Web Design Techniques using Delphi

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Abstract

Modern E-commerce is dynamic and goes beyond obtaining data from static Web HTML pages.

Developing and porting business applications on the Web is a broad area where a developer needs to face complexity, which is often beyond the two-tier client/ server database architecture.From a commercial perspective this poster will present a comparison of some of the popular techniques used in implementations of e-commerce. This Poster will clarify the difficulties and techniques associated with Web design of interest to developers and educators. Using Delphi examples, different techniques for implementation of commercial applications will be demonstrated. From the educational perspective the focus will be on practical examples, and how to set-up the necessary environment for a developer. Consideration will be given to practical issues such as how students can complete work at home where the environment will probably be different to that being used in a class or in a business environment.

Keywords

Web, Web design, Web development, e-commerce.

1. Introduction

To many users (including those who use e-mail, telnet, ftp, etc.) the World Wide Web means Internet. The Hypertext Transfer Protocol (HTTP) provides the rules for simple transactions between a server and client computers on the Internet.

HTTP by its nature is a stateless protocol, because the connection is not maintained during the browsing session. That means, the database connection is closed after every returned query result set. Inability to synchronise, lookup, exchange data between forms or simply scrolling through the records of a database means a different approach must be taken in programming a user interface - which is displayed within the Web browser.

2. Current Technology

The Internet is the biggest client/server system in the world. Division of labour (ie. processing) happens between clients computer and Web enabled servers. Different technologies are used for frontend, processing on Server machine, extending the server functionality and integrated systems such as JADE.

3. Conclusion

The growing popularity of e-commerce and the increasing number of Web enabled applications has influenced rapid IT growth. New technologies proposed standards (eg. HTTP/1.1 and XML) will affect DBMS integration.

Any computer able to run a browser will be able to access Internet enabled applications. The cost of deploying front-end applications, LAN, PC and Application maintenance will be reduced. Many existing database structures will become Web enabled and will cater to an even greater number of remote clients. With e-commerce your (international) client is just an Internet connection away, 24 hours a day. Computers will become more powerful, new compression algorithms and other technology improvements and bandwidth will improve. In the near future we will have a greater selection of larger multimedia elements able to be delivered to end users' web browser. More tools for cross-platform development will be available (eg. Kylix - the Linux edition of Delphi and C++ Builder). Educators are facing an uphill battle keeping pace with emerging technology and trying to incorporate it into their teaching. Teaching eg. User interface design for Web, applying useability-testing etc. will require new approaches.