## **A Project Report**

On

## "E-COMMERCE WEBSITE"

## **Submitted by:**

**ASHISH KUMAR (1903325)** 

ASHREY BHOIL (1903326)

In partial fulfillment for the award of the degree

of

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IN

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SHAHPUR (JALANDHAR), PUNJAB (INDIA) - 144020

(AFFILIATED TO IKG PUNJAB TECHNICAL UNIVERSITY, JALANDHAR, PUNJAB (INDIA)

## **DECLARATION**

I hereby declare that the project entitled "	E-COMMERCE WEBSITE " s	submitted for the		
B. Tech. (CSE) degree is my original work	and the project has not formed	the basis for the		
award of any other degree, diploma, fellowship or any other similar titles.				
	<b>G</b> *	6.1 0.1		
	Signature	of the Student		
Place:				
Date:				

#### **CERTIFICATE**

This is to certify that the project titled "\_E-COMMERCE WEBSITE" is the bona fide work carried out by ASHISH KUMAR and ASHREY BHOIL are student of B Tech (CSE) of CT Institute of Engineering Management and Technology, Shahpur (Jalandhar) affiliated to Punjab Technical University, Jalandhar, Punjab(India) during the academic year 2019-23, in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology (Computer Science and Engineering) and that the project has not formed the basis for the award previously of any other degree, diploma, fellowship or any other similar title.

	Signature of the Guide
Place:	
Date:	

## Chapter 1: Introduction

- 1. Overview
- 2. Background Study
- 3. Project Planning
- 4. Purpose

## Chapter 2: System Design

- 1. Design
- 2. User Characteristics
- 3. System Information
- 4. System Analysis
- 5. Feasibility Study
- 6. Context Design

## Chapter 3: Hardware and Software Requirement

- 1. Hardware Required
- 2. Software Required

## Chapter 4: Implementing Tools for the Project

- 1 Tools
- 2 Wamp
- 3 HTML
- 4 CSS
- 5 PHP
- 6 SQL
- 7 JavaScript 7
- 8 Bootstrap

## Chapter 5: Project Database and Table

- 1. Database Design
- 2. Signup Table
- 3. Product Table

## Chapter 6: Project Model View

- 1. Home Page
- 2. Signup Page
- 3. Login Page
- 4. Products Page
- 5. Cart Page
- 6. Checkout Page
- 7. Contact Us Page

## Chapter 7: Conclusion

- 1. Conclusion
- 2. Future aspect

### **Chapter One**

#### Introduction

#### 1.1 OVERVIEW

The 'Online E-commerce Web application' Services department strives to provide solutions to develop and transfer easy and efficient way in the digital age and to help reduces the human pressure and time. To help support shop collections, the digital initiatives, and external partner institution digital projects, It provide services that include the digitization of analog objects, metadata management, digital preservation, and discovery and access of digital collections. "Shop Management System" is a web application written for all operating systems, designed to help users maintain and organize shop virtually. This software is easy to use for both beginners and advanced users. It features a familiar and well thoughtout, an attractive user interface, combined with strong searching Insertion and reporting capabilities. The report generation facility of shop system helps to get a good idea of which are the various items brought by the members, makes users possible to get the product easily.

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#### 1.2 BACKGROUND STUDY

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.

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 ecommerce 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 PROJECT PLANNING

Project planning is part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment. Initially, the project scope is defined and the appropriate methods for completing the project are determined. Following this step, the durations for the various tasks necessary to complete the work are listed and grouped into a work breakdown structure. The logical dependencies between tasks are defined using an activity network diagram that enables identification of the critical path. Float or slack time in the schedule can be calculated using project management software. Then the necessary resources can be estimated and costs for each activity can be allocated to each resource, giving the total project cost. At this stage, the project plan may be optimized to achieve the appropriate balance between resource usage and project duration to comply with the project objectives. Once established and agreed, the plan becomes what is known as the baseline. Progress will be measured against the baseline throughout the life of the project

#### 1.4 PURPOSES

The project is about to handle all the information of the shop regarding members. Also it manages resources which were managed and handled by manpower previously. The main purpose of the project is to integrate distinct sections of the shop into consistent manner so that complex functions can be handled smoothly. The project aims at the following matters

- Automation of product manipulation.
- Buying products.
- To manage information of different types of items.
- Consistently update information of all the item.
- Managing security by providing authorized email & password. Manages database efficiently.

#### 1.5 Examples of Ecommerce Website and business

- When you purchase a mobile phone /shoes/software/ flowers on any website
  such as Amazon, Flipkart, etc. and pay through credit/debit card and then the
  seller delivers the product through courier or post mail on your location then
  it's called e-commerce. In this case, Flipkart is an online store website or an ecommerce website.
- When you subscribe to watch a cricket match, movies, and shows on any website such as Hotstar through debit card and credit card it is called e-

commerce. And in this way, Hotstar is a digital and mobile entertainment ecommerce website.

- When you rent or buy movies on YouTube and pay to watch by using the mobile/computer and internet it's called e-commerce. In this method, you have used computer/mobile and internet through electricity and visited youtube website to watch/buy/rent the movie and paid through debit card/credit card/net banking/payment wallet etc. It means youtube is an eCommerce website in which you can buy/watch/rent the latest movies and shows.
- When you use Google Ads or Facebook Advertising etc. to promote and advertise your products/services online and pay Google and Facebook to use the services and platforms then it's e-commerce. In this case, Google / Facebook etc. are e-commerce companies that provide you platform and tools to advertise and promote your business/products/services online.
- When you launch your apps on the Google Play store, you pay Google to use their platform to connect with your customers/target audience then it's ecommerce and googles play store is an eCommerce platform in which apps developers or apps launcher or owners have to pay Google. And all these transactions are online. It's e-commerce.
- When you recharge your mobile phone/dish tv/internet data pack by using the
  internet and the website such as Paytm, mobiwiki, JIO etc. and pay through
  debit/credit card, wallet, and net banking then it's e-commerce and PayTM,
  MobiKwik, Jio apps or websites are e-commerce websites. In which they are
  doing customers recharge online and get paid directly to their bank account.
- When you purchase software as a service, platform as a service, infrastructure
  as service for your business from cloud computing service providers such as
  Alibaba, Amazon web service, Microsoft, google cloud etc. on their website
  then these are the e-commerce websites.
- When you use internet banking then it is e-commerce. You pay bills, transfer money, open an RD/FD account, pay installments online, pay for offline products from payment wallets etc. are e-commerce.
- When political parties, government or non-government organizations received funds or donations online then it is e-commerce.

### **Examples of an e-commerce website**

While there are every website is an e-commerce website and platform. But following are well known or those are considered e-commerce websites.

- 1. Amazon
- 2. Flipkart
- 3. Shopclues
- 4. ajio.com

Etc. For me, every website is an e-commerce website and platform on the Internet. And even the rise of the internet is only because of e-commerce. It's impossible to imagine the internet without e-commerce. E-Commerce is the main source of wealth for internet companies and online businesses. If there is no commerce then there is no internet.

#### **How E-commerce Websites Works**

Almost all E-Commerce website works similarly. Following is the process of e-commerce website/eCommerce business/online transactions.

**Internet** – Connecting the people through computers/mobiles and the internet.

**User** – Searching on Google and other search engines for products/services and daily life solutions. **Website** – After search or research user visits the website that is in the top 10 search results.

**Products / Services** – User (customer) finds the product and selects it and adds it to the cart.

**Purchased** – Now user purchases it through debit and credit cards by using a third-party payment gateway such as ccavenue, payubiz etc.

Payment Gateway – (Payment Gateway, Merchant Accounts, and Online Credit Card Processing Service provider) – Received the payment and transfer it into website owner or sellers accounts after 1 week or later.

**Bank Account** – Customer can pay using the debit/credit card and net banking/merchant receive money in the bank account from payment gateway service provider.

**Delivery** – on spot, While many deliver the product within 8 days after receiving the payment. Some only receive cash on the delivery.

The above are general explanations of the e-commerce website and online store. If you want the technical part then please comment. I will cover it in the next article.

#### **Economic benefits:**

- Banks earning the money due to the increased use of debit/credit cards.
- The government can use that money for the development of its own machinery or citizens' development.

#### **Business benefits:**

- Less costly to sell products and services.
- Wide variety of customers on the internet than offline stores/shops.
- No credits or Udhar
- Easy to manage transactions
- Easy to market/sell

#### **Consumer Benefits:**

- Getting product/service at door.
- Saves time
- Less costly than offline
- To showcase modernism

**Who can start an eCommerce store:** Anyone can start or build an eCommerce website. Shopkeepers, handmade items manufacturers, small and medium domestic product manufacturers etc.

**Business Scope:** Unlimited. More than half of the population on the earth is on the Internet intentionally and unintentionally. People are looking for the best quality and organic products, they want to feel vow at less cost without wasting time on offline shopping. So if someone thinks that they can sell online or have anything that people need then they can start.

### **Chapter Two**

### **System Design**

#### 2.1 Design

The system is divided into some parts these are Register system, Login System, Buying System, Order Received System, Viewing System side with database represent the server using PHP, MYSQL and APACHE with WAMP server.

#### 2.2 USER CHARACTERISTICS

Admin The administrator has all the rights to access the system. He is the one who has all rights to view the members and product details, modify those details. He can add various product based on the category. He can also set the available quantity of a product and its reasonable price. Also he can also set discount in various occasion. Admin can also view the details of a member. The admin have the power to generate the scratch card so that users can also use the recharge card to buy various product.

The user can log in to the system by using his specific email and password. User can view the products and order the products according to their own needs. He can view his profile and update his details. He can update his personal information by logging into the system. User can find various product by using search option easily.

## 2.3 System Information

This system is an automated Shop Management System. Through the software user can add members, add product, update information, edit information, buy the product in quick time. The system has the following advantages:

- User friendly interface
- Fast access to database
- Look and Feel Environment

## 2.4 System Analysis

System Analysis refers into the process of examining a situation with the intent of improving it through better procedures and methods. System Analysis is the process of planning a new system to either replace or complement an existing system. But before any planning is done the old system must be thoroughly understood and the requirements determined. System analysis is therefore, the process of gathering and interpreting facts, diagnosing problems and using the information to recomment improvements in the system. System analysis is conducted with the following objectives in mind:

v/ Evaluate the system concept for feasibility. v/ Perform economic and technical analysis.

<sup>v</sup>/ Allocate functions to hardware, software people, database and other system elements. v/ Establish cost and schedule constraints. v/ Create a system definition that forms the foundation for all the subsequent engineering work.

## . 2.5 Feasibility Analysis

Whatever we think need not be feasible .1t is wise to think about the feasibility of any problem we undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study can be performed in two ways such as technical feasibility and Economical Feasibility

#### **Technical Feasibility**

It is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance.

## **Economical Feasibility**

Development of this application is highly economically feasible . The organization needed not spend much m one for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. I f we are doing so , we can attain the maximum usability of the corresponding resources . Even after the development , the organization will not be in a condition to invest more in the organization . Therefore , the system is economically feasible.

## **Chapter Three**

## **Hardware and Software Requirement**

## 3.1 Hardware Required

1. Processor: Pentium IV or Above

2. RAM: 2GB or above

3. Hard Disk: 50GB or above

4. Input Devices: Keyboard, Mouse

5. Output Devices: Monitor

## 3.2 Software Required

1. Operating System: Linux, Ubuntu, Mac, Windows XP, 7, 8, 8.1, 10.

2. Frontend: HTML, CSS, Bootstrap, JavaScript

3. Backend: Php, Sql

4. Database: XAMPP/WAMP/LAMP.

#### **Chapter Four**

## **Implementing Tools for the Project**

#### **4.1 Tools**

- 1) HTML
- 2) CSS
- 3) PHP
- 4) JavaScript
- 5) SQL
- 6) Bootstrap

#### 4.2 What is WAMP

WAMP is an acronym that stands for Windows, Apache, MySQL, and PHP. It's a software stack which means installing WAMP installs <u>Apache</u>, <u>MySQL</u>, and PHP on your operating system (Windows in the case of WAMP). Even though you can install them separately, they are usually bundled up, and for a good reason too.

What's good to know is that WAMP derives from <u>LAMP</u> (the L stands for Linux). The only difference between these two is that WAMP is used for Windows, while LAMP – for Linux based operating systems.

Let's quickly go over what each letter represents:

"W" stands for Windows, there's also LAMP (for Linux) and MAMP (for Mac).

"A" stands for Apache. Apache is the server software that is responsible for serving web pages. When you request a page to be seen by you, Apache grants your request over HTTP and shows you the site.

"M" stands for MySQL. MySQL's job is to be the database management system for your server. It stores all of the relevant information like your site's content, user profiles, etc.

"P" stands for PHP. It's the programming language that was used to write WordPress. It acts like glue for this whole software stack. PHP is running in conjunction with Apache and communicating with MySQL.

#### **4.3 HTML**

Every webpage you look at is written in a language called HTML. You can think of HTML as the skeleton that gives every webpage structure. In this course, we'll use HTML to add paragraphs, headings, images and links to a webpage.

In the editor to the right, there's a tab called test.html. This is the file we'll type our HTML into. Like any language, it has its own special syntax. A browser's job is to transform the code in test.html into a recognizable webpage! It knows how to lay out the page by following the HTML syntax.

HTML is a <u>markup language</u> that <u>web browsers</u> use to interpret and <u>compose</u> text, images, and other material into visual or audible web pages. Default characteristics for every item of HTML markup are defined in the browser, and these characteristics can be altered or enhanced by the web page designer's additional use of <u>CSS</u>. Many of the text elements are found in the 1988 ISO technical report TR 9537 *Techniques for using SGML*, which in turn covers the features of early text formatting languages such as that used by the <u>RUNOFF command</u> developed in the early 1960s for the <u>CTSS</u> (Compatible Time-Sharing System) operating system: these formatting commands were derived from the commands used by typesetters to manually format documents. However, the SGML concept of generalized markup is based on elements (nested annotated ranges with attributes) rather than merely print effects, with also the separation of structure and markup; HTML has been progressively moved in this direction with CSS.

Berners-Lee considered HTML to be an application of SGML. It was formally defined as such by the <a href="Internet Engineering Task Force">Internet Engineering Task Force</a> (IETF) with the mid-1993 publication of the first proposal for an HTML specification, the "Hypertext Markup Language (HTML)" Internet Draft by Berners-Lee and <a href="Dan Connolly">Dan Connolly</a>, which included an SGML <a href="Document type definition">Document type definition</a> to define the grammar. <a href="Internet-Define-Internet-Define-Internet-Draft">Internet-Define Internet-Define-Internet-Draft</a>, "HTML+ (Hypertext Markup Format)", from late 1993, suggested standardizing already-implemented features like tables and fill-out forms.

After the HTML and HTML+ drafts expired in early 1994, the IETF created an HTML Working Group, which in 1995 completed "HTML 2.0", the first HTML specification intended to be treated as a standard against which future implementations should be based. [12]

Further development under the auspices of the IETF was stalled by competing interests. Since 1996, the HTML specifications have been maintained, with input from commercial software vendors, by the World Wide Web Consortium (W3C). [13] However, in 2000, HTML also became an international standard (ISO/IEC 15445:2000). HTML 4.01 was published in late 1999, with further errata published through 2001. In 2004, development began on HTML5 in the Web Hypertext Application Technology Working Group (WHATWG), which became a joint deliverable with the W3C in 2008, and completed and standardized on 28 October 2014.

HTML documents imply a structure of nested <u>HTML elements</u>. These are indicated in the document by HTML *tags*, enclosed in angle brackets thus: .

In the simple, general case, the extent of an element is indicated by a pair of tags: a "start tag"  $\langle \mathbf{p} \rangle$  and "end tag"  $\langle \mathbf{p} \rangle$ . The text content of the element, if any, is placed between these tags.

Tags may also enclose further tag markup between the start and end, including a mixture of tags and text. This indicates further (nested) elements, as children of the parent element.

Some elements, such as the <u>line break</u> **<br/>br>**, or **<br/>br**/> do not permit *any* embedded content, either text or further tags. These require only a single empty tag (akin to a start tag) and do not use an end tag.

Many tags, particularly the closing end tag for the very commonly used paragraph element , are optional. An HTML browser or other agent can infer the closure for the end of an element from the context and the structural rules defined by the HTML standard. These rules are complex and not widely understood by most HTML coders.

The general form of an HTML element is

therefore: <tag attribute1="value1" attribute2="value2">"content"</tag>. Some HTML elements are defined as *empty elements* and take the form <tag attribute1="value1" attribute2="value2">. Empty elements may enclose no content, for instance, the <br/>tag or the inline <img> tag. The name of an HTML element is the name used in the tags. Note that the end tag's name is preceded by a slash character, /, and that in empty elements the end tag is neither required nor allowed. If attributes are not mentioned, default values are used in each case.

#### **4.4 CSS**

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language.[l] Most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, 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 document content from document presentation, including aspects such as the layout, colors, and fonts.[3] 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.

CSS has a simple <u>syntax</u> and uses a number of English keywords to specify the names of various style properties.

A style sheet consists of a list of *rules*. Each rule or rule-set consists of one or more <u>selectors</u>, and a <u>declaration block</u>.

#### Selector

In CSS, *selectors* declare which part of the markup a style applies to by matching tags and attributes in the markup itself.

Selectors may apply to the following:

- all elements of a specific type, e.g. the second-level headers h2
- elements specified by <u>attribute</u>, in particular:
  - o id: an identifier unique within the document, identified with a hash prefix e.g. #id
  - o *class*: an identifier that can annotate multiple elements in a document, identified with a period prefix e.g. .classname
- elements depending on how they are placed relative to others in the <u>document tree</u>.

Classes and IDs are case-sensitive, start with letters, and can include alphanumeric characters, hyphens, and underscores. A class may apply to any number of instances of any elements. An ID may only be applied to a single element.

Pseudo-classes are used in CSS selectors to permit formatting based on information that is not contained in the document tree. One example of a widely used pseudo-class is :hover, which identifies content only when the user "points to" the visible element, usually by holding the mouse cursor over it. It is appended to a selector as in a:hover or #elementid:hover. A pseudo-class classifies document elements, such as :link or :visited, whereas a pseudo-element makes a selection that may consist of partial elements, such as ::first-line or ::first-letter.

Selectors may be combined in many ways to achieve great specificity and flexibility. Multiple selectors may be joined in a spaced list to specify elements by location, element type, id, class, or any combination thereof. The order of the selectors is important. For example, div .myClass {color: red;} applies to all elements of class myClass that are inside div elements, whereas .myClass div {color: red;} applies to all div elements that are inside elements of class myClass. This is not to be confused with concatenated identifiers such as div.myClass {color: red;} which applies to div elements of class myClass.

Before CSS, document authors who wanted to assign such <u>typographic</u> characteristics to, say, all h2 headings had to repeat HTML presentational markup for each occurrence of that heading type. This made documents more complex, larger, and more error-prone and difficult to maintain. CSS allows the separation of presentation from structure. CSS can define color, font, text alignment, size, borders, spacing, layout and many other typographic characteristics, and can do so independently for on-screen and printed views. CSS also defines non-visual styles, such as reading speed and emphasis for aural text readers. The W3C has now deprecated the use of all presentational HTML markup.

#### **4.5 PHP**

The PHP Hypertext Pre-processor (PHP) is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications. This tutorial helps you to build your base with PHP.

**PHP** started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

**PHP** is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain. I will list down some of the key advantages of learning PHP:

- PHP is a recursive acronym for "PHP: Hypertext Pre-processor".
- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.

PHP is <u>loosely typed</u>. It stores integers in a platform-dependent range, either as a 32, 64 or 128-bit <u>signed integer</u> equivalent to the <u>C-language long type</u>. Unsigned integers are converted to signed values in certain situations, which is different behavior to many other programming languages. [191] Integer variables can be assigned using decimal (positive and negative), octal, hexadecimal, and binary notations.

<u>Floating point</u> numbers are also stored in a platform-specific range. They can be specified using floating point notation, or two forms of <u>scientific notation</u>. PHP has a native <u>Boolean</u> type that is similar to the native Boolean types in <u>Java</u> and <u>C++</u>. Using the Boolean type conversion rules, non-zero values are interpreted as true and zero as false, as in <u>Perl</u> and C++. [192]

The null data type represents a variable that has no value; NULL is the only allowed value for this data type. [192]

Variables of the "resource" type represent references to resources from external sources. These are typically created by functions from a particular extension, and can only be processed by functions from the same extension; examples include file, image, and database resources. [192]

Arrays can contain elements of any type that PHP can handle, including resources, objects, and even other arrays. Order is preserved in lists of values and in <u>hashes</u> with both keys and values, and the two can be intermingled. PHP also supports <u>strings</u>, which can be used with single quotes, double quotes, nowdoc or <u>heredoc</u> syntax. [193]

The **Standard PHP Library** (SPL) attempts to solve standard problems and implements efficient data access interfaces and classes

### 4.6 JavaScript

JavaScript is a scripting or programming language that allows you to implement complex features on web pages — every time a web page does more than just sit there and display static information for you to look at — displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc. — you can bet that JavaScript is probably involved. It is the third layer of the layer cake of standard web technologies, two of which (HTML and CSS) we have covered in much more detail in other parts of the Learning Area.

During the period of <u>Internet Explorer</u> dominance in the early 2000s, client-side scripting was stagnant. This started to change in 2004, when the successor of Netscape, <u>Mozilla</u>, released the <u>Firefox</u> browser. Firefox was well received by many, taking significant market share from Internet Explorer. [25]

In 2005, Mozilla joined ECMA International, and work started on the <u>ECMAScript for XML</u> (E4X) standard. This led to Mozilla working jointly with <u>Macromedia</u> (later acquired by <u>Adobe Systems</u>), who were implementing E4X in their ActionScript 3 language, which was based on an ECMAScript 4 draft. The goal became standardizing ActionScript 3 as the new ECMAScript 4. To this end, Adobe Systems released the <u>Tamarin</u> implementation as an <u>open source</u> project. However, Tamarin and ActionScript 3 were too different from established client-side scripting, and without cooperation from <u>Microsoft</u>, ECMAScript 4 never reached fruition.

Meanwhile, very important developments were occurring in open-source communities not affiliated with ECMA work. In 2005, <u>Jesse James Garrett</u> released a white paper in which he coined the term <u>Ajax</u> and described a set of technologies, of which JavaScript was the backbone, to create <u>web applications</u> where data can be loaded in the background, avoiding the need for full page reloads. This sparked a renaissance period of JavaScript, spearheaded by open-source libraries and the communities that formed around them. Many new libraries were created, including <u>jQuery</u>, <u>Prototype</u>, <u>Dojo Toolkit</u>, and <u>MooTools</u>.

<u>Google</u> debuted its <u>Chrome</u> browser in 2008, with the <u>V8</u> JavaScript engine that was faster than its competition. [26][27] The key innovation was <u>just-in-time compilation</u> (JIT), [28] so other browser vendors needed to overhaul their engines for JIT. [29]

In July 2008, these disparate parties came together for a conference in <u>Oslo</u>. This led to the eventual agreement in early 2009 to combine all relevant work and drive the language forward. The result was the ECMAScript 5 standard, released in December 2009.

#### **4.7 SQL**

SQL is a language to operate databases; it includes database creation, deletion, fetching rows, modifying rows, etc. SQL is an **ANSI** (American National Standards Institute) standard language, but there are many different versions of the SQL language.

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in a relational database.

SQL is the standard language for Relational Database System. All the Relational Database Management Systems (RDMS) like MySQL, MS Access, Oracle, Sybase, Informix, Postgres and SQL Server use SQL as their standard database language.

Also, they are using different dialects, such as –

- MS SQL Server using T-SQL,
- Oracle using PL/SQL,
- MS Access version of SQL is called JET SQL (native format) etc.

SQL was initially developed at <u>IBM</u> by <u>Donald D. Chamberlin</u> and <u>Raymond F. Boyce</u> after learning about the relational model from <u>Edgar F. Codd<sup>[12]</sup></u> in the early 1970s. This version, initially called SEQUEL (Structured English Query Language), was designed to manipulate and retrieve data stored in IBM's original quasirelational database management system, <u>System R</u>, which a group at <u>IBM San Jose Research Laboratory</u> had developed during the 1970s. [13]

Chamberlin and Boyce's first attempt at a relational database language was SQUARE (Specifying Queries in A Relational Environment), but it was difficult to use due to subscript/superscript notation. After moving to the San Jose Research Laboratory in 1973, they began work on a sequel to SQUARE. The name SEQUEL was later changed to SQL (dropping the vowels) because "SEQUEL" was a trademark of the UK-based Hawker Siddeley Dynamics Engineering Limited company. The label SQL later became the acronym for Structured Query Language.

After testing SQL at customer test sites to determine the usefulness and practicality of the system, IBM began developing commercial products based on their System R prototype, including <u>System/38</u>, <u>SQL/DS</u>, and <u>IBM Db2</u>, which were commercially available in 1979, 1981, and 1983, respectively. [15]

In the late 1970s, Relational Software, Inc. (now <u>Oracle Corporation</u>) saw the potential of the concepts described by Codd, Chamberlin, and Boyce, and developed their own SQL-based <u>RDBMS</u> with aspirations of selling it to the <u>U.S. Navy</u>, <u>Central Intelligence Agency</u>, and other <u>U.S. government</u> agencies. In June 1979, Relational Software introduced one of the first commercially available implementations of SQL, <u>Oracle</u> V2 (Version2) for <u>VAX</u> computers.

By 1986, ANSI and ISO standard groups officially adopted the standard "Database Language SQL" language definition. New versions of the standard were published in 1989, 1992, 1996, 1999, 2003, 2006, 2008, 2011, and most recently, 2016

## 4.8 Bootstrap

- Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website.
- It is absolutely free to download and use.
- It is a front-end framework used for easier and faster web development.
- It includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many others.
- It can also use JavaScript plug-ins.
- It facilitates you to create responsive designs.

Bootstrap also comes with several JavaScript components in the form of <u>jQuery</u> plugins. They provide additional user interface elements such as <u>dialog boxes</u>, <u>tooltips</u>, and carousels. Each Bootstrap component consists of an HTML structure, CSS declarations, and in some cases accompanying JavaScript code. They also extend the functionality of some existing interface elements, including for example an auto-complete function for input fields.



Example of a webpage using Bootstrap framework rendered in Firefox

The most prominent components of Bootstrap are its layout components, as they affect an entire web page. The basic layout component is called "Container", as every other element in the page is placed in it. Developers can choose between a fixed-width container and a fluid-width container. While the latter always fills the width of the web page, the former uses one of the five predefined fixed widths, depending on the size of the screen showing the page:

- Smaller than 576 pixels
- 576–768 pixels
- 768–992 pixels
- 992–1200 pixels
- Larger than 1200 pixels

Once a container is in place, other Bootstrap layout components implement a CSS Flexbox layout through defining rows and columns.

A precompiled version of Bootstrap is available in the form of one CSS file and three JavaScript files that can be readily added to any project. The raw form of Bootstrap, however, enables developers to implement further customization and size optimizations. This raw form is modular, meaning that the developer can remove unneeded components, apply a theme and modify the uncompiled <u>Sass</u> files.

#### **History**

### Early beginnings

Bootstrap, originally named Twitter Blueprint, was developed by Mark Otto and Jacob Thornton at <u>Twitter</u> 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 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. [3]

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 <u>hackathon</u>-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 Otto, Thornton, a small group of core developers, and a large community of contributors.

#### **Chapter Five**

#### **Project Database and Table**

## **5.1 Database Design**

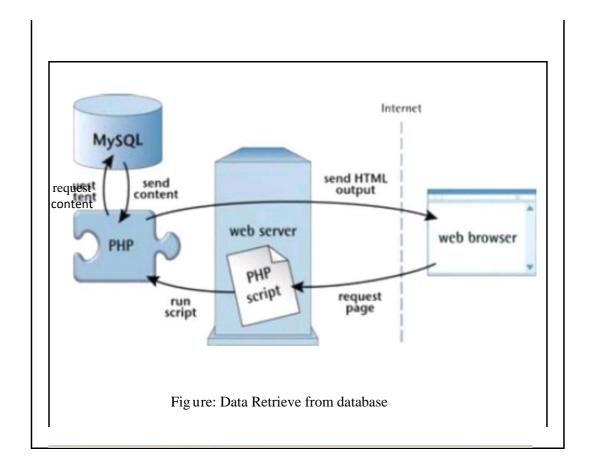
Database is critical for all businesses. A good database does not allow any form of anomalies and stores only relevant information in an ordered manner. If a database has anomalies, it is affecting the efficiency and data integrity. For example, delete anomaly arise upon the deletion of a row which also forces other useful data to be lost. As such, the tables need to be normalized. This fulfils the last objective of ensuring data are accurate and retrieved correctly.

Database files are the key source of information into the system. It is the process of designing database files, which are the key source of information to the system. The files should be properly designed and planned for collection, accumulation, editing and retrieving the required information.

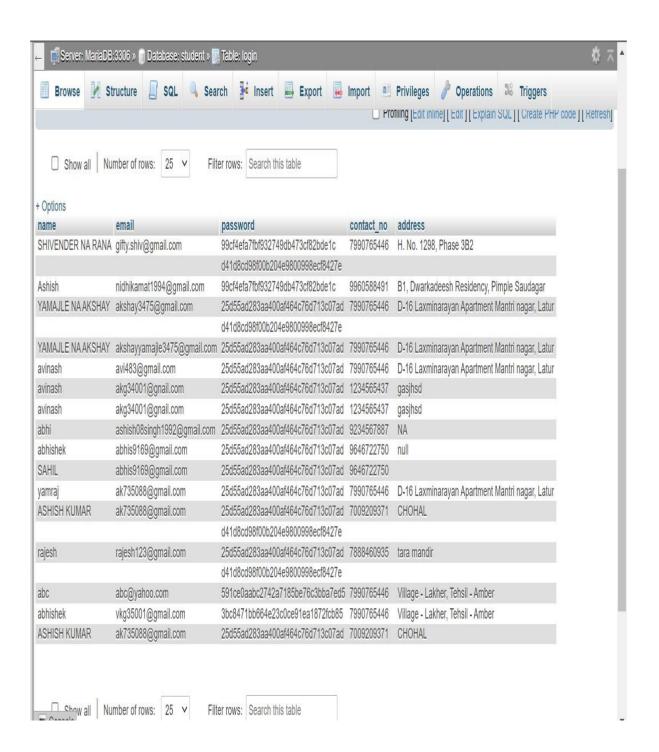
The organization of data in database aims to achieve three major objectives:

v/ Data integration v/ Data integrity v/ Data

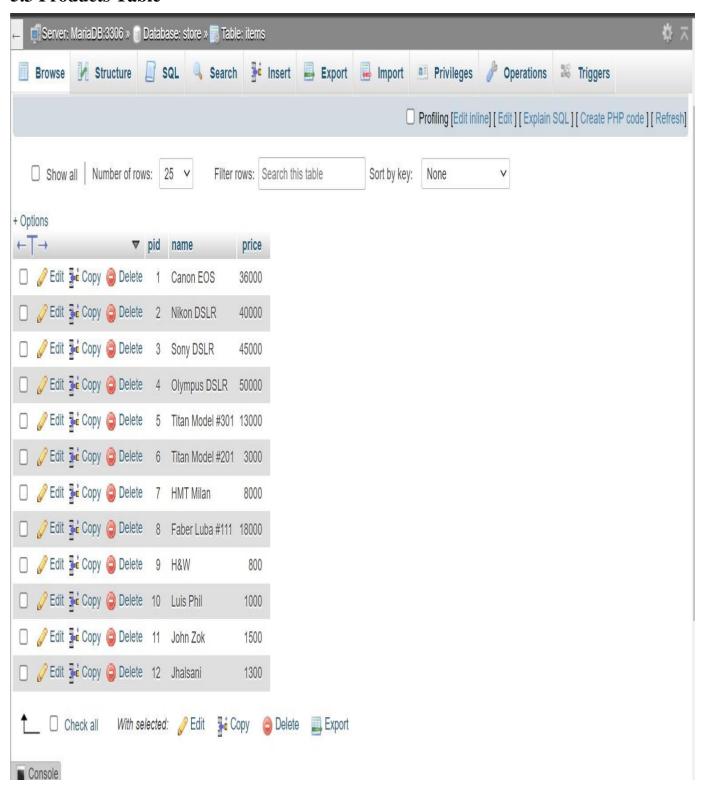
## independence



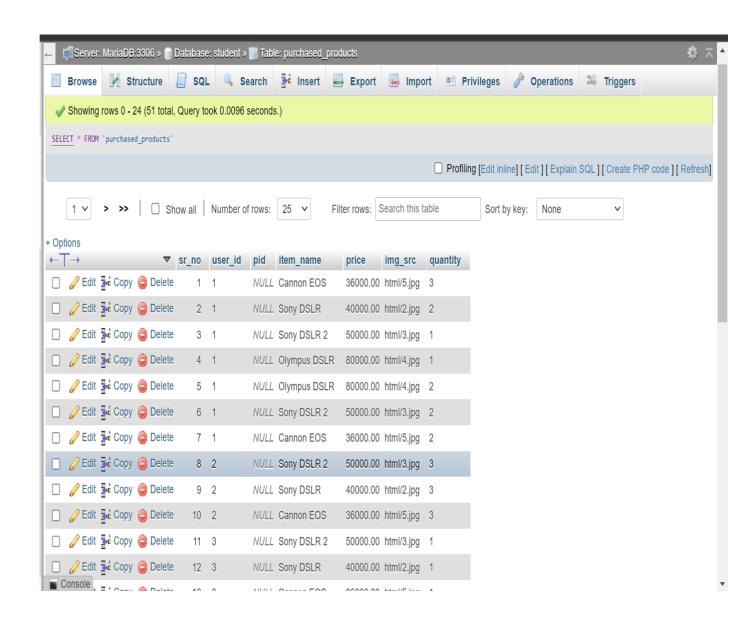
## 5.2 Signup Table



#### **5.3 Products Table**



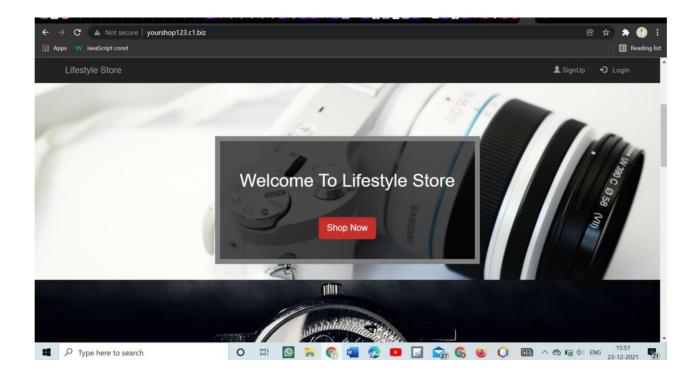
### **5.4 Purchased products**



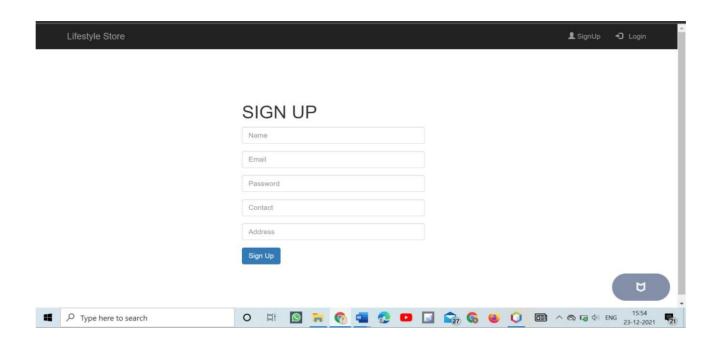
## **Chapter Six**

## **Project Model View**

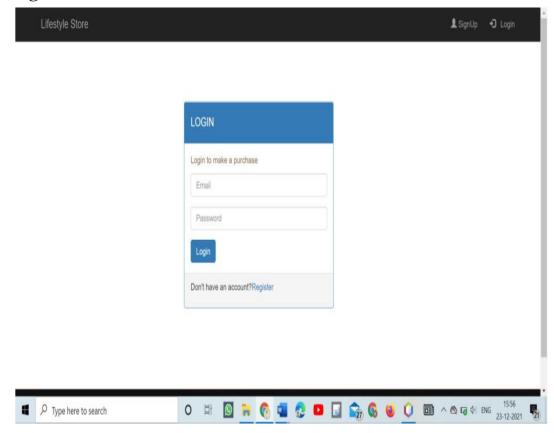
## **6.1 Home Page**



## 6.2 Sign Up Page



#### 6.3 Login Page



With so many logins and passwords to remember, it's easy to lose track of something. Even if you have the world's best organizational skills, you're going to end up using tons of different websites — especially if you run a business. Making things even more difficult is that some websites don't make their login pages easy to find, so **signing into your account can be frustrating**.

This article collects some of the **most common login pages from websites** you're likely to use while managing your business.

We've collected everything from <u>email providers</u>, to <u>eCommerce</u> and <u>website building platforms</u>, to <u>customer relationship management software</u>. This list of commonly-used websites will help direct you straight to the login pages you need.

Bookmarking these pages will make it even easier for you to access them quickly. It's your choice as to how you organize your bookmarks, but we recommend you keep all your business-related ones together. Some users prefer to place all their business bookmarks into a folder, where it can be

accessed from the Bookmarks or Favorites menu in their browser. Others prefer to put all their important bookmarks on the bookmarks bar, where they'll be constantly available at the top of the browser window. The important thing is to find a method that works for you.

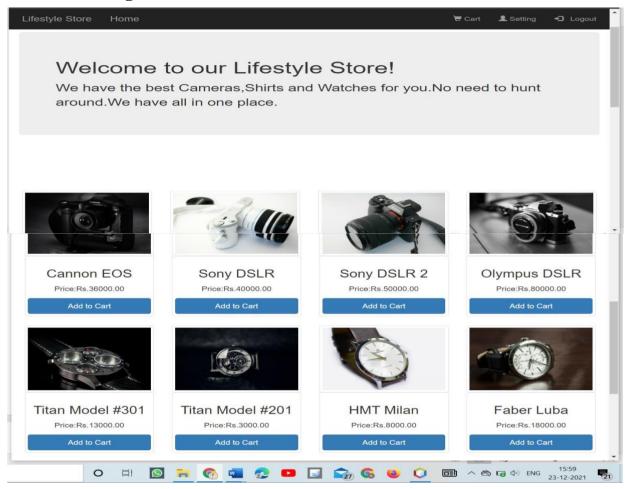
If you don't have an account, and want to sign up for some of these services, you can usually register for a new account from the login page. If not, you'll see a registration link nearby on the website.

3dcart is a powerful <u>eCommerce platform</u> with the most complete set of included features on the market and is the best <u>Shopify alternative</u>. Business owners can use 3dcart to build an entire website including content pages, a blog, categories and products, and a built-in shopping cart. Multiple pricing tiers are available and there is a 15-day free trial for testing the platform.

WordPress is primarily a blogging platform but can also be used for other types of websites, including online stores by installing the WooCommerce plugin. There are two main ways to use WordPress which can be confusing to new users. <a href="WordPress.com">WordPress.com</a> is a hosted blogging and website solution using the WordPress platform. <a href="WordPress.org">WordPress.org</a> is the other option, and offers the WordPress software for download and installation on websites with hosting elsewhere.

GoDaddy is most well-known as a domain registrar but has expanded their services to include hosting, email, <u>GoCentral website builder</u>, and more. Regardless of how many GoDaddy services you use, you can access them all through the same login page, but if you just want to check email, the GoDaddy webmail login page gets you there instantly.

## **6.4 Products Page**



A product detail page is the lifeblood of eCommerce. Read our blog post to learn the best ways to create high-converting PDPs and get a free 25-step design template.

Any online consumer will tell you that it's important to know everything there is to know about a product before purchasing it. And when you are running an eCommerce website, you want everything to be as easy as possible for your customers. Creating high converting eCommerce product pages is an essential part of a successful online store.

#### 6.5 Cart Page

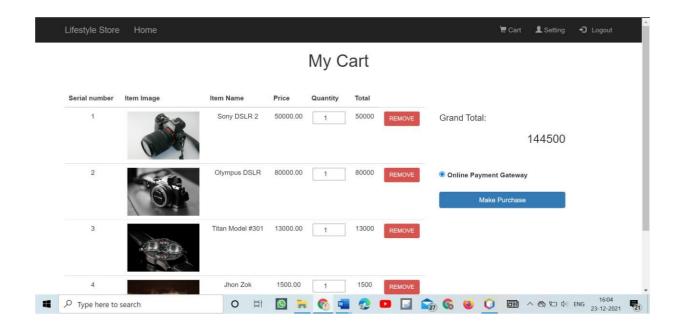
A cart page is an essential part of an <u>e-commerce</u> website. It is the page where users can pile up what they want to buy from the website and then simply checkout by paying online. To comprehend what a cart page does, think of it as a normal shopping cart in a store. People can keep adding whatever they want to buy in the shopping cart, and later, check out at the counter. Similar is the case with a cart page, only that the shopping is done online on an e-commerce website.

## How Does It Help?

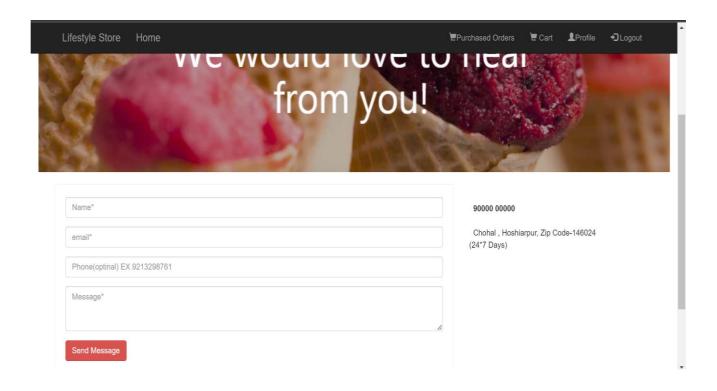
A cart page offers great ease to the user. It allows them to check out everything in one go instead of paying individually for every item they buy. In addition to the ease, users can also save a great deal of time while shopping. It helps a lot, especially if the users are buying multiple items from the website.

Cart pages on e-commerce websites are far easier to use in their most contemporary format. Users can simply keep browsing through the website online. As soon as they find something they want to purchase, a small 'shopping cart' icon is available by the product. By clicking on it, that particular item gets added into the shopping cart. Users can add as many items as they want in their shopping cart.

Once done with the shopping, this is where the cart page comes into play. Users can visit the cart page on the e-commerce website they are shopping from and see all the items they chose to buy. This page shows the individual prices of each of the products a user is buying, the quantity in which it is being bought, as well as the total amount of all the items being purchased. Customers can then proceed to checkout and receive a receipt of their payment via email.



## **6.6 Contact Us Page**



## Why have a Contact Us page?

Trust is the most important currency ecommerce stores have. New visitors are more likely to purchase when they trust your brand, and existing customers are more likely to recommend you and make repeat purchases when they trust you.

Being approachable and easy to talk to is a simple way of building trust with your website visitors. Just like when you meet someone at a party, it's way easier to trust someone who seems friendly right from the start. Brands are no different. When customers are reminded that there's a real person (or a team of people!) powering your ecommerce store, they are much more likely to trust you compared to a faceless logo.

Contact forms also helps reassure customers that there's someone listening to complaints and feedback. Making it easy for customers to contact you if something goes wrong can save a sale (and a customer) who's had a bad experience through a missing shipment or damaged product. Mistakes happen, and customers want to know that you'll be there to help when it does.

Finally, being available to answer questions can help convert a curious website visitor to a customer. When a customer delays a purchase, many times it's because they still have lingering questions or they just come to a decision on a final important detail. Unfortunately, that sometimes means they'll

decide to leave empty handed. If you're easy to contact, customers can get the answers they need and add that item to their shopping basket right away.

Not every Contact Us page serves the same purpose. Plus, you have other pages that serve different purposes, including a homepage and <u>about us page template</u>. Deciding the potential audience of your Contact Us page helps determine what features or fields to include.

Here are a few common purposes for Contact Us Pages:

- **Support.** Help resolve the concerns of existing customers who are having issues with their order, want to return or exchange a product, or having trouble completing an order.
- Sales. Help potential customers make a decision, convert prospects into customers and offer a channel for bulk or warehouse orders.
- **Press or PR.** Help media get in touch with the right people to talk to about your story.
- **Human Resources.** Help potential employees apply for a job or ask questions about your company.

## **Encouraging the right kind of contacts**

One of the biggest concerns merchants have when adding a Contact Us page is that they will be inundated with customer emails and phone calls. This is rarely the reality, but there are a few proactive steps you can take to help customers help themselves before they contact you.

First, <u>link to your FAQs</u> or Help Center at the top of the page. Suggest that finding an answer via the FAQs might be faster than waiting for a human response. <u>Frank Body</u> makes it easy for customers to look for their own answers or contact them - whichever the customer prefers.

#### **6.7 Our Services page**



### Reasons why customer service is important

Social networking, blogging, and making on the web content is basic to each marketing arrangement; however, have you considered the enormous significance of online client support? If not, you should. Here's the reason:

Client assistance, by and large, is an immense factor in consumer loyalty and reliability. Innovation and the advanced age have carried us to a period where clients anticipate prompt outcomes, generally because they can. The web has radically changed how we live our lives, lead business, and discover data. There is no turning back now; actually, it is savvy to look somewhat further into the future or hazard falling behind. The greater part of retail deals are on the web – and we are simply getting started. A few companies work totally from the web. Regardless of whether most of your business is not on the web, you need client assistance, that is. You might not have the assets accessible to respond to inquiries nonstop. However, your clients ought to have online choices that surpass your ordinary business hours.

Your site ought to be its client assistance focus. Your substance itself should be instructive about what your identity is, your main thing, and what you need your clients to do. Your products and services page ought to be intensive. Be certain that you have made a regularly posed inquiries (FAQ) page that gives the most point by point and modern data your organization brings to the table. This asset should offer responses to fundamental inquiries concerning products, administrations, and your business, wiping out the requirement for you to react to various requests about something very similar. This page alone can set aside your time and cash without ever really connecting with the client direct. Reconsider your FAQ page dependent on dull requests you get and any data that changes with time, guaranteeing the data is exact. Since you are capable, make

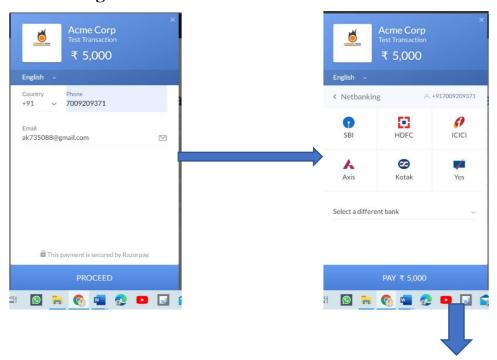
an online agent accessible to address questions or concerns that enable communication on your site.

Email is quite an essential approach to offer answers for your clients on the web. Attempt to be accessible as frequently as conceivable to react to email requests and issues. This enables your clients to contact you without a precise timetable, however, with a snappier react than holding up until the following industry day. The most noticeably awful slip-up you can make is letting clients expect something they won't get, including quick client care. Most organizations will give a window of 24 hours for email responses. This is all that anyone could need time to find them the solutions they need.

Social media is the freshest and most genuine with regards to astounding on the web client support. Facebook, Twitter, Google+, and such can be gotten to nonstop from a PC, tablet, or cell phone. It's obvious that enormous companies are likely previously beating you out concerning reaction time. Xbox, being perhaps the best organization with regards to client assistance, has an online reaction time of fewer than 5 minutes. What's more, that is 24 hours every day. You will be unable to stay aware of your tweets at painfully inconvenient times of the night, yet you ought to have somebody who accomplishes for most of the day and night. With the speed of innovation and the stature of development, we can just envision the pattern of consistent contact and prompt fulfillment to increment. You need to stay aware of the assets accessible to clients now and plan for the fate of an online business.

Making a total client care understanding by offering various online assets will enable your business to remain on top and increment consumer loyalty. Worth your clients, and let them realize you do as such by being accessible for their needs as frequently as could reasonably be expected and through various stages.

#### **6.8 Check-out Page**





<u>Web Payments</u> brings to the web a browser's built-in interface that allows users to enter required payment information easier than ever before. The APIs can invoke web-based payment apps, as well as <u>Android payment apps</u>.

- Payments are made in modals, in the context of the merchant website, which provides better user experience than typical payment app techniques that use redirects or pop-ups.
- Web Payments APIs can be integrated into established websites allowing you to leverage the existing user base.

• Unlike platform-specific apps, web-based payment apps don't need to be installed in advance.

# Chapter Seven Conclusion & Future Enhancement

#### 7.1 Conclusion

This project is only a humble venture to satisfy the needs in a shop. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the organization. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

This website provides a computerized version of shop manipulate system which will benefit the users as well as the visitor of the shop. It makes entire process online where users can search product, and buy various product. It also has a facility for common user by login into the system where user can login and can see status of ordered item as well request for items or give some suggestions. It provide the facility of admin's login where admins can add various item, review users activity and also give occasional discount and also add info about different events for the customer.

Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. While this has been the case in some areas, there is still demand for brick and mortar stores in market areas where the consumer feels more comfortable seeing and touching the product being bought. However, the availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time. In exchange, online shopping has opened up doors to many small retailers that would never be in business if they had to incur the high cost of owning a brick and mortar store. At the end, it has been a win-win situation for both consumer and sellers.

While online shopping has its attraction, there are also a number of drawbacks. For example, buying something in a store puts the goods into the consumer's hands immediately whereas there is a delay with online shopping since the product has to be shipped to the consumer. In

addition, the seller may choose to pass down the cost of shipping to the customer offsetting some or all of the discount that came with online shopping. Another drawback is when the consumer is not satisfied with the purchase. In order to return a product to an ordinary store, the customer simply has to go to the store and return the product in adherence with the return policy. However, returning an online purchase may have the consumer incur additional charges with the return shipping costs. While larger online stores have factored some of these considerations into their selling model, there are still a number of online vendors that attempt to pass as much of the expense onto the customer as possible.

### 7.2 Future aspect

The project has a very vast scope in future. The project can be implemented on intranet in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion. With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner.

The following are the future scope for the project.

Should be added payment gateway v/ Can be added inventory management system Can be added multiple branches v/ Can be added multilingual to this site And many features can be added this project to make it more robust.

In addition to associated expenses, there are a number of risks associated with online shopping. Privacy and security are two major concerns for today's online shoppers ("Privacy and Online Shopping- FindLaw," n.d. Para,3). Despite the technological advancements made, there is still considerable risk to the information that a consumer must provide to an online seller. This includes personal information such as address, credit card information, or bank account information. There have been a number of recent incidents where customer information has been compromised due to hacker attacks. This has led to many cases of identity theft making online shoppers that much more apprehensive in sharing such information.

Another issue with online shopping is the reliability of the seller. Since it is relatively cheap to stand up a website, there are many fraudulent websites being created taking advantage of consumers. Unless the consumer is very careful, they are susceptible to fraud where they may never receive what they purchased or receive products that are of bad quality. In the case of receiving bad quality, the consumer may be left with having to incur additional costs for sending the product back. Therefore, many online sellers opt to have their websites certified as "trusted" in order to win the confidence of the consumer.