

Library Book Management System – Project Report

1. Introduction

This project is a simple Library Book Management System designed for the Introduction to Programming course.

It allows storing book information, viewing all available books, and searching books by title or author.

2. Problem Definition

Managing books manually is slow and error-prone. A basic digital tool is needed for efficiency.

3. Objectives

- Add books
- View books
- Search books
- Simple interface

4. Requirements

Functional:

- Add book
- View book list
- Search book
- Exit program

Non-Functional:

- Easy to use
- Accurate search

5. Top-Down Design

Modules:

- add_book()
- view_books()
- search_book()
- menu()

6. Algorithm

1. Start
2. Show menu
3. Choose option
4. Perform selected task
5. Repeat
6. Exit

7. Implementation

Python lists and dictionaries used.

8. Testing

Tested with:

- Multiple entries
- Search keywords

9. Conclusion

Project demonstrates programming fundamentals and provides a simple solution.