PPS MINI PROJECT

LIBRARY MANAGEMENT SYSTEM

TEAM 1
MECHATRONICS WITH SPECIALIZATION IN ROBOTICS
SECTION B
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ABSTRACT

Our Project is regarding Library Management System where you can do basic library management task like adding the book, view the added book, search the books etc. Library management system helps to provide an easier way to handle files.

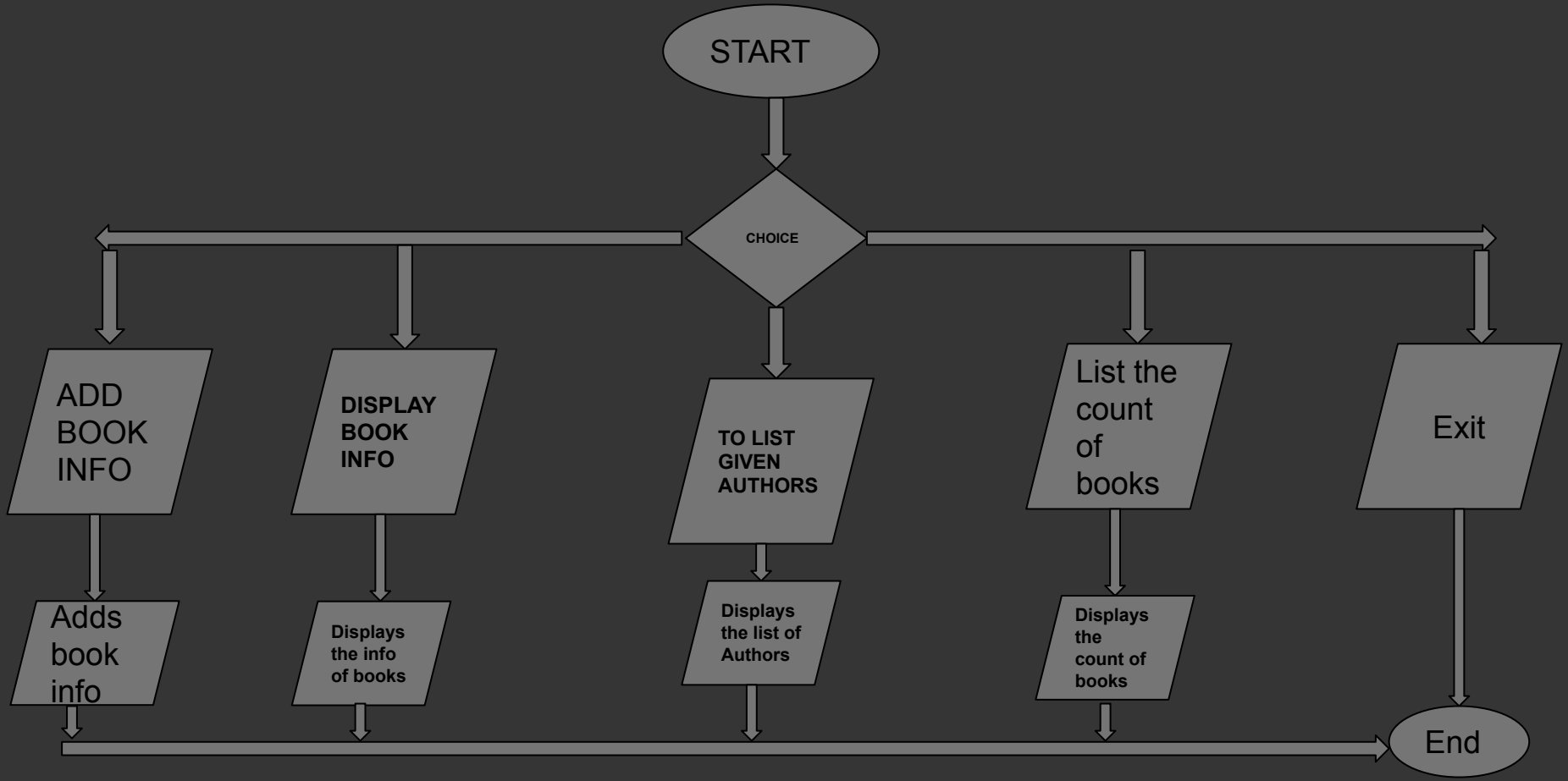
The user has the following options:

Add book information, Display book information, To list all books of a given author, To list the count of books in the library and exit.

ALGORITHM:

Step 1: Declare a structure which holds data members
Step 2: declare variables which are used for loop
Step 3: use switch case to work on each module
Step 4: case 1- for Adding book information
Case 2- for Display book information
Case 3- for Finding number for books in library
Case 4- for Listing all books of a given author
Case 5- for EXIT

FLOWCHART


START
CHOICE
ADD BOOK INFO
DISPLAY BOOK INFO
TO LIST GIVEN AUTHORS
List the count of books
Exit
Adds book info
Displays the info of books
Displays the list of Authors
Displays the count of books
End

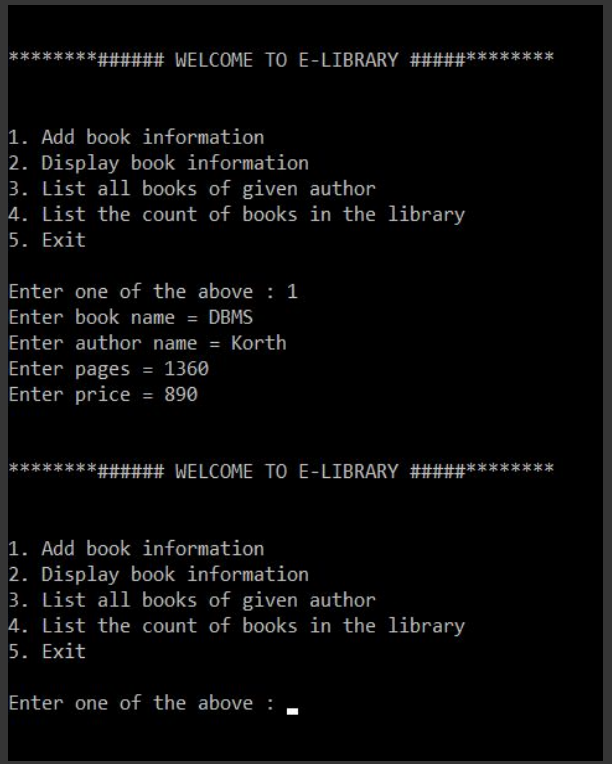
Program:

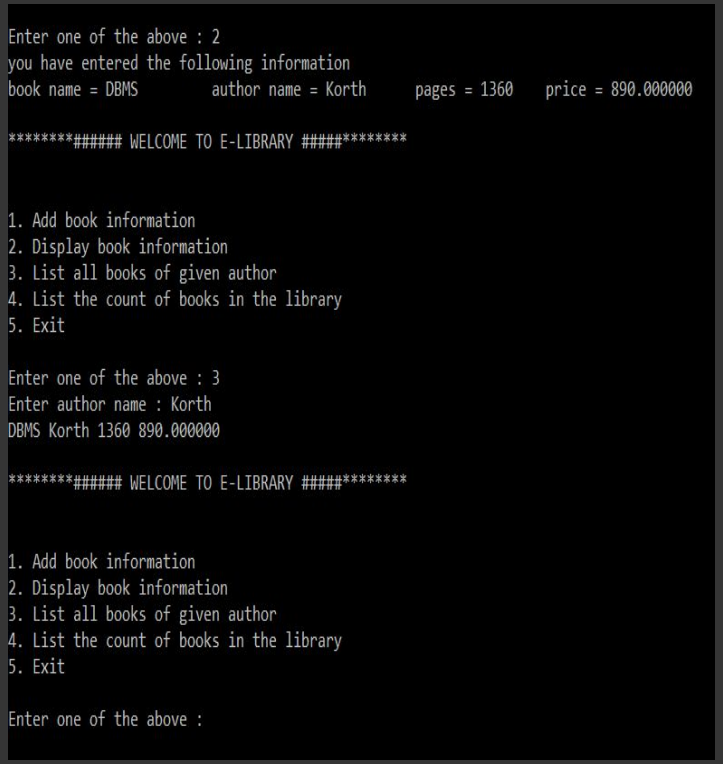
```
// C program for the E-library
// Management System
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

// Create Structure of Library
struct library {
    char book_name[20];
    char author[20];
    int pages;
    float price;
};

// Driver Code
int main()
{
    // Create a instance
    struct library lib[100];

    char ar_nm[30], bk_nm[30];

    // Keep the track of the number of
    // of books available in the library
    int i, input, count;

    i = input = count = 0;

    // Iterate the loop
    while (input != 5) {
```

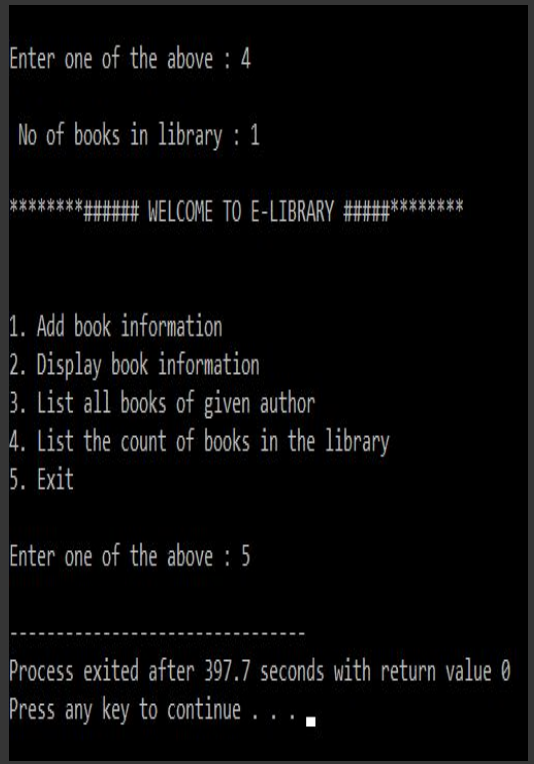
```
printf("\n\n********######"
        "WELCOME TO E-LIBRARY "
        "#####********\n");
printf("\n\n1. Add book infor"
        "mation\n2. Display "
        "book information\n");
printf("3. List all books of "
        "given author\n");
printf(
        "4. List the count of book"
        "s in the library\n");
printf("5. Exit");

// Enter the book details
printf("\n\nEnter one of "
        "the above: ");
scanf("%d", &input);

// Process the input
switch (input) {

// Add book
case 1:

        printf("Enter book name = ");
        scanf("%s", lib[i].book_name);

        printf("Enter author name = ");
        scanf("%s", lib[i].author);

        printf("Enter pages = ");
        scanf("%d", &lib[i].pages);
```

```
            printf("Enter price = ");
            scanf("%f", &lib[i].price);
            count++;

            break;

        // Print book information
        case 2:
            printf("you have entered"
                " the following "
                "information\n");
            for (i = 0; i < count; i++) {

                printf("book name = %s",
                    lib[i].book_name);

                printf("\t author name = %s",
                    lib[i].author);

                printf("\t pages = %d",
                    lib[i].pages);

                printf("\t price = %f",
                    lib[i].price);
            }
            break;
```

```
        // Take the author name as input
                case 3:
                        printf("Enter author name : ");
                        scanf("%s", ar_nm);
                        for (i = 0; i < count; i++) {

                                if (strcmp(ar_nm,
                                        lib[i].author)
                                == 0)
                                printf("%s %s %d %f",
                                        lib[i].book_name,
                                        lib[i].author,
                                        lib[i].pages,
                                        lib[i].price);
                        }
                        break;

                // Print total count
                case 4:
                        printf("\n No of books in "
                                "brary : %d",
                                count);
                        break;
                case 5:
                        exit(0);
                }
        }
        return 0;
}
```


********###### WELCOME TO E-LIBRARY ##########
1. Add book information
2. Display book information
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter one of the above : 1
Enter book name = DBMS
Enter author name = Korth
Enter pages = 1360
Enter price = 890
********###### WELCOME TO E-LIBRARY ##########
1. Add book information
2. Display book information
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter one of the above :


Enter one of the above : 2
you have entered the following information
book name = DBMS author name = Korth pages = 1360 price = 890.000000
********###### WELCOME TO E-LIBRARY ##########
1. Add book information
2. Display book information
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter one of the above : 3
Enter author name : Korth
DBMS Korth 1360 890.000000
********###### WELCOME TO E-LIBRARY ##########
1. Add book information
2. Display book information
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter one of the above :


Enter one of the above : 4
No of books in library : 1
********###### WELCOME TO E-LIBRARY ##########
1. Add book information
2. Display book information
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter one of the above : 5
Process exited after 397.7 seconds with return value 0
Press any key to continue . . .