**Project Description/Background**

**Library Management System**

Nowadays, more and more college students go to the library to look for resources that can help them with their assignments or some projects. However, the process of finding a useful book might be difficult. In order to serve the massive amount of incoming students more efficiently, the Library Management System could be put into use.

The purpose of the library management database application is to store the data that we generated and to provide an efficient, effective, and user-friendly library book management service for both the library and the user to provide students an easy way to access detailed information about books' availability and assist librarians manage storage information more efficiently. Despite that, this system can also help students borrow, return and purchase books in a more convenient manner.

**Mission objectives**

To maintain data on libraries.

To maintain data on books.

To maintain data on authors.

To maintain data on storage.

To maintain data on staff.

To maintain data on customers.

To maintain data on borrowing information for customers.

To maintain data on returning information for customers.

To maintain data on purchasing information for customers.

To maintain data on credit information for customers.

To maintain data on honesty for customers.

To maintain data on demand request.

**User requirement: Customer**

To become a customer, the user can register with his name and password. Then the user can login with a given customer identification code and its password. Once logged, the customer can manage its contact information, change password or check its purchase and rent history. Despite that, customers can start a new purchase or rent order from their main page. If there aren’t available copies of a certain book, users can also request it by posting a request message. The system also keeps track of customers renting history to estimate customer’s honesty.

**User requirement: Staff**

Staff can only be manually created by the administrator, along with its staff identification code, password, name and salary. Staff is granted the access to process purchase or rent orders created by the customer. Administrator is a special type of staff, with direct access to modify the entire system database.

**Data Queries**

Customer View

1. View and edit personal information.
2. List of personal order history
3. List of personal rental history
4. Search engine to look for book using its ISBN

Staff View

1. Check storage information of libraries.
2. Look up salary.
3. Create new order .
4. Check pickup or delivery order processed.
5. Look up customer honesty,

Admininstrator View

1. Add new staff.
2. Add a new administrator.
3. View all requests.
4. View summary of library, including sale, storage, pickup, and delivery.
5. Edit library storage.