DESIGN AND IMPLEMENTATION OF ONLINE GROCERY STORE

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Abstract— **Internet has converted a world into a global village. With the popularization of internet, online shopping has become a new and unique trend. From clothing to electronics, all the things are available on internet. Keeping up this trend, a need for online grocery store is felt because it can enhance the existing system even more. Consumers do not even need to go to a local grocery store anymore; they can buy each and everything by just sitting in a home at anytime. It is fast, simple, and flexible. The Online Grocery Store is based on B2C business model. The consumer is provided with the facility of registering, signing in, viewing and ordering the grocery items and secured online transaction. The consumers may give feedbacks and comments regarding each and every product as well. HTML/CSS & PHP are used to build the basic framework of web pages. MySQL is used for storing information about the consumer and vendors (sellers). Keywords: online grocery store, e-commerce, shopping cart, web store.**

I.INTRODUCTION

Internet has widely grown in the recent century and become the necessity. The popularization of internet has encouraged E-commerce as well.E-commerce (Electronic Commerce) is nothing but the selling or buying of the goods and services online. The main objective of e-commerce is to provide a hassle-free and enhanced shopping experience. It has not only replaced the traditional way of shopping but also provided the comfort and ease to shop from your desk. Consumers don't have to go to stores during restricted timings; they can buy almost everything at anytime from anywhere. It provides one window-multi vendor retailing.

The Online Grocery Store is the practical implementation of E-commerce for grocery goods. The vendors of different items of different brands can sell their product under one window. The selling process is made easier for vendors. The flexibility and enhanced shopping environment is provided to customers. The marketing industry is also getting the benefits

of the same. Thus, it is very important to focus on design and implementation of the said Online Store.

This web store can be implemented using various technologies such as PHP, Javascript , JSP and so on. The PHP is a scripting language and most preferred in most of the cases. This is because 1) PHP is an open source 2) it can be used to develop interactive web pages. 3) PHP can be written in HTML 4) It adds responsiveness in the web site. MySQL is used for creating database in the back-end. All necessary and relevant information of both consumers and vendors are stored in the database in the ordered manner. This data can be used to predict various behavior patterns.

Therefore PHP as developing tool alongwith MySQL as database server is applied for implementing the said store.

II. REQUIREMENT ANALYSIS

The local grocery stores have taken many shapes in early 20s. In earlier days, the grocery items like pulses, rice, flour etc were not abundance in nature. Hence people had to wait in a queue for a long time and that too without any assurance that they would get the needed items. It was a tiring and tedious task. The situation has got much better as of now. People don't have to wait in a long queue, they get the required items quickly.

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After going through e-commerce processes and real market trends, we aim at developing an online grocery store having simple and easy to use interface and secured transaction. It

will provide convenience to consumer. The major goals of this system are:

- It is user- friendly and easy to use for both consumers and vendors.
- The consumers are allowed to give feedbacks about any item.
- The consumers are also allowed to modify their carts individually. They can add/remove grocery item.
- The vendors are allowed to add new items in respective categories.
- The vendors are allowed to promote new arrivals.
- The consumers can view their order history and details.

III. SYSTEM ANALYSIS

The main components of this system are registration, login, browsing of items, ordering and view history and order details.

The users have to register themselves then only they will be able to buy goods. The registered members have to login first in order to purchase the goods. After that, the users (consumers) need to select the required goods and add it to the cart. At checkout, they have to pay the amount. The order details and history of ordered items can be viewed as well by the consumers.
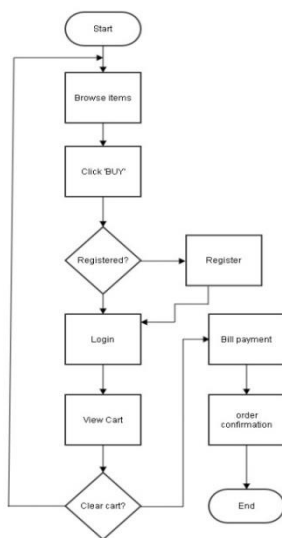
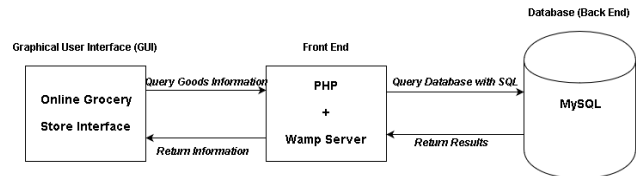

Fig. 3.1 System Flow Chart

IV. SYSTEM ARCHITECTURE

Fig. 4.1 System Architecture

The system architecture consists of three major parts namely Graphical User Interface (GUI),front end and back end. The architecture displays the basic process flow.

GUI is the interface visible to the user/customer. A GUI allows the use of icons or other visual indicators to interact with electronic devices; rather than using only text via the command line. It will display the different categories of grocery items, sign in, register etc.

PHP &Wamp server are used as front-end technologies. When user clicks on the particular product, the query goes to the front end part. After that front end fetches the required data from the database i.e. Back end. The results are returned to front end and from there, to GUI for displaying as shown in fig.4.1.

There is a database in the back end. It contains all the information regarding customers, products and vendors. Here, MySQL is used for this purpose. When user fires a particular query, the query is given to database and the corresponding result is segregated from large volume of information. Database is also used for retrieving the history of past orders.

V. ADVANTAGES

- Much of the time can be saved while shopping for groceries over the internet. Customers don't have to wait in a long queue. They don't have to carry the load of groceries as they are delivered online.
- It is a good option for people who are old and physically weak.
- The overspending can be prevented.
- Online store is suitable for busy people who don't have time to visit the local store.
- Online grocery shopping is available 24 hours a day and 7 days a week and 365 days in a year.
- Customers can keep track of the number of grocery items purchased by looking at the shopping cart which helps in purchasing grocery within the budget.
- Customers are able to compare the price of grocery items of different brands with ease.
- Fuel costs can be reduced.

The developed online store will enable user to shop grocery goods among wide varieties through secured payment option. It will enhance the user experience & promote hassle-free shopping environment.

REFERENCES

[1] Dien D. Phan, E-business Development for Competitive Advantages: A Case Study, Information & Management, 2003, pg.40-46.

[2] Bharat Rao, Advances In Online Retailing Towards The Convergence Of The Internet, Wireless and Broadband, IEEE, 2000.

[3] Na Li and Ping Zhang, Consumer Online Shopping Attitudes and Behavior: An Assessment of Research, Eighth Americas Conference on Information Systems, 2002.

[4] Yixiu Yu and Sisheng Liang, Sale System Analysis and Design for the Online Cosmetic Store Based on JSP, 2011.