**MINI PROJECT**

**On**

**‘Automation of Library’**

****

**BACHELOR OF TECHNOLOGY**

**GALGOTIA’S COLLEGE OF ENGINEERING AND TECHNOLOGY**

**ABSTRACT**

The project titled **Automation of Library** is Library management software

for monitoring and controlling the transactions in a library .The project “**Automation of Library**” is developed in java, which mainly focuses on basic operations in a library like adding new member, new books, and updating new information, searching books and members and facility to borrow and return books.

“**Automation of Library**” is a windows application, designed to help users maintain and organize library. Our software is easy to use for both beginners and advanced users. It features a familiar and well thought-out, an attractive user interface, combined with strong searching Insertion and reporting capabilities.

The software **Automation of Library** has following main modules.

* Insertion to Database Module – User friendly input screen
* Extracting from Database module – Attractive Output Screen
* Search Facility system – search for books and members

**REQUIREMENT SPECIFICATION**

The system specification is the final work produced by the system and requirements engineer. It serves as the foundation for hardware engineering, software engineering, database engineering and human engineering.

Once requirements have been gathered explore each requirements in relationship to others, examine requirements for consistency, omissions and ambiguity.

After requirements analysis the requirements of **Automation of Library** process as follows: -

**Software Requirements**

Java language

Net beans IDE

MS SQL server

**Hardware Requirements**

Operating system: Window 7

Hard disks: 40GB

RAM: 256 MB

**Roles by Members:**

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**PROJECT OVERVIEW**

**EXISTING SYSTEM**

In our existing system all the transaction of books are done manually, So taking more time for a transaction like borrowing a book or returning a book and also for searching of members and books. Another major disadvantage is that to preparing the list of books borrowed and the available books in the library will take more time, currently it is doing as a one day process for verifying all records. So after conducting the feasibility study we decided to make the manual Library management system to be computerized.

**PROPOSED SYSTEM**

Proposed system is an automated Library Management System. Through our software user can add members, add books, search members, search books, update information, edit information, borrow and return books in quick time. Our proposed system has the following advantages.

* User friendly interface
* Fast access to database
* Less error
* More Storage Capacity
* Search facility
* Look and Feel Environment
* Quick transaction

All the manual difficulties in managing the Library have been rectified by implementing computerization.

**SCOPE**

**Automation of Library**is a software application can be used by any Library to automate the process of manually maintaining the records related to the subject of maintaining the stock and Book Issues. This process made computerized to reduce human errors and to increase the efficiency. The main focus of this project is to lessen human efforts. The maintenance of the records is made efficient, as all the records are stored in the database, through which data can be retrieved easily. The navigation control is provided in all the forms to navigate through the large amount of records. If the numbers of records are very large then user has to just type in the search string and user gets the results immediately. The editing is also made simpler. The user has to just type in the required field and press the update button to update the desired field.

The problems, which existed in the earlier system, have been removed to a large extent. And it is expected that this project will go a long way in satisfying users requirements. The computerization of the Library Management will not only improves the efficiency but will also reduce human stress thereby indirectly improving human recourses.

**REFERENCES**

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* A Programmer's Guide to Java (Khalid A. Mughal and Rolf w. Rasmussen)