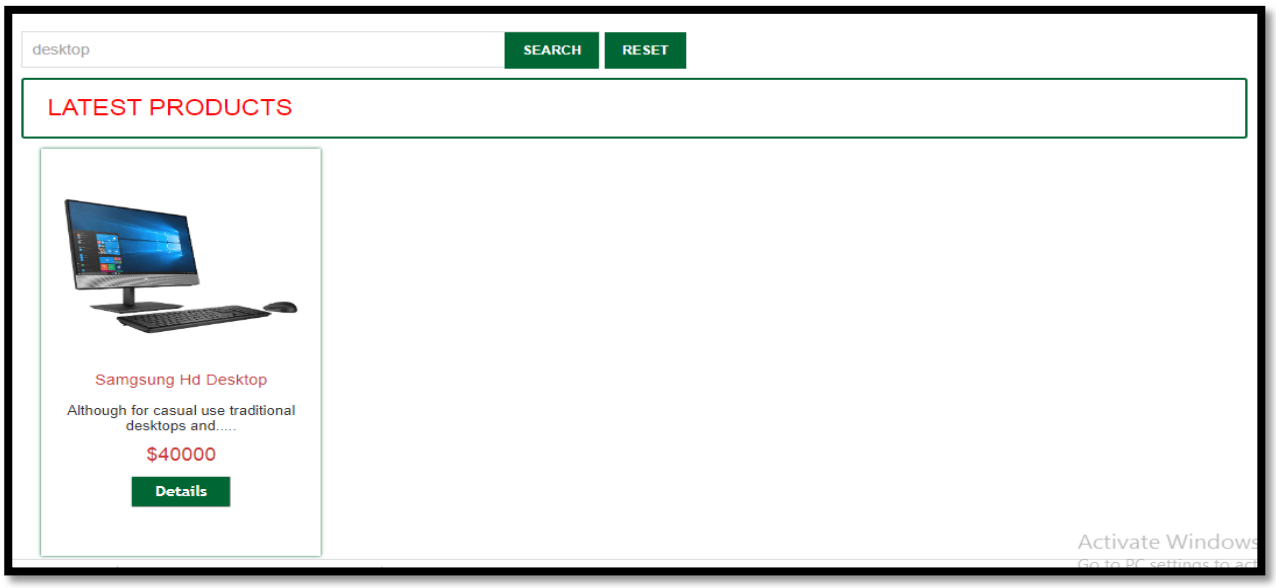


Figure 4. 8: Product Searching

In the e-Commerce Site Searching is one of the major part. Because there are countless products on e-Commerce websites. to find their own product, there is no alternative to search options.

4.9 Select Product:

In the following We can discuss the add to Cart(Selecting process) option about our Website:

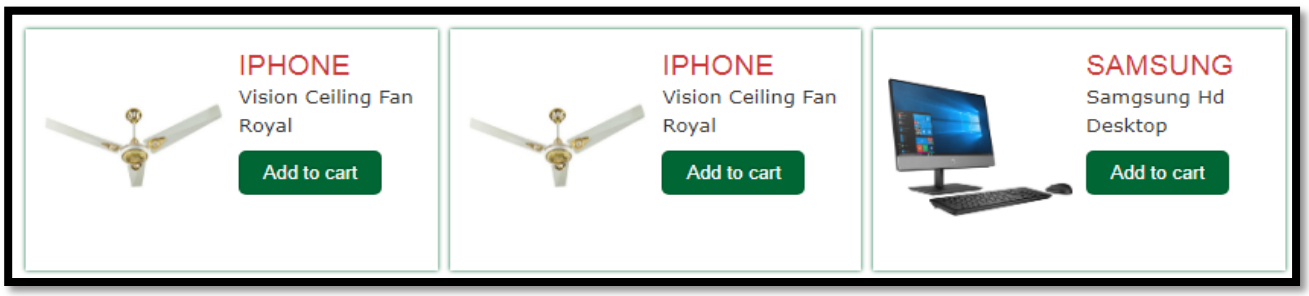


Figure 4. 9: Select Product

Any customer who signs in to our website must select the product in order to purchase or verify the product. Because if customer do not select the product, they will not be able to know the necessary information about the product. So if the customer wants to buy a product, he must select it by clicking on "Add to cart" at the bottom of the product.

4.10 Parches Process:

After Click on "**Add to Cart** " We can select the product for purchase. At this stage the Customer will see the category, brand, price and quantity of the products. Which looks like the image below:



Figure 4. 10: Parches Process:

Now customers will see two new fields in this section. one is **"Add to Compare"** & another is **"Save To List".** This is one of the most important field in this website .Some time Customer need to Compare two or more product. "Add to Compare" option provide to solve this problem. To understand the work of compare we need to see in the bellow image:

4.10.1Compare product:

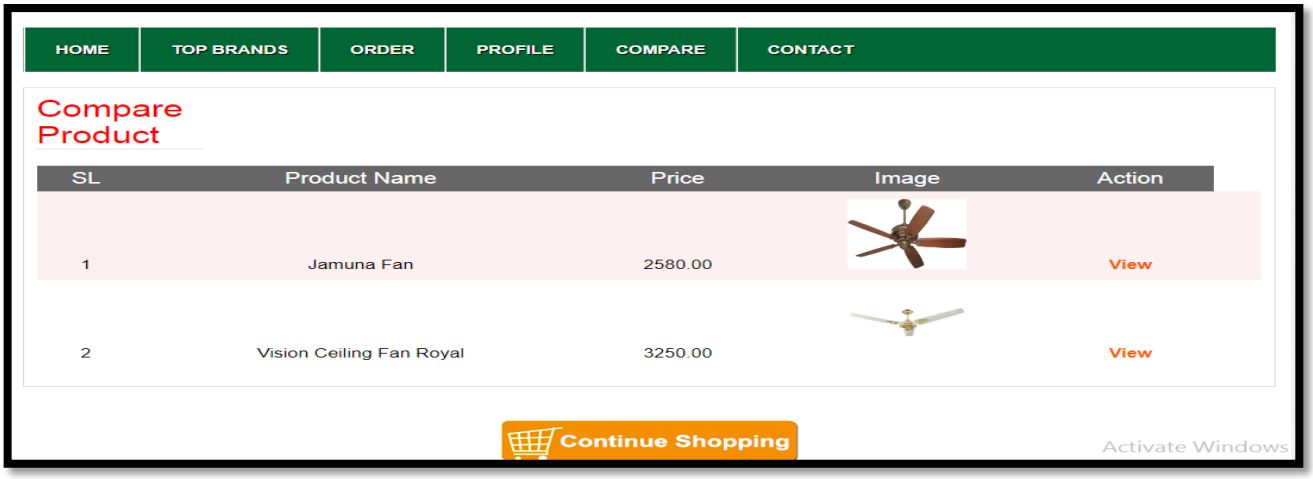


Figure 4. 11: Compare Product

If we see the following Picture we can easily understand that "Add to compare" option is a process where we can compare 2 or more product and purchase the best one. Some time it is not possible to do lots of things due to price. Using this process, the Customer can store the product in his Wish list and buy it later. Which looks like the image below:

4.10.2 Wish List:

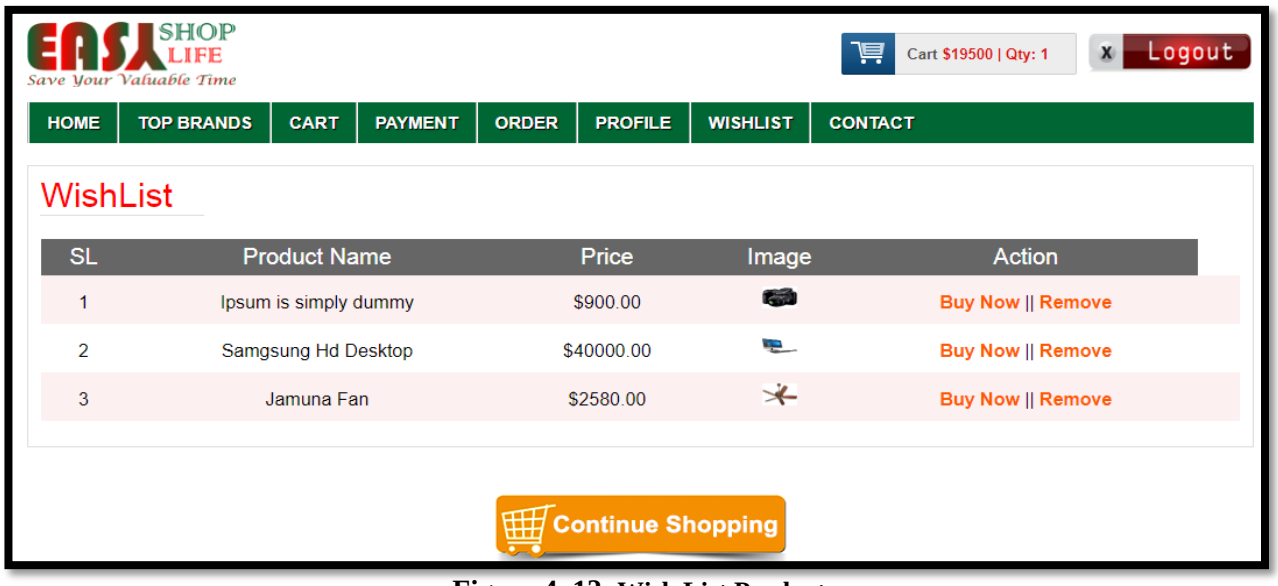


Figure 4. 12: Wish List Product

4.11 Payment Method:

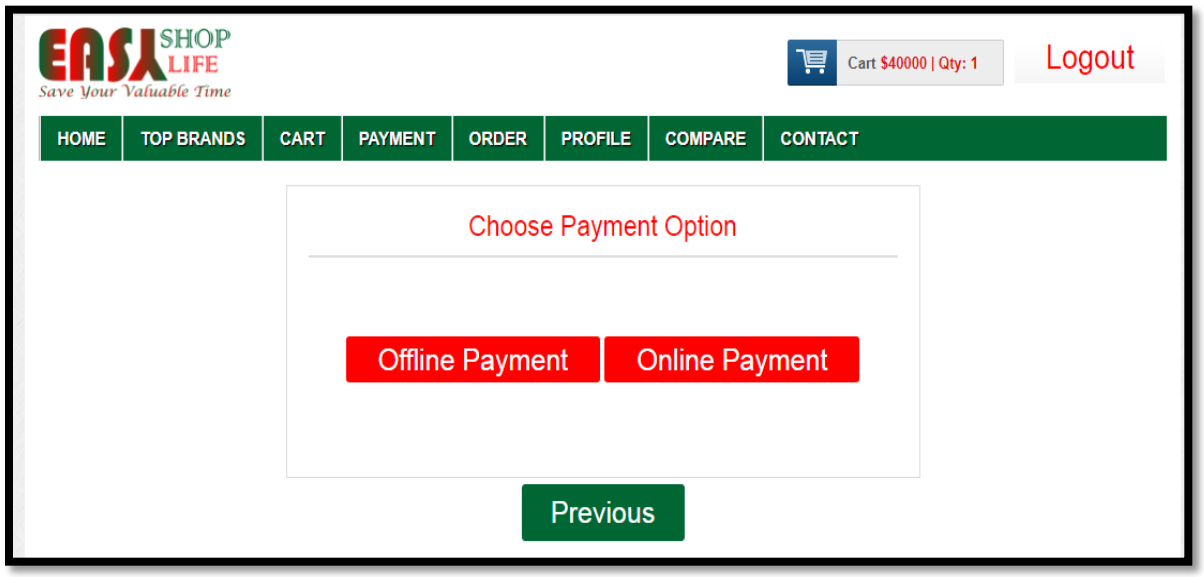
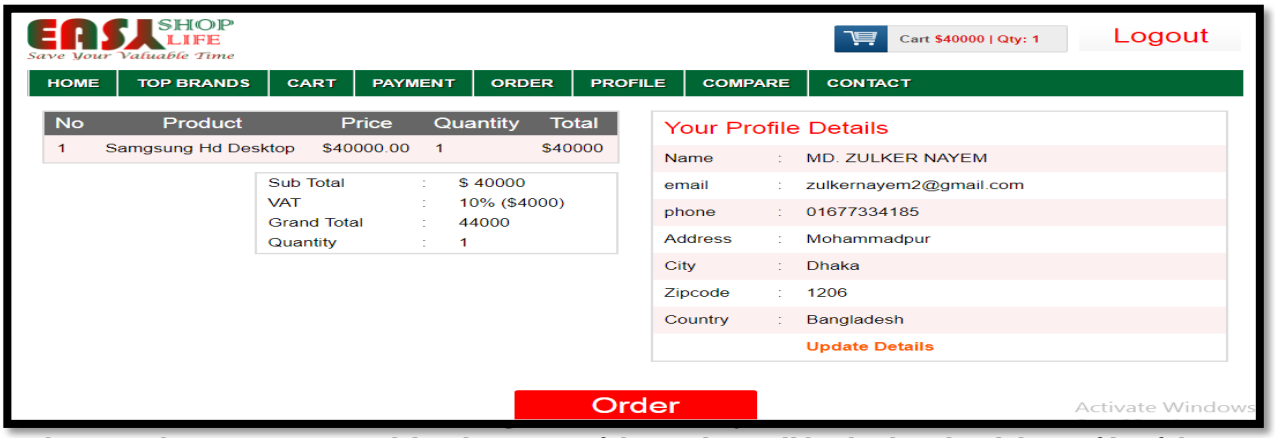


Figure 4. 13: Payment Option

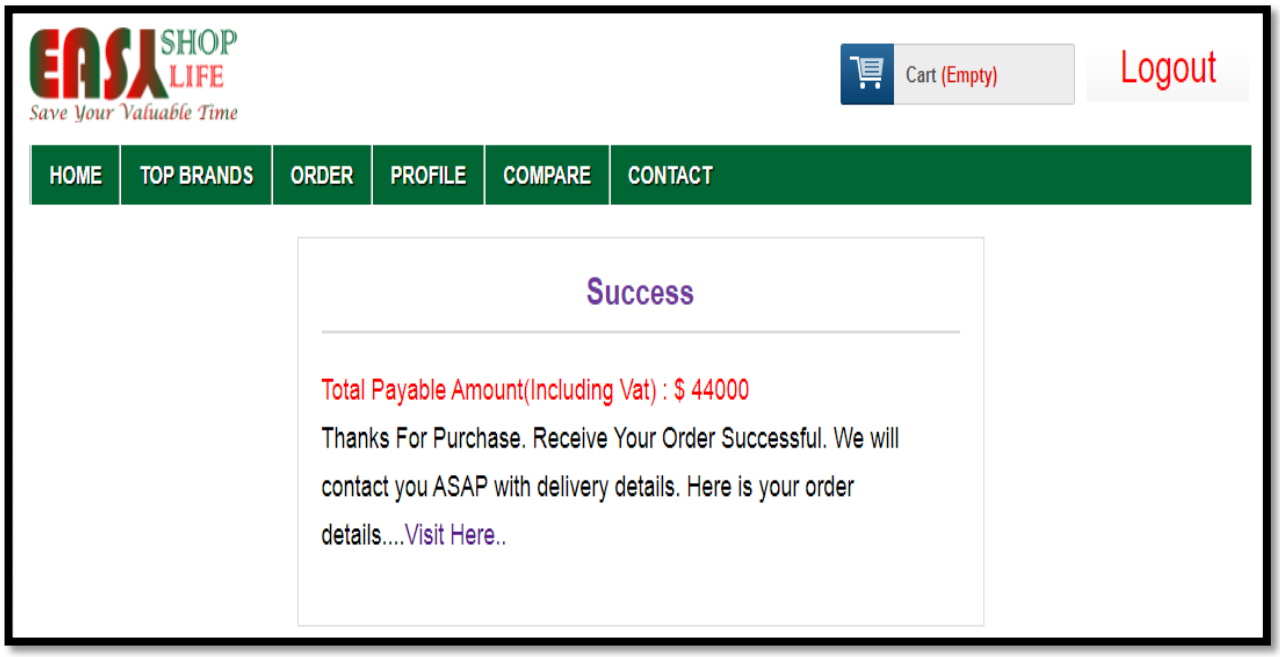
In the picture above we can see the process of payment..The payment system on our website is very simple. If someone wants to buy some product from our website and pay for it then he will get two options. One is offline and the other is online. The online and offline processes are described in the following.

4.11.1 Offline Payment:

The following page will display if the customer wants to pay offline.



In this case, the name, price, model and quantity of the product will be displayed and the profile of the customer who will select the product will be displayed also. If the customer see that everything is OK then he will click on the order option. Then the following massage shown you. In this way the price of offline product can be paid.



4.11.2 Online Payment:

Pricing products using different online platforms is an important part of ecommerce websites. We also have online payment arrangements on our website. If anyone ants, they can price the product through bKash. The process of paying the price is shown in the development.

Select Online Payment Option:

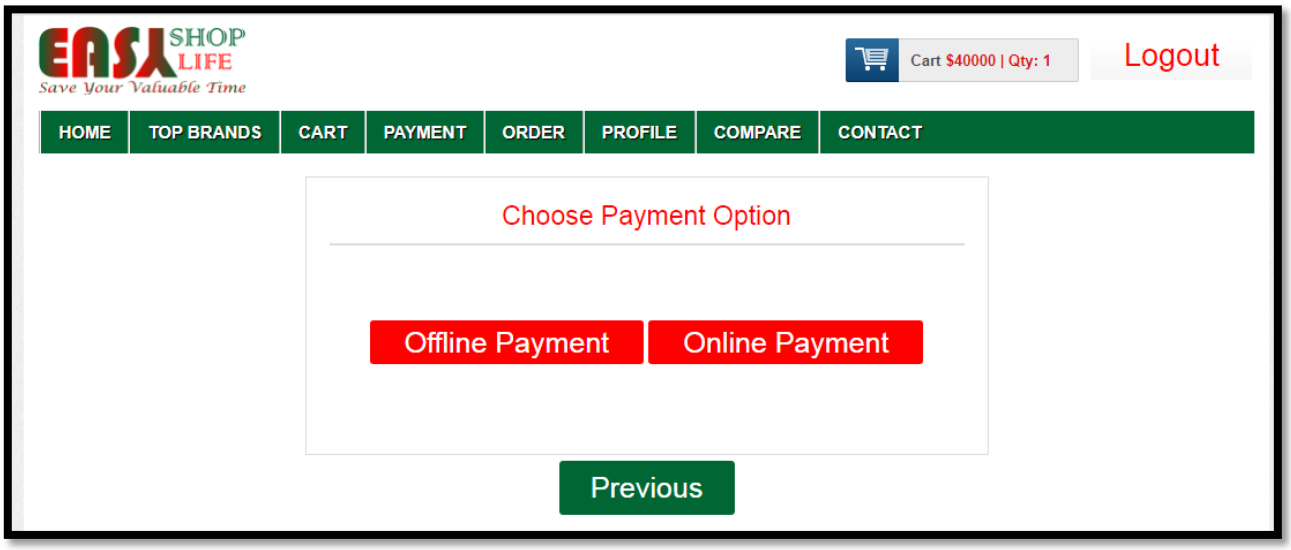


Figure 4. 14: Payment Option

First of all user need to select Online payment option from this Payment option. Then the following bkash Payment is shown user. Here User Click on bkash payment option . So that he can pay the price of the product using online.

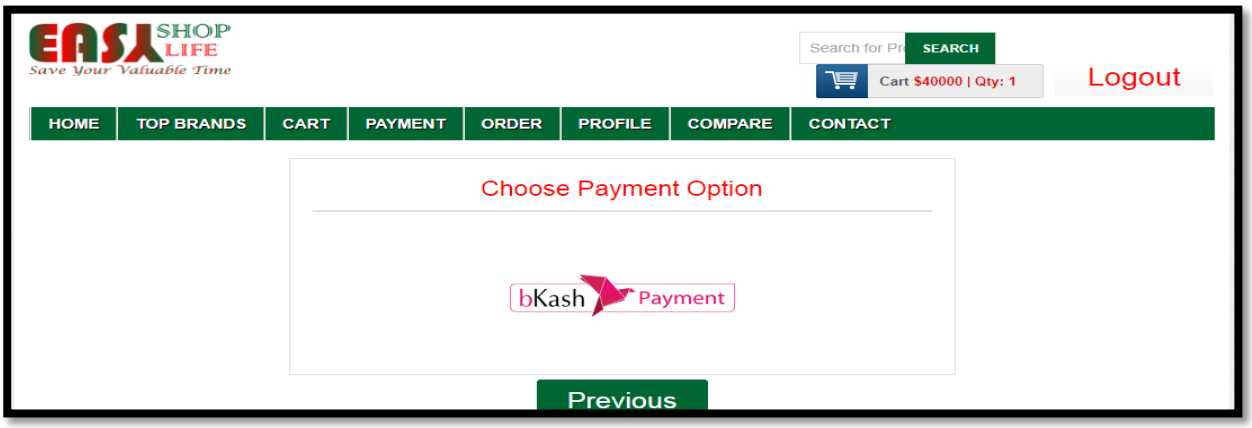


Fig 4.11.2: Payment Option

After Select the bkash payment option. user need to follow some guideline for complete the bkash payment option:

4.11.3 Enter Account Number:

At this stage users will be able to see the total amount spent and in order to pay this money the user must first enter the bKash account number where it says "Enter your account number". Then Click on Confirm. Which is like the following picture:

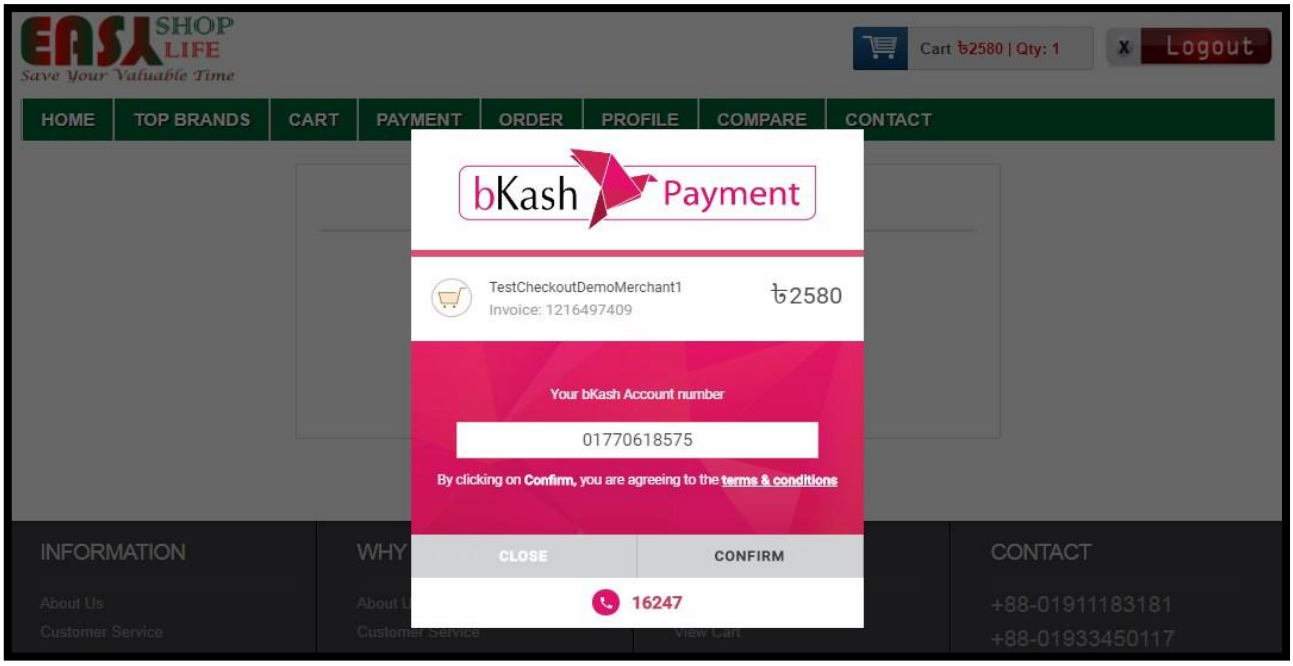


Fig 4.11.3: bkash Account No

4.11.4 Enter Verification Code:

After giving the bKash account number, a verification code will come to the user's mobile. User must have to give the code in "Enter Your Verification Code" option. and Click on Confirm. Which is like the following picture:

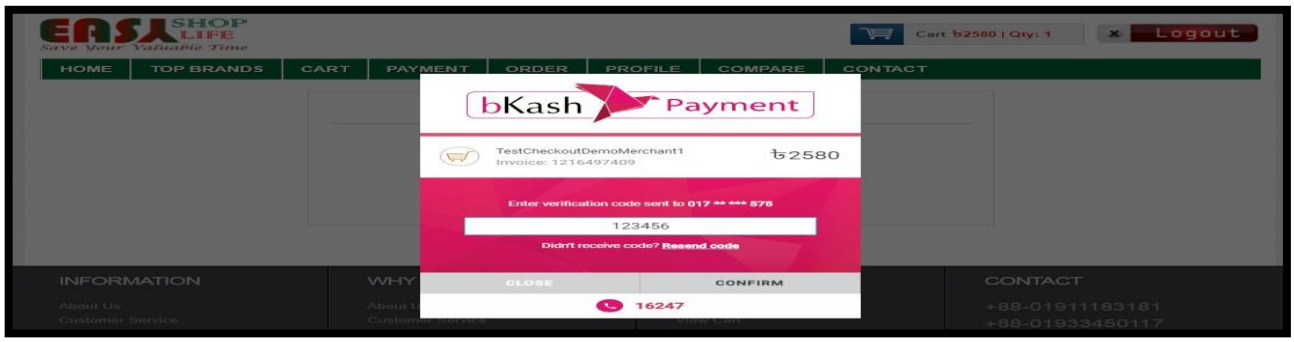


Fig 4.11.4: Enter Verification Code

4.11.5 Enter PIN**:**

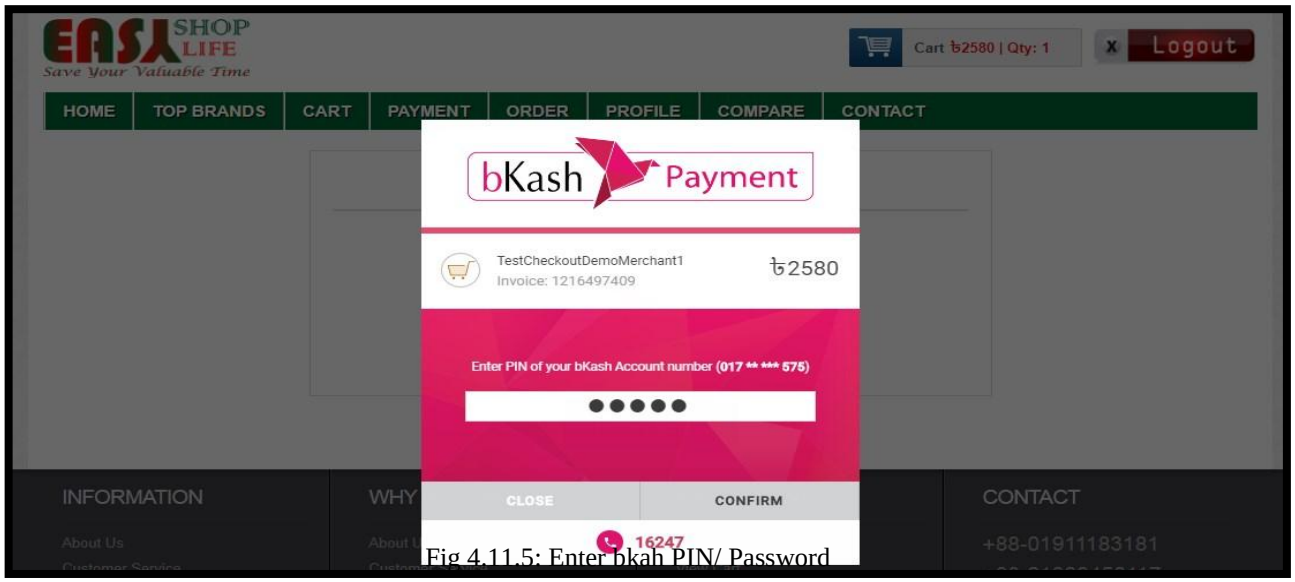
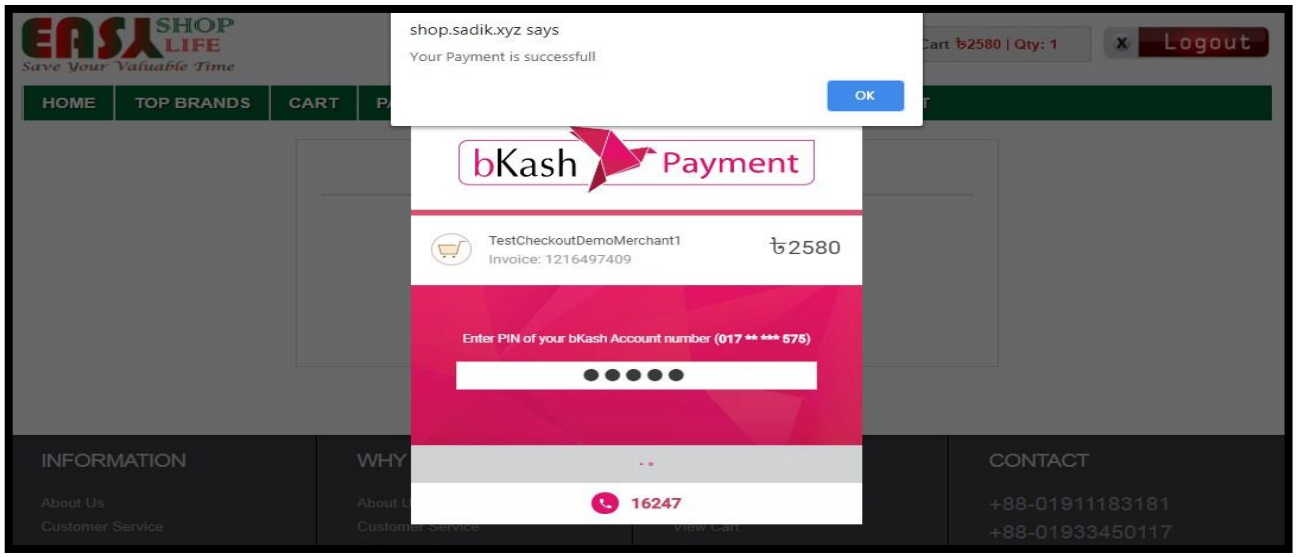


Fig 4.11.5: Enter bkah PIN/ Password

4.11.6 Payment Successful :

If all the work is properly done then the following Successful massage in your payment option.



4.11.6: Payment Successful

4.12 Order Details:

At this stage all the information about what the user has ordered from this website will be saved. So that there is no problem in delivery of his product.

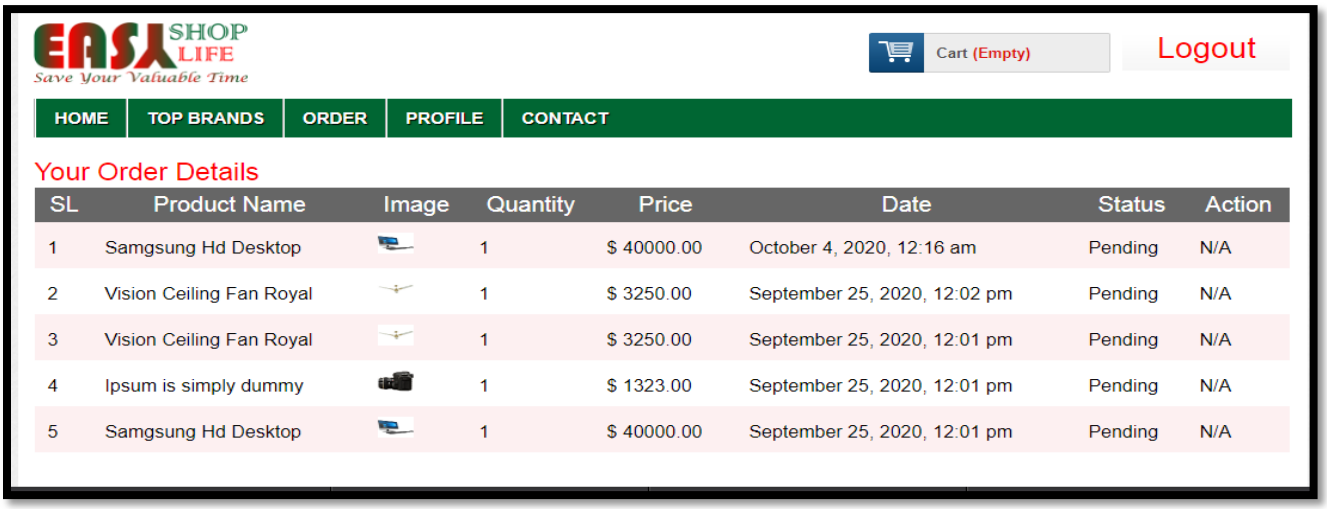


Figure 4. 15: order detail

4.13 Admin Dashboard:

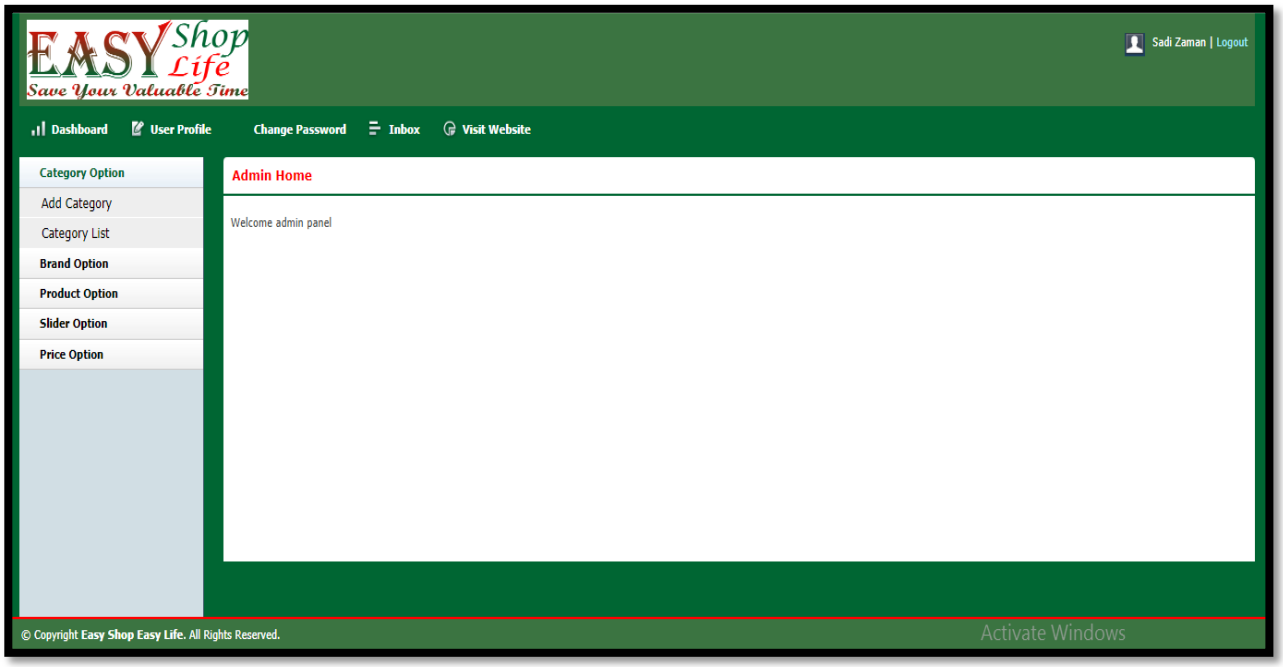


Figure 4. 16: Admin Dashboard

This is our Admin Panel. All the work of the website is controlled from hear. Such as adding ,Deleting, updating and editing product category, brand, price and other fraters. The whole work of this admin panel describe in the bellow.

4.13.1 Category Option:

In this website the category option is divided into two parts. They are:

Add Category &

Category list.

i. Add Category:

In this website we are trying to provide category related product. So that the customer can easily find their product base on their category. So we need to input necessary Product based on Customer interest. The process of add Category is shown in the following

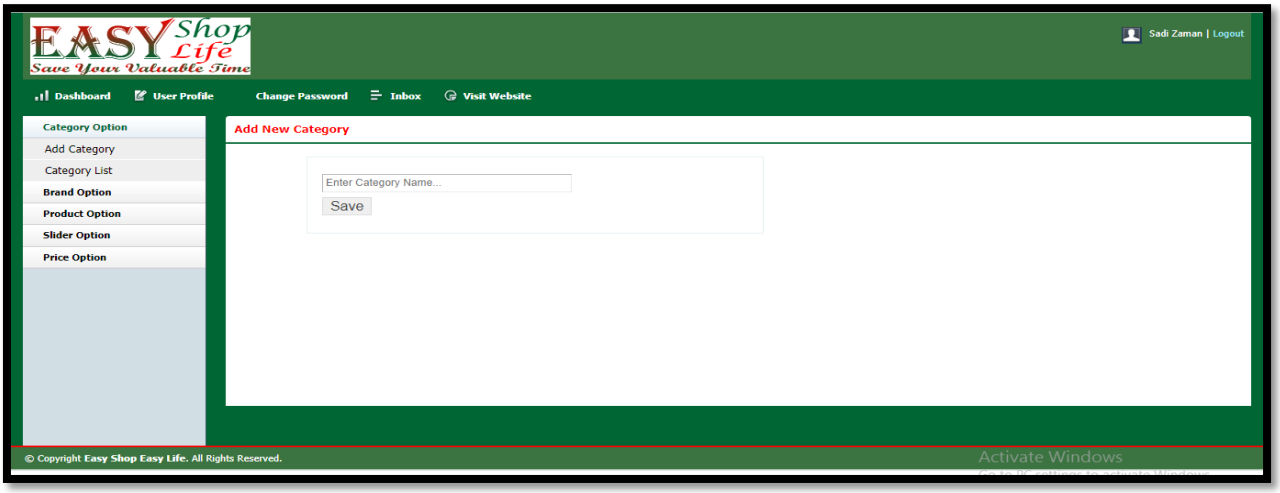


Figure 4. 17: Add Category

In this stage we just write the name of the category and click on Save. The name of the category is added in our category list.

ii. Category List:

After adding the required categories to our website, we can view all the categories from our website by using the category list option and we can edit or delete our category and subtract as needed. The category list represent the following process:

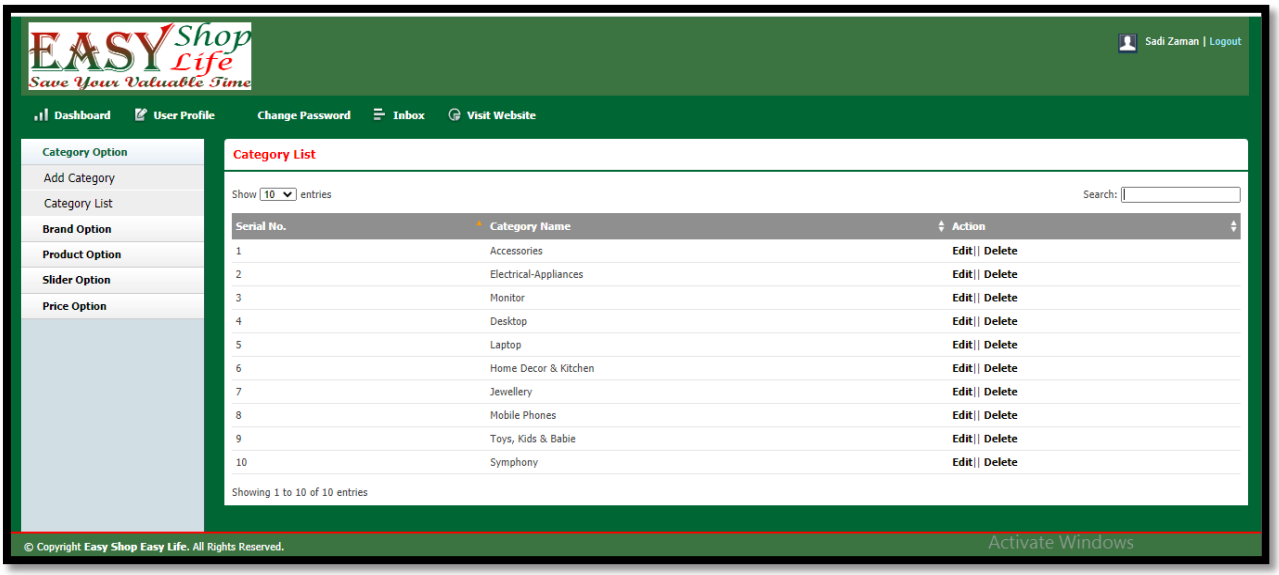


Figure 4. 18: Category List

4.13.2 Brand Option:

Brand Option is divided into two parts. Add Brand and Brand list.

i. Add Brand:

Now a day Brand is one of the main part in e-Commerce Business. Without good brand people can not want to buy product. So in our website we are trying to add good brand product for the customer. For this purpose we need to add product Brand . In this stage we just write the name of the brand, products details and Choose a brand picture then click on Save. The name of the brand is added in our category list.

The process of add Brand is shown in the following picture:



Figure 4. 19: Add **Brand**

ii. Brand List:

After adding the required Brand in our website, we can view all the Brand from our website by using the Brand list option and we can edit or delete our Brand as necessary. The Brand list represent the following process:

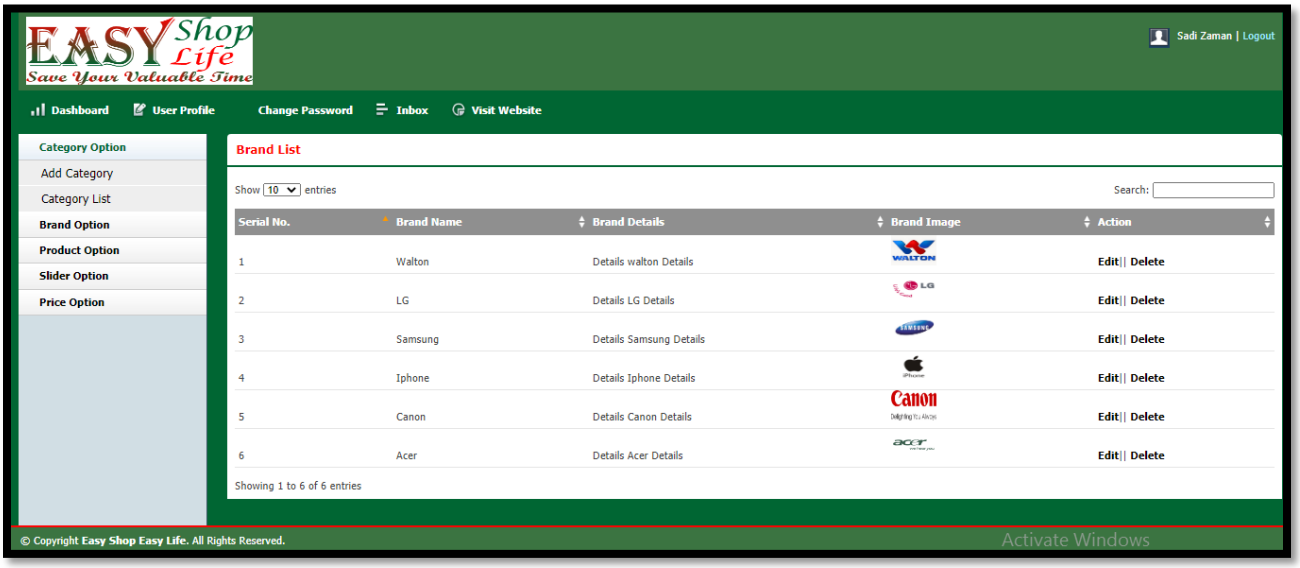


Figure 4. 20: Brand list

4.13.3 Product Detail Option:

Product detail option is divided into two parts. Add **Product** and **Product** list.

i. Add Product: Admin of this website must be add necessary product in this website base on their categories and brand. To add product we need some procedure like name, category, brand, Description, price, Image and product type. This information are must be add in this website. The process of add product is shown in the following picture:

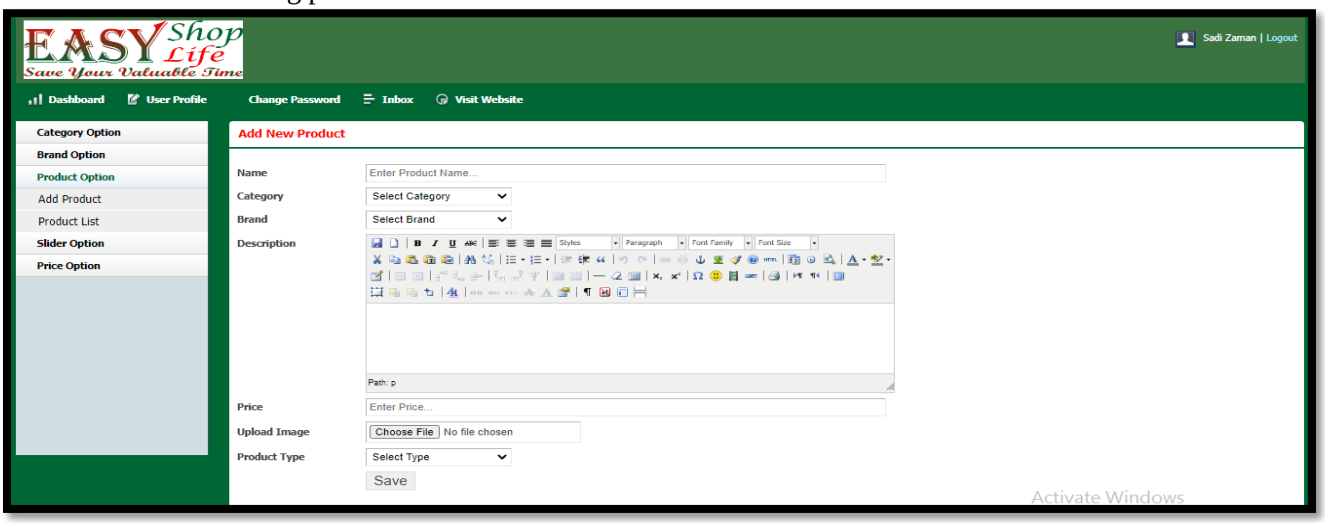


Figure 4. 21: Add Product

ii. Product List: After adding the required product in our website, we can view all the product from our website by using the product list option and we can edit or delete our product as necessary. The product list represent the following process:

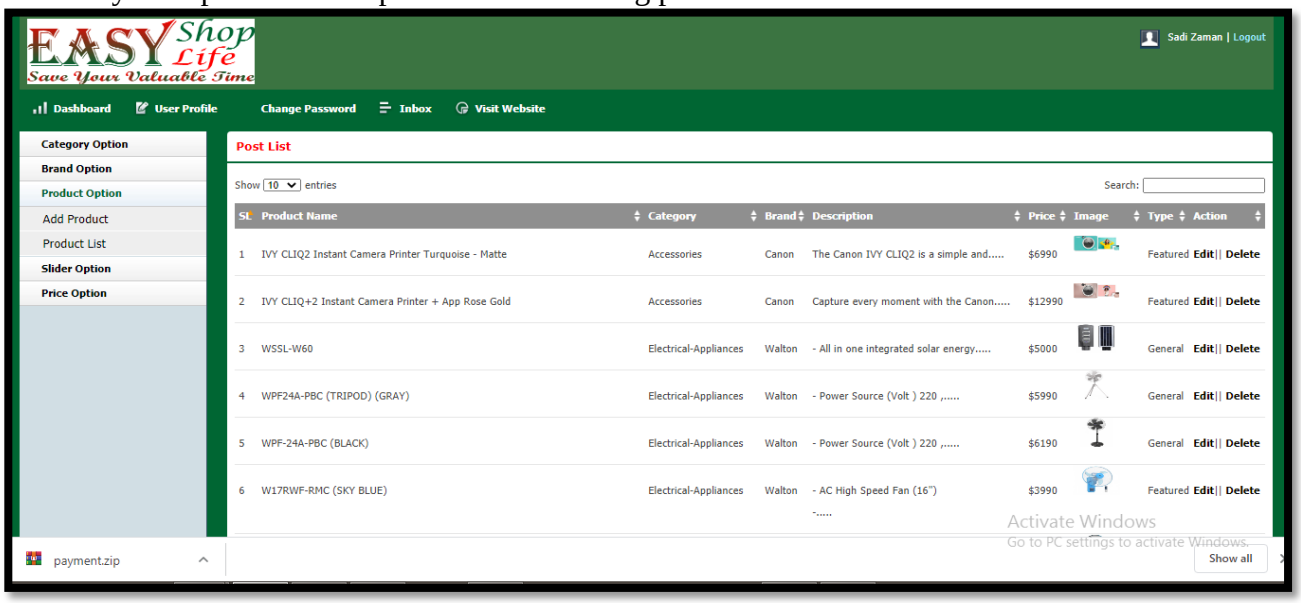


Figure 4. 22: Product List

4.14 Index:

After the customer orders the product, all the information is stored in the admin inbox with details. Which only the admin can see and try to get the customs to deliver his order on time.

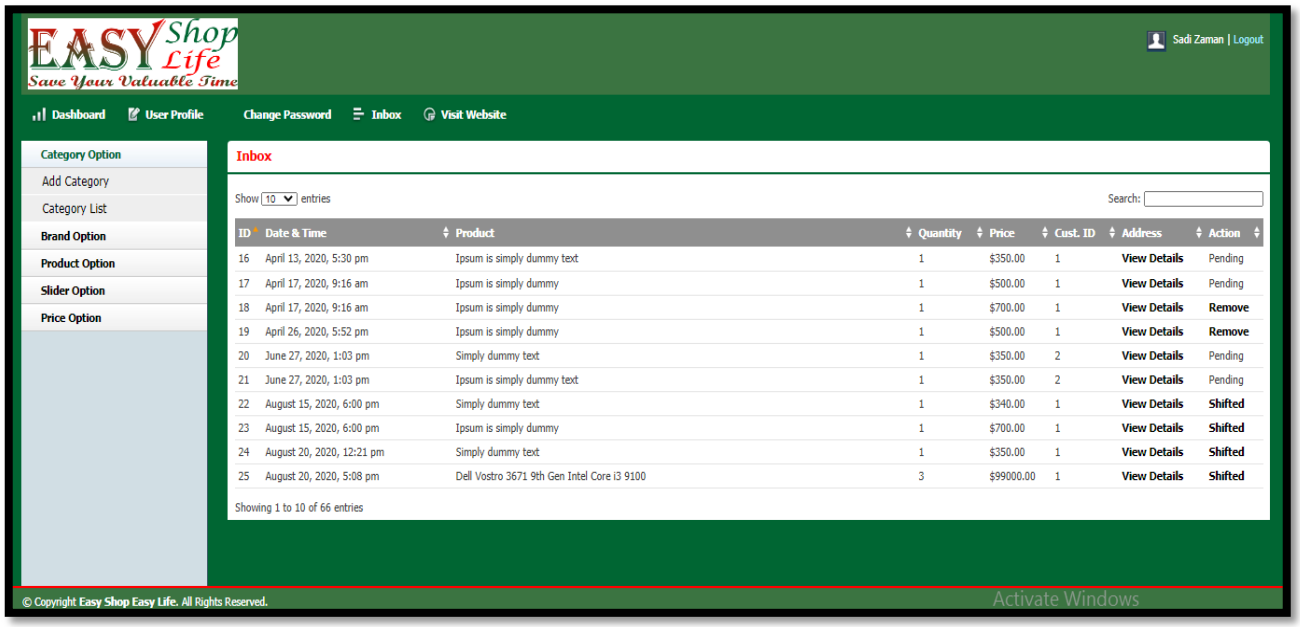


Figure 4. 23: Admin Inde

CHAPTER 5

SYSTEM TESTING & IMPACT

5.1 System Testing

The testing our online shopping platform is defined as System testing. It helps with avoiding different errors that may occur during the system development process, and thus add value to the product by making sure it conforms to the clients' requirement. In order to develop an e-commerce website, the first thing to think about is the design of the website it should be user-friendly. In an e-commerce website, everything is about the user and if the website is a bit complicated to use, then the user will refrain from using it. our conversion rate will be low. The website should be thoroughly tested as well, in order to ensure that all the features provided in the website are working properly and no unwanted bugs or defects will occur during use. This should be done so that the user will have a smooth and enjoyable experience with the e-commerce website. Testing is performed continuously on different platforms, different browsers, and in different combinations. This is done to make sure that the e-commerce website is working properly on all devices and is compatible with every browser. (Geeks for Geeks, 2005)

5.2 Reasons to check our website:

An e-commerce website is usually used for selling. It is used for conversion rate, so it needs to be secure and user-friendly.

These e-commerce websites and applications are very crucial for business nowadays. Technology has evolved very much and everything is available at your fingertips. These e-commerce websites are today’s shopping stores and everything depends on them. These applications and websites are in huge demand because they provide faster and better delivery. The e-commerce websites and applications are growing at a very fast rate as it is the need of the future. It requires a lot of investment of money and resources. To ensure that the investment doesn’t go to waste it also requires extensive testing. Sometimes when an e-commerce website crashes it can cause a lot of damage to the users and to the organization as well, therefore, it should be tested continuously.

5.3 Importance of System Testing.

As we discussed above ecommerce is vital for businesses. Many things should be taken care of in order to maintain a good e-commerce website. (https://www.axistechnical.com) Some of the

important factors in which testing of e-commerce websites are really helpful are:

5.3.1Ensuring the readiness of transactions

Testing an e-commerce website will help you make sure that every single webpage on our website is tested well enough and is validated to complete all the e-commerce transactions. It will also confirm whether it is ready for the customer use or not.

5.3.2 Validation of different factors

Testing of an e-commerce website is also helpful in checking the website in terms of its compatibility, functionality, usability, performance, and security. These are some of the most important factors for any website.

5.3.3 Enhancing the usability

One of the criteria of a successful online buying website is about enhancing the usability of the website along with reducing the risk factors associated with it. Testing process for an e-commerce website deals with both of these aspects.

Reducing the challenges in delivering a good buying experience.

The most important factor in an e-commerce website is giving the customer a smooth experience.

Testing an e-commerce website provides a better user experience without incorporating major time challenges for the customers.

5.3.4 Reducing the risk of changes

The changes in an e-commerce website is necessary to make the experience faster and smoother for the user. Regression testing is employed to make sure that the incorporation of new changes doesn't affect the website and ensures no unintentional bugs occur.

5.3.5 Evaluating the functionality and compatibility against load

In order to serve customers' requirements and needs perfectly, every organization needs to ensure that the function provided in their websites are working properly at different amounts of load conditions and whether the website is able to support different browsers and platforms or not.

Testing is a must for an e-commerce website to ensure the compatibility and good working conditions of the website during heavy loads as well.

5.4 Important Segments Of System Testing Web Application

Every testing process contains small processes and segments within them. The completion of all of these segments altogether will make the testing process complete.QA Specialists performing

testing in an e-commerce system should plan well and lay down an integrated plan which should cover every aspect of e-commerce.

5.5 The Impact on the current situation:

E-Commerce and E-Business are not solely the Internet, websites or dot com companies. It is about a new business concept that incorporates all previous business management and economic concepts. As such E-Business and E-Commerce impact on many areas of business and disciplines of business management studies.

i. Management Information Systems – Analysis, design and implementation of e-business systems within an organization; issues of integration of front-end and back-end systems

ii. Human Resource Management – Issues of on-line recruiting, home working and 'Entrepreneurs' works on a project by project basis replacing permanent employees.

iii. Finance and Accounting – On-line banking; issues of transaction costs; accounting and auditing implications where 'intangible' assets and human capital must be tangibly valued in an increasingly knowledge based economy.

iv. Economics –The impact of e-commerce on local and global economies; understanding the concepts of a digital and knowledge-based economy and how this fits into economic theory

v. Production and Operations Management –The impact of on-line processing has led to reduced cycle times. It takes seconds to deliver digitized products and services electronically; similarly the time for processing orders can be reduced by more than 90 per cent from days to minutes. Production systems are integrated with finance marketing and other functional systems as well as with business partners and customers.

vi. Marketing – Issues of on-line advertising, marketing strategies and consumer behavior and cultures. One of the areas in which it impacts particularly is direct marketing. In the past this was mainly door-to door, home parties and mail order using catalogues or leaflets.

vii. Computer Sciences – Development of different network and computing technologies and languages to support e-commerce and e-business, for example linking front and back office legacy systems with the 'web based' technology.

viii. Business Law and Ethics – The different legal and ethical issues that havearisen as a result of aglobal 'virtual' market issues such as copyrightlaws, privacy of customer information, legality of electronic contractsetc.

5.6 Website Capability:

The Capability of the website can be classified into two parts. Strength & Weakness.

5.6.1 Strengths:

i. Boundary less (global location): E-commerce can be dealt globally as no specific boundary is required. It enables all the companies to expand them to global level.

ii. Time saving: It saves time and transportation. Because there is no need to go anywhere physically.

iii. No time constraints: It can be used anywhere any time as there is no time constraints.

iv. Price/Product comparison: Helps consumers to compare price and product effectively and efficiently.

v. Cost effective: Reduces logistical problems and puts a small business on a par with giants.

vi. Direct communication with consumer: Social networking sites, online advertising networks can be mediums to buzz about online store.

vii. Improved customer interaction: Quick feedback and comment forms are main features to interact with customers.

viii. Flexible target market segmentation: Target market segment here in e commerce is flexible can be modified any time.

ix. Simple and easier exchange of information: Improves information sharing among merchants and customers and enables prompt quick just in time deliveries.

x. Lowers transaction cost: Things can be automated in a well implemented online store. If online download facility is available then distribution cost can be cut off.

xi. Easy arrangement of products: Products can be arranged in the shelves within minutes. With online store it is quite easy.

xii. Faster buying procedure: Ecommerce means better and quick customer services. Online customer services make customer happier. Due to absence of intermediaries for buying products. So buying procedure will be fast and quick.

xiii. No physical company set up: Doing e business is cost effective because no physical set up is required for that.

xiv. Easy transactions: Financial transactions through electronic fund transfer are very fast and can be done from any part of the world.

5.6.2. Weaknesses:

Security: Security matter confuses customers especially about the integrity of the payment process.

Fake websites: Fake websites can not only disgrace e commerce but bring bad name to e commerce also.

Fraud: Concerns about misuse of financial and personal data is a great weakness in e commerce.

Fewer discounts and bargaining: Hardly online businesses offer discounts and bargaining cannot be possible.

Long delivery timing: Delivery time can be in days or weeks which one cannot wait for.

No idea about quality and physical condition of the product: Online products cannot be touched, wear or sit on the products.

Limitation of products: Limited number of products can be available.

Lack of personal services: Physical products can be available but lack in personal services which are intangible.

More shipping cost: Shipping cost increases if we order online.

CHAPTER 6

SYSTEM SECURITY

6.1 Systems Security

Security is an essential part of any transaction that takes place over the internet. (https://en.wikipedia.org/)Customers will lose his/her faith in e-business if its security is compromised. Following are the essential requirements for safe e-payments/transactions -

Confidentiality − Information should not be accessible to an unauthorized person. It should not be intercepted during the transmission.

Integrity − Information should not be altered during its transmission over the network.

Availability − Information should be available wherever and whenever required within a time limit specified.

Authenticity − There should be a mechanism to authenticate a user before giving him/her an access to the required information.

Non-Reputability − It is the protection against the denial of order or denial of payment. Once a sender sends a message, the sender should not be able to deny sending the message. Similarly, the recipient of message should not be able to deny the receipt.

Encryption − Information should be encrypted and decrypted only by an authorized user.

Audit ability − Data should be recorded in such a way that it can be audited for integrity requirements.

6.2 Measures To Ensure Security

Major security measures are following −

Encryption − It is a very effective and practical way to safeguard the data being transmitted over the network. Sender of the information encrypts the data using a secret code and only the specified receiver can decrypt the data using the same or a different secret code. (Tutorial Point, 2012)

Digital Signature − Digital signature ensures the authenticity of the information. A digital signature is an e-signature authenticated through encryption and password.

Security Certificates − Security certificate is a unique digital id used to verify the identity of an individual website or user.

6.3 Security Protocols in Internet

We will discuss here some of the popular protocols used over the internet to ensure secured online transactions. (www.cybersmile.org)

i. Secure Socket Layer (SSL)

It is the most commonly used protocol and is widely used across the industry. It meets following security requirements −

Authentication

Encryption

Integrity

Non-reputability

"https://" is to be used for HTTP urls with SSL, where as "http:/" is to be used for HTTP urls without SSL.

ii. Secure Hypertext Transfer Protocol (SHTTP)

SHTTP extends the HTTP internet protocol with public key encryption, authentication, and digital signature over the internet. Secure HTTP supports multiple security mechanism, providing security to the end-users. SHTTP works by negotiating encryption scheme types used between the client and the server. (Suharyanto & Simanjuntak, 2017)

iii. Secure Electronic Transaction

It is a secure protocol developed by MasterCard and Visa in collaboration. Theoretically, it is the best security protocol. It has the following components −

Card Holder's Digital Wallet Software − Digital Wallet allows the card holder to make secure purchases online via point and click interface.

Merchant Software − This software helps merchants to communicate with potential customers and financial institutions in a secure manner.

Payment Gateway Server Software − Payment gateway provides automatic and standard payment process. It supports the process for merchant's certificate request.

Certificate Authority Software − This software is used by financial institutions to issue digital certificates to card holders and merchants, and to enable them to register their account agreements for secure electronic commerce.

CHAPTER 7

CONCLUSION AND FUTURE WORKS

7.1 Conclusion

In general, today's businesses must always strive to create the next best thing that consumers will want because consumers continue to desire their products, services etc. to continuously be better, faster, and cheaper. In this world of new technology, businesses need to accommodate to the new types of consumer needs and trends because it will prove to be vital to their business' success and survival. E-commerce is continuously progressing and is becoming more and more important to businesses as technology continues to advance and is something that should be taken advantage of and implemented.

From the inception of the Internet and e-commerce, the possibilities have become endless for both businesses and consumers. Creating more opportunities for profit and advancements for businesses, while creating more options for consumers. However, just like anything else, e-commerce has its disadvantages including consumer uncertainties, but nothing that cannot be resolved or avoided by good decision-making and business practices.

There are several factors and variables that need to be considered and decided upon when starting an e-commerce business. Some of these include: types of e-commerce, marketing strategies, and countless more. If the correct methods and practices are followed, a business will prosper in an e-commerce setting with much success and profitability. References

7.2 Future Works

The Most Important Ecommerce Features Include:

Language Efficiently

Augmented Reality

Voice search option

Secure lock packaging

An easy-to-use checkout

Search engine optimized code and layout

An integrated blog or articles section

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