



# An Online Purchase Portal for Books and Seeds in Regional Language (Punjabi)

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**Abstract:** Online shopping has become fast growing trend in current world. The primary goal of an e-commerce site is to sell goods and services online. Be it the clothing, households, transport or any useful item, everything is easily available online and on cheaper prices as well. But the most important sector in which the online facility has not been provided so far is the field of agriculture. Farmers in Punjab still have to travel from their distant places to buy the required seeds and agriculture related books from Punjab Agriculture University. To facilitate the farmers, implementation of online purchase portal for farmers has come into picture. Here, farmers can buy whatever variety seeds they want in whatever quantity and the main thing is that they can buy all this in their regional language, Punjabi. Facility for both English and Punjabi is the main feature of this online implementation. This system will use the names and price of books and seeds as input. Also, we will provide information regarding those books and seeds. The purchase portal has been developed using ASP.Net (3.5) technology with C# being the language for the implementation. At the back end, all the data will be stored and managed using Microsoft SQL SERVER.

**Keywords :** Purchase Portal, ASP.Net (3.5), Microsoft SQL SERVER.

## I. INTRODUCTION

With the increase of internet application by non-professional users in India, many retailing companies tend to sell their goods or services online instead of the traditional ways. An online selling system can make opportunity for the organization to introduce its goods and services, advertise its new items, sell easily and quickly, and receive money online. Also, the company reaches customers in remote places and this can extend the area of its business. Besides, customers increasingly prefer to purchase many items online. This has many benefits for them versus the traditional purchasing ways. For instance, instead of travelling a long distance to buy something, they may enjoy not only a free delivery, but also online purchasing discount by using an e-shopping system. Due to these changes, e-retailing companies are trying to find loyal customers to ensure their survival. Customers' loyalty is considered important because of its positive effect on long-term profitability [7].

Electronic commerce has become one of the essential characteristics in the Internet era. According to UCLA Center for Communication Policy (2001), online shopping has become the third most popular Internet activity, immediately following e-mail using/instant messaging and web browsing. It is even more popular than seeking out entertainment information and news, two commonly thought of activities when considering what Internet users do when online. Of Internet users, 48.9 percent made online



purchases in 2001, with three-quarters of purchasers indicating that they make 1-10 purchases per year. When segmented into very versus less experienced Internet users, the very experienced users average 20 online purchases per year, as compared to four annual purchases for new users [1].

Online shopping behavior (also called online buying behavior and Internet shopping/buying behavior) refers to the process of purchasing products or services via the Internet. The process consists of five steps similar to those associated with traditional shopping behavior [3]. In the typical online shopping process, when potential consumers recognize a need for some merchandise or service, they go to the Internet and search for need-related information. However, rather than searching actively, at times potential consumers are attracted by information about products or services associated with the felt need. They then evaluate alternatives and choose the one that best fits their criteria for meeting the felt need. Finally, a transaction is conducted and post-sales services provided. Online shopping attitude refers to consumers' psychological state in terms of making purchases on the Internet [4].

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 ecommerce is increasing. As more people gain confidence in current encryption technologies, more and more users can be expected to frequently purchase items online [10].

A good e-commerce site should present the following factors to the customers for better usability [10]:

- 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 categorial 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.

Another important factor in the design of an e-commerce site is feedback [2]. The interactive cycle between a user and a web site is not complete until the web site responds to a command entered by the user. According to Norman [5], "feedback--sending back to the user information about what action has actually been done, what result has been accomplished--is a well known concept in the science of control and information theory. Imagine trying to talk to someone when you cannot even hear your own voice, or trying to draw a picture with a pencil that leaves no mark: there would be no feedback".

The relationships among e-service quality, e-customer satisfaction, perceived value and loyalty has been examined empirically. Data were collected from online customers and structural equation modeling was applied to test the relationships. The results revealed that e-service quality positively influences customer satisfaction, perceived value and e-loyalty. Also, findings showed both e-customer satisfaction and perceived value directly affect e-loyalty [9].

Which item have Internet users ever purchased online?

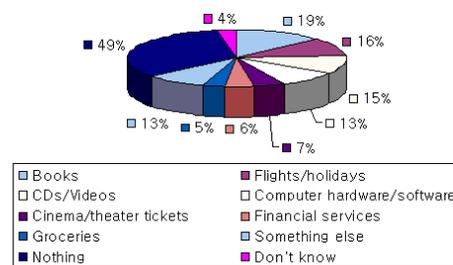


Fig 1: Graph of Internet Users Purchasing online

## II. IMPLEMENTATION

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 [8].

Natural Language Processing holds great promise for making computer interfaces that are easier to use for people, since people will (hopefully) be able to talk to the computer in their own language, rather than learn a specialized language of computer commands [6].

ASP.NET is a programming framework built on the common language runtime that can be used on a server to build powerful Web applications. ASP.NET has many advantages – both for programmers and for the end users because it is compatible with the .NET Framework. This compatibility allows the users to use the following features through ASP.NET [5]:

- a) Powerful database-driven functionality
- b) Faster web applications
- c) Memory leak and crash protection

**III. METHODS AND METHODOLOGY**

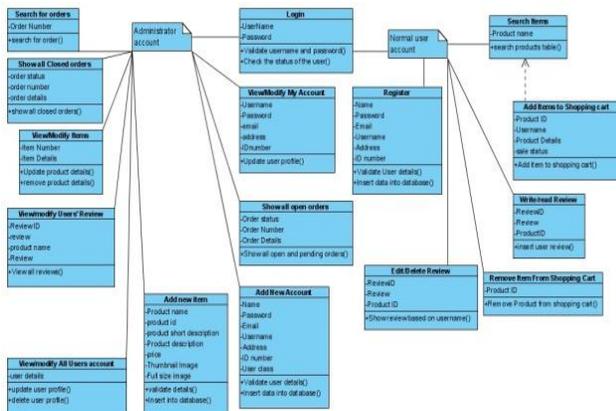


Fig 2: Block Diagram of the System

From the user’s point of view, when the user will open the purchase portal, he will find the option to operate the site whether in English or Punjabi version. He will select the language according to his priority. Then the user will login by giving his login details. Then he will select the category as well as the type (vegetable seeds, fruit seeds etc.) from which he wants to purchase an item i.e whether books or seeds.

After the selection of the item, he will add the item to the shopping cart and he can review the order as well as edit any purchase, he will be asked to provide the payment details according to the type he selects.

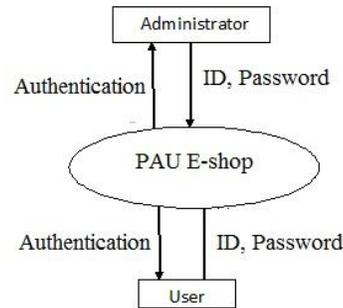


Fig 3: Context Diagram

The above figure shows us that how the username id and password is checked by the administrator.

At the user level, the data will flow as follows:

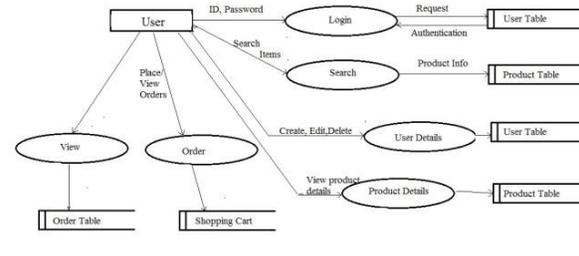


Fig 4: DFD for User

At the administrator level:

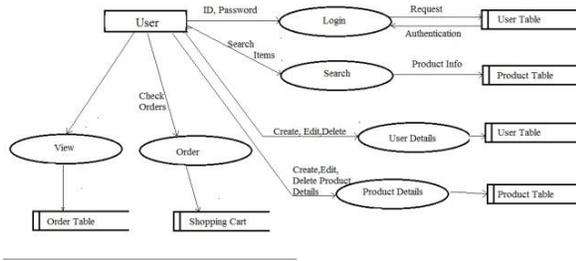


Fig 5: DFD for administrator

IV. RESULTS AND DISCUSSION

As per a survey, most consumers of online stores are impulsive and usually make a decision to stay on a site within the first few seconds. “Website design is like a shop interior. If the shop looks poor or like hundreds of other shops the customer is most likely to skip to the other site” [4]. Hence the purchase portal designed mentioned above can be used to provide the user with easy navigation and retrieval of data. The user is provided with an e-commerce web site that can be used to buy books and seeds online. To implement this as a web application ASP.NET has been used as the technology. To build any web application using ASP.NET a programming language such as C#, VB.NET, J# and so on is needed. C# was the language used to build this application.

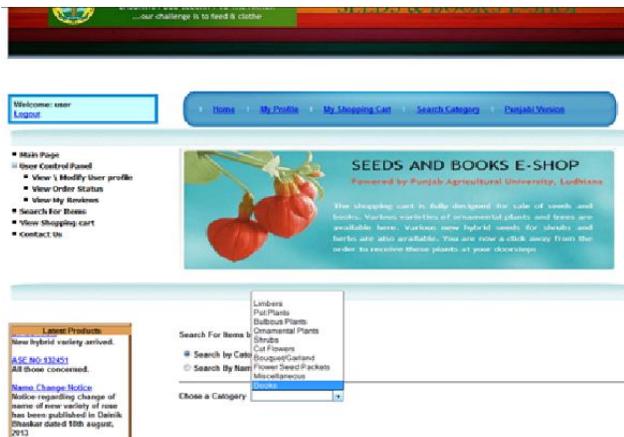


Fig 6: User can select from the category-books/seeds and if seeds, then which variety of seeds.

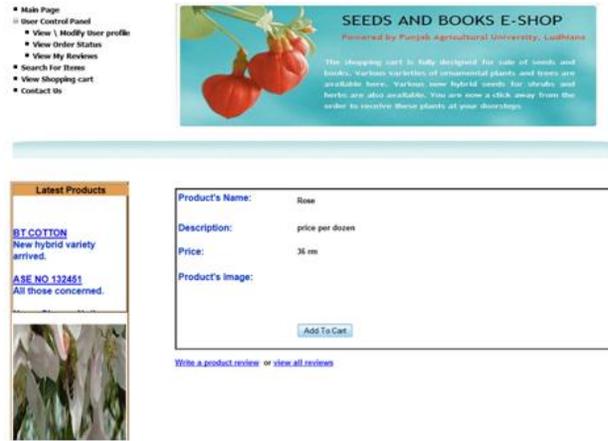


Fig 7: Item’s description and price are given. User can select the item and add to the cart.

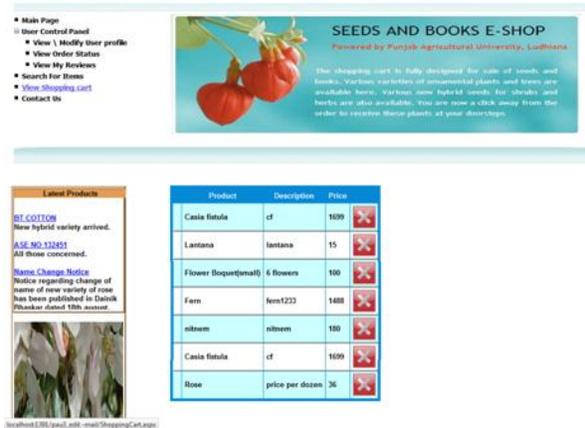


Fig 8: User can view the shopping cart from the ‘View Shopping Cart’ option on the left hand side of the site.

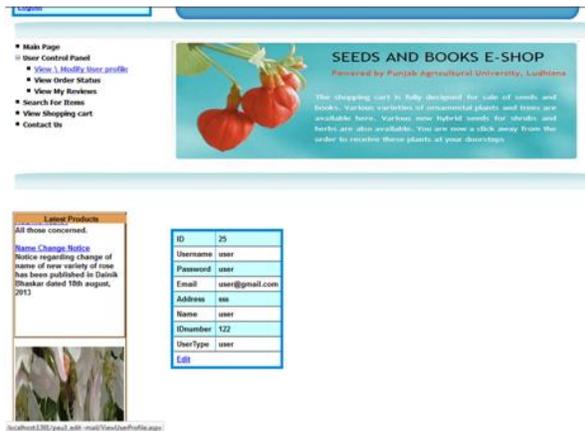


Fig 9: User also has the privilege of viewing or modifying the user profile.



## V. CONCLUSION

The “Online Purchase Portal for Books and Seeds in Regional Language (Punjabi)” is an online web application that has been developed for the convenience of farmers. The application can be used by the farmers to purchase books and seeds in their regional language. The rapid development of internet technology has changed the sale and purchase scenario. It is easy to access the application online. Farmers have been facilitated as they are able to purchase books and seeds in Punjabi. The use of internet technology has greatly enhanced the benefits of such applications. However, the development of online purchase portal poses new challenges and emphasis on more researches to be carried out.

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