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تصميم وتنفيذ موقع تجارة إلكترونية للتسوق

Design and Implementation of E-Commerce Website for Shopping

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المستخلص

وفقا للتغير السريع في بيئة العمل في الوقت الحاضر ، يجب أن تكون أكثر فعالية وسرعة في الاستجابة لاحتياجات العملاء لجعلهم قادرين على الوصول إلى منتجاتنا على الفور. ويمكن القيام بذلك عن طريق تصميم تطبيق تجارة إلكترونية للتسوق عبر الإنترنت ، والذي يبيع الموضات والبضائع المتنوعة للعملاء إما عن طريق الدفع الفوري أو الدفع عند التسليم. تقوم العديد من دور الأعمال التجارية بمعاملات تجارية باستخدام مواقع الإنترنت. وهذا يجعل عملية التسوق على الإنترنت مألوفة ويجعل التجارة الإلكترونية نموذجا مقبولا. لتنفيذ التسوق عبر الإنترنت ، هناك حاجة إلى متجر ظاهري على الإنترنت يتيح للعملاء البحث عن المنتجات وتحديدتها من دليل معين (كتالوج). يحتاج العميل لملء بعض الحقول لطلب منتج معين. الغرض من هذا البحث هو تصميم وتنفيذ موقع لتسوق الملابس عبر الإنترنت. يجب تصميم وتطوير موقع التسوق الإلكتروني هذا من خلال دراسة وفهم تقنيات الخادم والعميل وتطبيق Adobe Dreamweaver وقواعد البيانات العلائقية والعديد من لغات البرمجة مثل HTML و CSS و JAVA و JAVASCRIPT و PHP.

ABSTRACT

According to the fast changing of business environment nowadays, we have to be more effective and fast in responding to customers' needs to make them able to access to our products instantly. This can be done by designing an E-commerce web application for online shopping, which sells variant fashions and goods to the customers either by instant payment or by payment on delivery. Many business houses carry out commercial transactions using websites. This makes the shopping process on the web familiar and makes the E-commerce an accepted paradigm. To implement an online shopping, a virtual store on the Internet is needed which allows customers to seek for products and select them from a catalog. The customer needs to fill some fields to order a specific product. The purpose of this paper is designing and implementation of online shopping website of clothes. This E-commerce shopping website needs to be designed and developed by studying and understanding the server and client techniques, Adobe Dreamweaver application, relational databases and many programming languages such as HTML, CSS, JAVA, JAVASCRIPT and PHP.

Keywords: E-commerce Website, Statistics E-commerce, Online Shopping System.

Design and Implementation of E-Commerce Website for Shopping

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ABSTRACT

According to the fast changing of business environment nowadays, we have to be more effective and fast in responding to customers' needs to make them able to access to our products instantly. This can be done by designing an E-commerce web application for online shopping, which sells variant fashions and goods to the customers either by instant payment or by payment on delivery. Many business houses carry out commercial transactions using websites. This makes the shopping process on the web familiar and makes the E-commerce an accepted paradigm. To implement an online shopping, a virtual store on the Internet is needed which allows customers to seek for products and select them from a catalog. The customer needs to fill some fields to order a specific product. The purpose of this paper is designing and implementation of online shopping website of clothes. This E-commerce shopping website needs to be designed and developed by studying and understanding the server and client techniques, Adobe Dreamweaver application, relational databases and many programming languages such as HTML, CSS, JAVA, JAVASCRIPT and PHP.

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1. INTRODUCTION

E-commerce has seen developed in the recent period in the area of trade in Iraq and there is a significant change in the electronic shops. In addition, captured the new e-commerce in the field of businesspersons and this through the market orientation of commercial sites in Iraq for continued attraction in the domain of web browsing sites. Supporting many web broker access first to find information about technology, news, tutorials and other, so the content of web sites is the backbone of the existence of this site and its usefulness. Web content provides visitors to the site and visitor traffic to the site to be one of the two cases, the movement of a petition and the movement of narrow in terms of content [1]. Broad movement, see the visits represent and pursue varied content on the pages of the site where the content in this layer petition targeting of an example of Arab arenas contain content Mono political and economic and religious and scientific and thus the movement of the visit [2].

The global Statistics e-commerce will grow by \$ 1.5 trillion in 2017 and growth rates between 20 and 30 per cent in emerging regions such as Latin America, Africa, the Middle East and North Africa [3]. The number of Internet users in the Middle East is 90 million users, e-commerce sales estimated in the Middle East and North

Africa by about 17 billion dollars in 2016, up from \$ 9 billion since 2013 [4]. In addition, the value of electronic commerce via smart phones in the Middle east and north Africa could reach \$ 4.9 billion by 2017 [5]. Half of the consumers in the Middle East almost 47% have paid card, and between 70% to 80% of online purchases of physical goods in the Middle East are made through payment by those cards upon receipt, while there are only 30% payment [6]. The Middle East, the Arab market and Iraq collectively represent only 2.5% of the global e-commerce market, which has huge growth opportunities in the Arab region.

2. JAVA SERVER PAGE

The web pages dynamically characterized by strong performance and breadth of the areas used for. It holds all the features of Java such as property work on different operating systems and the ability to communicate between multiple servers with different operating systems to get the information and we will explain a little bit in this article how this technique and why suffer from slow operation compared to the rest of similar programming languages (PHP - ASP) [7]. The Java Server Pages JSP is an interface to facilitate the use of the Servlet. In other words, servlet can dispense with JSP completely, but it will be more difficult to show replies in HTML format. When a JSP page is asked from server happens one of two things if the operator before they will be running Servlet and the page is displayed [8]. The two technologies and two sides of the same coin , but when understood together will learn when to rely on the JSP or how long depends on the Servlet and we can summarize this knowledge and simplify it as possible as, in order to know when it comes to use every one of them. A great ease is provided by JSP when the page contains large output to HTML format where the page can be programmed and designed by HTML as usual and interference with code JSP either the addition or deletion or modification to the contents and parts of the HTML page either when reliance on Servlet find the possibility and ease of the largest to get tom classes and packages other and exchange information with them [9]. The two are used together, for example, putting the code compiler year in Beans as needed (e.g. to deal with databases - to account time - Management Files - etc.) and then programmed Servlet the codes medium , which aims to combine and extract useful of Beans different and sends it to the beneficiary parties and the output is an HTML page [10]. Relatively complex it is better to leave the task to a JSP, so have facilitated access to information as possible as in order to avoid the complexity of the code of JSP as shown in Figure 1.

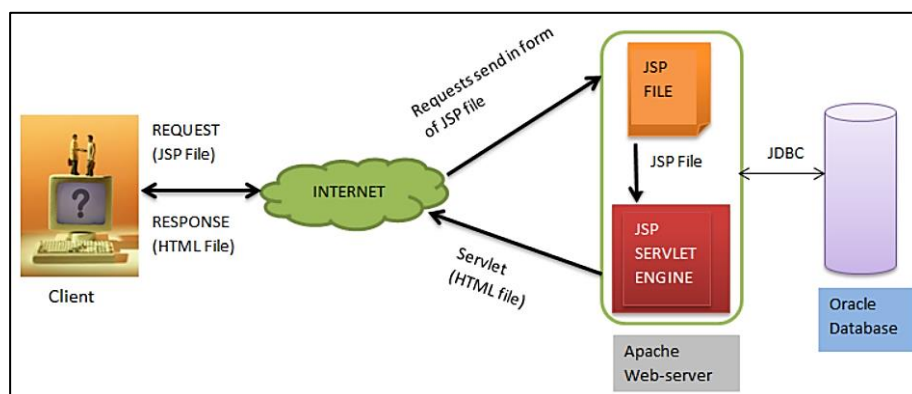


FIGURE 1. Generating Dynamic Content With JSP [11]

3. E-COMMERCE WEBSITE METHODS

The aim of this paper is to implement E-commerce using HTML, JSP, qualitative research in the form of exploratory case study. It is best suited to deal with hypothetical issues, as the results in the subject area consists of views, lacking the statistical significance required in the quantitative studies, as it is difficult to find statistical data. It is still a new area to some extent in this sector of Alsoq.albaanat which are analyzed are collected mainly from published articles and reports, but magazines and newspapers operating in this area, are also used to the extent that they provide information [12]. Anyone do the shopping. This form will be uploaded to the Internet through a website; there will be a list of all the shops categories such as: Clothes, women's, children's, men's clothes [13]. The web browser performs a function selection. E-commerce shopping sites offer shopping cart list, which is a new process in the shopping-mail in Iraq, also provides the site's wish list to encourage the client to use features.

The paper proposes the application of E-commerce shopping in the community only a special marketing and promotion of Iraqi products. The E-commerce, which operates the Internet electronic E-commerce software website steps to do E-commerce in the implementation of the systems development life continuously for E-commerce sites cycle [14]. The steps are systems analysis / planning, design, system building, testing and implementation the stage of system analysis / planning, the following are formulated:

- a) Identifying information, which contains information elements that achieve the outputs of the system to be implemented in order to achieve the objectives of the commercial site.
- b) Business goals, estimated efficiency of the website.
- c) Building system functions, which provide the goals that the information system works to achieve business.

4. DESIGN AND IMPLEMENTATION

The paper proposes functions and application consists of a set of slipshod units. Units serves the customer service and so from providing shopping cart, product selection conveniently, and electronic payment process. These options make the website integrated by providing all the functionality required of the application.

4.1. ANALYSIS AND DESIGN OF THE SYSTEM

Building a system of hiring options that create the system. Attract customers and display the main product through the site-mail, for example, E-commerce, which sells children's clothes and enjoy the bright colors the site pulls the user site. Transactions, it is to build a B to C sales model, which is the consumer and buyer.

4.2. WEB DESIGN

Selecting and design technology the site and see the prototypes: Prototype and basic sketches after selecting the appropriate company and send ideas and outline of the site will begin to work and competent company design work and initial check it through the ideas articulated them previously. Then access the appropriate form through agreed upon and then begin another phase which is working on

programming the site and here you must choose software solutions for the site [15]. Where some customers prefer to work, site steadily Static and the other wants to dynamically Dynamic and other solutions free Open Source provides work signed and between [16]. The options the company decides the best and presented to the client and then choose the best based on the time, cost and own vision. As it is shown in Figure 2.

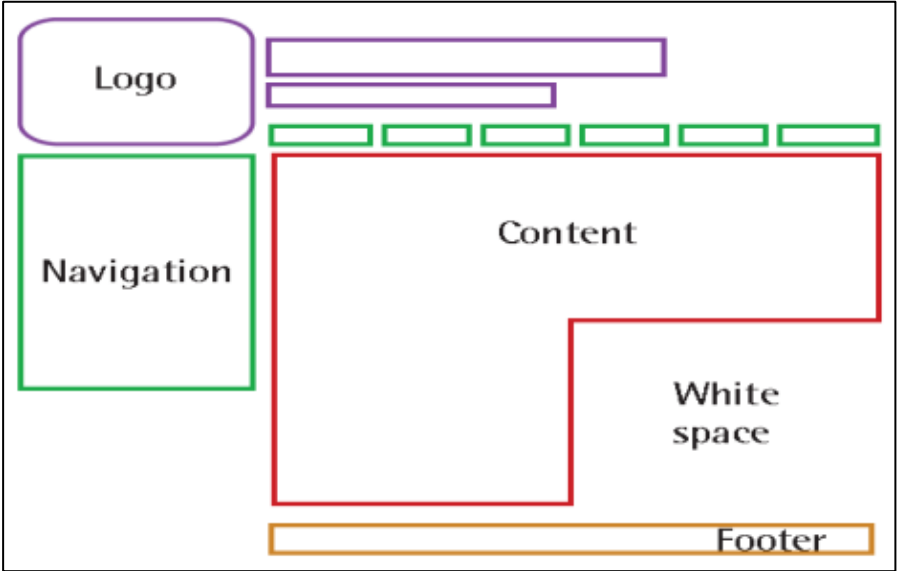


FIGURE 2. Web Page Anatomy

4.3. THE CONTEXT OF THE SYSTEM

After work designing and programming another phase starts and it is well-known from the beginning of a work where the content will be divided into specific site sections, for example the company's products and presentations, as well as details of those products, branches, etc. This content must be classified carefully and be easy to read and is focused on specific things only and is not just the content of the site fill any formality. The interest is to view all details about the company's products, as well as providing the means to contact. Figure 3 shows the Context Diagram.

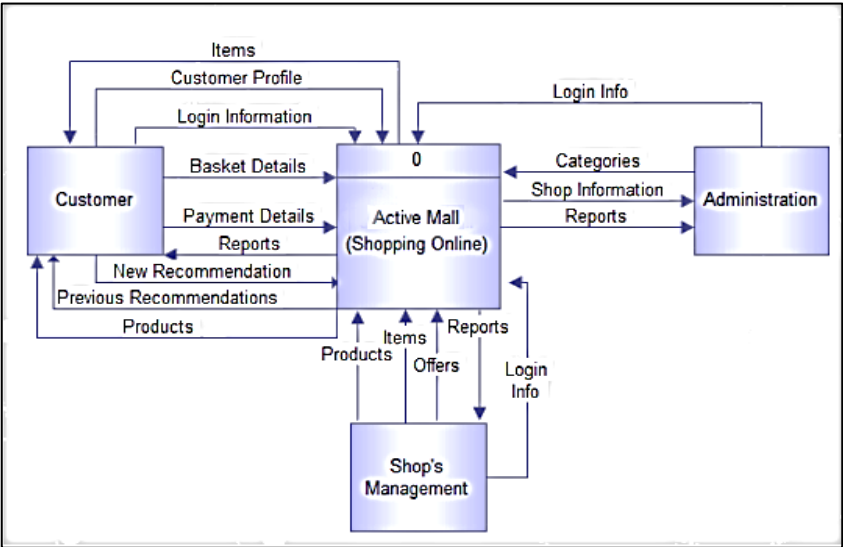


FIGURE 3. Context Diagram

4.4. THE E-R DESIGN OF ONLINE SHOPPING SYSTEM

To control the contents of the data in the website, a data entry model E-R is needed to build and generate data sheets. Therefore, according to the description above, along with the need to achieve the purpose of the site or the target . The product can be vulnerable to view through the shopping website. However, there are many system database papers; recalling a default model explaining the relationship between the contents of the design of the commercial E-R diagram in Figure 4.

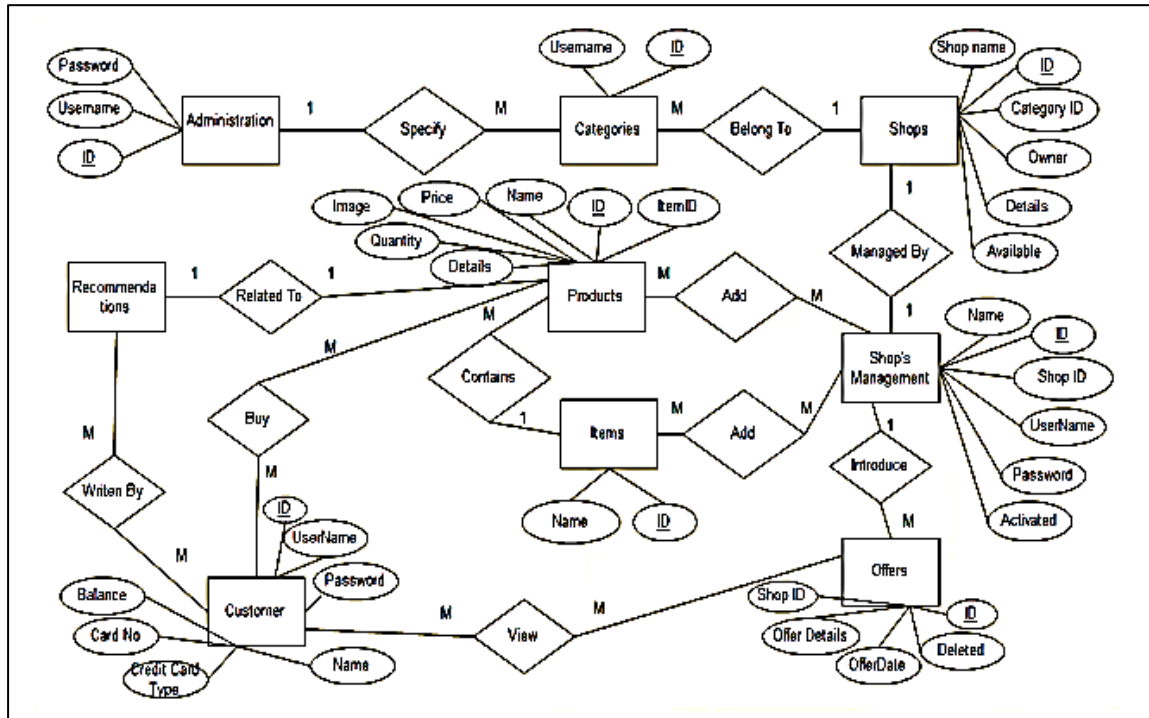


FIGURE 4. The Commercial E-R Diagram

4.5. THE ONLINE PAYMENT

This part of is to design the mail site to work on the flow and processing of the payment system. Implementing these steps: credit card, the promotion of electronic commerce site offers discount for payment in the E-card and spatial payment upon delivery. The total amount of the product after viewing the product across the web payments is processed. The process works in eight simple steps [17].

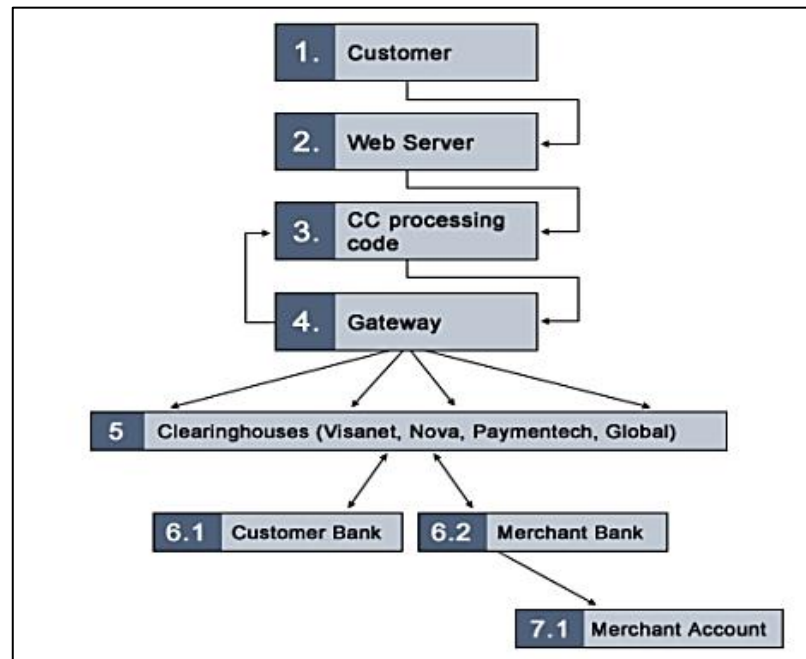


FIGURE 5. Credit Card Processing Workflow [18]

CONCLUSION

Global network of electronic commerce has made in this era on the first list in the modern business; offering job opportunities in the field of E-Commerce Website, Statistics e-commerce, online shopping system. The proposed site design is characterized by attractive and provides easy navigation, multiple options in terms of brand, color and design. The purpose of this paper is to locate the customer a flexible, attractive and easy-to-use web site to provide along with an added feature, such as a list of payment using a credit card. The online trading system is also undergoing improvements as the change is working to improve e-commerce in the future such as working to provide multiple shopping carts for all design mobile applications for social site, Payment in all ways provided by banks or economic companies that trade of electronic and send logos or SMS users in all applications, whether phone or any program running on the network of electronic funded.

REFERENCES

- [1] I. Kim and J. Kuljis, "Applying Content Analysis to Web-based Content," *J. Comput. Inf. Technol.*, vol. 18, no. 4, p. 369, 2010.
- [2] F. Sabate, J. Berbegal-Mirabent, A. Ca??abate, and P. R. Lebherz, "Factors influencing popularity of branded content in Facebook fan pages," *Eur. Manag. J.*, vol. 32, no. 6, pp. 1001–1011, 2014.
- [3] R. L. Siegel, K. D. Miller, and A. Jemal, "Cancer statistics, 2017," *CA. Cancer J. Clin.*, vol. 67, no. 1, pp. 7–30, 2017.
- [4] Internet Live Stats, "Internet Users by Country (2016)," *Internet Live Stats*, 2016. [Online]. Available: <http://www.internetlivestats.com/internet-users-by-country/>.

- [5] S. Akter and S. F. Wamba, "Big data analytics in E-commerce: a systematic review and agenda for future research," *Electron. Mark.*, vol. 26, no. 2, pp. 173–194, 2016.
- [6] Z. Bezhovski, "The Future of the Mobile Payment as Electronic Payment System," *Eur. J. Bus. Manag.*, vol. 8, no. 8, pp. 2222–2839, 2016.
- [7] M. A. Chauhan, M. A. Babar, and B. Benatallah, "Architecting cloud-enabled systems: a systematic survey of challenges and solutions," *Softw. - Pract. Exp.*, vol. 47, no. 4, pp. 599–644, 2017.
- [8] I. De La Torre-Díez, M. Antón-Rodríguez, F. J. Díaz-Pernas, and F. J. Perozo-Rondón, "Comparison of response times of a mobile-web EHRs system using PHP and JSP languages," in *Journal of Medical Systems*, 2012, vol. 36, no. 6, pp. 3945–3953.
- [9] A. Halbe, "A Novel Approach to HTML Page Creation Using Neural Network," *Procedia Comput. Sci.*, vol. 45, pp. 197–204, 2015.
- [10] I. A. Davies and L. J. Ryals, "The effectiveness of Key Account Management practices," *Ind. Mark. Manag.*, vol. 43, no. 7, pp. 1182–1194, 2014.
- [11] L. Chen, Y. He, and C. Wang, "Study on JSP-based dynamic web page security technology," in *Communications in Computer and Information Science*, 2012, vol. 267 CCIS, no. PART 1, pp. 33–38.
- [12] P. Wang, D. K. W. Chiu, K. K. W. Ho, and P. Lo, "Why read it on your mobile device? Change in reading habit of electronic magazines for university students," *J. Acad. Librariansh.*, vol. 42, no. 6, pp. 664–669, 2016.
- [13] K. Yang, X. Li, H. J. Kim, and Y. H. Kim, "Social shopping website quality attributes increasing consumer participation, positive eWOM, and co-shopping: The reciprocating role of participation," *J. Retail. Consum. Serv.*, vol. 24, no. C, pp. 1–9, 2015.
- [14] N. Verma, D. Malhotra, M. Malhotra, and J. Singh, "E-commerce website ranking using Semantic web mining and neural computing," in *Procedia Computer Science*, 2015, vol. 45, no. C, pp. 42–51.
- [15] T. Segaran, *Programming Collective Intelligence: Building Smart Web 2.0 Applications*. 2007.
- [16] S. Brin and L. Page, "Reprint of: The anatomy of a large-scale hypertextual web search engine," *Comput. Networks*, vol. 56, no. 18, pp. 3825–3833, 2012.
- [17] V. Van Vlasselaer, C. Bravo, O. Caelen, T. Eliassi-Rad, L. Akoglu, M. Snoeck, and B. Baesens, "APATE: A novel approach for automated credit card transaction fraud detection using network-based extensions," *Decis. Support Syst.*, vol. 75, pp. 38–48, 2015.
- [18] A. C. Bahnsen, D. Aouada, A. Stojanovic, and B. Ottersten, "Detecting credit card fraud using periodic features," in *Proceedings - 2015 IEEE 14th International Conference on Machine Learning and Applications, ICMLA 2015*, 2016, pp. 208–213.