

BINOD BIHARI MAHTO KOYALANCHAL UNIVERSITY, DHANBAD

BOKARO STEEL CITY COLLEGE, BOKARO
(A PREMIER COLLEGE OF BBMKU)



DEPARTMENT OF BCA
FACULTY OF TECHNOLOGY
B.S. CITY COLLEGE (827006)
MAY 2022

A

SYNOPSIS
ON

LIBRARY MANAGEMENT SYSTEM

[BACHELOR OF COMPUTER APPLICATION](SEM
– 6TH)

UNDER THE GUIDENCE OF

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Co-ordinator

Principal/Director

ACKNOWLEDGEMENT

We have immense pleasure in presenting the report for our synopsis entitled “Library Management System”.

We would like to take this opportunity to express our gratitude to a number of people who have been sources of help & encouragement during the course of this project.

We are very grateful and indebted to our project guide Mr. Vivek Kumar Mahatha (Faculty of BCA Department) for providing their enduring patience, guidance & invaluable suggestions. They were the ones who never let our morale down & always supported us through thick & thin. They were the constant source of inspiration for us & took an utmost interest in our project.

We would also like to thank all the staff members for their invaluable co-operation & permitting us to work in the computer lab.

We are also thankful to all the students for giving us their useful advice & immense co-operation. Their support made the working of this project very pleasant.

Group Members:

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Why are we creating the Library Management System Project?

Library Management Systems are a great way to monitor books, add them, update information in it, search for the suitable one, issue it, and return it when needed. This Library Management System Project is developed in Java, to provide all the features that a Library Management System should usually have and overcome the drawbacks of the present system such as:

- Paper-based record keeping.
- Mis-management of data due to manual and paper-based handling.
- A vast amount of time consumption in searching for books and library management.
- Book-thefts from the library.

Features of the Library Management System

Reports:

- Proper reports can be generated with the necessary information to view the real-time updates and progress, with a click of a button.
- Friendly user interface: A library management system with functionalities to issue, return, and view the status of books should be user friendly enough so that the person handling it can get the work done efficiently. It is such that people who haven't used software earlier can also work on it efficiently without knowing any technicalities.
- Real-time errors display: A proper provision to display error messages is provided so that the problem with the system can be known and resolved easily.

Security:

- A secure system for logins and preventing unauthorized ones is provided so that no one uses it without permission.
- Validated entries are permitted: Each form has its validations, so the possibility of wrong entries is minimized.

The project created with Java used for controlling and monitoring operations in the library management system has been divided into four main modules:

- **Database module:** This has two functions – Insertion of data and extraction of data with a user-friendly screen.
- **Report module:** For the borrowed books list to display.
- **Available module:** To view the availability of books.
- **Search Module:** search facility for books and members.

Users in this system:

- Admin/Librarian

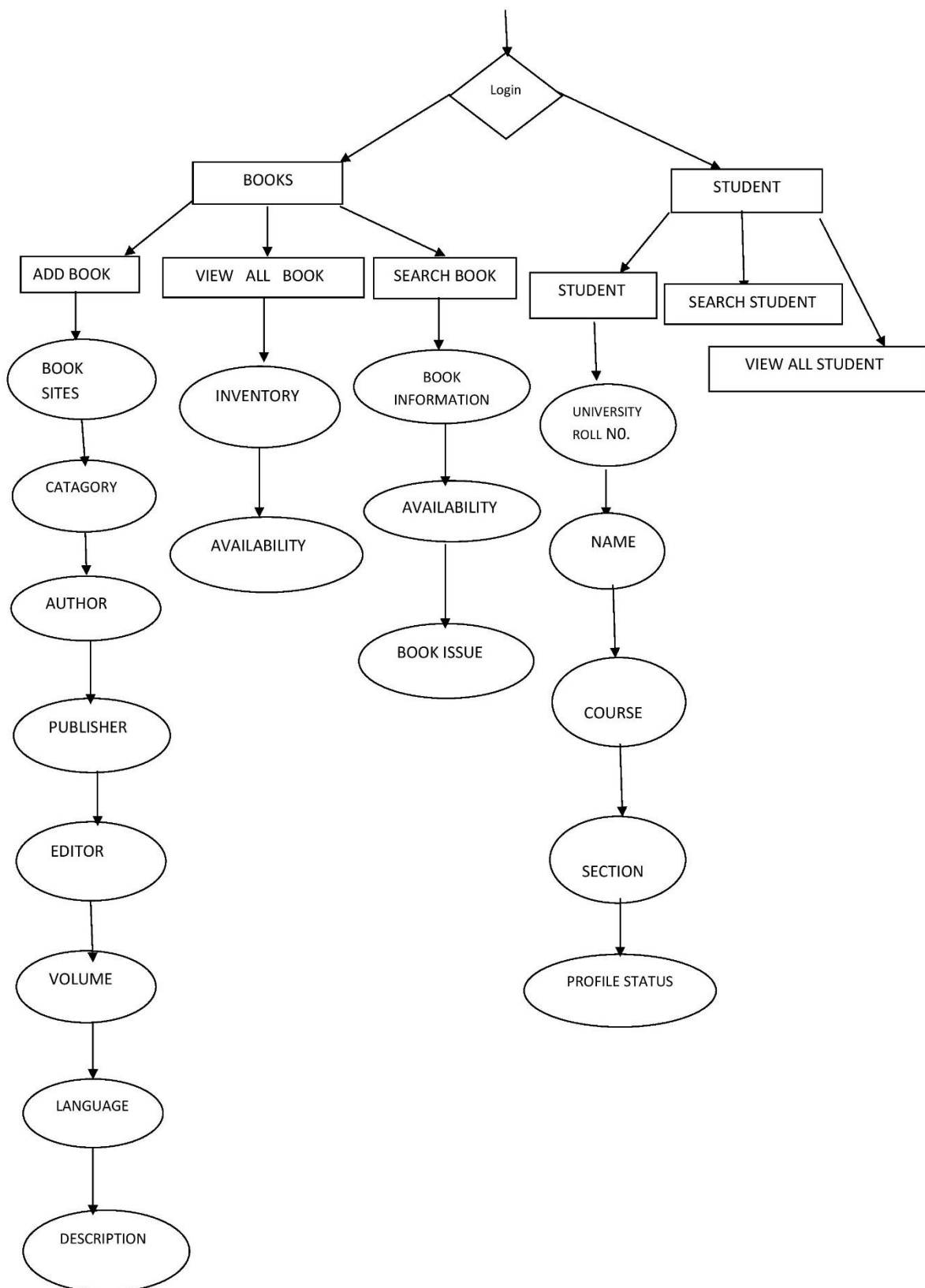
User functions:

- Add, view, and delete the students.
- Add, view, issue books, return books.

Hardware & Software to be used:

- | | |
|----------------------|------------------------------|
| • Processor | : Intel Core i3 |
| • Clock Speed | : 1.5GHz or more |
| • RAM | : 4GB or more |
| • Hard disk Capacity | : 20GB |
| • Keyboard | : 101 Keys |
| • Front End | : Eclipse IDE/Html, CSS, JSP |
| • Back End | : SQL Server |
| • Operating System | : Windows 10 |
| • Coding Language | : Java |

Data Flow Diagram:



Biography

- Java Server Pages <https://www.javatpoint.com/>
- Core Java E. Balagurusamyl
- Database programming with JDBC <https://www.javatpoint.com/>
- Data Structures <https://www.geeksforgeeks.org/>
- Java Servlets <https://www.javatpoint.com/>