

PPS MINI PROJECT

LIBRARY MANAGEMENT SYSTEM

Presented By

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INTRODUCTION

The mini-project “Library management system project in C” is a console application using the C programming language. This project compiled in Code Blocks with the GCC compiler. In this console application, you can do basic library management task like adding the book, view the added book, search the books, ..etc.

OBJECTIVE

Library Management System is a term for computer-based system that manage the catalogue of a library. The main purpose of this system is to manage library daily operation efficiently. To build a system that can receive input and generate automatically output in easy way and short time. To build a monitoring system that is able to monitor and manage all library operations efficiently. Give an opportunity to librarians to reduce mistakes that always happen during manual method. To store properly the library items in order to maintain their security. To enter and preserve details of the various issues and keep a track on their returns.

This system basically has four types of modules that handle daily activities for the library :

- a) Manage Account module b) Search Record Module
- c) Book Borrowing System Module d) Report Generator Module

OBJECTIVE

By using library management system, the operation of borrowing and managing inventories is paperless. This system provides a user-friendly data entry with dropdown button menu, list box and checkbox in purpose to make the input entry easier to understand and use. It is also created to ensure that the library items are stored properly in order to maintain their security.

This system will store all the books and members information that consist book numbers, book titles, author names and racks to the system database. It also provides search function to help students find the book by number of book. Search function will search through the books database to look for the book and view where the book is situated.

For the administrator user, only librarians have access to view or edit data from the system databases. Administrator user will handle administrative functions such as create new LMS user account and decide the number of days allowed for the borrowed books. Users need to enter correct password and user id before they can access to this function. From here, they can add, delete or update the book and borrower database.

ALGORITHM

- 1) First we declare structure variable, and in main syntax we declared all other necessary variables.
- 2) Then we make a loop for a startup page which is a menu for library management so that we can use one option from menu and after completing that we come to main page for other management work.
- 3) Then we make a switch case system according to the option in menu.
- 4) We make first switch case as a option in which we can add book details. Second we make option for listing all books with all added details. Third we add option for searching book related to the entered author name. Forth we add option for search books detail related to book name. Fifth we add option which tell how many books are store in program.
- 5) And after completing with all switch case with full coding of the program to be done in each case we just complete the coding.
- 6) Now program is ready for managing library things

SAMPLE CODE

The screenshot displays the OnlineGDB web interface. The browser's address bar shows 'onlinegdb.com'. The interface includes a sidebar on the left with navigation links: 'IDE', 'My Projects', 'Classroom' (marked 'new'), 'Learn Programming', 'Programming Questions', 'Sign Up', and 'Login'. Below these are social media icons for Facebook and Twitter, and a '+ 133K' badge. The main area features a toolbar with buttons for 'Run', 'Debug', 'Stop', 'Share', 'Save', 'Beautify', and a download icon. The language is set to 'C'. The code editor shows a file named 'main.c' with the following C code:

```
1 #include<stdio.h>
2 #include<conio.h>
3 #include<stdlib.h>
4 #include<string.h>
5
6 struct library
7 {
8
9     char bk_name[30];
10
11     char author[30];
12
13     int pages;
14
15     float price;
16
17 };
18
19
20 int
21 main ()
22 {
23
24     struct library l[100];
25
26     char ar_nm[30], bk_nm[30];
27
28     int i, j, keepcount;
```

The Windows taskbar at the bottom shows the time as 20:45 on 01-02-2022, with system icons for network, volume, and battery.

CODE OUTPUT

The screenshot displays the OnlineGDB web interface. The browser's address bar shows the URL `onlinegdb.com`. The left sidebar contains navigation links: **OnlineGDB beta**, *online compiler and debugger for c/c++*, *code. compile. run. debug. share.*, **IDE**, **My Projects**, **Classroom** (with a 'new' badge), **Learn Programming**, **Programming Questions**, **Sign Up**, and **Login**. Below these are social media icons for Facebook, Twitter, and a '+ 133K' button. The footer of the sidebar lists: **About • FAQ • Blog • Terms of Use • Contact Us • GDB Tutorial • Credits • Privacy** and **© 2016 - 2022 GDB Online**.

The main editor area shows a C program named `main.c` with the following code:

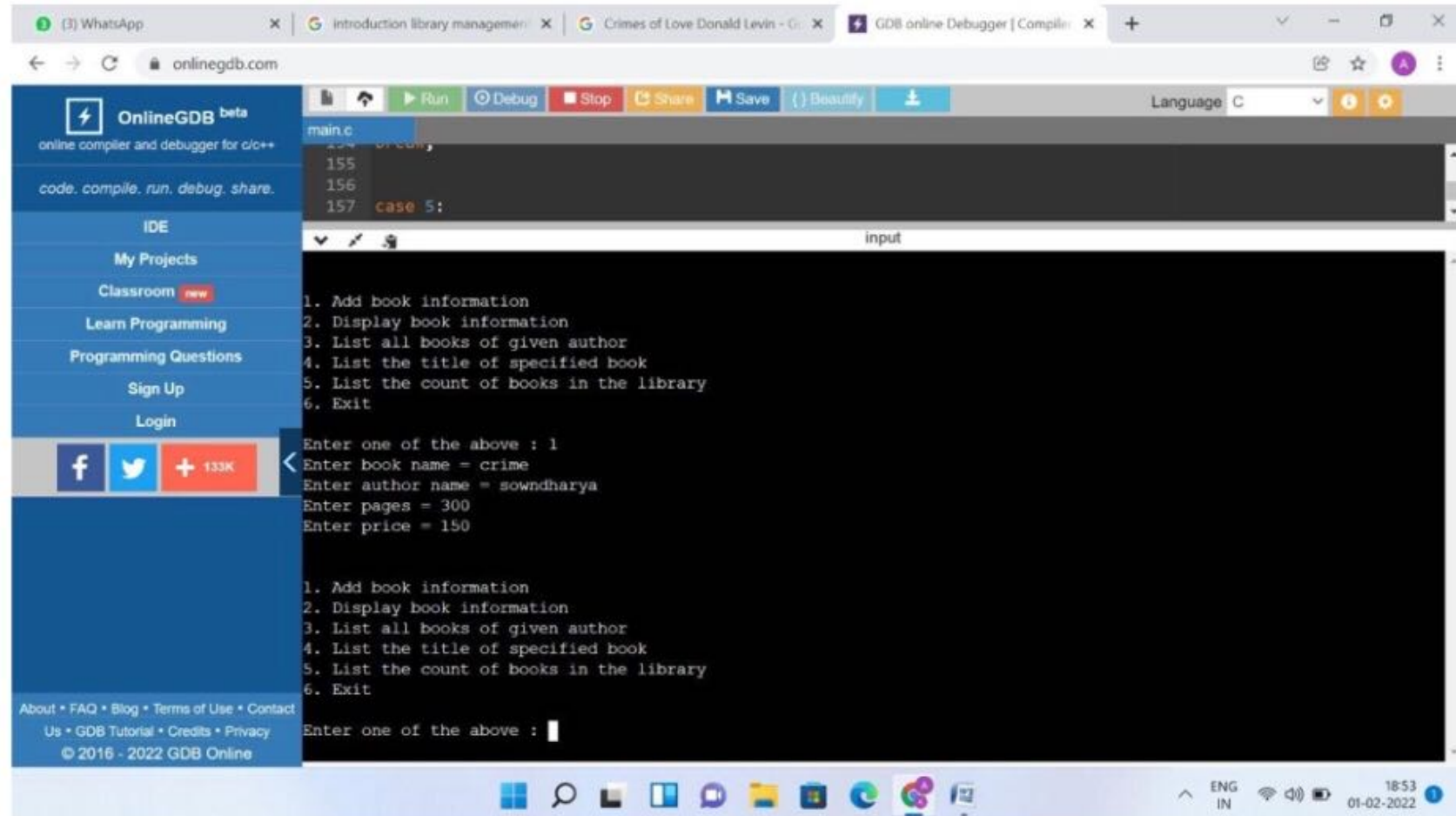
```
154 break;  
155  
156  
157 case 5:
```

The output window, titled 'input', shows the program's execution:

```
Enter price = 200  
  
1. Add book information  
2. Display book information  
3. List all books of given author  
4. List the title of specified book  
5. List the count of books in the library  
6. Exit  
  
< Enter one of the above : 1  
Enter book name = killer  
Enter author name = mohammad  
Enter pages = 500  
Enter price = 250  
  
1. Add book information  
2. Display book information  
3. List all books of given author  
4. List the title of specified book  
5. List the count of books in the library  
6. Exit  
  
Enter one of the above :
```

The Windows taskbar at the bottom shows the time as 18:56 on 01-02-2022, with system icons for network, volume, and battery.

CODE OUTPUT



The screenshot shows the OnlineGDB website interface. The browser's address bar displays 'onlinegdb.com'. The left sidebar contains navigation links: 'OnlineGDB beta', 'online compiler and debugger for c/c++', 'code, compile, run, debug, share.', 'IDE', 'My Projects', 'Classroom new', 'Learn Programming', 'Programming Questions', 'Sign Up', and 'Login'. Below these are social media icons for Facebook and Twitter, and a '+ 133K' button. The main area features a toolbar with 'Run', 'Debug', 'Stop', 'Share', 'Save', and 'Beautify' buttons. The code editor shows a C program in 'main.c' with the following code:

```
154 // ...  
155  
156  
157 case 5:
```

The output window, titled 'input', displays the program's execution results:

```
1. Add book information  
2. Display book information  
3. List all books of given author  
4. List the title of specified book  
5. List the count of books in the library  
6. Exit  
Enter one of the above : 1  
Enter book name = crime  
Enter author name = sowndharya  
Enter pages = 300  
Enter price = 150  
  
1. Add book information  
2. Display book information  
3. List all books of given author  
4. List the title of specified book  
5. List the count of books in the library  
6. Exit  
Enter one of the above :
```

The bottom of the page includes a footer with links: 'About', 'FAQ', 'Blog', 'Terms of Use', 'Contact Us', 'GDB Tutorial', 'Credits', and 'Privacy'. The copyright notice reads '© 2016 - 2022 GDB Online'. The Windows taskbar at the bottom shows the system clock as 18:53 on 01-02-2022.

CODE OUTPUT

The screenshot displays the OnlineGDB web interface in a browser. The browser's address bar shows the URL `onlinegdb.com`. The interface includes a sidebar on the left with navigation links: **OnlineGDB beta**, *online compiler and debugger for c/c++*, *code. compile. run. debug. share.*, **IDE**, **My Projects**, **Classroom** (marked as new), **Learn Programming**, **Programming Questions**, **Sign Up**, and **Login**. Below these are social media icons for Facebook, Twitter, and a '+ 133K' button. At the bottom of the sidebar are links for **About**, **FAQ**, **Blog**, **Terms of Use**, **Contact Us**, **GDB Tutorial**, **Credits**, and **Privacy**, along with the copyright notice **© 2016 - 2022 GDB Online**.

The main area features a toolbar with buttons for **Run**, **Debug**, **Stop**, **Share**, **Save**, **Beautify**, and a download icon. The language is set to **C**. The code editor shows a file named `main.c` with the following C code:

```
154 break;  
155  
156 |  
157 case 5:
```

The output window, titled **input**, displays the program's execution results:

```
2. Display book information  
3. List all books of given author  
4. List the title of specified book  
5. List the count of books in the library  
6. Exit  
  
Enter one of the above : 1  
Enter book name = everything  
Enter author name = thiyagu  
Enter pages = 300  
Enter price = 200  
  
1. Add book information  
2. Display book information  
3. List all books of given author  
4. List the title of specified book  
5. List the count of books in the library  
6. Exit  
  
Enter one of the above : 1  
Enter book name = killer  
Enter author name = mohammad  
Enter pages = 500  
Enter price = 250
```

The Windows taskbar at the bottom shows the system clock as 18:56 on 01-02-2022, along with icons for network, volume, and battery.