01.66

W

# E-BOOKSTORE WITH DISTRIBUTED DATABASE APPROACH

A PROJECT PRESENTED BY
CHANDIMA SAMAN WEERASOORIYA

To the Board of Study in Statistics and Computer Science of the **POST GRADUATE INSTITUTE OF SCIENCE** 

in partial fulfillment of the requirement for the award of the degree of

### MASTER OF SCIENCE IN COMPUTER SCIENCE

of the

UNIVERSITY OF PERADENIYA SRI LANKA

2009



645680

### E-BOOKSTORE WITH DISTRIBUTED DATABASE APPROACH

## K.L.C.S. Weerasooriya

Post Graduate Institute of Science
University of Peradeniya
Peradeniya

#### **Abstract**

The Ikra International School is an English medium day school with separate Girls and Boys sections, founded in 1990. The Colombo Boys and Girls branches are distributed in Colpetty area with a total enrolment over 2000 students. The school has its own bookstore in each section that is separately managed, to facilitate the students. The managements have decided to increase the sales of books by online.

The Distributed Database system consists of loosely coupled sites that share no physical components. Furthermore, the database systems that run on each site may have a substantial degree of mutual independence. Each site may participate in the execution of transaction that access data at one site or several site. The distribution of data is the cause in transparency, transaction processing and query processing.

This paper discusses the mechanism, that E-Commerce web application for the Ikra International Schools bookstore known as E-Bookstore through distributed database approach.

The sales system must link both bookstore in Boys and Girls section and virtually should act as one. The customer can search for a particular book or a magazine via the Book title. Author name and the customer can view the latest arrivals such as new novels, storybooks or magazines.

A web server, which uses three-tier architecture, can be used to accomplish the transparency of database systems in both bookstores. Integrity of the Databases can be maintained by using Name Server, Functional Decomposer and Distributed Quarry Builder with web middle tier.