# INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, ALLAHABAD (Deemed University)

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#### Database Management System (IDBM432C)Lab

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DBMS Mini Project:- Library Management System

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#### **Abstract of the project**

Library Management System is a software application to maintain records related to Book Issue, Book Search, Book Returns, Book reissue, adding member and all necessary requirements for the Library to manage day to day operations.

The main objective of the application is to automate the existing system of manually maintaining the records of Book Issue, Book return from the member, Book Search to be computerized. So the book issue, return, searching will be faster. This application can be used by any Library to automate the process of manually maintaining the records related to the subject of maintaining books & member records.

This software allows user to add data about the book and details of the members issuing the books. It allows user to fetch data about currently issued books. It allows user to issue, reissue, return book(s). The GUI of software is user friendly for easy to use experience of user.

### **Specific Technology:-**

- Java
- Apache Derby ( Database Technology )
- JavaFX
- JFoenix( open source GUI library )
- Netbeans 8.2
- External JAR files used( derby.jar , derbyclient.jar , jfoenix.jar )

## **Project Tasks:-**

- Entity-Relationship(ER) Diagram
- Activity Diagram
- State Diagram.

## Functional components of the project :-

- Two search boxes, first to search about book details and second for member details.
- A addMember button that provide user to add himself as member of Library.
- A addBook button that provide user to add details of book.
- View member & view book buttons to see current details of added members and available books.