Website Development for E-commerce Platform


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Abstract—E-commerce websites are used on daily basis by people from developed and developing countries to purchase their day to day's need. Here, we developed E-commerce website to bridge gap between farmers and end users. This website is user friendly for end user. We Provides services like branding, consultancy, water solution. We sell dry fruits like Badam, Kismish, Kaju, Pasta, etc. As information concerning dried fruits are hardly available, the recognition of consumer’s preferences for dried fruit and products containing them in different contexts was undertaken. The objective of website is to deliver the online shopping product through web platform. This project is an attempt to provide the features of online shopping to customer of a healthy food and many different types of products. It helps buying the products in the shop anywhere through internet by using an Android Device, Laptop and Computer. Users can enjoying the shopping from anywhere, the shops won’t be losing any more users to the trending online shops such as a flip cart or e-Bay. It includes all shop information such as Customers record keeping, user just have to enter the primary information about a user and his/her account. Thus our website is highly integrated. It also has an easy to use interface for customers, dealer and blood donor.

Index Term—E-Commerce, Service, e-Bay, Dry Fruits, etc.

I. INTRODUCTION

In today's world, people don't have time for their personal needs. The innovation is fast to the point that anybody can do anything by simply sitting in a room. So, it is an imperative issue as per observation. The internet is the way that helps a person in all aspects. In the event that somebody wish to purchase and view things, they can purchase online with the assistance of web. Commercial centres like Flipkart, Amazon and Snapdeal are giving gigantic choices to youthful understudies, housewives just as little shop proprietors to scale their organizations and win great cash [1][13]. Not with standing, there are different variables that one needs to take a gander at before beginning up an online business. Setting up an online shop to move your items can be a valuable and beneficial method for working together.

It enables you to work without fundamentally requiring a conventional shopfront and gives your clients greater adaptability since they can purchase your items whenever of the day. Web based moving can likewise widen your client base, as you can pitch to individuals who are interstate or abroad. Internet shopping doesn’t speak to everybody, so ensure your objective market is OK with purchasing on the web before you begin. You may discover you can achieve more clients by offering web based shopping close by a customary shop. Web based shopping makes utilization of advanced innovation for dealing with the stream of data, items, and installment between shopper, website proprietors and providers.

In the event that you were move your item disconnected, at that point you will ready to move your items in constrained region where your shop is found, however when you are going to move your items online then you can move the items in various locales. For this situation, your benefit will be naturally expanded. Presently multi day everybody is occupied with their work they didn’t get time for buying the items by going to specific shop, with the assistance of online commercial centres they will spare their profitable time just as they will ready to see clients audit and contrast and the results of different merchants [6].

The clients get limits through which they can spare their cash. Labour additionally diminishes because of online commercial center. Online stores offer item depiction, pictures, correlations, cost and significantly more. Shopping basket is one of the essential office gave in web based shopping, this lets client to peruse distinctive products and enterprises and once they select a thing to buy they can put the thing in shopping basket, and keep perusing till the last choice [12].

II. RESEARCH METHODOLOGY

The proposed application is implemented using HTML, ASP and MYSQL workbench [4]. The application was tested on DOT NET web browser to determine the functionality. The existing e-commerce websites provide the features of a sophisticated shopping cart, on-site wish list. This paper proposes an e-commerce shopping application to sell and promote only the Indian products. The additional feature proposed in this paper is the off-site wish list.

A. Modular Design

The functionality of the proposed application is divided into number of sub modules. The modules to be taken into account are customer shopping cart, orders, payment and product module. These modules while integrated together give the functionality desired out of the application.
B. Customer

In this module the client information is processed. This information includes giving username and password to login to this site. This is required to verify the user. The email id of the customer is used to confirm the customers orders and also to send promotional emails[10].

C. Shopping Cart

This sub-module lets the user to select the items that they intends to buy to store in cart before placing the order. The items can be stored into the cart and it can be deleted from the cart.

D. Order

In this module customer order is processed. The user can place the order for the items they wants to buy. It verifies the pin code and it confirms the order to delivered place. At the shipping address the product should be delivered.

E. Payment

In this sub module payment options for the order is given and processed. Payment would be through credit card, debit card, E-cash or cash on delivery. The total charges of the product is the sum of cost of the product and delivery charges will be deducted from the user’s account in case of payment options other than cash on delivery.

F. Product

In this module product details can be added to the database. The tax per product and actual price of the products can be added. The product details can be edited. The products are stored as per category. Arrangement of products into categories enables the user to search the products based on its category. The database is normalized [13] so that the redundancy is minimized. The database for the proposed application is normalized up to third normal form.

DEVELOPMENT TOOLS

The entire development process has been subdivided into two: the front end development and the backend development. The front end comprises of the visually visible parts such as the home page, admin panel, contact page, shopping cart page. The back end contains the database and its interaction with the front-end.

1) Front End Development: The front end was initially raw coded using JavaScript. JavaScript is a client side scripting language which is a dedicated language for web development. JavaScript code was simply mixed with the Hypertext Mark-up Language (HTML) code. Hypertext mark-up language is the language used to design the web pages of an application. A static page is an HTML document that is stored on the web server and does not change.

This was performed by Cascading Style Sheet (CSS). CSS is a style sheet language used for describing the look and formatting a document written in a mark-up language. These CSS files are linked with the class files with .php extensions to put the panels in order, the text with correct font, size and color.

JavaScript is a client side scripting language most commonly used as part of web browsers and its implementations allow client side scripts to interact with the user, control the browser and alter the document content which is displayed.

For example, in website for the clients registration, the system ask to provide their details which contains their name, email address, age, etc. If they missed any of the details then immediately the browser asks them to fill the particular field. This is implemented and handled by a JavaScript. Bootstrap programs are also introduced in for web application which supports creation of animations.

2) Backend Development: The Database Management System (DBMS) provides support for the back end. The database management system is essentially software where admin can create the database, add, drop, alter and update tables. The tables can hold different types of data for example: integer, variable characters etc. in our application we have chosen the MySQL DBMS to hold the database. MySQL is a relational database management system. The main reason is MySQL development project has made its source code available under the terms of the General Public License (GNU) which is an open source web application.

3) Database Design: One of the most important and challenging task is the database design. The information passed by the customer while registering in the website is stored in the database. The products with their identification, description and image is stored in the database. Moreover, if admin update any of the featured products then update takes place in the database. So the program has a lot to do with the database.

Any query is run on the database by Structured Query Language (SQL). As stated earlier that PHP has some useful features one of them is the support to connect the database and run queries. The following diagram explains the details the database design [3].

The system have six tables in the database namely: advertise, brand, category, product, small add and registration. The formation of three tables are shown in the diagram. The table entitled “product” has the attributes namely: product id, product rate, category id, brand id, and product rate. Where product id is the primary key for this table i.e. each product will have a unique identity.

The attribute category id plays as a foreign key for this table i.e. this foreign key creates a link with table category having two attributes: website his information will be stored in the customer table with the attributes- name, customer id, product id, quantity and email. Again customer id is the unique key for this table and product id is the foreign key to link with the product table.

III. SYSTEM ARCHITECTURE

The Admin side DFD [2][3] describe the functionality of Admin. Admin is an owner of the website. Admin can add category of item and then add items by category wise and admin can manage order and payment detail.

The Customer side DFD describe the functionality of Customer. Customer should login with correct credentials.
Customer select the product as per their requirements specification, description. Then it should place the order through the payments. Customer can pay the payment through net banking credit card, debit card and cash on delivery.

IV. IMPLEMENTATION

The website design in this paper needs a web browser and a database for implementation at the server side and only a web browser at the client side. The user types the URL corresponding to the website in the address field of the browser, a web server is contacted to get the requested information. The application is developed using HTML as, and MYSQL workbench as the backend.

A. Integrating the website and the database:

Customers’ ordering the products from an e-commerce website should be able to get the information of products, ask questions, review, and give feedback on the products, select the products they would like to buy, submit payments. Admin should be able to keep track of the products ordered,
payment details, customer inquiries. So a well organized database is very essential for maintenance of an e-commerce website. The user must be able to access the data base and for this the remote database connectivity is established. The user information is stored in and retrieved from the remote database. The database used in this paper is MYSQL Server.

B. Webpage design:

The web pages are designed in HTML and Java Script [8][9]. The web pages should be dynamic in nature as the user should be able to access the product details, make payment, post feedback, etc. The static web pages are used for displaying the product description, privacy policy and so on. ASP is used as middle tier that establishes the necessary connection with the database to retrieve the information from the remote database.

C. Working:

The administrator is given the benefits to change and refresh the database. The administrator includes new items, settles on the ideas on certain items. The items that are not sought after can be for all time erased from the database which implies that the closeout of those items on the site is ceased. The seller subtleties, installments to the merchant are to be taken consideration by the administrator. The transportation subtleties, for example, the regions where the delivery offices are accessible, the subtleties of the delivery organizations and the exchange between them are to be checked. The administrator can choose the money down office to make accessible in all territories or limit to certain regions as it were. The reports of the regular deal, benefit, the items are very on interest, etc are produced according to the demand.

The report age isn't feasible for the client. A client suspected to have broken the protection strategy can be hindered by the administrator.

Promotional mails can be sent to the customers e-mail id based on their address. The heuristics analysis is to be made on a particular customer to know their interests. So that only on those products, the promotional mails can be sent to that customer. The customer accesses the website by typing the URL corresponding to the website as shown in Fig. 4. The user can request for product details by clicking the products menu. The user is provided with two types of wish lists – onsite wish list and offsite wish list. In the list the user is allowed to add any product available on the site to the list.

The customer should sign up for the first time to place order of a product. Later each time user to buy products he should login. The wish list of the user can be maintained if and only if the user has an account in the database. The product that user want to buy will be added to the cart, and if user to see some more products he can continue while one or more products are on the cart. The order of the products is placed from the cart as shown in Fig. 5. The products in the cart can be removed, more products can be added.

Once the order is placed the next step would be to give the order details as shown in Fig. 6. The user is asked to type his address, mobile number and pin code. Pin code is used to check the availability of the shipping service to given place.

The next step is payment. The payment can be done through credit card, debit card, pay pal and cash on delivery. If the user want to make the payment via credit card or debit card, then the card details are asked. Once the user enters the card details the user is directed to a payment gateway for the transaction. Once the order is placed then mail will be send to the user. The user is informed via e-mail while the order is processed, shipped, and delivered at the destination.

The user will be given an order id which will help in tracking the order. The order can be cancelled before it is being shipped. The return policy is specified by the admin. The recently viewed products are displayed on the user's home page. The user can assign rating to products, review the products and give feedback. The purchase history of the user is maintained.

Fig. 4. Home Page of Website.

Fig. 5. Product Details.
V. CONCLUSION

World Wide Web has become a major resource in modern business as it gives new opportunities to business. An online website can be compared to a shop’s interior. The website is attractive, provides easy navigation, multiple options in terms of brands, color, and design that the customer would stay on the site. This paper supports a flexible, attractive, and an easy-to-use environment for an online website along with the addition of a mobile wish list. This paper provides an easier design to implement the website, provides easy navigation, onsite and offsite wish lists, and online payment. The offsite wish list is a new feature proposed in this paper. Hence, as future enhancements to the proposed system the following features:

- Multiple shopping carts can be provided per user.
- A mobile application for the website can be developed.
- Payment through e-wallets could be made possible.
- Send SMS alerts to the users.

REFERENCES