

**NAME: MUCYO Emmanuel**

**REG NO: 221013134**

**CLASS NO: 33**

**PROJECT NAME: Library management system**

## **LIBRARY MANAGEMENT SYSTEM**

### **1. PLANNING**

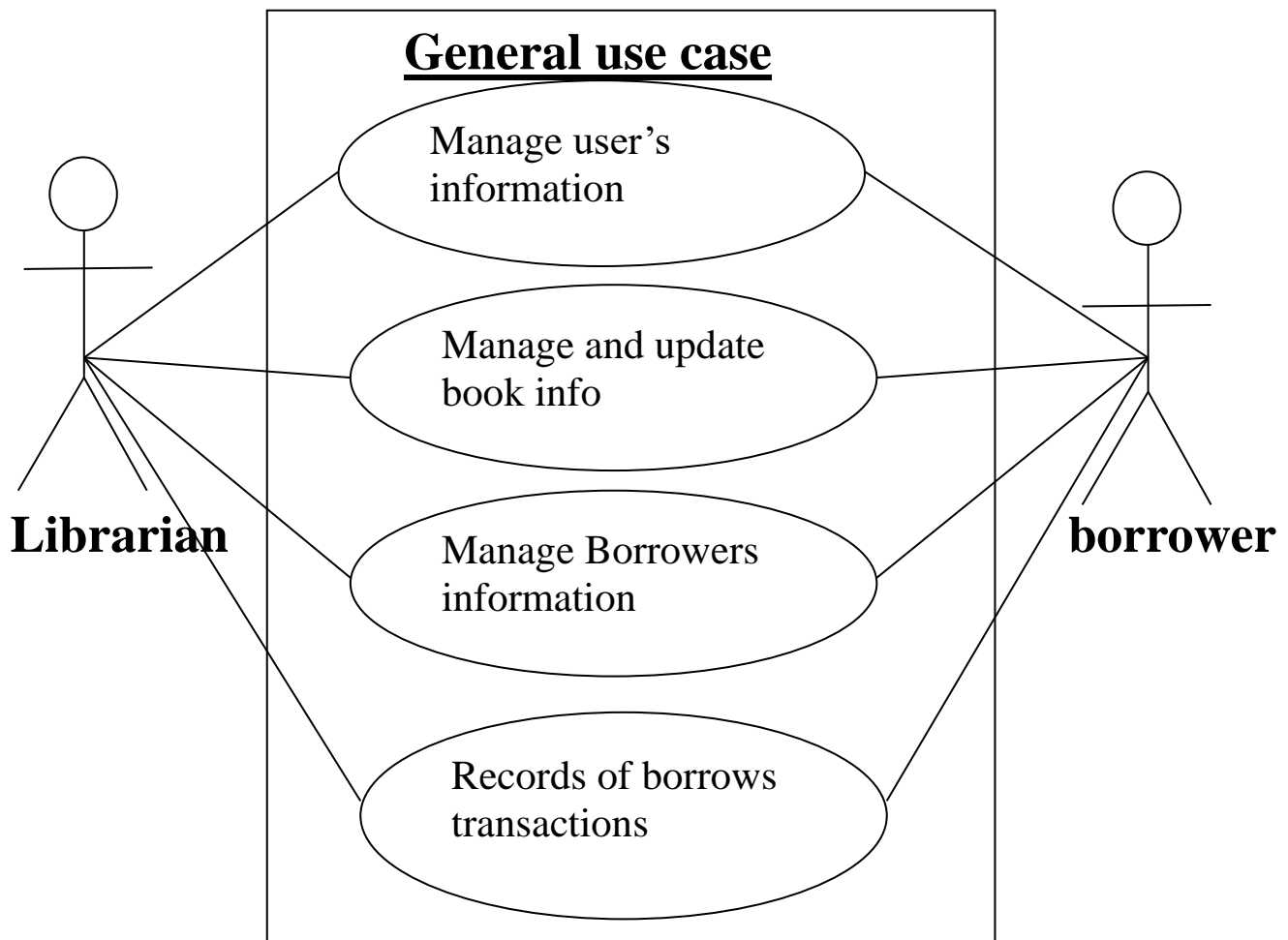
Library Management System is an application refer to other library system and it is suitable to use by small and medium size library. It is designed to be used by librarian to manage the library using a computerized system. The system was developed and designed to help librarian record every book transaction so that the problem such as file missing or record missing will not happened again.

The project goals, objectives and problems the future system needs to solve are:

- ✓ To eliminate the paper-work in library.
- ✓ To record every transaction in computerized system so that problem such as record file missing won't happen again.
- ✓ To design a user friendly graphical user interface which suit the users
- ✓ To complete the system according to project schedule
- ✓ To produce technical report that documents the phases, tasks and deliverables in the project

## **2. DESIGN**

The user of library system is librarian; the interface does not need to be colorful but needs to maintain user friendliness. The interface designed is using system default color. The buttons are also designed in suitable size so that the interface won't be messy. Suitable control has been used to ensure that the librarian can easily use the library system.



### 3. **Development**

- ❖ The Library Management System (LMS) is a program that helps librarians manages a library.
- ❖ Based on the needs of users, the system could provide a minimal set of functionality, such as adding and updating members and books.
- ❖ This system can also handle check-in specifications, borrower's transactions and more.
- ❖ Libraries used are MySQL-connect.
- ❖ Storage and database are xampp

| The whole Project is divided in two parts the front end and the back end.

#### **Front end**

- ❖ The front end is designed by net bean using java.
- ❖ Java is a dynamic computer programming language.
- ❖ It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate and alter the document content that is displayed.

#### **BACK END**

- The back end is designed using MySQL which is used to design the databases

#### 4. **Testing**

- System testing phase made me understand the important of bug free system.
- If one system contains bugs, users will be frustrated and meet some problems.
- Computerized system should be creating to help user reduce the work so it is very importance so ensure the system is bug free.
- In system testing, the problem I meet is time limitation.
- After complete the system, I only left few day due to wasting too much time at earlier stages.
- With the help of my friend, I done the module test and debug on it.
- We must test the system completely and perfectly to ensure the system is bug free.
- No matter how powerful a system, it will not consider as good system if it contains bugs.
- The system which is bug free is more powerful and more helpful to end user because it does not produce problems and bugs.

#### 5. **Deployment**

- Installing MYSQL as database management system.
- Download and configure com.mysql.jdbc\_5.1.5.jar as library handling MYSQL connection.
- Use portable storage device to transfer project from development computer to the any library's librarian computer.
- Run project file and start using the system.