The Design and Implementation of an E-Commerce Site for Online Hand Arts Sales and Making of Hand Arts

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Abstract: The business-to-consumer aspect of electronic commerce (e-commerce) is the most visible business use of the World Wide Web. The primary goal of an e-commerce site is to sell goods and services online. This project deals with developing an e-commerce website for Online HAND ARTS Sale. It provides the user with a catalog of different HAND ARTS available for purchase in the store. And another thing is the History of every ART. And also the making of every ART included in the website. This is the main thing in this an E-Commerce Web site. In order to facilitate online purchase a shopping cart is provided to the user. The system is implemented using a 3-tier approach, with a backend database, a middle tier of Apache2 and Sql, and a web browser as the front end client. In order to develop an e-commerce website, a number of Technologies must be studied and understood. These include multi-tiered architecture, server and client side scripting techniques, implementation technologies such as SQL, programming language (such as Html, Php), relational databases (such as MySQL, Access). This is a project with the objective to develop a basic website where a consumer is provided with a shopping cart application and also to know about the technologies used to develop such an application. This document will discuss each of the underlying technologies to create and implement an e-commerce website.

Keywords- GVU (Graphics, Visualization, and Usability),

1. INTRODUCTION

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. Now The objective of this project is to develop a purpose e-commerce store where any product (Paintings, Toys, Handi Crafts, Silver lamp Shades, etc.,) can be bought from the comfort of home through the Internet. However, for implementation purposes, this paper will deal with an online HAND ARTS store and most important of modules are history of every Hand art and making of every Hand art. In the module of history the total history of every hand art added to in this E an- Commerce site. 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 credit card number. An e-mail notification is sent to the customer as soon as the order is placed.

Actually the HAND ARTS makers are totally decreased in the overall world. The next generation no body is there working in making of hand arts. So The ART is to pass over. No one coming to this works in makers family in the next generation. But some people are interesting to learning of making HAND ARTS. But the interesting people are staying some different places and Hand ART makers place are different. This is way bridge of these two category people.

All versions

<table>
<thead>
<tr>
<th>PHP Version</th>
<th>Drupal 6</th>
<th>Drupal 7</th>
<th>Drupal 8</th>
</tr>
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<td>No</td>
</tr>
<tr>
<td>5.4</td>
<td>Core ok; some contrib modules and themes may have problems</td>
<td>Yes (minimum recommended)</td>
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</tr>
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<td>Core ok; some contrib modules and themes may have problems</td>
<td>Yes</td>
<td>5.5.9+</td>
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</table>
Apache  Apache is the most commonly used web server for Drupal. Drupal will work on Apache 2.x hosted on UNIX/Linux, OS X, or Windows. The majority of Drupal development and deployment is done on Apache, so there is more community experience and testing performed on Apache than on other web servers. Drupal 7 and 6 will likely work on Apache 1.3. You can use the Apache ‘mod_rewrite’ extension to allow for clean URLs. Note that with Drupal 8, clean urls are enabled by default and can’t be disabled, so mod_rewrite needs to be installed and enabled for Drupal 8 to work. The Apache Virtualhost configuration must contain the directive AllowOverride All to allow Drupal’s .htaccess file to be used. If the Apache server has Options +MultiViews enabled by default, then the Apache Virtualhost configuration should also contain Options -MultiViews (or have -MultiViews added to the existing Options directive). SymLinks: Drupal versions prior to 8.0 set +FollowSymLinks option in the .htaccess file. This prevents Drupal running on shared hosts which require +SymLinks If Owner Match instead for security reasons. Drupal 8.0 does not set either option, but this causes installation on at least OpenSuse distributions to fail. The onscreen error messages are unhelpful, but the error logs identify the problem correctly in both cases. If edit the .htaccess file remember that have to re-edit after updates which overwrite the file!

**PHP Built-in Web Server (Development Only)** PHP built-in Web Server is included as a CLI SAPI tool in PHP versions 5.4.0 and above.

PHP web server was designed to aid in application development. It may also be useful for testing purposes or for application demonstrations that are run in controlled environments. It is not intended to be a full-featured web server therefore it should not be used as a production server for public use. This web server can be started through a Drush command provided by the PHP Server Drupal module.

**PHP Configuration Settings** PHP needs the following configuration directives for Drupal to work (only directives that differ from the default php.ini-dist/php.ini-recommended): error_reporting set to E_ALL & ~E_NOTICE. Work is ongoing to change this to E_ALL and Drupal 7.

Safe_mode: off. Safe mode may interfere with file and image uploads. This is applicable for only for PHP version's below 5.3.0, as of PHP 5.4.0 Safe Mode has been removed Tokenizer functions require the tokenizer extension to be enabled. (Read more #357970: Undefined function token_get_all) **Database server Recommended:** MySQL (or an equivalent such as MariaDB or Percona Server) **MySQL, MariaDB or Percona Server** Drupal 6 supports MySQL 4.1.11 or higher, but MySQL 5.0.15 or higher is recommended Drupal 7 supports MySQL 5.0.15/MySQL 5.1.30/MariaDB 5.1.44/Percona Server 5.1.70 or higher, and requires the PDO database extension for PHP (see What is PDO?). Drupal 8 supports MySQL 5.5.3/MariaDB 5.5.20/Percona Server 5.5.8 or higher with InnoDB as the primary storage engine, and requires the PDO database extension. Drupal has been extensively tested with MariaDB, error_reporting set to E_ALL & ~E_NOTICE. Work is ongoing to change this to E_ALL for Drupal 6 and Drupal 7. safe_mode: off. Safe mode may interfere with file and image uploads. This is applicable for only for PHP version's below 5.3.0 as of PHP 5.4.0 Safe Mode has been removed Tokenizer functions require the tokenizer extension to be enabled. (Read more #357970: Undefined function token_get_all) **Database server Recommended:** MySQL (or an equivalent such as MariaDB or Percona Server) MySQL, MariaDB or Percona Server Drupal 6 supports MySQL 4.1.11 or higher, but MySQL 5.0.15 or higher is recommended Drupal 7 supports MySQL 5.0.15/MySQL 5.1.30/MariaDB 5.1.44/Percona Server 5.1.70 or higher, and requires the PDO database extension for PHP (see What is PDO?). Drupal 8 supports MySQL 5.5.3/MariaDB 5.5.20/Percona Server 5.5.8 or higher with InnoDB as the primary storage engine, and requires the PDO database extension. Drupal has been extensively tested with MariaDB.

### II. LITERATURE SURVEY/REVIEW OF LITERATURE

Electronic Commerce (e-commerce) applications support the interaction between different parties participating in a commerce transaction via the network, as well as the management of the data involved in the process. The increasing importance of e-commerce is apparent in the study conducted by researchers at the GVU (Graphics, Visualization, and Usability) Center at the Georgia Institute of Technology. In their summary of the findings from the eighth survey, the researchers report that “e-commerce is taking off both in terms of the number of users shopping as well as the total amount people are spending via Internet based transactions”. Over three quarters of the 10,000 respondents report having purchased items online. The most cited reason for using the web for personal shopping was convenience (65%), followed by availability of vendor information (60%), no pressure form sales person (55%) and saving time (53%). Although the issue of security remains the primary reason why more people do not purchase items online, the GVA survey also indicates that faith in the security of e-commerce is increasing. As more people gain confidence in current encryption technologies, more and more users can be expected to frequently purchase items online. A good e-commerce site should present the following factors to the customers for better usability:

- Knowing when an item was saved or not saved in the shopping cart.
- Returning to different parts of the site after adding an item to the shopping cart. Easy scanning and selecting items in a list. Effective categorical organization of products.
- Simple navigation from home page to information and order links for specific products. Obvious shopping links or buttons. Minimal and effective security notifications or messages. Consistent layout of product information.

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<table>
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<tr>
<th>Version</th>
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<td>7</td>
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<td>Yes</td>
<td>yes</td>
<td>PHP Built-in Web Server (Development Only)</td>
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</tbody>
</table>
Requirement engineering and analysis Brief discussion of software requirement engineering and analysis that are related to the proposed method are as follows:

The broad spectrum of tasks and techniques that lead to an understanding of requirements is called requirements engineering. Requirements engineering, which is a major process in software engineering, provides the appropriate mechanism for understanding what the customer wants, analyzing need, assessing feasibility, specifying the solution unambiguously, and so on. It encompasses seven distinct tasks, which are inception, elicitation, elaboration, negotiation, specification, validation, and management. Some of these tasks occur in parallel and all are adapted to the needs of the project. Project inception, among other things, system analysis and modeling. The activity includes establishing product vision and project scope. At the requirement elicitation, activities are performed to formulate the objectives for the system, what is to be accomplished, how the system or product fits into the needs of the business, and how the system is to be used. Requirements elicitation (also called requirements gathering) combines aspects of problem solving, elaboration, negotiation, and specification. Requirements analysis is the activity of elaborating basic requirements established during the inception, elicitation and negotiation tasks. Requirements analysis results in the software specification detailing the operational characteristics, interface with other system elements, and constraints that the software must meet. Requirements: Based on their functions, requirements can be classified into: (a) Functional requirements, which describe system functionalities or services; (b) Non-functional requirements, which define system properties and constraints (e.g., reliability, response time and storage requirements). The functional and non-functional requirements can further be classified into few types. As this research mainly concerns with business requirements that will be used in designing user requirements and the business rules that will be included in the use–case document, brief descriptions are provided for the three as follows: (a) Business requirements: Represent high-level objectives of the organization or customer who requests the system. They describe why the organization is implementing the system (the objectives the organization hopes to achieve). (b) User requirements: Describe user goals or tasks that the users must be able to perform with the product. (c) Business rules: The rules in the organization that affect the system, which include corporate policies, government regulations, industry standards, accounting practices, and computational algorithms.

III. REQUIREMENT ENGINEERING AND ANALYSIS

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IV. CONCLUSIONS

Advantages to Organizations
Using E-Commerce, organization can expand their market to national and international markets with minimum capital investment. An organization can easily locate more customers, best suppliers and suitable business partners across the globe. E-Commerce helps organization to reduce the cost to create process, distribute, retrieve and manage the paper based information by digitizing the information.

- E-commerce improves the brand image of the company.
- E-commerce helps organization to provide better customer services.
- E-Commerce helps to simplify the business processes and make them faster and efficient.
- E-Commerce reduces paper work a lot.
- E-Commerce increased the productivity of the organization. It supports "pull" type supply management. In "pull" type supply management, a business process starts when a request comes from a customer and it uses just- in-time manufacturing way.

Advantages to Customers
- 24x7 support. Customer can do transactions for the product or enquiry about any product/services provided by a company any time, any where from any location. Here 24x7 refers to 24 hours of each seven days of a week.
- E-Commerce application provides user more options and quicker delivery of products.
- E-Commerce application provides user more options to compare and select the cheaper and better option.
- A customer can put review comments about a product and can see what others are buying or see the review comments of other customers before making a final buy.
- E-Commerce provides option of virtual auctions.
- Readily available information. A customer can see the relevant detailed information within seconds rather than waiting for days or weeks.
- E-Commerce increases competition among the organizations and as result organizations provides substantial discounts to customers.

Advantages to Society
- Customers need not to travel to shop a product thus less traffic on road and low air pollution.
- E-Commerce helps reducing cost of products so less affluent people can also afford the products.
- E-Commerce has enabled access to services and products to rural areas as well which are otherwise not available to them.
- E-Commerce helps government to deliver public services like health care, education, social services at reduced cost and in improved way.

Technical Disadvantages
- There can be lack of system security, reliability or standards owing to poor implementation of e-Commerce.
- Software development industry is still evolving and keeps changing rapidly.
- In many countries, network bandwidth might cause an issue as there is insufficient telecommunication bandwidth available.
- Special types of web server or other software might be required by the vendor setting the e-commerce environment apart from network servers.
- Sometimes, it becomes difficult to integrate E-Commerce software or website with the existing application or databases.
- There could be software/hardware compatibility issue as some E-Commerce software may be incompatible with some operating system or any other component.

Non-Technical Disadvantages
- Initial cost: The cost of creating / building E-Commerce application in-house may be very high. There could be delay in launching the E-Commerce application due to mistakes, lack of experience.
- User resistance: User may not trust the site being unknown faceless seller. Such mistrust makes it difficult to make user switch from physical stores to online/virtual stores.
- Security/ Privacy: Difficult to ensure security or privacy on online transactions.
- Lack of touch or feel of products during online shopping.
- E-Commerce applications are still evolving and changing rapidly.
- Internet access is still not cheaper and is inconvenient to use for many potential customers like one living in remote villages.

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REFERENCES
[8] website WWW.Drupal.org