**Abstract**

The objective of our project is to create a library management system with several key features depending upon whether one is a user or an admin. The features of a user account will consist of a book database, a database search function, and a user account database. First, the book database will be comprised of a book’s title, author, and ISBN number. Secondly, our database search function will allow users to search for a specific book by its title. Our search function will then return the results that match the search criteria entered by the user. Lastly, a user account database will contain information such as the borrower’s name, username, and four-digit PIN number.

Much like the user, the admin will have similar features, but with some added functions. The features of an admin account will consist of the same book database, database search function, and an admin account database. The admin book database contains all of the above features in addition to an add new item function, which allows an admin to add books to the database, and a remove item function, which allows an admin to remove books from the database. The admin database search function is identical to that of the user. The admin account database will also contain the admin’s name, username, and four-digit PIN number information.

**Functional Requirements**

* All users shall be able to login to their account
* New users shall be able to create a new account
* A user should be able to search for books with the book title
* An admin user shall be able to add books into the database
* An admin user shall be able to remove books from the database

**Nonfunctional Requirements**

* Web Browsers (availability) - the web application shall be able to run on Chrome, Safari, Firefox, and other various web browsers.
* Security Requirement (reliability) - usernames and 4-digit PINs must be secured from the public to protect account information.
* Response Time (performance) - the web application must respond to all users within 10 seconds.
* Language (serviceability) - everything shall be displayed in English.