Library Management System

This software project is implemented in Java using PostgreSQL database. It is designed for managing and maintaining libraries in any educational institution through an integrated computerized system. The library management software will allow librarians to operate more productively while handling the typical day-to-day tasks of a library.

The proposed project seeks to solve all the challenges associated with the traditional library management system. Since it stores and manages all the library records in a computerized database, it eliminates the need for manual record-keeping. The software includes different modules, each of which handles and manages specific library operations. For example, by using this software application, librarians and students don’t need to search the entire library to find a particular book. They can enter the genre or the author’s name, and the system will display the list of all the possible books available for that search keyword/phrase.

There are 4 classes in this software project:

- Book (code, subject, title, author, publisher, pages, numberOfBooks, numberOfAvailableBooks, numberOfBorrowedBooks);

- Customer (id, name, surname, gender, dateOfBirth, email);

- Order (id, customerID, bookCode, date, returnDate, returnStatus);

- Employee (id, name, surname, gender, age, salary).