DATABASE MANAGEMENT SYSTEMS

CS6106

PROJECT ABSTRACT

LIBRARY AT YOUR DOORSTEP

'Library At Your Doorstep' is an online library service for those who prefer physical copies of books but are unable to go to a library. This is particularly useful in this pandemic since it isn't safe for us to go out. This project is developed to maintain a record of the library's users, books, employees, and orders.

Front-End : HTML, CSS
Back-End : Python 3, flask framework
Database Server : MySQL Server 8.0
Database Tools : MySQL Workbench 8.0 CE, MySQL Shell 8.0.24

The system maintains the data of:

- Users registered with the library
- Delivery executives employed at the library
- Books available at the library
- Orders of books by users
- Details of each order

Relations Under The Database:
1. **USERS:**
   Attributes:
   - userid (primary key, uniquely identifies a user)
   - fname (first name)
   - lname (last name)
   - phoneno
   - email (unique)
   - address
   - password

2. **BOOK:**
   Attributes:
   - bid (primary key, uniquely identifies a book)
   - name
   - author
   - price
   - status ('A' if available, B' if borrowed)
   - borrowed_by (foreign key, refers to USERS.USERID; NULL if not borrowed)

3. **DELPPL:**
   Attributes:
   - empid (primary key, uniquely identifies a delivery executive)
   - fname (first name)
   - lname (last name)
   - phoneno
   - ordercount (number of current orders)

4. **ORDERS:**
   Attributes:
   - oid (primary key, uniquely identifies an order)
   - odate (order date)
   - ddate (delivery date)
   - rdate (return date)
   - userid (foreign key, refers to USERS.USERID)
   - empid (foreign key, refers to DELPPL.EMPID)
   - ostatus ('O' if on the way, 'D' if delivered, 'R' if returned)
   - amount (total price of books in current order)
   - fine (fine for late return)
   - total (total price inclusive of fine)

5. **ODETAILS:**
   Attributes:
   - oid (foreign key, refers to ORDERS.OID)
   - bid (foreign key, refers to BOOK.BID)
   - price (price of book)