**Library Management System**

**Project Synopsis**

Course Name (IDS353)

Degree

**BACHELOR OF TECHNOLOGY (CSE)**

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| PROJECT GUIDE:  **Project Guide Name** | SUBMITTED BY:  **Aashish Saini (TCA2266001)**  **Muskan Singh (TCA2250006)** |

09, 2023



**FACULTY OF ENGINEERING & COMPUTING SCIENCES**

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Table of Contents

[1 Project Title 3](#_Toc31139962)

[2 Domain 3](#_Toc31139963)

[3 Problem Statement 3](#_Toc31139964)

[4 Project Description 3](#_Toc31139965)

[4.1 Scope of the Work 3](#_Toc31139966)

[4.2 Project Modules 3](#_Toc31139967)

[5 Implementation Methodology 3](#_Toc31139968)

[6 Technologies to be used 4](#_Toc31139969)

[6.1 Software Platform 4](#_Toc31139970)

[6.2 Hardware Platform 4](#_Toc31139971)

[6.3 Tools 4](#_Toc31139972)

[7 Advantages of this Project 4](#_Toc31139973)

[8 Future Scope and further enhancement of the Project 4](#_Toc31139974)

[9 Team Details 4](#_Toc31139975)

[10 Conclusion 5](#_Toc31139976)

[11 References 5](#_Toc31139977)

# Project Title

Librarian Pro: Next-Gen Library Automation

# Domain

LibrarianPro.net

# Problem Statement

The manual management of a library is time-consuming and error-prone. The project aims to develop a Library Management System in C++ to automate and streamline library operations.

# Project Description

4.1 Scope of the Work

The project will involve the development of a comprehensive library management system, including cataloging books, managing user accounts, tracking book borrowings and returns, generating reports, and ensuring data security.

4.2 Project Modules

User Authentication

Book Cataloging

Borrowing and Returning

Search and Filtering

User Management

Reports and Statistics

Data Backup

Security

# Implementation Methodology

We will use c++ programming language and dev c++,

# Technologies to be used

6.1 Software Platform

C++ for the core application

MySQL for database management

6.2 Hardware Platform

Standard PC hardware

6.3 Tools

Integrated Development Environment (IDE) for C++ development

MySQL database management tools

# Advantages of this Project

Efficient and error-free library management

Quick access to information for librarians and patrons

Improved user experience

Data security and backup

# Future Scope and further enhancement of the Project

Integration with an online catalog and reservation system

Mobile app for patrons

Integration with RFID technology for tracking books

Integration with digital resource management

# Team Details

*Project Manager: [Aashish saini]*

*Lead Developer: [Muskan Singh]*

| **Project Name & ID** | **Course Name** | **Student ID** | **Student Name** | **Role** | **Signature** |
| --- | --- | --- | --- | --- | --- |
| Library management system | project | TCA2266001 | Aashish saini | Developer, Testing etc. |  |
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|  |  |  |  |

# Conclusion

The Library Management System in C++ will significantly enhance the efficiency of library operations, providing a user-friendly interface for librarians and patrons while ensuring data security and integrity.

# References

*[List any references or resources that will be used during the project.]*

*This outline provides a structure for your Library Management System project in C++. You can further expand on each section and develop the actual project based on this framework.*