

## MINI PROJECT

### EEX3467 SOFTWARE ENGINEERING AND CONCEPTS

# Library Management System

## 1. Introduction

### Library History :

D.S. Senanayake Memorial Public Library was initiated as Central Town Library in 1841 by a group of citizen for the benefit of the English educated local and foreign readers.

In 1920 Kandy Municipal Council took charge of library and made it larger population to make use of its services

### Online Library Management System :

Online Library Management System is a system which maintains the information about the books present in the library, their authors, the members of library to whom books are issued, library staff and all. This is very difficult to organize manually. Maintenance of all this information manually is a very complex task. Owing to the advancement of technology, organization of an Online Library becomes much simple. The Online Library Management has been designed to computerize and automate the operations performed over the information about the members, book issues and returns and all other operations. This computerization of library helps in many instances of its maintenances. It reduces the workload of management as most of the manual work done is reduced.

This system was developed by the open university of sri lanka in 2015.

- Library Name : D.S. Senanayake Memorial Public Library
- Address : Ahalepola Kumarihami Mawatha, Kandy 20000
- Phone Number : 0812 223 716
- contact staf : Mis chamila
- Open time : 8.00AM
- close time : 5:30PM
- Open Date : Sunday,Tuesday,Wednesday,Thursday,Friday,Saturday
- close Date : Only Monday
- Items collected : Book Lending, Reference, Periodicals, News Papers, Mobile Library, Branch Libraries, Reading Rooms
- Size : 300,000

Members : 80,000

## 2. Stakeholders of the system

Stakeholders : ( This system was developed by the open university of sri lanka in 2015.)

- County Taxpayers
- Users {
- Children of all ages
- Parents and their surrogates (non-parental caregivers, foster parents )
- Educational partners (schools, teachers, home schools, charter schools, public schools, private schools, parochial schools, preschools, daycare centers, afterschool programs, tutors)
- }
- Library Staff
- Advisory Board
- Volunteer Library Staff
- Funding Agencies
- Media

## 3. Requirements Elicitation Methodology

- Stakeholder Analysis.
- Interview.
- Document Analysis/Review.
- Focus Group.
- Interface Analysis.
- Prototyping.
- Questionnaires.
- Workshops.

## 4. Functional and Non-functional Requirements

## FUNCTIONAL REQUIREMENTS

- Only authentic user must have the access to the system.
- Only the user must be able to provide the information related to the library.
- Search for the required books from database.
- Add new book to the database.
- Update the number of books in database.
- Enter data of issued book in Database.
- Information of returned books.
- User must have the knowledge about the no of copies of a book.
- User must enter issue and return date in database.

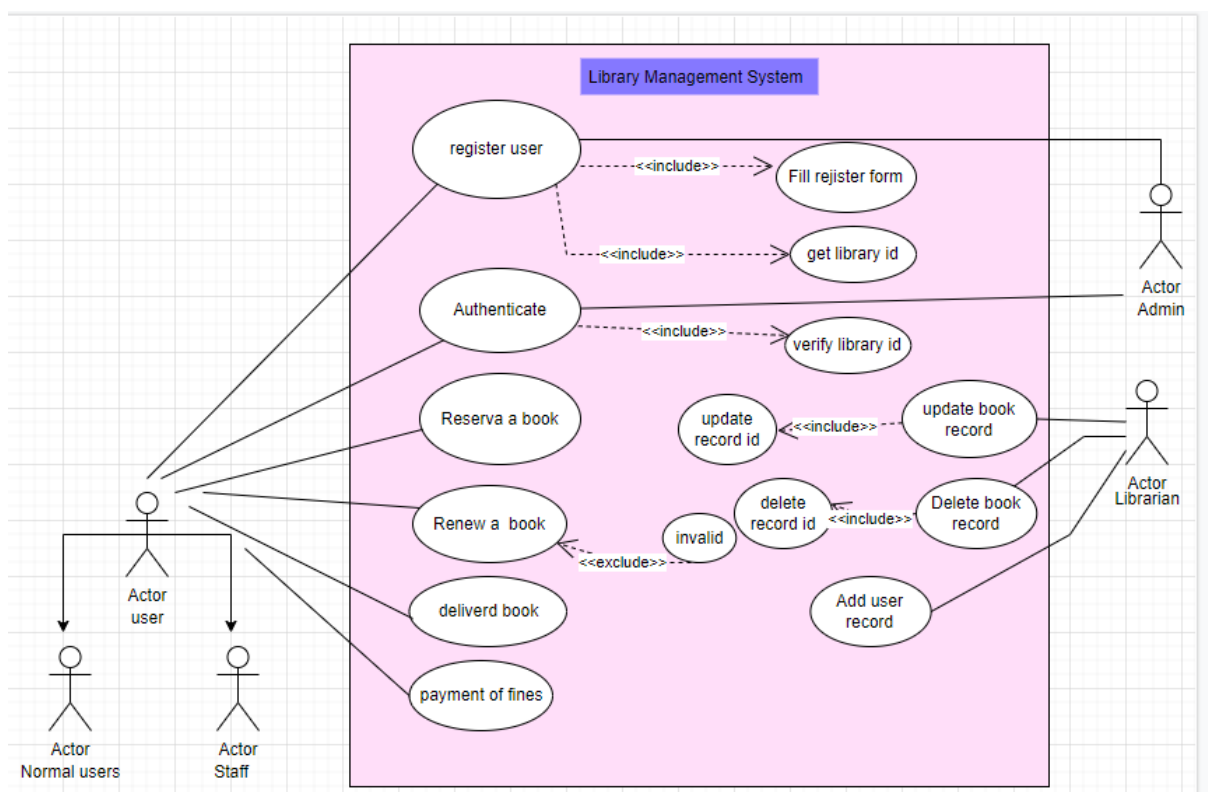
## Non FUNCTIONAL REQUIREMENTS

- Reliability
- (The Server would perform desired tasks as expected. The system does its work with more accuracy like user registration to the system, user validation and authorization, book search and issue operation, return status ,
- and updating the database by synchronizing between database and application.)
- Security
- Efficient System (In our proposed system, Administrator can easily maintain their server and website.)
- Ease of Use
- (The proposed system would be user-friendly and would provide Graphical User Interface .)
- Accessibility
- Benefits of Proposed System.

## 5. Identify the business Actors

: Admin, user, Librarian, Student

## 6. Use case diagram



## 7. Use Case Narrative

use case	Registration
<ul style="list-style-type: none"><li>• interaction:</li><li>• primary actor:</li><li>• Goal in context:</li><li>• precondition:</li><li>• scenario:</li></ul>	<p>last modification:2019</p> <p>users</p> <p>to be a member in library</p> <p>users must agree with the terms of policy</p> <p>staff logs onto the website the staff enters his/her id ,password the staff selects the function.</p> <p>the staff selects check in, check out book id and another option</p>
<ul style="list-style-type: none"><li>• channel of actor:</li><li>• Exception:</li><li>• frequency of use:</li></ul>	<p>web browser,staff server</p> <p>id or password are incorrect or not recognized.</p> <p>every weekend and weekdays not monday.</p>

## 8. Discussion and Conclusions

- the library managment system allows the user to store the book details and the person's details.
- this software allows storing the details of all the data related to library.
- the implimentation of the system will reduce data entry time and provide readily calculated reports.

## 9. References

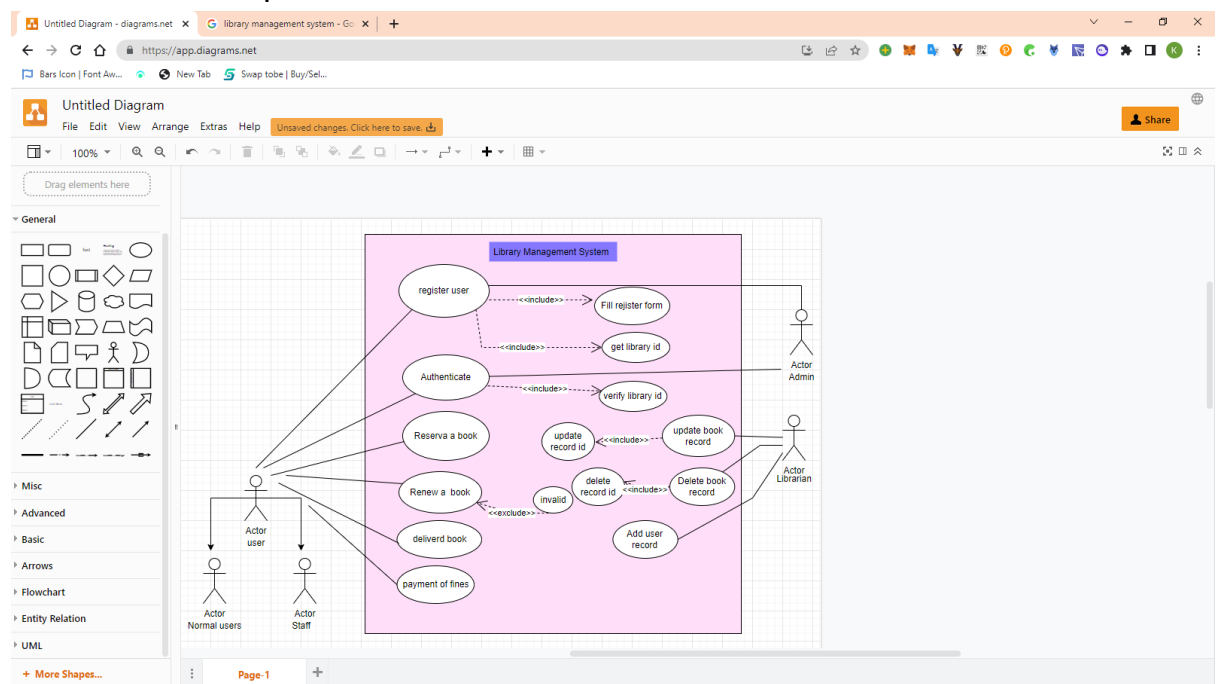
- D.S. Senanayake Memorial Public Library
- <https://vymaps.com/LK/D-S-Senanayake-Memorial-Public-Library-87332/>
- [https://en.wikipedia.org/wiki/D.S.\\_Senanayake\\_Memorial\\_Public\\_Library](https://en.wikipedia.org/wiki/D.S._Senanayake_Memorial_Public_Library)
- <https://www.facebook.com/kandypubliclibrary>

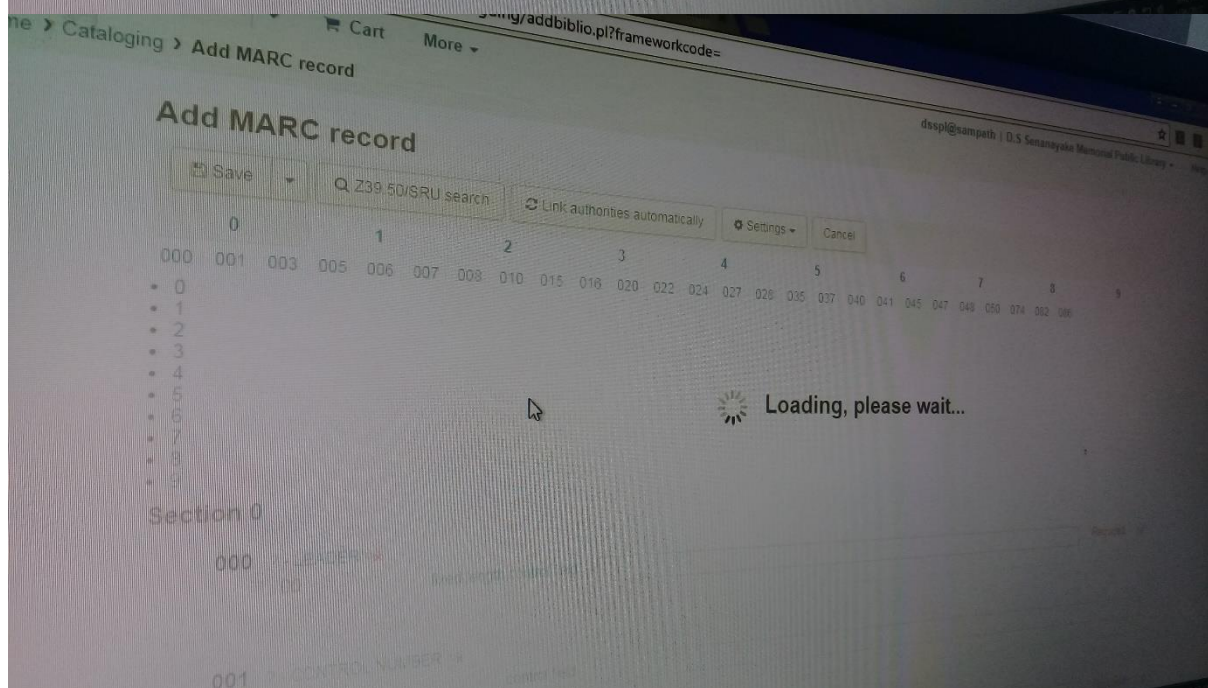
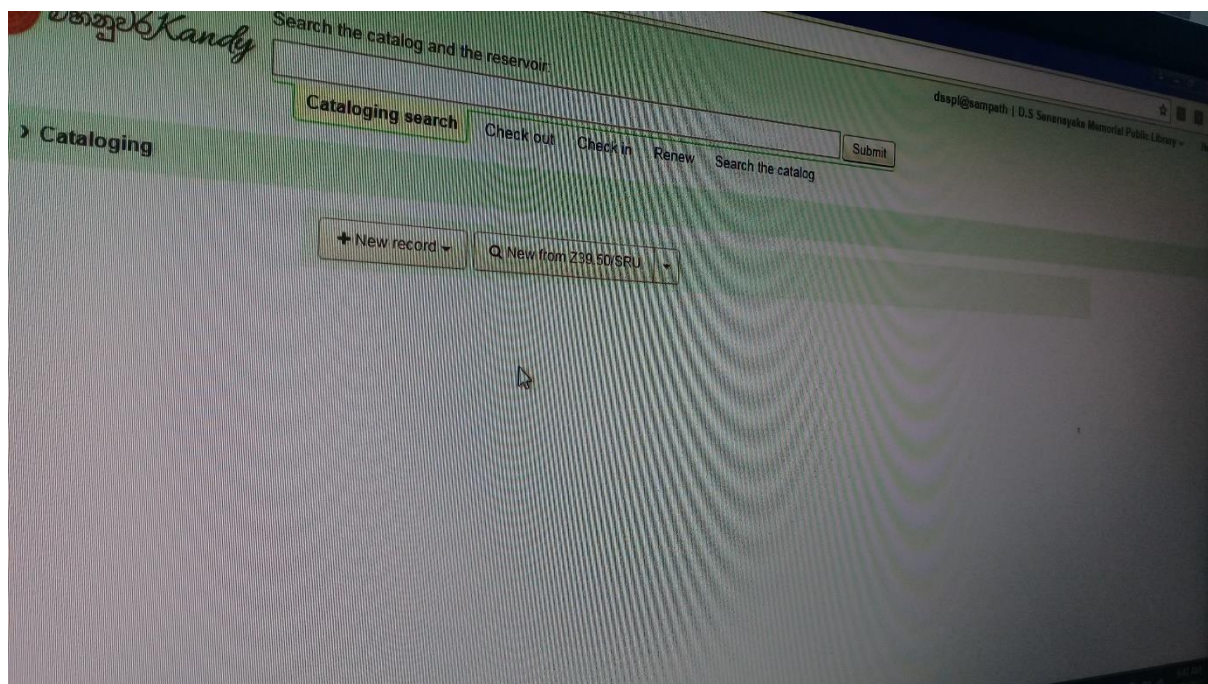
## 10. Appendix

What is the problem this Online Library Management System?

Not any problem in this Management System . It takes a long time for staff to understand the workings going on in this system.

Screen shot and photos.





**Add MARC record**

Save Q Z39.50/SRU search Link authorities automatically Settings Cancel

0 1 2 3 4 5 6 7 8 9

000 001 003 005 006 007 008 010 015 016 020 022 024 027 028 035 037 040 041 045 047 048 050 074 082 086

**Section 0**

000 ? - LEADER  
≡ 00 fixed length control field Required

001 ? - CONTROL NUMBER  
≡ 00 control field Required

003 ? - CONTROL NUMBER IDENTIFIER  
≡ 00 control field Required

005 ? - DATE AND TIME OF LATEST TRANSACTION  
≡ 00 control field Required

006 ? - ADDITIONAL MATERIAL CHARACTERISTICS

S number – S92074774

Name – R.A.K.A. Kumara

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