TSW 3241 – Semantic Web Technology

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Assignment 02

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Introduction

Semantic refers to meaning or significant meaning of something currently we have a web of documents but web semantic is the "web of data or things" which known as the context of text and capable to making a logical relation between such things. Semantic web enables computers to understand the text written on them. It is not real artificial intelligence that a computer is self-aware of everything. Additional information incorporates and describes the context of application data.

Today's application is database driven, more centralized, which keeps its data in one data source using one fixed vocabulary. They can only interchange documents. However, the semantic web vision more decentralized retrieves data from distributed data sources using arbitrary vocabulary. Semantic web defines that common format to interchange data between applications. World Wide Web Consortium (W3C) has defined such as open standards as Resource Description Framework (RDF) and Web Ontology Language (OWL).

Along with RDF Shema (RDF-S) and SPARQL query language, to describe RDF vocabularies and express queries across diverse data sources respectively. Large number of profession groups are helping semantic web greatly by building metadata vocabularies such as Semantically-Interlinked Online Communities (SIOC), Friend of a Friend (FOAF), e3value ontologies that enable semantic web to share data between different application, increase reusability and better conclusion using different results coming from different applications.

<u>Objectives</u>

The objectives are to manage the book data using XML for bookstore, library or personal collection of books. This system will helpful for the bookstore such as Popular, MPH Bookstore, E-Books to manage their data of books having or selling. For library, this system will make easier for them to manage the books they having. This system use of XML, HTML, PHP, CSS and XSLT which are efficient to develop this system easily so that, the cost of this system is not that much expensive.

Problem statement

Most of time a person gain knowledge by reading books. These books are consists of valuable knowledge. However, so many seller are difficult to sell the books because of the system. They using expensive system to manage the records of the books and sometimes they not efficient that much to manage the data of books. Because of this problem, many sellers are not selling that much of books because of the complicated system. The problem that they have in existing system clash with other books or adding new type of books to the system. The seller of e-books also have to face the same problem.

XML

Extensible Markup Language (XML) used to describe data. The XML standard is a flexible way to create information formats and electronically share structured data via the public Internet, as well as via corporate networks. XML code, a formal recommendation from the World Wide Web Consortium, is similar to Hypertext Markup Language (HTML). Both XML and HTML contain markup symbols to describe page or file contents. HTML code describes web page content mainly text and graphic images only in terms of how it is to be display and interacted with it.

XML data known as self-describing or self-defining, meaning that the structure of the data was embed with the data, thus when the data arrives there is no need to pre-build the structure to store the data. It dynamically understood within the XML. The XML format can be use by any individual or group of individuals or companies that want to share information in a consistent way. XML is actually a simpler and easier to use subset of the Standard Generalized Markup Language (SGML), which is the standard to create a document structure.

The basic building rock of an XML document is an element, defined by tags. An element has a beginning and an ending tag. All element is an XML document are contained in an outermost element known as the root element. XML can also support nested elements or elements within elements. This ability allows XML to support hierarchical structures. Element names describe the content of the element and the structure describes the relationship between the elements.

An XML document is considered to be "well formed" that is, able to be read and understood by an XML parser if its format complies with the XML specification, if it is properly marked up, and if elements are properly nested. XML also supports the ability to define attributes for elements and describe characteristics of the elements in the beginning tag of an element.

Applications for XML are endless. For example, computer makers might agree upon a standard or common way to describe the information about a computer product such as processor speed, memory size and so forth and then describe the product information format with XML code. Such a standard way of describing data would enable a user to send an intelligent agent to each computer maker's Web site, gather data and then make a valid comparison.

XML's benefits sometimes appeared revolutionary in scope shortly after it was introduce. However, as a concept, it fell short of being revolutionary. It also fell short of being the panacea. The over-application of XML in so many areas of technology diminished its real value, and results in a great deal of unnecessary confusion. Perhaps most damaging is the predictable behavior of many vendors that looks to recast XML using their own set of proprietary extensions. Although some want to add value to XML, others seek only to lock in users to their products.

Flowchart
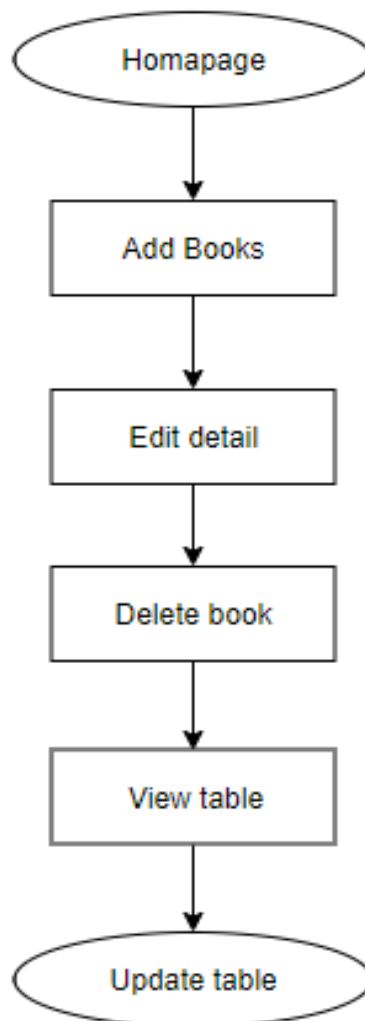
KB- Bookstore is one of the efficient and inexpensive system. First user have to key in the book details such as ISBN code, Book title, Author name, Quantity, Price. After add the book details user can view a pop up message, which is "record added successfully". The added book detail can view the table. When user want to edit the specific book detail, user click update record button and then key-in the ISBN number and following details. For remove the particular book details user have to key in the ISBN number at Delete Record page and click the delete button. Lastly the record will update automatically.

<u>Conclusion</u>

XML is an efficient way to manage the data. KB-Bookstore Management developed using XML for the data and HTML for user interface. This system is efficient to manage the record of the books in an inexpensive way. This system is can use by other platform such as library to manage their book records.

References

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