

Invento: E-Commerce Framework

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Abstract— The current world scenario has changed a lot now a days , The use of Internet and its applications are evolving day by day. The wide use of smartphones and Android applications has increased tremendously. This paper describes the innovation of e-commerce framework for website construction in E-commerce. Non-technical persons are unable to use current frameworks if they want to create their e-commerce website for selling their product. In this paper, we propose a standard architectural framework invento that can be easily used by any non-technical persons for developing their e-commerce applications and for selling their products online. The paper first describes the necessity for the building of e-commerce websites and architecture, implementation, advantages and application of invento framework. This framework is a complete e-commerce solution that allows you to set up an online store to sell your goods. This framework will provide a complete customization options for your online store, where you can add, delete, update your store products and sell them by creating your own website and also android app of invento framework is also available so that it's also mobile friendly.

Key words: E-Commerce Website, Data Driven Framework, Android

I. INTRODUCTION

The exchange or buying and selling of commodities on a large scale involving transportation from place to place is known as commerce. When all this is done electronically, it is known as e-commerce. E-commerce from communication perspective is the delivery of information, products or services, or payments via telephone lines, computer networks. E-commerce from service perspective is a tool that addresses the desire of firms, consumers and management to cut service costs while improving the quality of goods and increasing the speed of service delivery. Ecommerce from online perspective provides the capability of buying and selling products and information on the Internet and other online services [1][2].

In the current world use of Ecommerce has grown on a large scale. In the era of rapid development of information, it is no doubt that E-commerce sites will bring enormous business [2]. These websites on the Internet cover the economic market, finance, management, human resources, business and technology .Online shopping mall is becoming a new kind of trade. So that there is need to create e-commerce websites that is helpful for peoples to sell their products online.

The current ecommerce world consists of many frameworks like magento, shopify, open cart etc which are used for creating e-commerce websites. invento framework provides users feasibility to add items, delete items, update products and to set the theme accordingly which thus allows the customer easy user interaction so that even a non-technical person can interact with the framework to create and launch his own website. Android app of invento

framework is also available Hence proposed framework provides both desktop as well as mobile adaption functionality. It is just a majestic tool which allows to create ecommerce websites with the help of framework.

II. KEY FEATURES

Proposed framework is also used by non-technical person for creating their own website.

Provide the customization option thus the user can add/delete/update the product information using the framework and launch his own website.

Invento is about buying and selling products and services on the Internet

Android app for invento framework also available so it is mobile friendly.

The ranges of things that can be sold using invento is enormous and include art, apartment, antennas, batteries, bicycles, books, cars, cells phones, computer, cosmetics and whatever else can change hands.

III. ARCHITECTURAL OVERVIEW

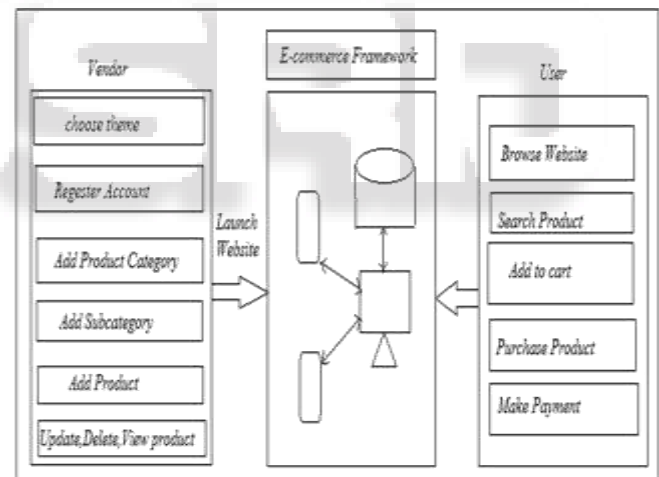


Fig. 1: Architectural framework of e-commerce website creation

The proposed approach consists of an architectural framework of e-commerce website creation. This framework is consists of two modules such as, vendor, user.

A. Vendor

In this module many options are provided for vendor to create e-commerce website.

First vendor has to register to use the framework. Once vendor registered with framework then he can access the framework and use it for creating website. Then vendor has to select a theme from pool of available themes for website. After vendor is add product to sell. all information related product should be enter in framework e.g name, price, discount, category, subcategory, number of products etc. vendor can be also update, delete the product according to his need.

B. User:

After creating website of vendor then it is launch so that user can visit on website for buying products. many options are available for user on website. user can view the product, search the product from website also user add the product to cart after that user purchase the product from website and make the payment for that product.

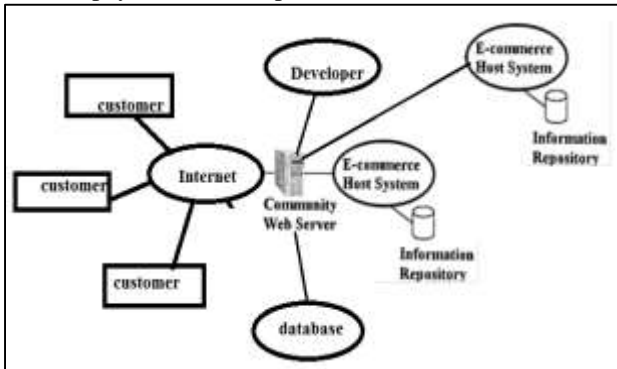


Fig. 2: Architecture of invento framework

Diagram depicts detailed architecture of invento framework.

It mainly consists of three modules such as

- E commerce host module
- Web server and data management module
- customer module

1) E-Commerce Host Module

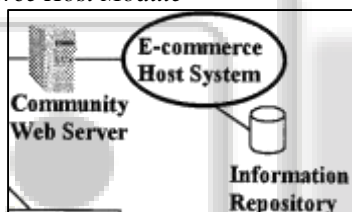


Fig. 3: E-commerce host module

This module is main part of represented framework. E-commerce host module is for non-technical person who want to create their online store. E-commerce host is provided with following facilities

- Theme selection
- Register account
- Add product category
- Add sub product category
- Add products

2) Web Server and Data Management Module

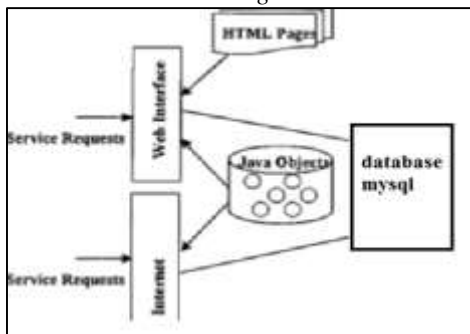


Fig. 4: web server and data management module

3) Customer Module

This module consists of activities to be done by end user.

- Login/authenticate
- Browse website

- Add to cart
- Purchase product
- Make payment

IV. APPLICATIONS

A. Online Shopping and Advertising

With the use of e-commerce, one can do online shopping. Unlike traditional model, customer need not to go to store, he or she can visit any website and find all the information regarding any product at screen of his computer and places the order. In the online model, the retailer seeks out the customer. With online shopping, constraints of time and space disappear. There is no bricks and mortar storefront to worry about, no critical locations. Retailer can only concentrate on the quality of their product. They need not to worry about the stores where customer came and saw their product. They advertise their product on the Internet in such a way that more and more people get attracted to it [3].

On the customer side, it is also easy for a customer to do online shopping, He need not to go to market place by crossing the heavy traffic areas and then find out the parking place for their vehicles, find and select items for purchase, take them to checkout counter, wait in line, pay for items and carry them back to home. With online shopping, customer sit in front of his computer screen and then find out the information regarding his product by visiting different websites. Choose the product by considering all the aspect which includes its cost, quality etc. and then places an order. And after some time he got the home delivery of his product. Customer can pay the bill by the mode which he and his merchant have decided.

Thus online shopping saves time and money of customer as well as merchant

V. IMPLEMENTATION

Invento framework is implemented using the technology JSP that is java servlet pages. Invento also used AJAX (Asynchronous javascript and xml) for making user-friendly framework.

A. JSP:

JavaServer Pages (JSP) is a technology that helps software developers create dynamically generated web pages based on HTML,XML, or other document types. Released in 1999 by Sun Microsystems, JSP is similar to PHP and ASP, but it uses the Java programming language[1][6].To deploy and run JavaServer Pages, a compatible web server with a servlet container, such as Apache Tomcat or Jetty, is required. Invento used apache tomcat to run javaserver pages.

B. AJAX:

AJAX stands for Asynchronous JavaScript and XML.Ajax is a client-side script that communicates to and from a server/database without the need for a postback or a complete page refresh. AJAX is a new technique for creating better, faster, and more interactive web applications with the help of XML, HTML, CSS, and Java Script. Conventional web applications transmit information to and from the server 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.

Invento used AJAX for login module as follows:

```
$.post("<%=request.getContextPath()%>/tiles/ajax.jsp?meth  
odId=registerUser")
```

Our proposed framework consists of two phases:

- Website creation
- Launching website

1) Website creation:

Home page of the invento.

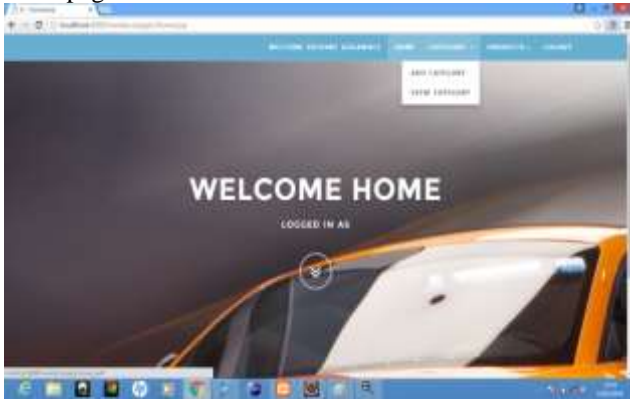


Fig. 5: Home page of invento

Add product, category, update, delete product in the website.



Fig. 6: Entering the product information

2) Launching Website:

Website is created and launched using invento framework.



Fig. 7: E-Commerce website

VI. FUTURE SCOPE

The currently designed invento framework is small scale view which allows only limited usability. Thus additional security and payment related options can be added. Much more convenient functionality can also be added to our invento Framework. The users location tracing and order

placing and delivery functionality can be provided to the invento framework. Recommender system also added in invento framework. The popularity of recommender systems has evolved to provide suggestions and recommendations to the user for relevant information from web according to their preferences [5].

VII. CONCLUSION

E-commerce is a worldwide opportunity which will be the major means of building business in the 21st century. It is no doubt that E-commerce sites will bring enormous business so that there is need to create e-commerce websites that is helpful for peoples to sell their products online. Thus propose framework invento that can be easily used by any non-technical persons for developing their e-commerce applications and for selling their products online.

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