

**PURBANCHAL UNIVERSITY**

**Faculty of Science and Technology**

**Biratnagar,Nepal**



**KIST COLLEGE OF**

**INFORMATION TECHNOLOGY**

**Project Work on C**

**Library Management System**

**S. No Submitted by: Symbol no.:**

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**A project report submitted in partial fulfillment of the requirements for**

**BACHELOR IN INFORMATION TECHNOLOGY (BIT) 1st SEMESTER**

**Of**

**Purbanchal University, Biratnagar, Nepal**

**ACKNOWLEDGEMENT**

We take this opportunity to express our profound appreciation and unfathomable regards to the Information Technology (IT) department for this commendable guidance, monitoring and constant encouragement throughout the course of this project. The help and guidance given by shall carry us a long way, in the journey on which we are about to embark.

We also take this opportunity to express a deep sense of gratefulness to **Mr. Prawesh Dhungana** for his amiable support, valuable information and guidance, which helped us in completing this task throughout its various stages. We also want to thank our coordinator **Mr. Deepak Khadka** who helped us a lot during the complete project by giving us his precious time. We are also indebted to all members of **KIST College**, for the valuable suggestions and help provided by them in their in their respective fields. We are grateful for their cooperation during the period of our project.

Finally, we would also like to express lots of thanks to **PURBANCHAL UNIVERSITY** for designing such a wonderful course structure. It will help us to get more knowledge in the field of Information Technology & help us to have a bright future in the field of technology.

We hope our University will accept this attempt as a successful project.

**\*Thank you\***

**LETTER OF CERTIFICATION**

This is to certify that Mr. Abit Shrestha, Mr.Mingmar Gyalzen Sherpa, Mr.Pranit Dong Lama and Mr.Samik Shakya has prepared and submitted this final project report under our guidance and supervision. This project work has been accomplished in individual basis and submitted here for practical fulfillment of BIT 1st semester final examination in Project I for **Purbanchal University**. The result of the presented project will be best of our knowledge. This project work is based on C programming.

We therefore, forward this project work for final examination as final approval acceptance of our project.

Internal Examiner External Examiner

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**STUDENT’S DECLARATION**

We following students, hereby declare that the Project Report titled "**LIBRARY MANAGEMENT SYSTEM "** is a result of our own work and our indebtedness to other work publications, references, if any, have been dully acknowledged. If we are found guilty of copying any other report or published information and showing as our original work, we understand that we shall be liable and punishable by **Purbanchal University**, which may include fail in examination, ‘Repeat study and re-submission of the report' or any other punishment that **Purbanchal University** may decide.

We further certify that this Project submitted in partial fulfillment of the requirement for the award of Bachelor in Information Technology (**BIT**) of the **Purbanchal University** is our original work and has not been submitted for award of any other degree or other similar title or prizes.

|  |  |  |  |  |
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| S.N | NAME | Regd.No. | Symbol No. | Signature |
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Date:

**EXAMINER’S CERTIFICATION**

This is to certify that the project entitled " **LIBRARY MANAGEMENT SYSTEM**" has been successfully completed by Mr.Abit Shrestha, Mr.Mingmar Gyalzen Sherpa , Mr.Pranit Dong Lama and Mr. Samik Shakya in partial fulfillment of Degree of Bachelor of Information Technology(**BIT**) of **Purbanchal University** during the Academic year 2021 under the guidance of **Mr. Prawesh Dhungana.**

**TO WHOM IT MAY CONCERN**

This is to certify that Mr. Abit Shrestha, Mr. Mingmar Gyalzen Sherpa, Mr. Pranit Dong Lama and Mr. Samik Shakya of Bachelor in Information Technology (BIT) has studied as per the curriculum of BIT 1st Semester and completed the project entitled “**LIBRARY MANAGEMENT SYSTEM”**This project is the original work of Mr. Abit Shrestha, Mr. Mingmar Gyalzen Sherpa, Mr. Pranit Dong Lama and Mr.Samik Shakya and was carried out under the supervision of Mr. Prawesh Dhungana as per the guidelines provided by Purbanchal University and certified as per the student’s declaration that project “**LIBRARY MANAGEMENT SYSTEM**” has not been presented anywhere as a part of any other academic work.

The detail of the student is as follows:

Name of Students : Abit Shrestha

Mingmar Gyalzen Sherpa

Pranit Dong Lama

Samik Shakya

Semester : 1st

Subject Code : BIT 178C0

Project Title : **LIBRARY MANAGEMENT SYSTEM**

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Mr. Deepak Khadka  
Program Coordinator, BIT  
KIST College of Information Technology

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# ABSTRACT OF THE PROJECT

**Library Management System** is a project which aims in developing a computerized system to maintain all the daily work of library with more efficiency. It can improve management of the book property in the library. It also has a facility of admin login through which the admin can monitor the whole system. The library management system is the 32bit windows application to help users to maintain and organize library.

This Library Management System is mainly used by librarian and library admin. Normal Librarian is able to manage the member book maintenance module and also the most important module in a library which is book transaction module. The system is mainly used to design the user interface and keep database records. It has also better security with facility of login using username and password and user can also change password in it. The facility of check in book, checkout book, searching various books etc. is there in the software. It is also easy to use for both beginners and advanced users.

Overall this project of ours is being developed to help the students as well as staff of library to maintain the library in the best way possible and also reduce the human efforts.

# INTRODUCTION

The project titled “**Library Management System**” is Library management software for monitoring and controlling the transactions in library. The project “Library Management System” is developed in C programming. Library Management System is specially designed for purpose of adding books records in a library. The system elaborates the basic concept for storing and generating the book’s detail. The details of the book include book id, book name, book author. It mainly focuses on adding books, deleting books records, searching books etc.

To develop this project “Dev C++ v.5.11” is used. This project uses basic C function to generate outlook, menu, show message, display information and take input. It also implements various C concepts such as file operation, looping, function, and decision making and branching. It consists of C preprocessors header file stdio.h, conio.h, string.h, windows.h ,stdlib.h to link C library files for desire output.

This is a simple Library Management System developed using C language. In future, the improved version can be written in other programming languages. The versions developed in future can be more users friendly and interactive. Our software is easy to use for both beginners and advanced users.

# OBJECTIVES OF THIS PROJECT

* To store books details
* To edit book records
* To allow user to view available books and quantity
* To search the book records
* To protect from unauthorized access

# FUTURE ENHANCEMENT

* Network and online based application can be introduced
* Can introduce Bar Code Reader
* Good Graphical User Interface can be introduced
* Better security with biometrics can be introduced
* Can introduce staff member management

# SYSTEM REQUIREMENTS

**Minimum System Requirements**

OS: Windows 95 or higher.

RAM: 256 MB

Hard Disk: 200MB of free space available

Processor:  Intel Pentium III or later.

**Recommended System Requirements**

OS: Windows 7 or Higher

RAM: 4GB

Hard Disk: 500MB or above free space available

Processor: Intel I3 or Higher

# ALGORITHM

Step 1: START

Step 2: Program asks for options to go to Admin Panel or Customer Panel

Step 3: For the condition of admin panel, Password and Username Check and authorization to program.

Step 4: For condition 1 of admin menu program further shows option as:

1. Admin Panel:
   * 1. Add books
     2. Remove Books
     3. View books list
     4. Edit book record
     5. Password Change
     6. Back to main menu
     7. Exit

Step 5: The program provides functions to run on the basis of the options chosen by user.

Step 6: If user choses 7 goto step 10

Step 7: In second Condition of Customer Panel further shows option as:

1. Customer panel:
   * + 1. CheckOut Book
       2. Checkin Book
       3. Search book
       4. Go to Main Menu
       5. Exit

Step 8: The program provides functions to run on the basis of the options chosen by user.

Step 9: If user choses 5 goto step 10

Step 10: Stop

# F**LOWCHART**

Yes

STOP

Exit

Back to Main Menu

Change password

Edit book record

View books list

Remove books

START

Menu (select the option)

Admin panel

Customer Panel

Login

Add books

CheckOut Book

CheckIn

Book

Search Book

Back to Main Menu

Exit

No

# USE CASE DIAGRAM

**Library Management System**

Admin

Login

Add book

Remove book

View book list

Edit book record

Change password

Back to main menu

Exit program

Customer

Checkout book

Checkin book

Search book

Back to main menu

Exit program

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