**INTRODUCTION**

**AIM**

The aim is to digitalize the library process of acquiring a book and create a high integrity application that is accurate and efficient.

**PROBLEM DEFINATION**

The consumers often find it difficult to know where certain books are allocated. When Patrons are looking for a specific book, they have to walk around the library searching for that book shelf by shelf until they find it. Consequently wasting time and potentially causing disturbance or distraction to other people who are there studying.

There is excess paperwork which ends up creating a backlog and also potential loss of data because hard copies are not easy to keep intact.

**HYPOTHESIS**

The app will be installed on the consumer’s mobile device, allowing them to search the books of their choice and find the availability of books across various libraries. There will be more additional features whereby the patrons will be able to order the books online and collect them from the library designated to them.

If the application is successfully developed and implemented following a specialized criteria, then it will work effectively and reduce the traditional manual way of how the library systems work. There will be a specific software for the library to administer and moderate the tracking of book inventories.

**OBJECTIVES**

* The app is automated in that customers are able to browse for books from various libraries in a certain region or geographical area.
* It enables patrons to order or borrow books online without being there physically.
* The app helps librarians to retrieve information about the book being borrowed and the borrower, electronically.
* This application makes it easier for the librarians to track the inventories of the books.
* When customers borrow books from the library using the app, they will get confirmation message through their registered email.
* The app is also automated in that, when the due date for the borrowed books to be returned approaches, patrons receive reminders on their mobile phone.
* There is an option for the customers to extend their borrowing period, provided, the renewal is done before the due date.

**JUSTIFICATIONS**

* The option of browsing for books online will help the customers to know whether the books they are looking for are available at the library or not, and if they are –where to find them.
* There will be minimal or no paperwork at all, due to the fact that every information will be stored digitally.
* The app will create a sense of security because receipts and important documentation will be stored safely in the system’s database.
* The chances of people not returning books that they had borrowed would be slim because everything will be recorded in the database.
* The app is time conserving because both the patrons and librarians won’t have to do the paperwork since everything will be done electronically, which is faster and more convenient.
* Customers will no longer have to look for a specific book shelf by shelf in the library because they will know exactly where to find the book that they are looking for.

**Expectations**

* We anticipate to eliminate the time consumption process of going through each and every shelf in order to find a specific book.
* We expect to have an application that will work in favor of both parties and make things simpler.