

Design And Implementation of E-Commercesite For Product Sale Using Php And Mysql

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Abstract- 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. Adopting e-business is no longer a competitive advantage, but a normal business process, without which an enterprise is unlikely to survive in the new economy. Year 2000 saw many Dot –com companies built up and many companies are failing, and investors are becoming cautious to invest money into companies are failing and investors are becoming cautions to invest money into internet ventures. There is more cash needed then was expected. Some of them had to get on the bandwagon as everybody else were and didn't want to be left behind and now that the bubble has burst they are facing the consequences. This project will aim to help companies to realize what they need to follow to have a successful business if they plan well and have a good strategy. This project also identifies that implementing an E-commerce strategy is neither straightforward nor cheap for example it comprises a completer rethink of traditional modes of behavior the need and importance to involve internal staff and external suppliers and customers right from the conceptual stage need to re-evaluate company's core competences and required substantial investment in IT.

Keywords- e-commerce, e-commerce business, database, online shopping

I. INTRODUCTION

Online Shopping is a web-based shopping system for an existing shop. This Project deals with developing an E-commerce website for online shopping which sells Electronics, Books, Furniture. It provides the user with a catalogue of different goods and services available for purchase in the website. In order to facilitate online purchase a shopping cart is provided to the user. This is a complete E-commerce website with order management system. The User can create an account and buy the products from the website. An E-commerce website allows visitors to find their products, add them to “cart” and securely enter their payment information to complete their purchase. User can add their liked product to “Wishlist”. The Main Functionality of online shopping system is that contains an admin panel where the admin can add, edit and remove the products on their own and

that will be dynamically reflected in the website. This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the products in the shop anywhere through internet. Thus, the customer will get the product from their favorite shop through online shopping. This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains. If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as Flipkart, Amazon. Since the application is available in the Smartphone it is easily accessible and always available.

II. MODULE DESCRIPTION

A module description provides detailed information about the module and its supported components, which is accessible in different manners. A module is a collection of source files and build settings that allow you to divide your project into discrete unit of functionality.

User Module

- User Registration
- User Login System
- Profile Management System
- Shopping Cart
- Wishlist
- Order history.

User Registration

User can Register on website using Registration Module. User Management system is application that enables users to create and store User record. The Registration module helps to maintain User's Basic information. It contains list of fields. User will fill all the required details and set Username and Password for further process.

User Login System

The login module allows the user to enter their username and password. The User is taken for Validation whether he/she is authentic or not. It helps the user to login into different forms according to their need, only if the user is authorized.

Profile Management System

Profile Management System allows the user to view their order History and payment pending process. It maintains the overall shopping inform of the user. It also allows the user to change the password.

Shopping Cart

A Shopping Cart module shows the items that have been added to the cart before the customer proceeds to checkout. The module also shows an order summary and lets the customer apply or remove promotional codes. The cart module supports signed-in checkout and guest checkout. It also supports a Back toshopping link.

Wishlist

A Wishlist allows shoppers to create personalized collections of products they want to buy and save them in their user account for future reference. Wishlist's signify a customer's interest in a product without an immediate intent to purchase.

Order History

Order History is the complete record of a customer's orders, past and current. It includes shipping, delivery, and payment details. It is different from "order status," which shows an order's processing stage (e.g., active, pending, processed, shipped, cancelled, returned). Order History is a must-have in eCommerce because it's very helpful to both buyers and sellers. It allows buyers to easily re-order the same item. It allows sellers to identify buying trends, patterns, and seasonality, enabling them to apply marketing techniques like cross-selling, upselling, bundling, personalized and targeted messaging.

Admin Module

- Product Management
- Order Management System
- User Management
- Category/Sub Category Creation

Product Management

Product Management is an Admin side Module. E-Commerce product managers ensure that E-Commerce sites run smoothly (according to agile practices), the demands and feedback of the customers are heard, and that the quality of the new products is as per set standards. This includes managing the Product Lifecycle, gathering and prioritizing product and customer requirements, defining the product vision, and working closely with engineering, to deliver winning products.

Order Management System

The goal of an order management system is to get a product into a customer's hands as efficiently as possible. It manages the journey of each item in the customer's order, from the time it goes into their cart to the moment it arrives on their doorstep – and any returns that may follow. Built for retailers, an order management system (OMS) is a technology that helps track orders across commerce channels. The system helps with order processing and order fulfillment. After an order is placed and a delivery method is selected automated process is triggered for fulfillment. It is an Important step, particularly when scaling your business. Order management helps you to automate and streamline the mundane process of order business. Order fulfillment.

User Management

User management (UM) is defined as the effective management of users and their accounts, giving them access to purchase product. User Management module maintain the overall information of user shopping details. User Management modules are typically available only to administrators for managing user information. A user is an individual who uses Identity Manager to manage their accounts. A person who has an identity manager account is a resource user. This module allows admin to manage users, groups and roles defined in the default security realm. Admin must be logged in as a member of the Administrators or Integration Administrators group to add, delete, or modify a user, group, or role.

Category/Sub Category Creation

The overall goal of **E-commerce category management** is to increase the profit of a company. "Category Management" is the process of pooling similar products into a singular category and then addressing all business initiatives for that category as a whole. Books, Electronics, Furniture are main category. Sub Category of Electronics are Mobiles, Laptops, Mobile Accessories, Television. Subcategory of Books are Comics, Encyclopedia category of Furniture are sofa, Dining tables. Administrator

can add category, sub category according to availability of the Product.

III. PROPOSED SYSTEM

The purpose of Online shopping is to save time and money. This project provides an easy access to Administrators and Managers. The Main Functionality of online shopping system is that contains an admin panel where the admin can add, edit and remove the products on their own and that will be dynamically reflected in the website. It supports for local retailers. The most common operation scenario for a PHP website is the Lamp stack. It means that a website runs on an Apache HTTP web server deployed on a Linux System, and uses MySQL as a database. All these components are free, and the stack is well -tested, which implies the reduction of required time and funds for development.

Advantages of Proposed System

Supports for Local Retailers

Due to simple and cheaper nature of proposed system Local Retailers can easily switch to online shopping. If Local Retailers moves to online shopping it reduce crowd. Convenience is one of the main reasons that online shopping has become so popular it allows you to switch stores and products by clicking a button rather than traveling to a new store.

Deliver on Time

Most of the Products are delivers to local areas only so the delivery will be on time. Meeting customer's expectations and delivery requirements has to be a priority of every business. On time delivery drives better collaboration with your customers, ensures reliability of delivery and most importantly customer loyalty.

Returns can be easier

A concise and clear return policy gives consumers a feeling of security; that what they are buying is guaranteed to be what it is represented to be. If a retailer doesn't give this be. If consumers often become suspicious and avoid buying the product.

FEASIBILITY STUDY

The objective of Feasibility study is to determine whether the proposed system is Feasible. A Feasibility study is an analysis that considers all of a project's relevant factors

including economic, technical, legal and scheduling considerations to ascertain the likelihood of completing the project successfully. It is an assessment of the practicality of a proposed project. A Feasibility study analyzes the viability of a project to determine whether the project or venture is likely to succeed. The Feasibility is determined in terms of four aspects.

- Technical Feasibility
- Behavioral Feasibility
- Economical Feasibility
- Legal Feasibility
- Schedule Feasibility

Technical Feasibility

In this, one has to test whether the system can be developed using existing technology or not. It is evident that necessary hardware and software are available for development and implementation of proposed system. we acquired the technical knowledge of working in languages, and then only we have started designing our project. It is process of figuring out how you're going to produce your product or service to determine whether it's possible for your company. Before launching your offerings, you must plan every part of your operations, from first sourcing your production materials all the way to tracking your sales.

Behavioral Feasibility

The customers are using different types of peripherals devices. Our System is capable of providing user friendly interface for all devices (like laptops, mobile phone). Behavioral Feasibility evaluates and estimates the user attitude or behavior towards the development of new system. It helps in determining if the system requires special effort to educate, retrain, transfer, and changes. It is a scale of how the proposed system solves the problems, to what extent it takes the advantages of the opportunities identified during scope definition and how much it satisfies the requirements identified in the requirements analysis phase of system development.

Economical Feasibility

As a part of this, the cost and benefits associated with the proposed system are compared and the project is economically feasible only if tangible and intangible benefits outweigh the cost. The cost for proposed online shopping system is outweighing the cost and efforts involved in maintaining the registers, books, files and generation of

various jobs that single software can do. So, this system is economically feasible.

Legal Feasibility

Legal feasibility determines whether the proposed system conflicts with legal So, this Data Protection Act. It will be done by some legal advisors. A data processing system must comply with the local data protection regulations and if the proposed venture is acceptable in accordance to laws of the land.

Schedule Feasibility

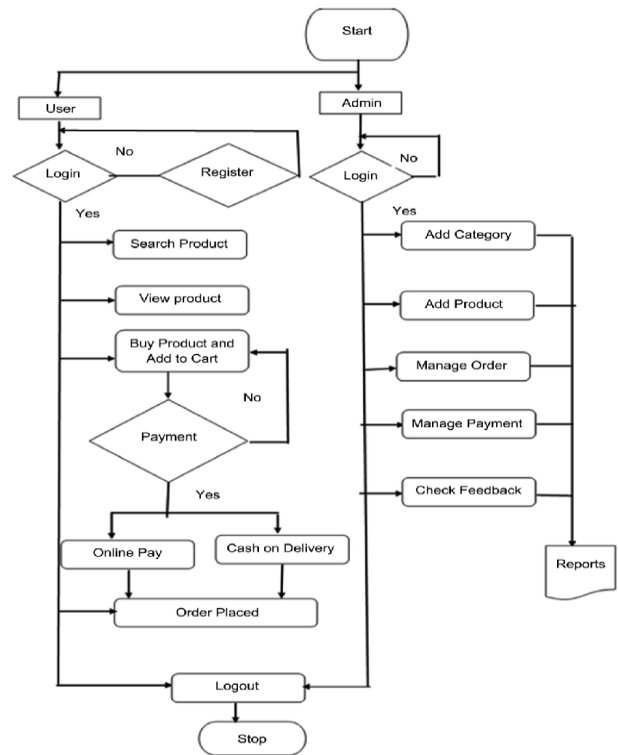
A project will fail if it takes too long to be completed before it is useful. Typically, this means estimating how long the system will to develop, and if it can be completed in a given time period using some methods like payback period. Schedule feasibility is a measure of how reasonable the project time table is. Based on given information the system will perform given tasks. Planning a project strategy and building a project schedule to

- Complete project within time and budget.
- Resource management system.
- Increase team productivity.
- Increase project success rate.
- Realize significant time and resource savings.

We tried to complete the software within time limit. And almost I can do it. The proposed system will easily be accessible and it will be well organized and delivered the right information in the right place.

SOFTWARE PROJECT PLAN

BUSINESS DIAGRAM



SYSTEM ANALYSIS

DATA FLOW DIAGRAM (DFD)

DEFINITION

A data flow diagram is a graphical view of how data is processed in a system in terms of input and output. The Data flow diagram (DFD) contains some symbol for drawing the data flow diagram. DFD is the abbreviation for Data Flow Diagram. The flow of data of a system or a process is represented by DFD. A data-flow diagram is a way of representing a flow of data through a processor a system. The DFD also provides information about the outputs and inputs of each entity and the process itself.

A data-flow diagram has no control flow, there are no decision rules and no loops. Specific operations based on the data can be represented by a flowchart. For each data flow, at least one of the endpoints must exist in a process. The refined representation of a process can be done in another data-flow diagram, which subdivides this process into sub-processes.

The DFD belongs to structured-analysis modeling tools. Data Flow diagrams are very popular because they help us to visualize the major steps and data involved in software-system processes. The name of the entity should be easy and understandable without any extra assistance.

The processes should be numbered or put in ordered list to be referred easily. The DFD should maintain consistency across all the DFD levels. A single DFD can have maximum processes up to nine and minimum three processes.

In Business Analysis –

DFD is used for the assessment of existing and projected systems and its elements. Diagramming provides a useful tool set for exposing possible weaknesses and structural flaws.

In Software Development –

DFD is used to explain and visualize the requirements of the projects from the business perspective and a technical point of view. This feature allows hatching through and through step-by-step plan for the development of each element.

FRONT END SPECIFICATIONS

HTML:

HTML stands for Hypertext Markup Language. It is used to design the front-end portion of web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. The markup language is used to define the text documentation within the tag which defines the structure of web page.

FEATURES OF HTML:

- It is the language which can be easily understood and can be modified.
- Effective presentations can be made with the HTML with the help of its all-formatting tags.
- It provides the more flexible way to design web pages along with the text.
- Links can also be added to the web pages so it helps the readers to browse the information of their interest.
- You can display HTML documents on any platforms such as Macintosh, Windows and Linux etc.

CSS:Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide

more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate.

FEATURES OF CSS

- **Opportunity in Web designing:** If anyone wants to begin a career in web designing professionally, it is essential to have knowledge of CSS and HTML.
- **Website Design:** With the use of CSS, we can control various styles, such as the text color the font style, the spacing among paragraphs, column size and layout.

JAVA SCRIPT:

JavaScript often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled and multiparadigm. It has dynamic typing, prototype-based object-orientation and first-class functions. Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. Over 97% of websites use it client-side for web page behavior, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on the user's device.

FEATURES OF JAVASCRIPT:

• Validating User's Input

JavaScript is very useful while using forms. It has the capability to validate user input for errors and also saves time. If the user leaves a required field empty or the information is incorrect, it checks for them before sending the data over to the server.

•Generating HTML Content

JavaScript has very handy features to dynamically generate HTML content for the web. It allows us to add text, links, images, tables, etc. after an event occurrence (e.g. – mouse click).

•Arrow Functions

These functions are very useful in simplifying the syntax and tamp down the lines of codes for the web page or web application. Since these are light-weight in syntax, they can be very easily used in anonymous functions in JavaScript.

JQUERY jQuery is a lightweight, "write less, do more", JavaScript library. The purpose of jQuery is to make it much easier to use JavaScript on your website. jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code. jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

AJAX: AJAX stands for **A**synchronous **J**avaScript and **X**ML. AJAX is a new technique for creating better, faster, and more interactive web applications with the help of XML, HTML, CSS, and Java Script.

- Ajax uses XHTML for content, CSS for presentation, along with Document Object Model and JavaScript for dynamic content display.
- Conventional web applications transmit information to and from the sever using synchronous requests. It means you fill out a form, hit submit, and get directed to a new page with new information from the server.
- With AJAX, when you hit submit, JavaScript will make a request to the server, interpret the results, and update the current screen. In the purest sense, the user would never know that anything was even transmitted to the server.
- . AJAX is a web browser technology independent of web server software.

BACK-END SPECIFICATIONS

- MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL). A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in a corporate network. In particular, a relational database is a digital store collecting data and organizing it according to the relational model. In this model, tables consist of rows and columns, and relationships between data elements all follow a strict logical

structure. An RDBMS is simply the set of software tools used to actually implement, manage, and query such a database. MySQL is integral to many of the most popular software stacks for building and maintaining everything from customer-facing web applications to powerful. Its open-source nature, stability, and rich feature set, paired with ongoing development and support from Oracle, have meant that internet-critical organizations such as Face book, Flickr, Twitter, Wikipedia, and YouTube all employ backend specification.

FEATURES OF MYSQL:

- Easy to use: MySQL is easy to use. We have to get only the basic knowledge of SQL. We can build and interact with MYSQL by using only a few simple SQL statements.
- It is secure: MYSQL consists of a solid data security layer that protects sensitive data from Textbox are encrypted in MYSQL.
- Client/ Server Architecture: MYSQL follows the working of client/server architecture. There is a database server (MYSQL) and arbitrarily many clients (application programs), which communicate with the server; that is, they can query data, save changes, etc.

MIDDLE WARE SPECIFICATIONS

XAMPP is a free and opensource development web server solution package developed by Apache Friends, consisting mainly of the Apache HTTP server, maria db database, and interpreters for scripts written in the PHP and Perl programming language Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible. XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer, with the advantage that common add-in applications such as word press and jomia can also be installed with similar ease using bitnami.

XAMPP FEATURES

- Xampp allow website designer and programmer to test their work on their own computer without any access to the internet
- To make this as way as possible, many important security features are disabled by default.
- Xampp has the ability to server web pages on the World Wide Web.

PHP: Stands for "PHP: Hypertext Preprocessor," a recursive acronym. PHP is a scripting language web developers use to create dynamic websites. It is often installed by default on Apache web servers, alongside MySQL as part of a "LAMP" configuration. It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1994.

[7] <https://github.com/mohsinenur/E-Commerce-Website-Using-PHP> - Creating Order details page

FEATURES OF PHP:

- **Performance:** PHP script is executed much faster than those scripts which are written in other languages such as JSP and ASP. PHP uses its own memory, so the server workload and loading time is automatically reduced, which results in faster processing speed and better performance
- **Open Source:** PHP source code and software are freely available on the web. You can develop all the versions of PHP according to your requirement without paying any cost. All its components are free to download and use.

IV. CONCLUSION

This project has achieved the requirements and objectives that have been identified during analysis phase. Web Application for online gift shopping has helped to make easier for purchasing gift products. Modifications after successful analysis can be incorporated into the system. The system has been well developed and future enhancements are also explained, so that it could be used to make any of the future modification, this making the application.

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