

IT Project Management Techniques for E-Commerce Site for online Book Sales

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Abstract—In Project Management, the process involves of planning, cautiously projecting, organizing and governing assets to attain precise goals and objectives. Number of projects in different industries plays a vital role towards project management; IT projects also receive a great attention in the field of computer industry. Using principles of project management, a different procedure is discussed in this paper to setup and implement an e-commerce site for online book sales, where the customer is provided the facility of online book purchase. In order to develop a project or e-commerce site, number of tools and techniques must be studied to achieve sophisticated goals. The case of largest book store (amazon.com) is also discussed, with their success factor that how an online web gets success and customers can get access throughout the world by world wide web. In this project books are separated into several sets that are based on subjects like project management, operating systems, research methodology, pervasive computing and so on. Shopping system provided to customers where they can maintain their purchase history. Customer's feedback will be incorrigible.

Keywords— *Project Management, E-Commerce, Online Shopping*

I. INTRODUCTION

Project management is a field that provide number of processes, methods, and skills that help to manage projects more efficiently.

It provides a discipline and clear objects for managers to lead a project from planning to execution through successful completion. Project management develop a project plan and quantifying resources that includes specific tasks, goals, budgets, and timelines to achieve good and successful outcomes.

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An IT project manager is one who can develop his/her project management techniques to analysing and developing a system according to user's satisfaction. Project management is not just a technical skill but it provides common terminologies for project managers for understanding, communicating, and developing a desired project.

The primary objective of this project is to develop an e-commerce site aimed at online book sales that facilitates searching and purchasing of books based on author, title and subject. The selected books are shown in a tabular format and from where the customer can do the final payment through online payment system. In this system the user is able to opt for cash on delivery mode of payment. There are many ways by which users can search or become familiar by online book sales by searching on internet, Facebook, newspapers, magazines and so on. The success of this project will be measured by both: the traffic the website generates and the number of purchases. The characteristics of our target audience are students who want to buy books to complete their course, professors, and teachers, scholars who are doing research and finally people who love to read for education and entertaining purposes.

II. LITERATURE REVIEW

Now day's e-commerce has a great worth in business industry, with Project managers of major companies enhancing their business outcomes by means of e-commerce. Through E-commerce, several category areas are opted for conducting online business like banking, publishing, marketing, product management etc [1].

It's an e-business facilitating online purchase facility to its users. Good IT project management skills can be helpful to start any online business. In an online business there are millions of products that are successfully sold, books are one of them. Largest book stores are amzon.com, fabingo.com, libertybooks.com, Powell's book, Barnesandnoble.com, etc. all are successfully running their business with greater competence level.

There are plenty of online and physical book stores that facilitate the e-commerce application system like discussed in [2]. The selling of books using the online websites began in 1980s with this online e-commerce becoming popular in early 90's, and at that time the first online bookstore were selling only computer books.

This online ecommerce system become extremely popular with advent of technology and easy reach to internet by masses, where the number of online stores increased dramatically [3]. Similarly, internet giant Amazon.com, launched their online ecommerce book shop in [4]. Amazon is currently a multinational, most successful online retailer in the world [5]. The key factor behind their success is the implementation of long-term strategy of low margins with low price, customer satisfaction was given high priority ensuring rapid shipment and high quality of product [5-7].

III. GOALS/OBJECTIVES

- Main objective is to computerize the manual system of bookstore to design a system in such a way that even non-technical person can use it.
- To make the software completely user friendly
- To reduce the working hours
- Maximize search options
 1. by author name
 2. by book's title
 3. by subject
- Provide up to date information
- Help users by providing contents of books for reading
- To avoid errors like entering the wrong data
- To prevent the physical loss of data which was possible in manual systems

IV. SCOPE OF THE PROJECT

The scope of the project deals with various key features and attributes that are to be incorporated into the online store. The Figure 1 shows the basic working structure on which this online store is based on. Following are the various key features of the store.

- To facilitate every users in purchasing books online
- To be able to add and remove user accounts
- System should be able to manage user accounts
- To be able to offer countless discounts on completed purchasing
- To offer wide collection of books of different categories
- The user interface must be friendly and convenient
- To provide facility of user feed back

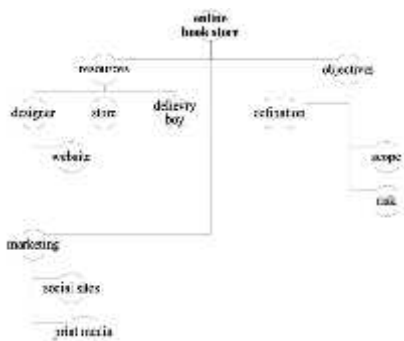


Figure 1: working structure of online book store

The phase breakdown structure shown in figure .2, illustrates the time required for each tasks. Start from the planning phase. This involves creating the set of plans e.g. what type of goals, scope and objectives should be. In analysis there is a deep understanding of project once goals and objectives are set then what type of risk involves and how to sort out the certain issues during the project , so analysis take more time than planning. Website needs to be design in such a way that customer can easily understand the system that how to use it and browse information so it should be user friendly. PHP is an open source programming, most suitable for any e-commerce site which fits well with MySQL which is a type of data base. So Coding consumes a huge amount of time for making e-commerce site. Testing and implementation are the execution points for any project, when coding phase completed there is need to test your website mostly testing shows how well you have organize your business requirements and how good your programming skills are. When all phases are completed then it's time to deploy your software. Implementation phase is important to maintain your momentum.



Figure 2: Phase breakdown structure

V. WORKBENCH STRUCTURE OF THE ONLINE STORE

The workbench structure of this online store is shown in Figure 3. The objective of this diagram is to breakdown the system into smaller workable steps. This data flow diagram shows the top down functional decomposition of system. The online e-commerce site functionally serves two categories. Customer and administration services. In customer service customer can browse and search for books which can be categorise in a tabular form. The one thing that is most important that newly customers first registered him / she by providing account details their name, contact number and shipping address. Once a customer gets registration he/ she can access the website. If customer wants to purchase then provide shipping details before or after placing order. Customers can also update their shopping cart by adding or deleting items and provide feedback about the book. The administrator will have extra functionalities when associated to common user. Admin have access on over all data base so he can add or delete items from inventory and can update it. Administrator can also change the type of credit card.

a. Administrator Section

The use case diagram shown in Figure 4, illustrates that the type of functionalities an administrator can perform. Administrator can manage user's accounts and he can add or delete categories from data base. When customers provide feedback he can provide fast access response. If customer unable to get the right product for which he has ordered then administrator is a person who will be responsible for their products so he can manage their orders and will be able to contact them by their specific addresses.

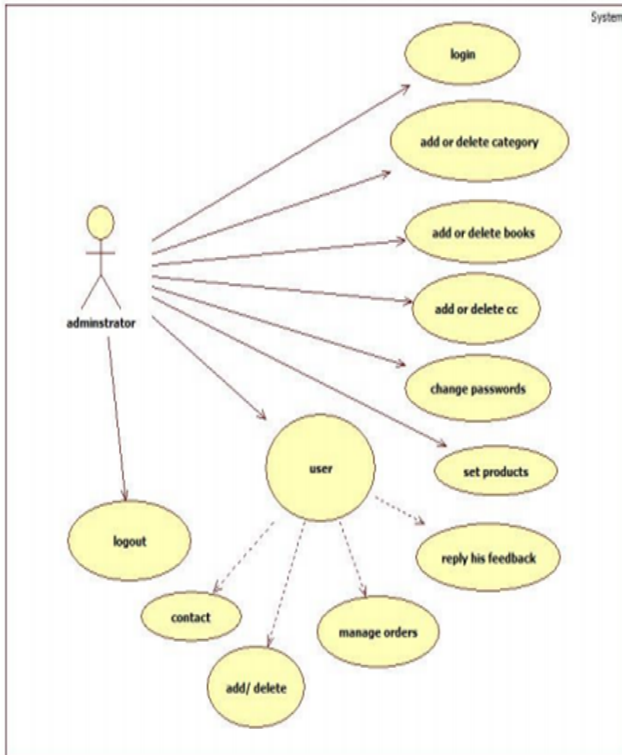


Figure.4: Use case diagram of Administrator

b. User Section

User can browse for books by login details if he is already registered then he can login by password as shown in Figure 5. On the home page he can view top released books and also search books of his own choice. User can search book by the name of author or by book name. User can also be responsible for some feedback in the form of ratings or comments. Users have access on their profile so they can update their profile as well as shopping cart.

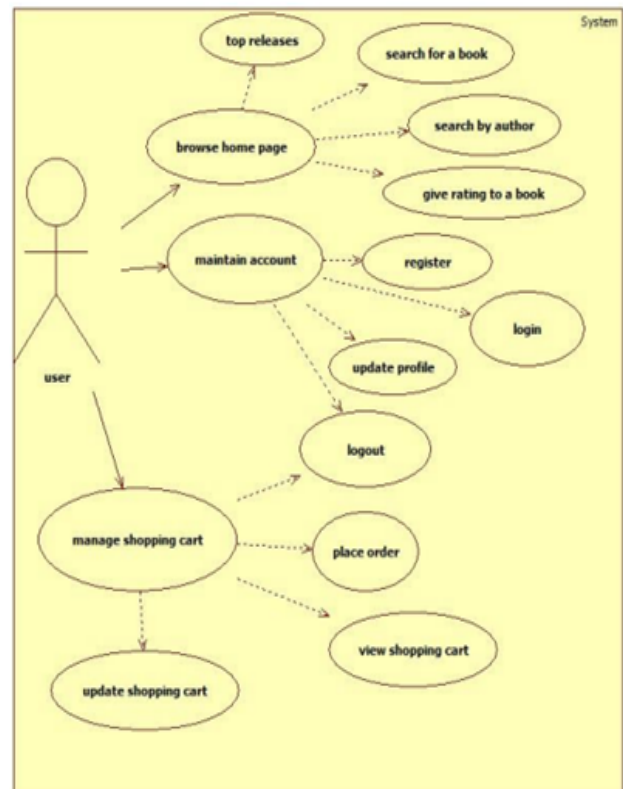


Figure.5: Use case diagram of User section

VI. IDENTIFY PROBLEMS AND RISKS

Each project entails various risk that have to be pre-assessed and precautionary measures have to be taken against them. For this project following three key risk factors have been determined

- If item not in stock, yet the system is still providing available information.
- If the customer did not get order delivered on time. In such case we must contact him/ her by cell and assure better service and some compensation.
- If price were changed and not updated then charge customer for currently displayed price.

VII. RESULTS & DISCUSSIONS

In manual book keeping all the entries are basically done through entry in the books but in this project the records maintained are more secure as an outsider can't manipulate the database without knowing the password. This approach is easy for the newly registered customers and as well as system navigation, users can be attracted by the system as it is easy to use & user-friendly. The information regarding books, book name, author name, publication and so on provided for customer for their facility. As discussed that how a particular user can interact with the system, whenever a search query is entered by user, the system will respond by matching the queries. The Following Table.1, illustrate some main functions regarding user and system.

This paper deals to provide techniques for developing an e-commerce site for online book sales, where customers can search and purchase books from home.

VIII. CONCLUSION& FUTURE WORK

The success of any project depends on good planning, good communication, and a clear understanding. We have purposed a study to build e-commerce book sale project by utilizing IT skills. User visiting the website and will be able to see wide range of books arranged in respective categories. The users will purchase books and view its desired prices. This system will saves both time and travelling cost of customers. We have also studied the world's largest bookstore amazon.com. The company was originally a book seller but due to huge success service of customers they expended their products in to various sub categories.

As for future concerns following can be done:

Multiple users can shop online simultaneously and order various. It could be more preferable if one category not only show the particular subject but it can also include research papers, articles, video tutorials based on the category of subject, users can find it more interesting if multiple language options would be included & the administrator of the website will be disposed additional functionalities such as: advanced payment options, & books, articles etc. that have to be reordered, all the sales and purchases made by the owner can be recorded in a separate database which would be helpful for him in the future for the development of his establishments .Moreover ,the researchers can also deploy their investigation on the environmental impact of Amazon's success and could find more information about what they are doing on the planet of e-commerce.

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Table.1: Main functions of user system

Purpose	Actor	Input	Output
Search for a book	User	The user will select a book by inserting text in the text box	Matching books will be exhibited when search query is matched.
Register	User	New user will enter all his required details in the registration process.	After completing the successful registration user will be directed to home page.
Update user profile	User	User perform search query to update his profile.	The system will update the entered information in the database using an update query.
Place an order	User	The user will enter the required quantity and can add in the shopping cart.	The order will be added to the shopping cart of user.
View the shopping cart	User	The user can view the shopping cart at top of the every page.	Shopping cart will be displayed with the quantity of all user books.
Login	Administrator	Administrator will enter his name and password	If his login becomes successful he will be directed to his home page.
	Administrator	Administrator can add or delete book category by inserting & deleting options	The update categories will be displayed on the home page
Add/delete book	Administrator	He can add or book in the category and can remove from the database	The books will be update in the particular category
Manage orders	Administrator	Administrator wants to add an order then he should click the insert button in the orders page or delete selected order.	The update list of order will be proceed to the user.

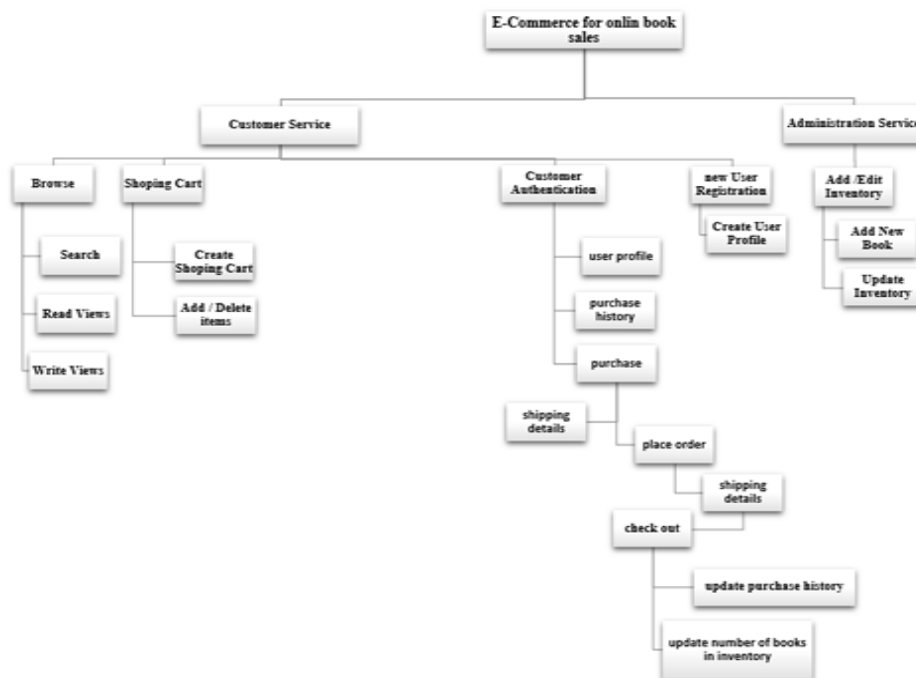


Figure.3: The workbench structure of the User and Administrator sections.