Database Term Project (Sample)

A Bookstore

Design and implement a database, using a relational and SQL-based DBMS, that captures all informational aspects of a bookstore:

A bookstore will encompass the typical operations of a bookstore, including maintaining inventory, supporting the ordering process, gathering customer information, and customer service.

The proposed database system includes the following functional requirements:

- Track the current inventory of books using the International Standard Book Number (ISBN)
- Add or edit records by bookstore employees
- Place of one or more selected items in the customer's shopping cart
- Enable customers to view items in their shopping carts
- Login for existing customers or register new customers who decide to place an order
- Gather information from the customer needed to complete the order (e.g., payment and delivery methods, etc.)
- Issue an order confirmation for each order
- Keep track of shipments and charges by shipping invoice
- Enable the staffs to generate ordering statistics for internal research, including monthly, quarter and annual sales
- Enables the staffs to pull out the order with customer's last name
- Acquire of information for establishing a customer profile (name, address, phone, etc.) when customers create a customer account
- Collect customer's credit card information either at the time they establish their account, or when placing their order
- Allow customers to update their own account information (name, address, phone, credit card, etc.)
- Collect customer's comments by providing a form with a multiple-choice section (unsatisfied, fair, good, or excellent)
- Generate reports:
    - Annual, Monthly, and Quarterly Sales Report
    - Author, Publisher, and Book Information
    - Reorder Report
    - Customer Expenditure Report
    - Customer/Number of Orders
    - Books Returned within the past 30 days
    - Unsatisfied Customers Information

You will use a given template for your database documentation. Your project documentation should include the database E/R model, the database dictionary, CRUD matrix and content, your design rationale, sample retrievals/updates and their corresponding output.

A database application with a graphical user interface is not required. However, it is recommended that you can implement advanced database features such as triggers, stored procedures, functions,

or others to demonstrate your advanced database knowledge on handling your database business rules.

Your project will be graded on completeness, correctness, originality, unique design and/or advanced features, characteristics, and implementation.