

# **LAB REPORT**

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## ABSTRACT

The management of book libraries in large organizations and companies is a complex and challenging task that requires an efficient and secure system. The current process of managing libraries often lacks efficiency, accuracy, and security, which can lead to data inconsistency and integrity issues. Therefore, this report presents the development of a Library Management System designed to automate the processes involved in managing a library and enhance the user experience.

The proposed system provides a basic set of features that enable librarians to add/update members, add/update books, and manage check-ins. Additionally, the system maintains records of issued books, late fines for students who return books after the due date, and stock availability in the library. The development of the system includes establishing and maintaining a back-end database and front-end application development aspects that ensure strong data security and good libraries.

The system's design aims to enhance the user experience by providing a fully functional and easy-to-use application. The system allows librarians to retrieve details of books available in the library, issue books to students, and maintain their records. The proposed system provides an efficient and secure way to manage book libraries in large organizations and companies.

Overall, the development of this Library Management System provides an opportunity for organizations to streamline their library management processes, reduce the risk of data inconsistency and integrity issues, and improve the user experience. The proposed system can be further improved and customized based on the client's specific requirements and can serve as a model for future library management systems.

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**LIST OF ABBREVIATIONS**

<b>NO</b>	<b>WORD</b>	<b>ABBREVIATION</b>
1	TSV	TREE STRUCTURE VIEW
2	WBS	WORK BREAKDOWN STRUCTURE
3	ER	ENTITY RELATION
4	DFD	DATA FLOW DIAGRAM
5	UI	USER INTERFACE
6	SWOT	STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS
7	RMMM	RISK MITIGATION, MONITORING AND MANAGEMENT

## **CONCLUSION**

In conclusion, this report has presented the development of a Library Management System designed to address the challenges associated with managing book libraries in large organizations and companies. The proposed system offers a basic set of features that automate the processes involved in managing a library and enhance the user experience. The system's design ensures strong data security and good libraries, which reduces the risk of data inconsistency and integrity issues.

The proposed Library Management System provides an efficient and secure way to manage book libraries, enabling librarians to add/update members, add/update books, manage check-ins, and maintain records of issued books, late fines, and stock availability in the library. The system's design also allows librarians to retrieve details of books available in the library, issue books to students, and maintain their records.

Overall, the proposed Library Management System offers an opportunity for organizations to streamline their library management processes, reduce the risk of data inconsistency and integrity issues, and improve the user experience. The proposed system can be further customized and improved based on the client's specific requirements and can serve as a model for future library management systems.

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