

Synopsis for Online Shopping Website (CSIT 6-C)

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STATEMENT ABOUT THE PROBLEM

a. Introduction:

In modern society, computers are no longer treated as stand-alone machines. Instead, they are communicating to share resources and data through computer networks. The Internet, which is a network of these networks, has been used in many applications since the last century. One such application domain which has been growing very rapidly is E-Commerce. Today, the Internet can be used to run any business. This can be considered as a good alternative to the traditional business systems because the Internet is used by many users today and so business can be spread among a large number of people in a very short time. Online shopping is a part of E-commerce in which users can buy and sell products online. This is like a traditional shop in which users can choose their products and buy them after payment. The only difference is that users need not go anywhere to buy the product. He can buy the product at home by using a computer which is connected to the Internet.

b. Problem Definition:

Online Shopping is a form of electronic commerce which allows consumers to directly buy products or services from a seller over the Internet. An Online Shop is analogous to a physical shop in which goods or services are sold. However, instead of setting up a physical shop, the online shopping system uses a website to buy and sell products. The seller displays the products on the website and the buyers select their desired products for buying. The buyer includes all the selected products in a cart and proceeds for payment. There are several options for payment. The buyer can choose either cash on delivery option or he/she can use credit/debit card or net-banking facility for payment. After verification of the payment, the physical product is sent to the buyer. If the product is received by the buyer, an acknowledgement will be sent by him, and the product database will be updated by the administrator of the Online Shopping System. Also, the product database is updated whenever a new product is included in the inventory.

OBJECTIVES AND SCOPE

Objectives:

The Online Shopping Website enables the vendors to set up online shops, customers to browse through the shops, and a System Administrator to approve or reject requests for shopping items and maintain lists of shop categories.

Our Online Shopping Website will use the Internet as the sole method for selling goods to the customers. Shopping will be highly personalized, and the system will provide more security to perform online transactions than most competitors. Our system will showcase a complete shopping experience in a small package.

Scope:

The scopes of the project are stated as follows-

Initial functional requirements will be:

- Secure registration and profile management facilities for customers.
- Browsing through the Shopping web site to see the items in each category of products like Books and Media, Electronics items, Clothing and Footwear, Home and Kitchen Appliances, Games, and many more.
- Adequate search mechanisms for easy and quick access to products and services.
- Creating a Shopping cart so that customers can shop „n“ no. of items simultaneously and checkout finally with the entire shopping carts.
- Feedback mechanism, so that customers can give feedback for the product or service which they have purchased.
- Adequate payment mechanism and gateway for all popular credit cards, cheques and other relevant payment options, as available from time to time.

Initial non-functional requirements will be:

- Secure access to confidential data (user's details). SSL can be used.
- 24 x 7 availability.
- Better component design to get better performance at peak time.
- Flexible service-based architecture for future extension.
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METHODOLOGY

Brief Summary

The Online Shopping System will be a Web-based system. It allows Internet users to buy products online. Users can choose products from various categories displayed in the web site and place order to buy those products. The main advantage of this system is that it allows the sellers to sell their products worldwide and the buyers to buy their desired products at home. The system will allow the buyers to buy products quickly and safely.

Top-down Design Approach

We will follow a top-down design approach for building the proposed Online Shopping System. The top-down design approach starts with a description of the overall system and usually consists of a hierarchical structure which contains more detailed descriptions of the system at each lower level. The lower-level design details continue until further subdivision is no longer possible, i.e., until the system is described in terms of its "atomic" parts.

Structured Analysis and Structured Design Methodology

Structured Analysis and Design Technique (SADT) is a systems engineering and software engineering methodology for describing systems as a hierarchy of functions. The aim of the structured analysis activity is to transform a textual problem description into a graphic model. More precisely structure analysis is used to carry out the top-down decomposition of the set of high-level functions depicted in the problem description and represents them graphically.

In structured design all functions identified during structured analysis are mapped to a module structure and are directly implemented using a conventional programming language.

Iterative Waterfall Model Methodology

The iterative waterfall methodology will be followed in order to develop the Online Shopping System. In Iterative waterfall methodology we can go back to previous phases and can make the changes accordingly. It is very well suited for this system because this model provides feedback paths from every phase to its preceding phases so that the errors committed during a phase can be corrected as and when these are detected in a later phase of development. We review the final output product at the end of the Software Development Life Cycle.

HARDWARE AND SOFTWARE TO BE USED

Hardware:

- Processor : 1.6GHz or higher
- RAM : 512MB or higher
- HD : 120GB or higher
- Monitor : 1024x768 resolutions
- Mouse : Windows compatible
- Keyboard : Standard

Software:

- Development environment: VSCode
- Languages: JavaScript, JQuery, Bootstrap, CSS and HTML
- Word processing package: MS Word 2007/2010

WHAT CONTRIBUTION THE PROJECT WOULD MAKE?

The project will make a great contribution to the Internet users because the proposed system provides facility to buy and sell products online without setting up a physical store. It will allow the sellers to sell their products worldwide and the buyers to choose their required items from a variety of items of different category. It will therefore be a good alternative to a physical store. The different payment mechanisms will also facilitate the buyers to make their payments securely and reliably.

CONCLUSION

Online shopping is a popular trend in modern society. Today, people often prefer to buy products online from their home instead of going to a physical store. There are lots of advantages of online shopping. The customer can check the specifications of a product very carefully without anybody's interference. He can choose items of different categories and different brands without going to different stores. Online shopping systems provide 24 X 7 shopping facilities. The sellers also prefer to sell their products online because they can reach many customers in a short while. Online shopping systems also provide advertising space for new products. Our Online shopping system will also try to provide all these advantages of online shopping.

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