Departmental Library Management System,

Computer Science and Engineering Department,

VNIT Nagpur – 440010

This project was successful due to the grace of Almighty God and the unwavering support of several key individuals and groups. I extend my heartfelt gratitude to the Head of the Department (CSE Department), Mrs. Madhuri Pimple, and Mrs. Bharati Polke, whose guidance, support, and encouragement were instrumental in bringing this project to fruition. I am also immensely grateful to the entire CSE Department staff and the faculties of VNIT Nagpur for their invaluable assistance and the knowledge they imparted.

The Department Library of the CSE Department has been a significant resource for students like me, allowing us to keep books for the entire semester without the worry of renewals. It houses specific books that are sometimes unavailable in the Institute Library. I am pleased that a student-made system will digitize the department library operations, enhancing its efficiency and accessibility. I humbly request further expansion and development of the library to benefit even more students in the future.

Kaustubh Shivshankar Shejole

BT20CSE112

CONTENTS

Sr. No.	Topic Names	Page Number
1	INTRODUCTION – Starting the system	1
2	HOME PAGE	2
3	BOOK RELATED FUNCTIONALITIES	3
	i. Inserting a book record	3
	ii. Viewing Books and their details	7
	iii. Finding a book record	9
	iv. Updating a book record	15
4	STUDENT RELATED FUNCTIONALITIES	17
	i. Inserting a student record	17
	ii. Viewing students and their details	18
	iii. Viewing Student who have issued books	18
	iv. Finding a student record	19
	v. Updating a student record	19
5	ISSUING A BOOK BY A STUDENT	21
6	RETURNING A BOOK BY A STUDENT	22
7	DEPARTMENT RELATED FUNCTIONALITIES	23
	i. Generating a report of students who have books issued	23
	ii. Check Student's clearance report	24
8	INSERTING NEW CATEGORIES AND SUBJECTS	26
	i. Inserting a category	26
	ii. Inserting a subject	26
	iii. View Categories	27
	iv. View subjects	28
9	UPDATING SUBJECTS AND CATEGORIES	29
10	BACKUP FUNCTIONS	30
11	FACULTY RELATED FUNCTIONALITIES	31

1. INTRODUCTION – Starting the system

This is the icon of Departmental Library Management System (DLMS in short). Clicking on this icon opens a terminal where the commands to run a process happens and a tab in Google Chrome . Google Chrome is opened automatically and, on this browser, the complete system runs.

2. HOME PAGE

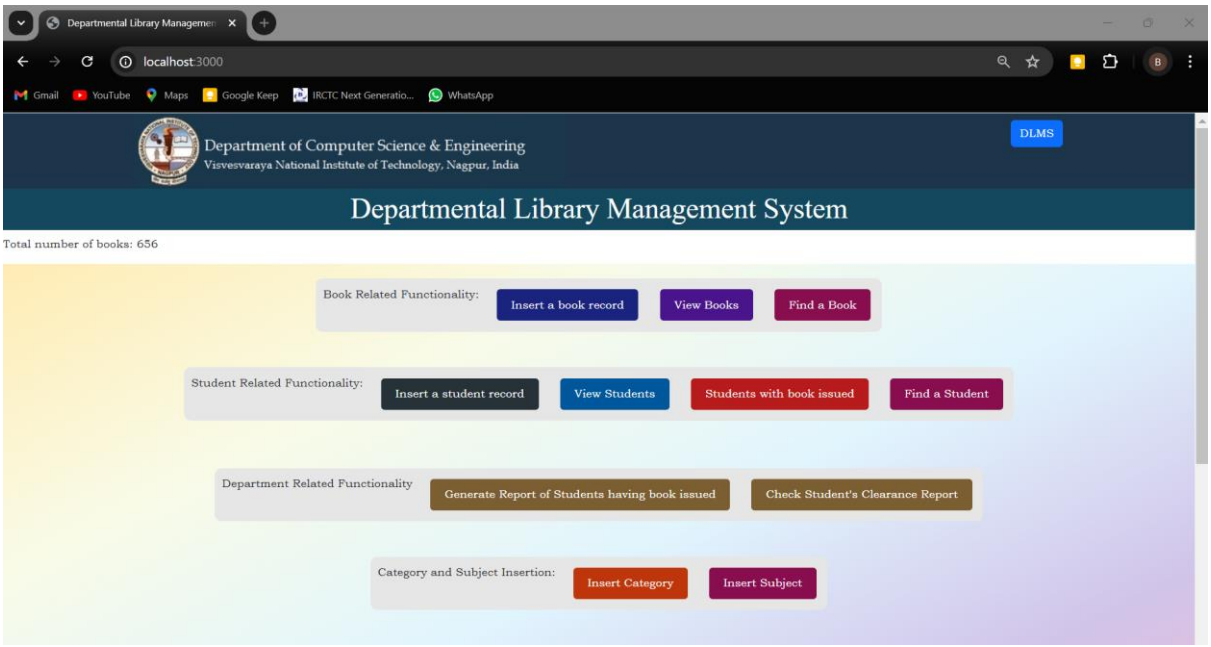
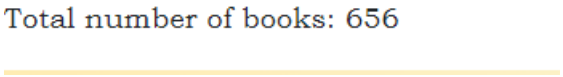


Figure 1: Showing the home page of the DLMS system.

The first window that we get to see when the chrome browser opens is the home page as shown in Figure 1.

button is disabled and hence we can only go forward or go to the home page by clicking at button which is located at top-right side of the webpage.

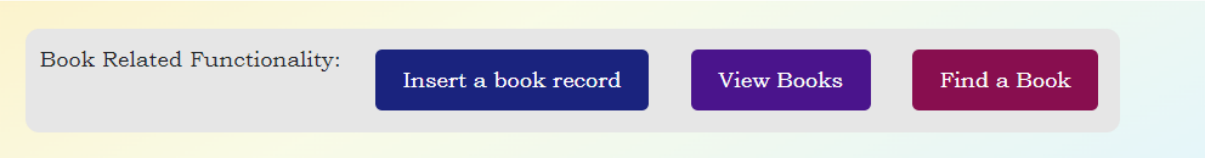


The home page shows the total number of books available in the library.

Then we have some functionalities given as follows:

1. Book Related Functionality
2. Student Related Functionality
3. Department Related Functionality
4. Category and Subjects Insertion
5. View Subjects and Categories
6. Backup Functions
7. Faculty Related Functionality

3. BOOK RELATED FUNCTIONALITIES

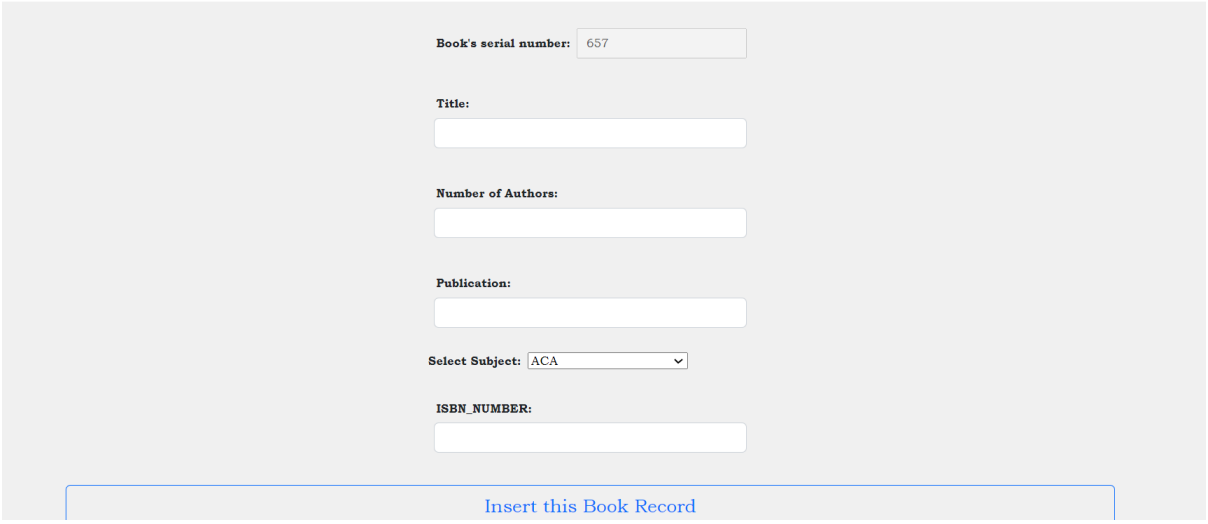


This functionality deals with book-related matters like inserting a new book record, viewing the book and searching a book.

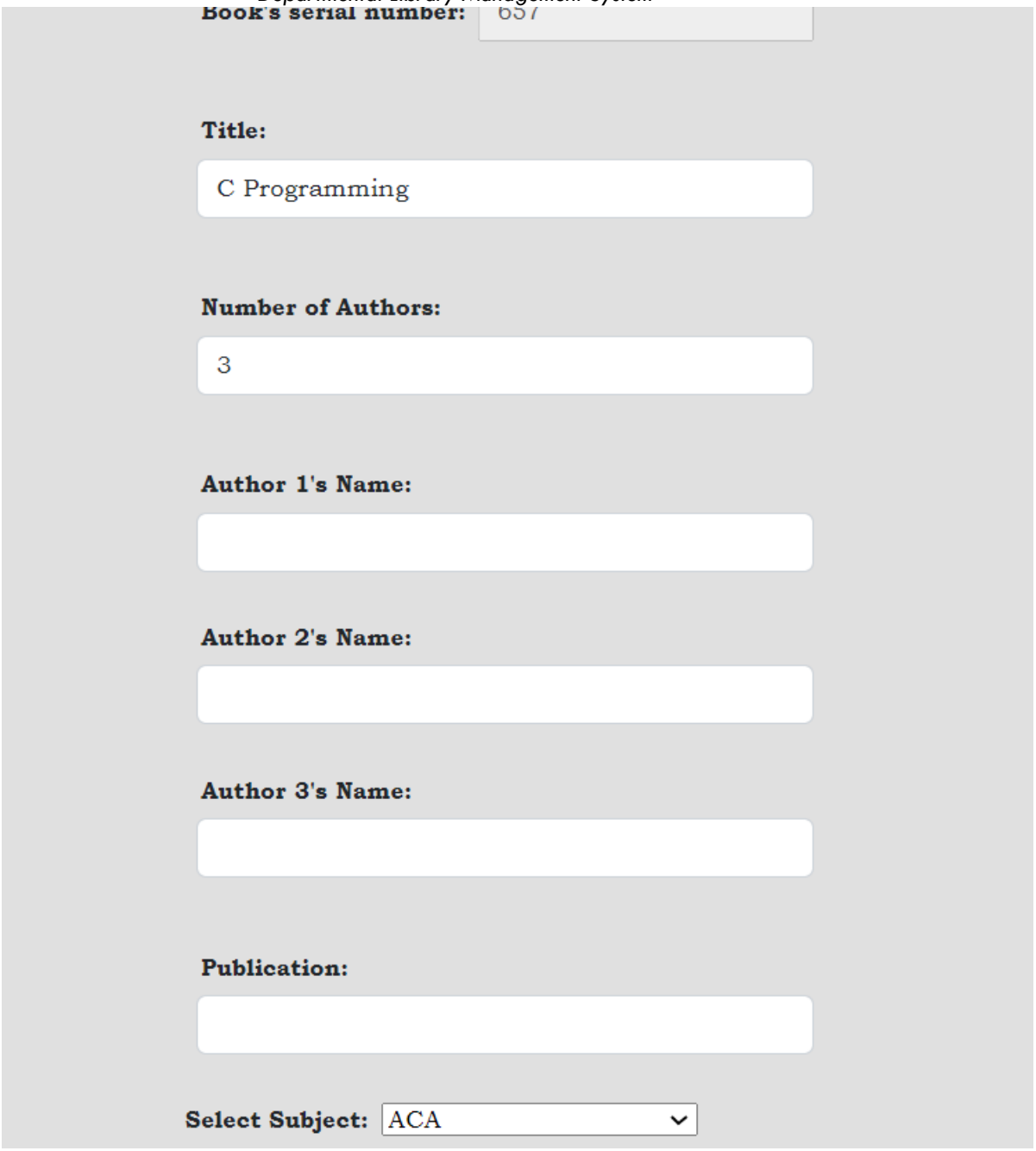
1. *Inserting a book record:*
   a. Go to home page by Clicking on button.

   b. Click on button in Books Related Functionality.

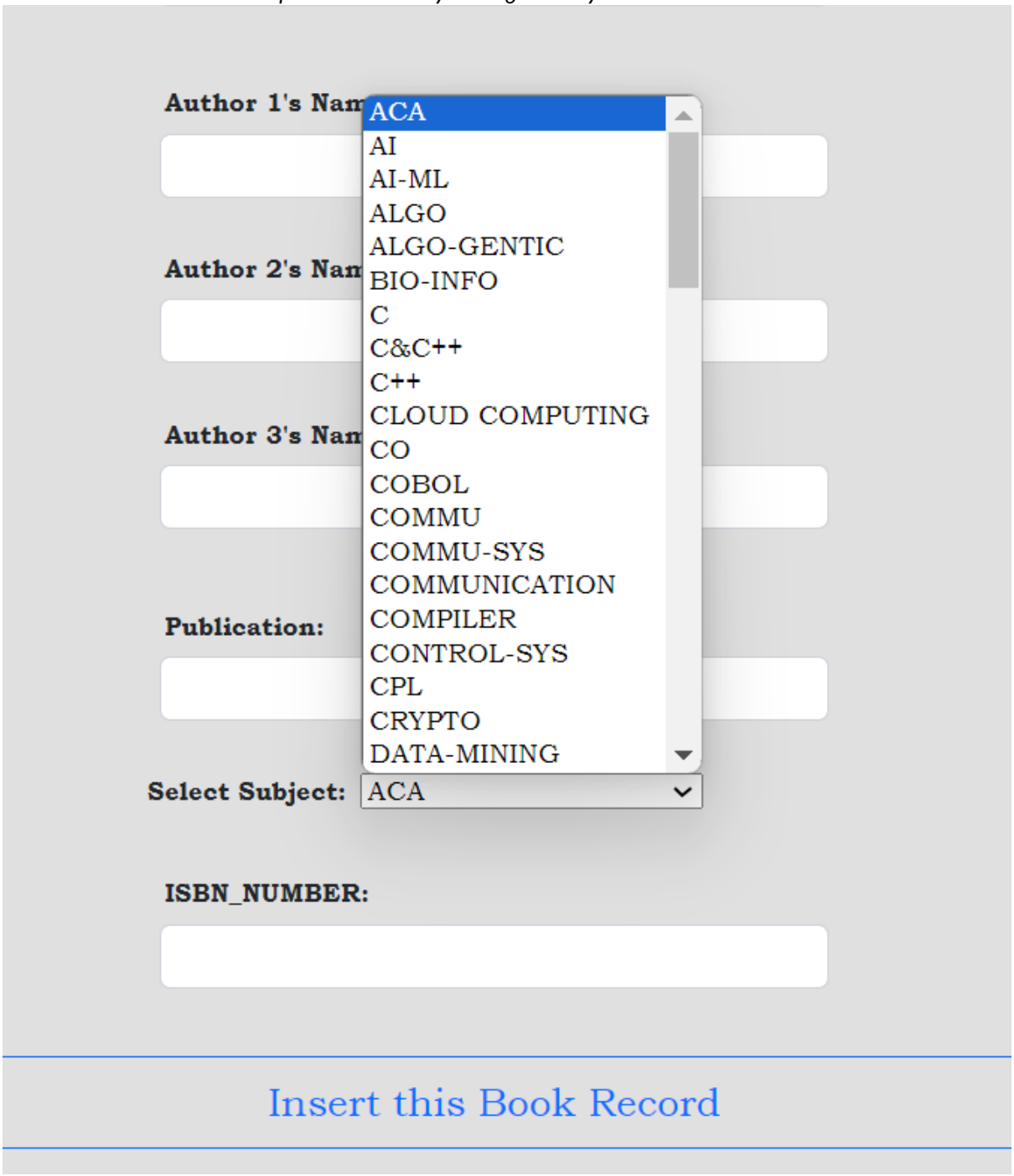
   c. The page open which look like the following



   d. Book's serial number is automatically given by the system.
   e. Enter the book's title.
   f. Entering the details in Number of Authors would automatically open the text for author names shown as follows:



g. After that enter the Publication details.
h. Clicking on the drop-down list will open a list of subjects shown as follows:

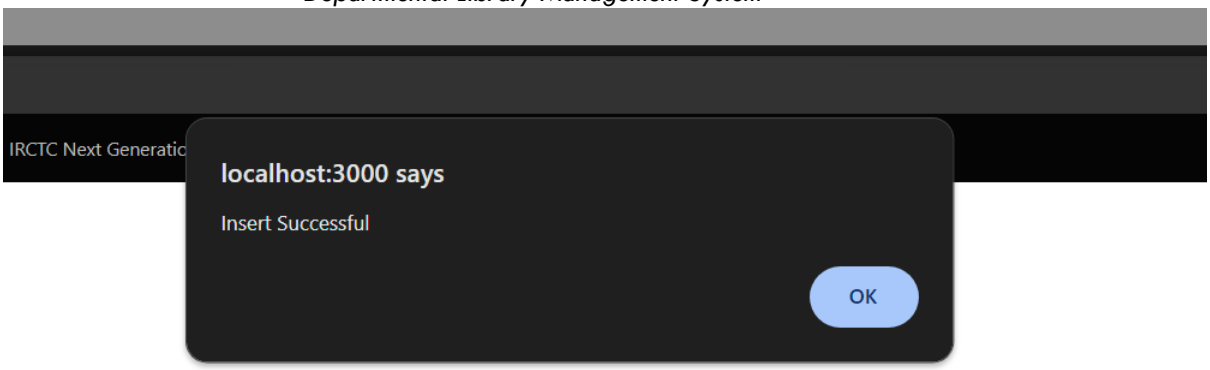


Select appropriate subject from the list of subjects.

i. Then enter the ISBN Number which is usually at the back-cover of a book or on the first pages at the downside of the book.

j. Then Click on **Insert this Book Record** Button.

k. On successful insert you will get the result as follows:

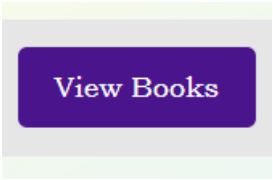


l. After which clicking on OK will take you on the home page.

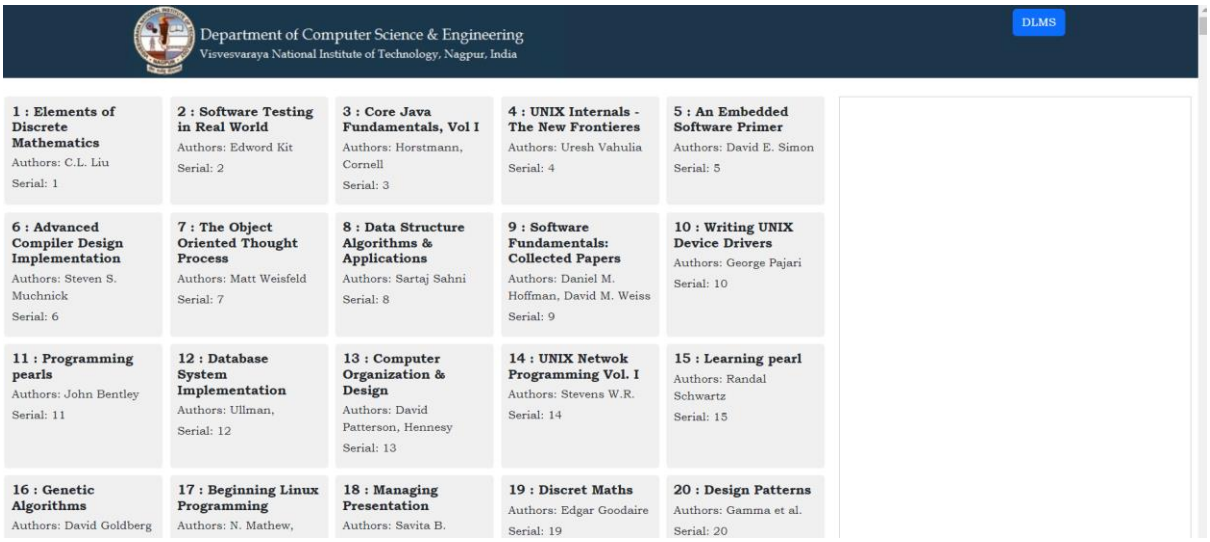
m. In case you missed out filling some field and clicking on **Insert this Book Record** you will be reminded of that as follows

IN THIS WAY, WE CAN INSERT A BOOK RECORD.

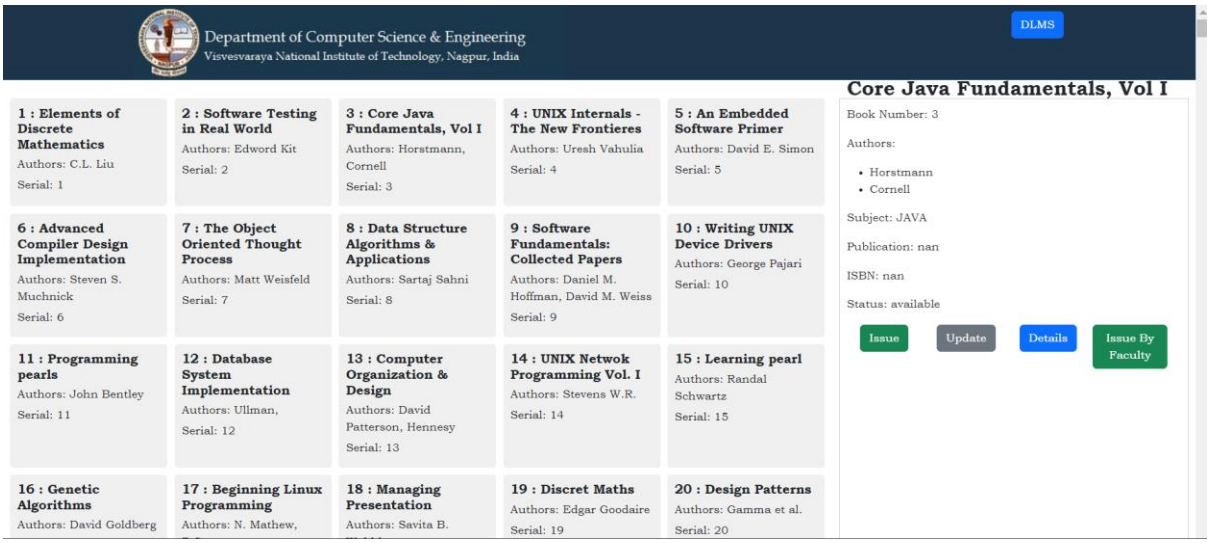
2. *Viewing Books:*
   a. Go to home page by Clicking on button.

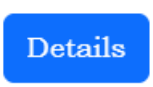
   b. Click on button in Books Related Functionality.
   c. A page will open which look like the following

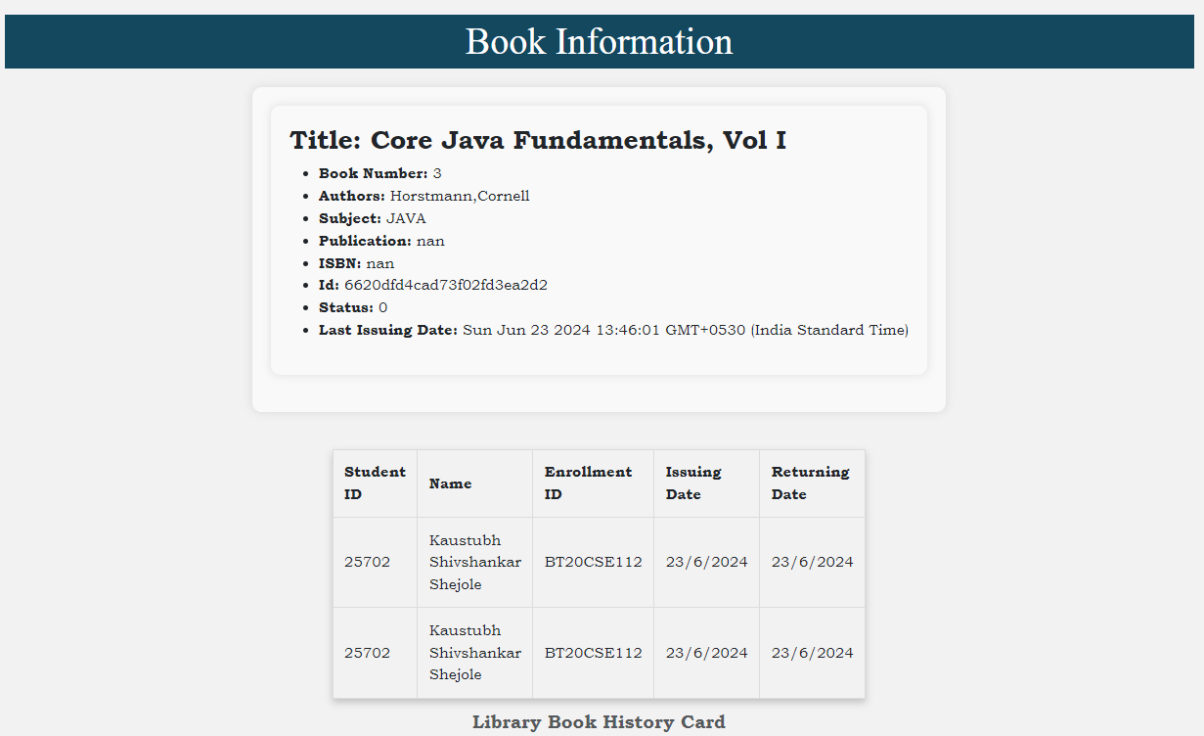


Clicking on any book show its detail in the blank space present in the right side as follows:



Here we clicked on Book 3 : Core Java Fundamentals, Vol I.

Now Clicking on  will show the details of the book as follows:

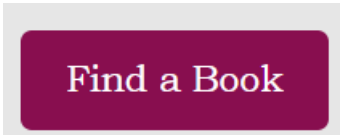


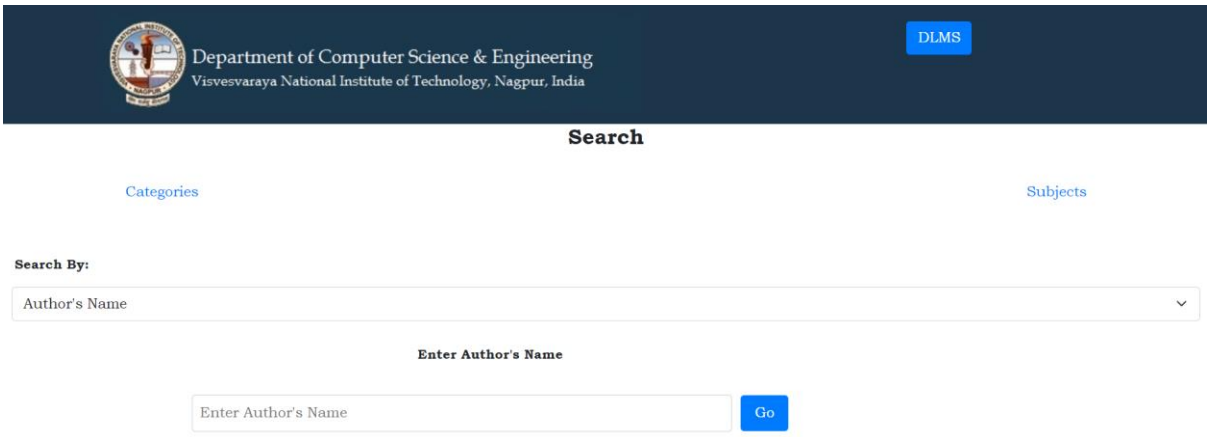
Including the details of the book with the Library Book History Cards showing the previous issuing of this book.

d. Click on

button and go to the home page.

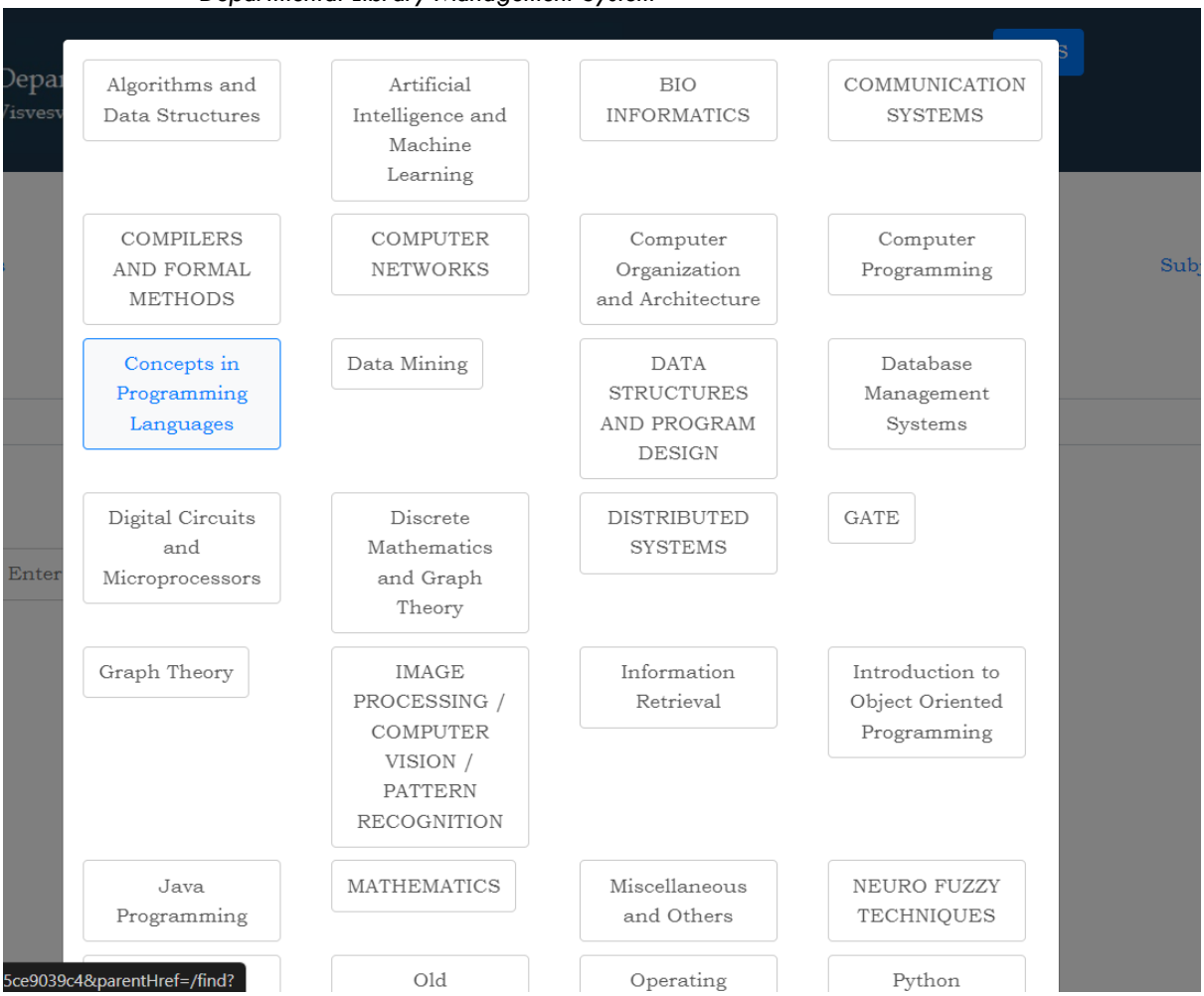
IN THIS WAY, WE CAN VIEW BOOK's DETAILS.

3. *Finding Book Details:*
   a. Go to home page by Clicking on button.
   b. Click on  button in Books Related Functionality.
   c. A page will open which look like the following



   d. We can search by the following ways:
      i. Categories
      ii. Subjects
      iii. Author's Name
      iv. Book's Name
      v. Publication
      vi. Book's Serial Number
      vii. ISBN Number.

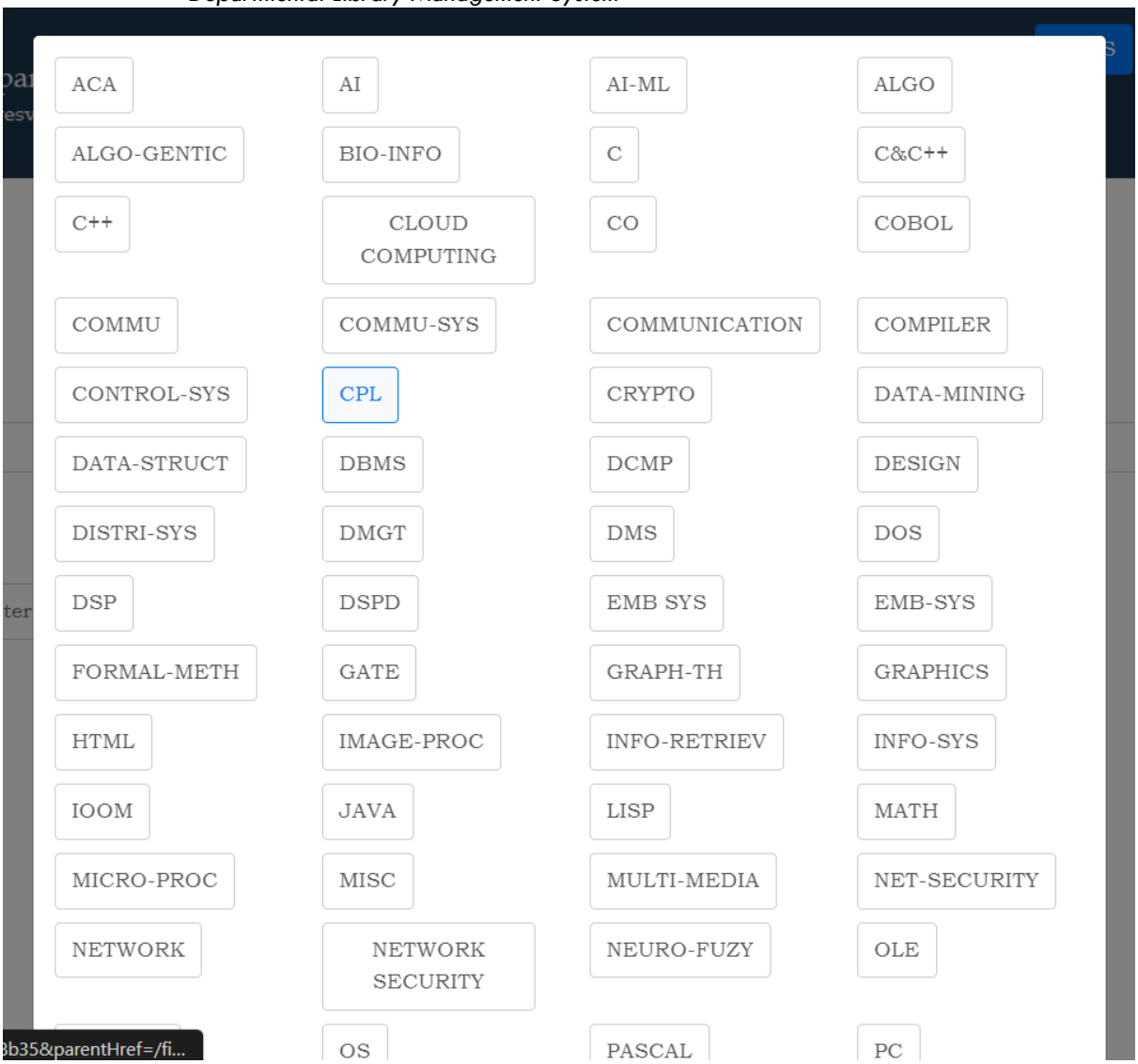
      i. Hover on you will get the following grid of categories as follows:



Now suppose we click on **Concepts in Programming Languages** we get the following:

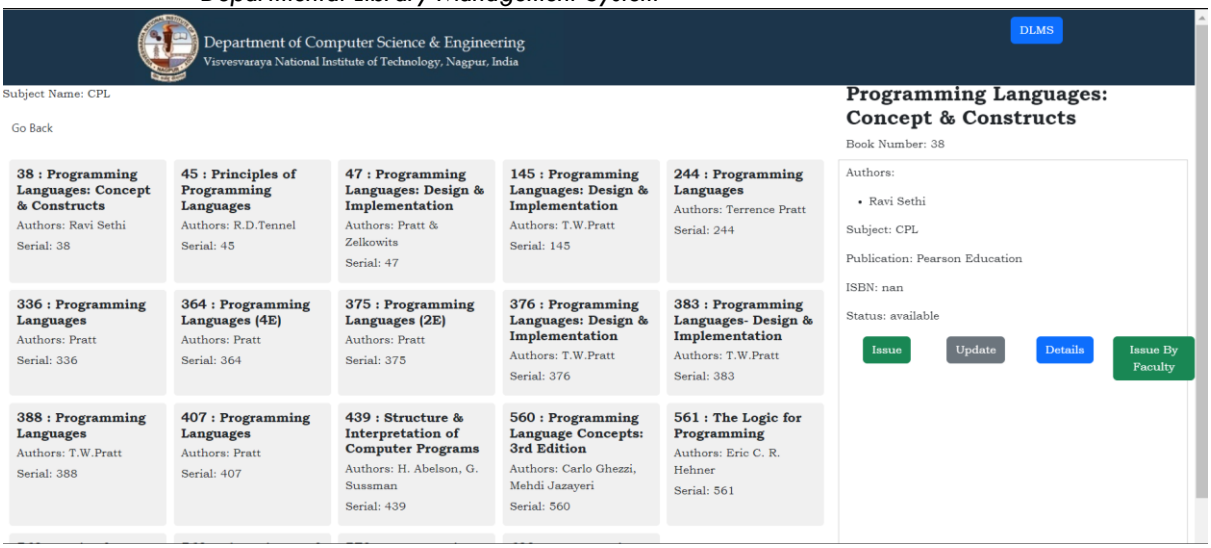
This is the list of books in the category **Concepts in Programming Languages**. Now suppose clicking on 38: Programming Languages: Concept & Constructs.

ii. Hover on Subjects you will get the following grid of categories as follows:



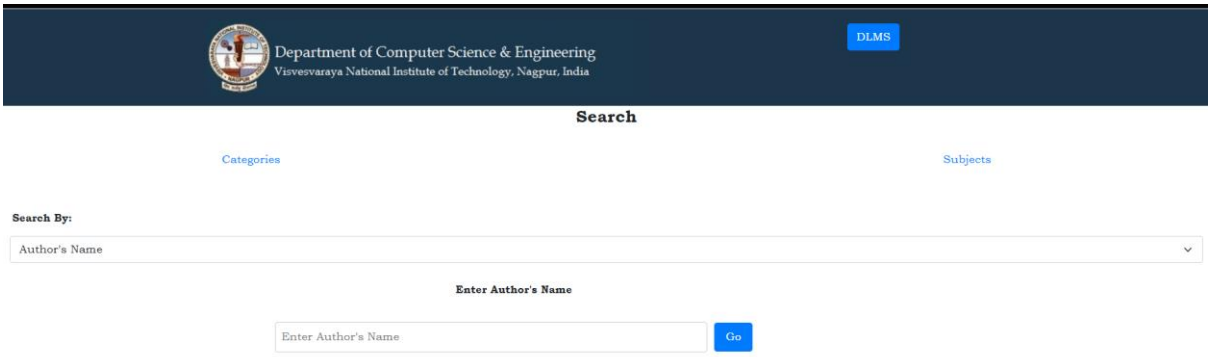
Now suppose we click on CPL subject we will get the book as like the following picture:

Clicking on 38 : Programming Languages: Concept & Constructs we get the page like as follows:



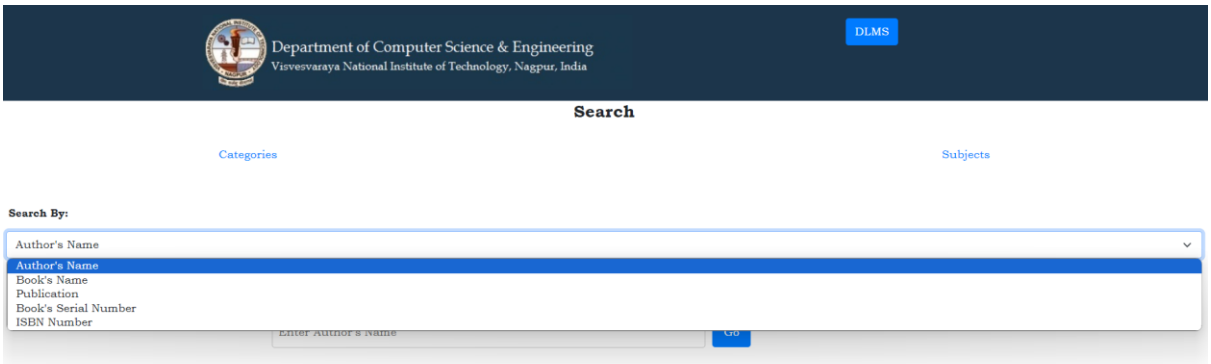
iii. Author's Name
iv. Book's Name
v. Publication
vi. Book's Serial Number
vii. ISBN Number.

For all of the above



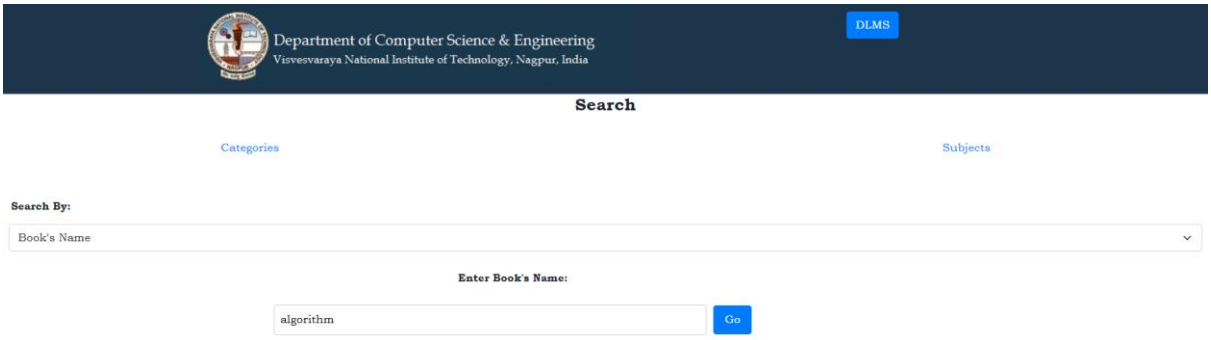
Click on the list below Search By:

The page like as that of the following appears:

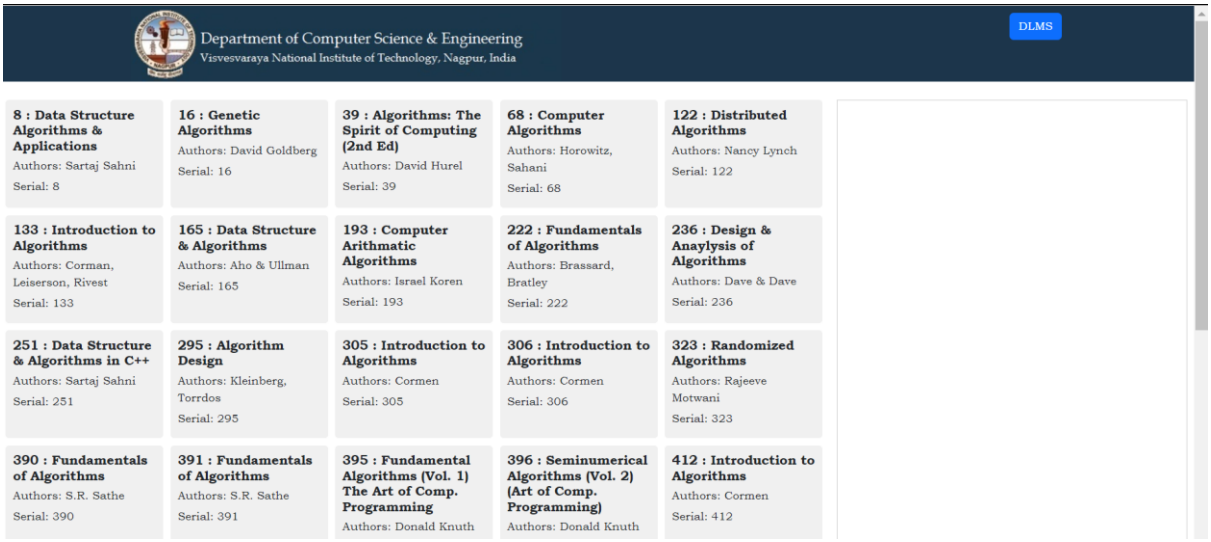


Select appropriate option, for example selecting Book's Name will give the page as follows:

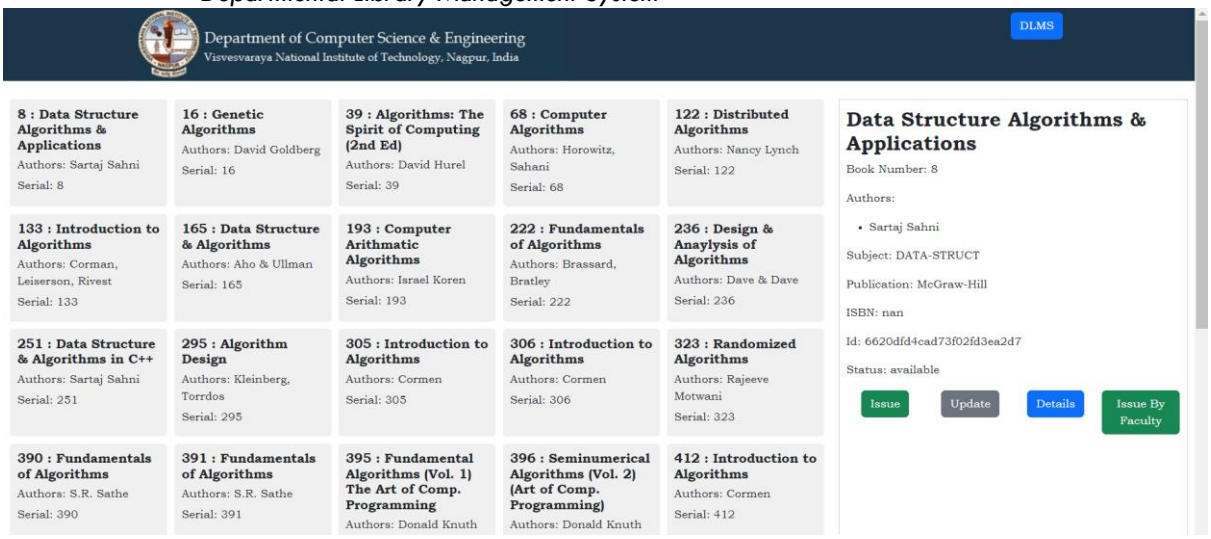
Enter the Book's Name and Click on Go, example if we write algorithm in it like the following



And click on go we get the page like the following



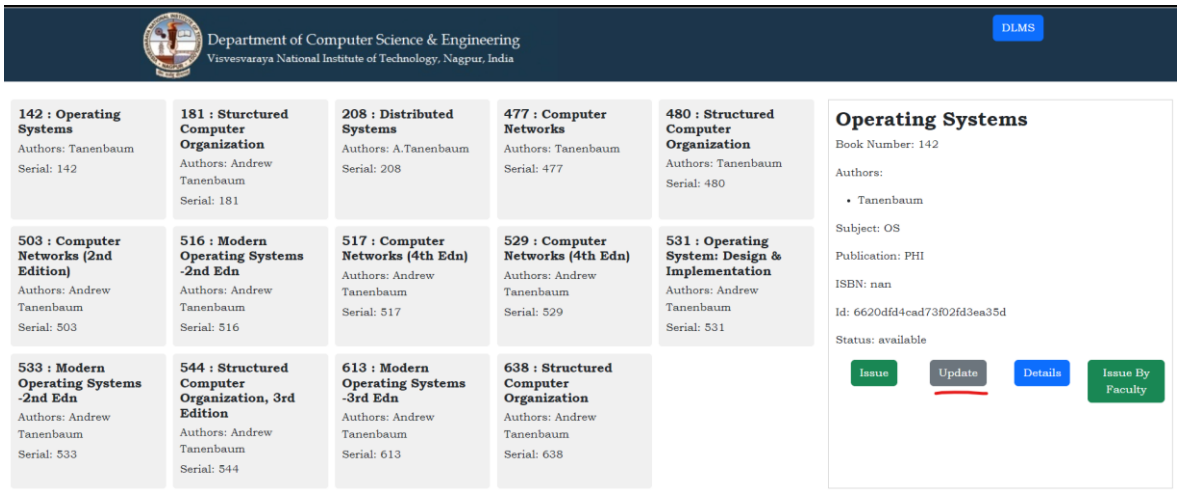
And suppose we click on 8 : Data Structure Algorithms & Applications we get a page like the following

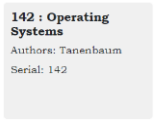


IN THIS WAY, WE CAN FIND ANY BOOK IN THE DEPARTMENTAL LIBRARY MANAGEMENT SYSTEM.

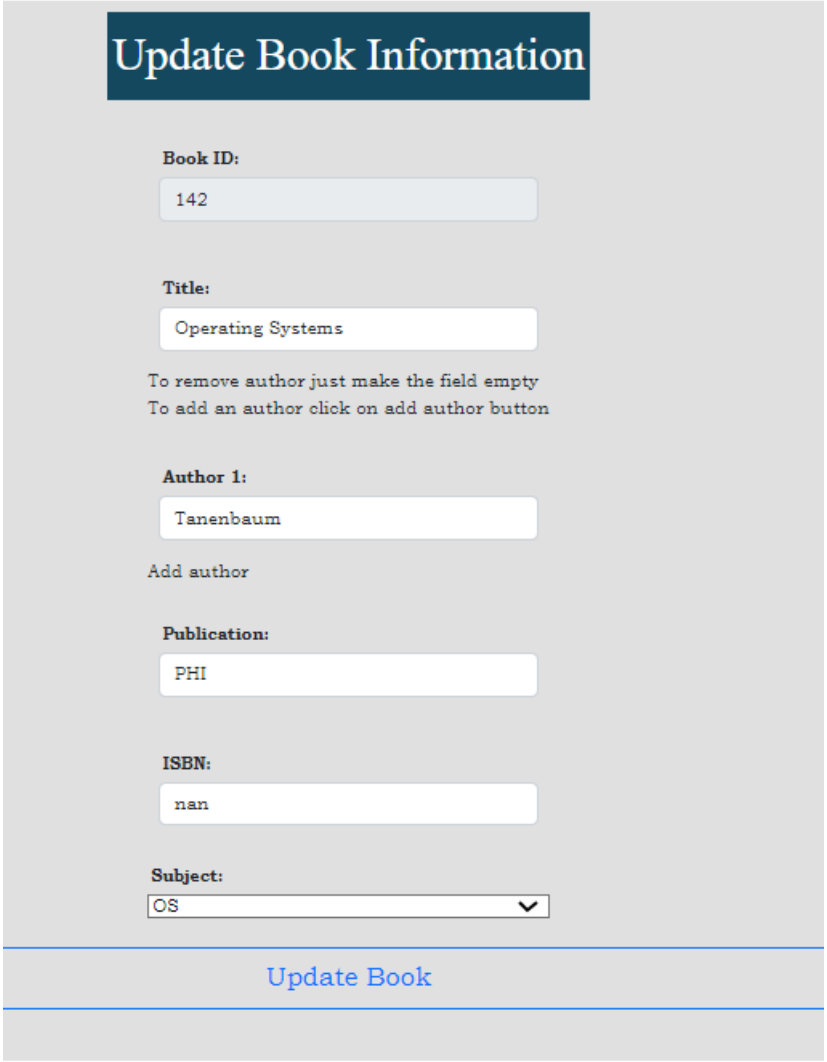
4. Updating Book Details:
    a. Go to home page by Clicking on

button.
    b. Find a book you want to update following the instruction given in Section 3 of Finding Book Details.
    c. The webpage looks like the following:



    d. So clicking on 

gives in the right side these options.
    e. Select Update from it and click on Update.
    f. A form opens like the following:



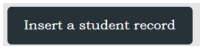
IN THIS WAY, A BOOK CAN BE UPDATED.

4. STUDENT RELATED FUNCTIONALITIES

i. Inserting a Student Record:

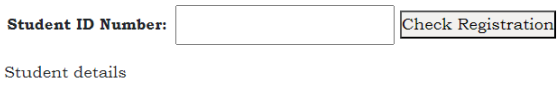
a. Go to home page by Clicking on

button.

b. Click on 

button in Students Related Functionality.

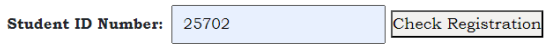
c. A page will open which look like the following



Student details

d. Enter the student id and check if the student is already registered.

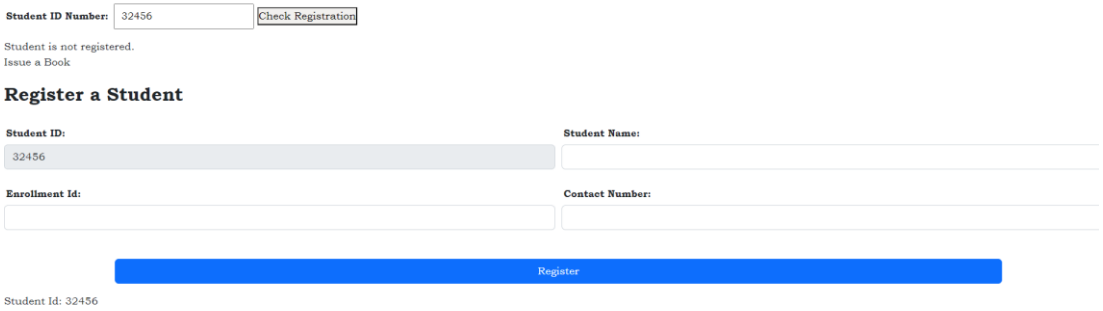
e. For example, I am already registered with ID 25702: hence it will show:



Student is registered.
Issue a Book

Student Id: 25702

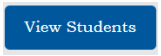
f. Now try for a new ID example 32456 it shows:



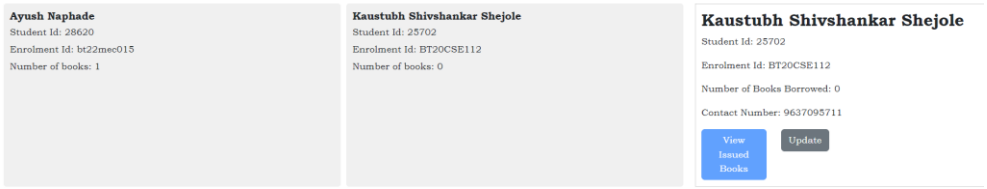
g. A form opens for registration, fill the form by taking student ID card and filling the details and student is registered.
IN THIS WAY, STUDENT REGISTRATION IS DONE.

ii. Viewing students and their details:

a. Go to home page by Clicking on button.

b. Click on  button in Students Related Functionality.

c. A page will open which look like the following



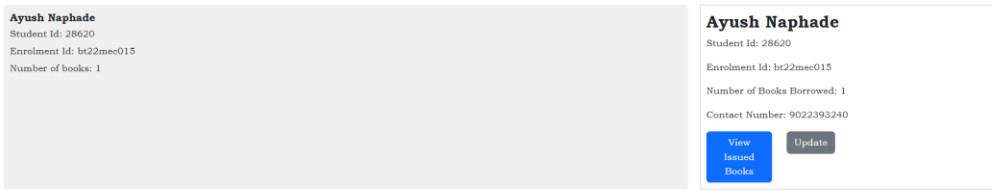
d. The page shows the students, clicking on which shows the complete details in the right panel.

iii. Viewing Student who have issued books:

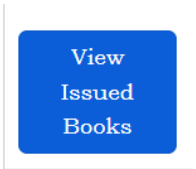
a. Go to home page by Clicking on button.

b. Click on Students with book issued button in Students Related Functionality.

c. A page will open which look like the following



e. The page shows the students who have at least one book issued, clicking on which shows the complete details in the right panel.

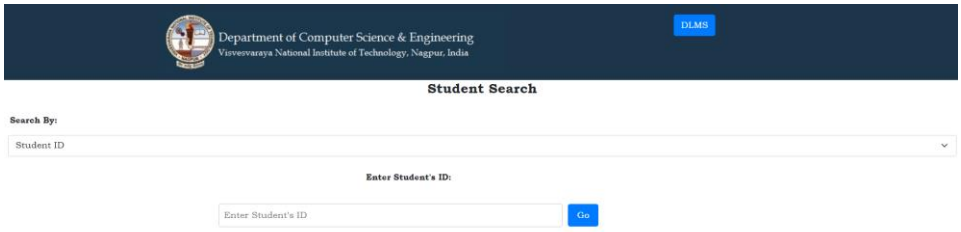


f. Clicking on button shows the details of book like the following:

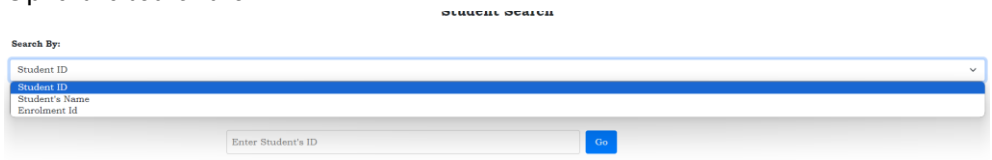
IN THIS WAY WE CAN SEE STUDENTS WITH AT LEAST ONE BOOK ISSUED.

iv. Finding a student record:

a. Go to home page by Clicking on DLMS button.
b. Click on Find a Student button in Students Related Functionality.
c. A page will open which look like the following

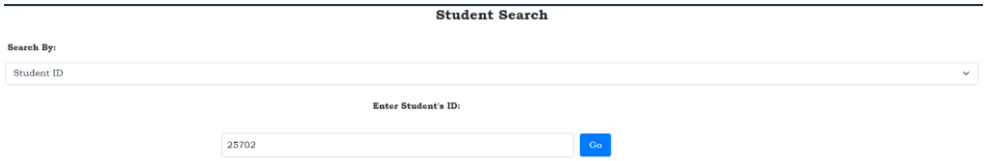


d. Options to search are:

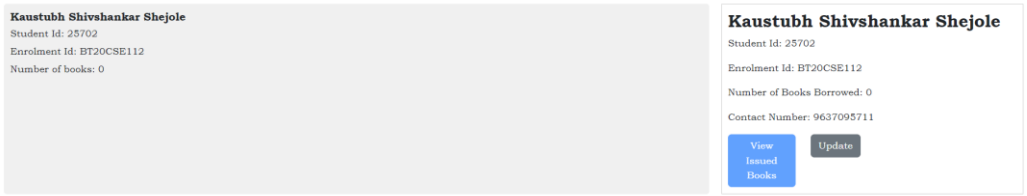


Student ID, Enrolment Number and Student's Name.

e. Suppose we search by Student ID as 25702, it looks like this:

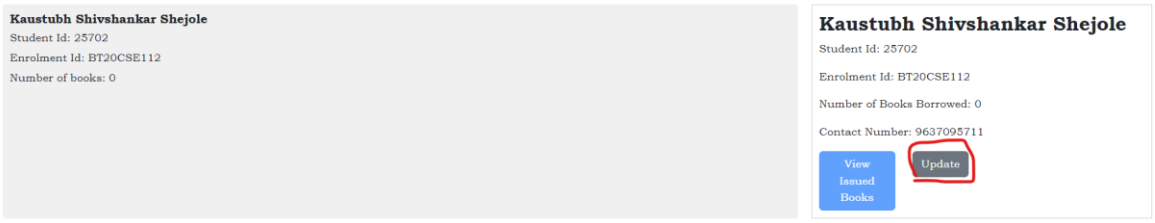


Click on Go gives matching student record:

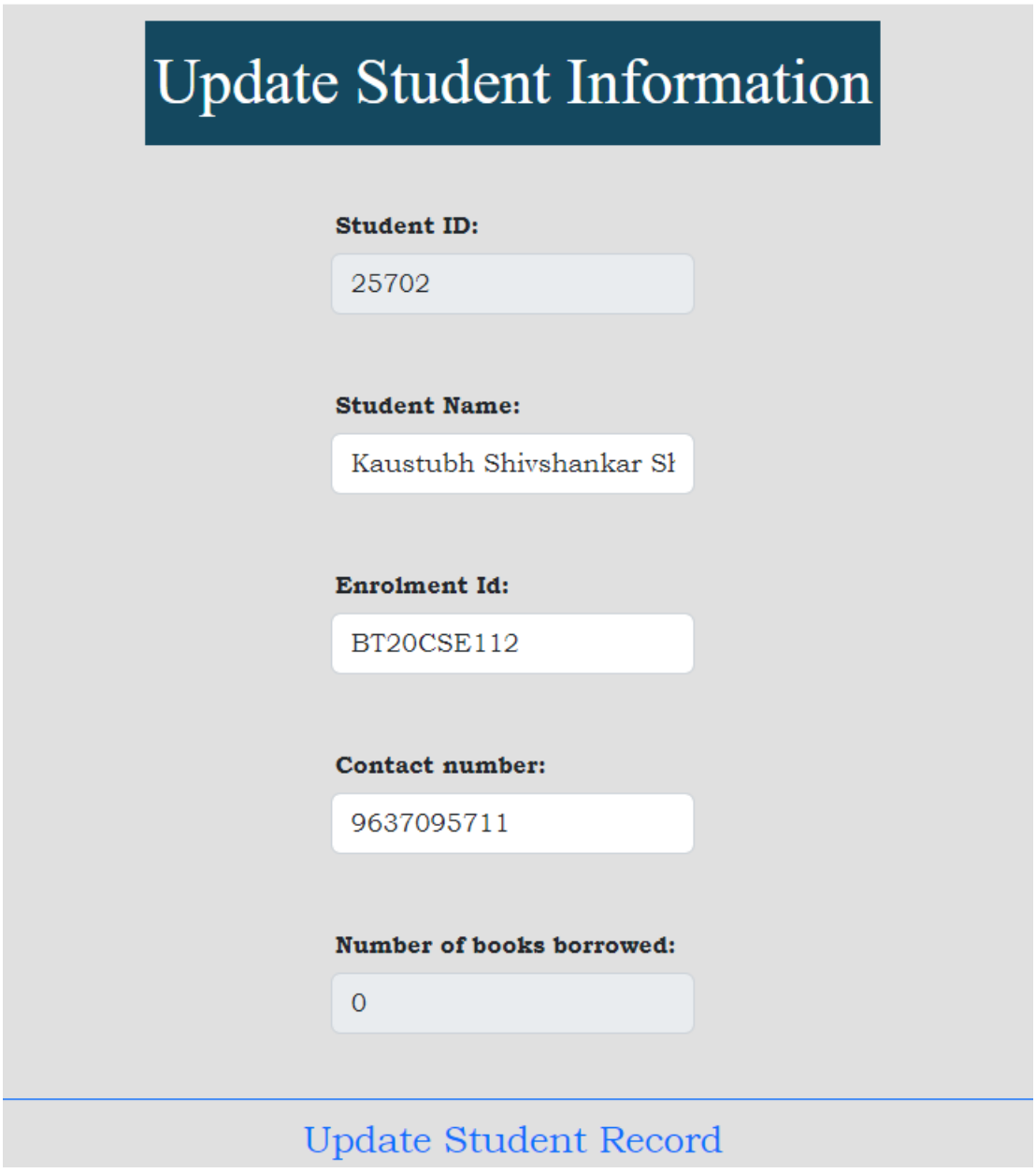


v. Updating a student record:

a. Go to home page by Clicking on DLMS button.
b. Find a student record you want to update following Section iv. Finding a student record.
c. A page look like this:



d. Click on Update opens a look like the following:



Update the required fields.

In this way, updations can be done.

5. ISSUING A BOOK BY A STUDENT

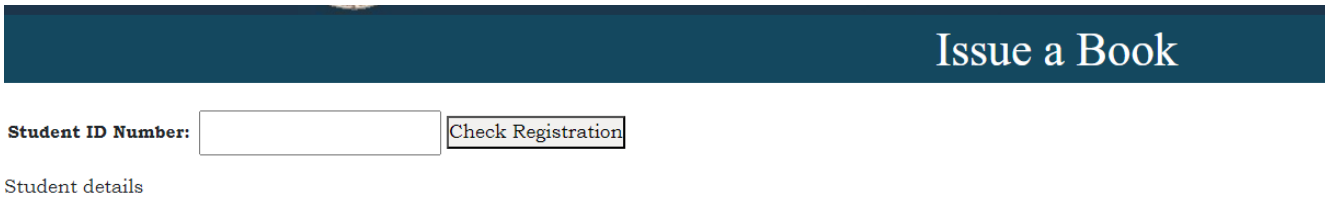
a. First ensure that the student is registered on the system.

b. Then find a book record the student want to issue. It will show page like the following:
Click on the book you want to issue:

Example above we clicked on book 371.

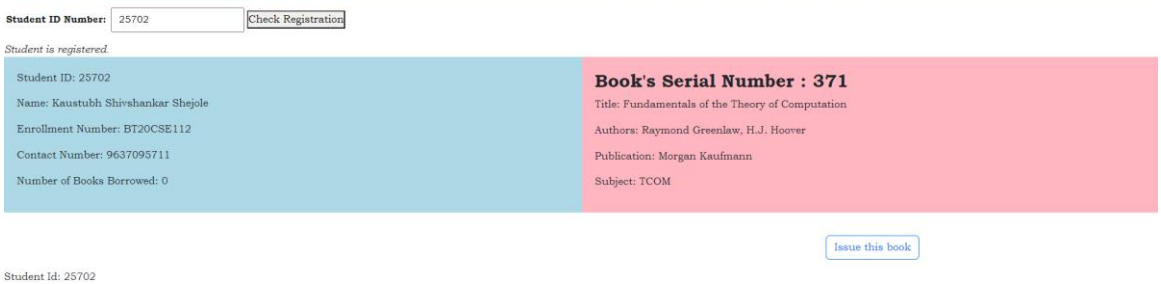
c. Then click on

, a book will open like the following:



d. Put student details i.e., ID Number and click check registration.

e. Example putting 25702 it shows:



f. Check the details and click on and the book will be issued.

g. A confirmation like the following will appear:

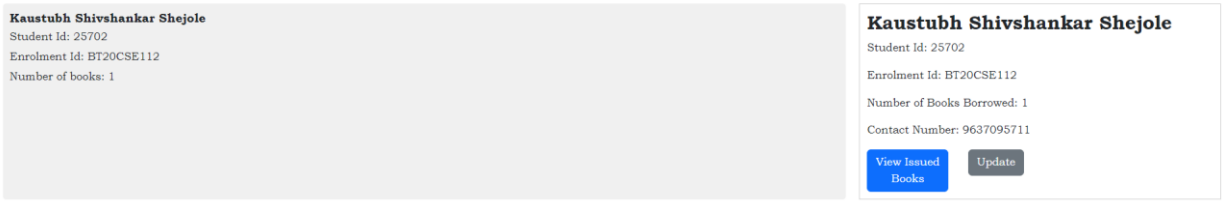
IN THIS WAY, A BOOK IS ISSUED.

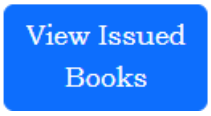
6. RETURNING A BOOK BY A STUDENT

a. Find student details by following the procedure given previously.

b. Example, finding the student by ID Number say 25702 will give page like the following:

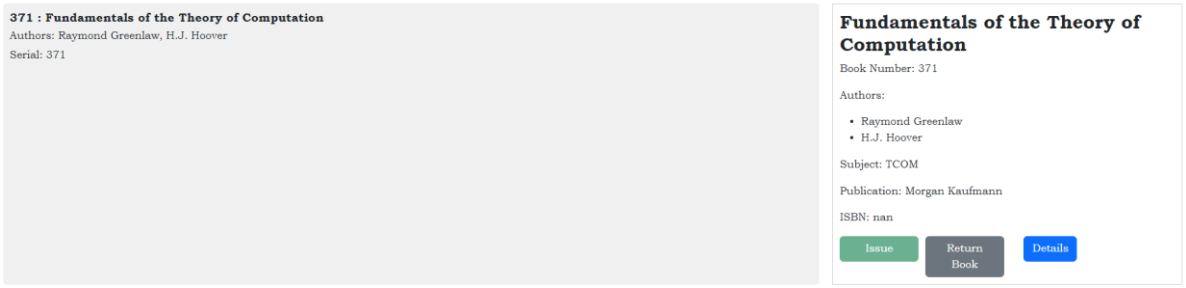
Click on the required student:

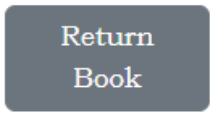


c. Now click on 

and a page will appear like the following:

d. The page will show details of books issued by the student, click on the book the student is returing:



e. In the right panel, click on 

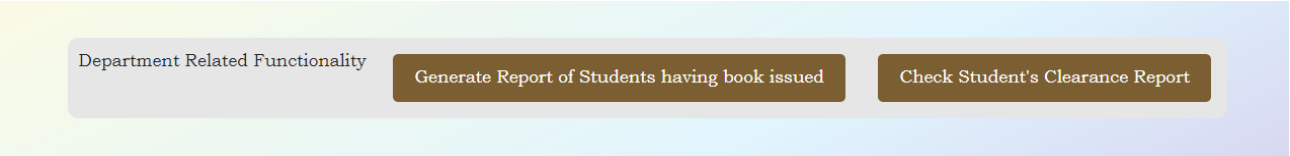
option and the book would be returned after clicking again OK to return a book.

Book Returned

IN THIS WAY, A BOOK IS RETURNED.

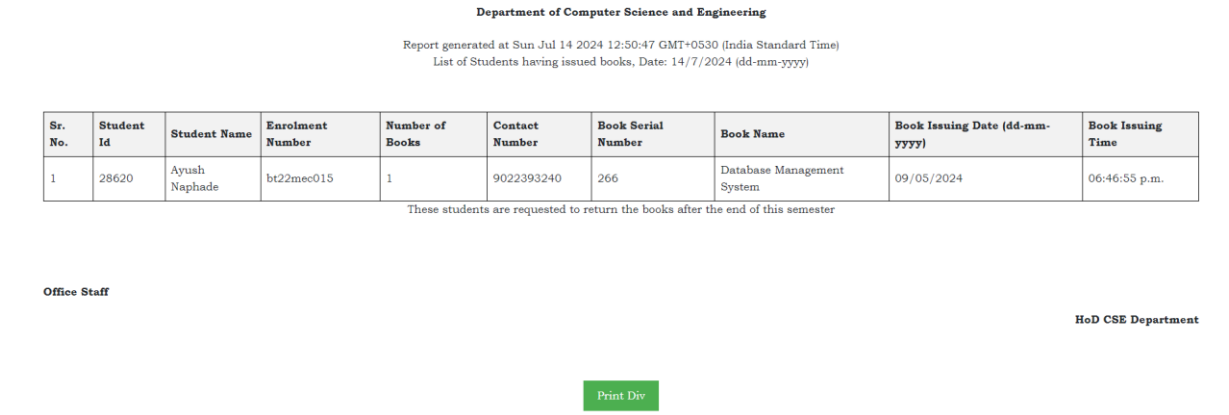
7. DEPARTMENT RELATED FUNCTIONALITIES

On home we can observe:



a. Generating a report of students who have books issued:
Click on
Generate Report of Students having book issued

It will show a page like the following:



Department of Computer Science and Engineering

Report generated at Sun Jul 14 2024 12:50:47 GMT+0530 (India Standard Time)
List of Students having issued books, Date: 14/7/2024 (dd-mm-yyyy)

Sr. No.	Student Id	Student Name	Enrolment Number	Number of Books	Contact Number	Book Serial Number	Book Name	Book Issuing Date (dd-mm-yyyy)	Book Issuing Time
1	28620	Ayush Naphade	bt22mec015	1	9022393240	266	Database Management System	09/05/2024	06:46:55 p.m.

These students are requested to return the books after the end of this semester

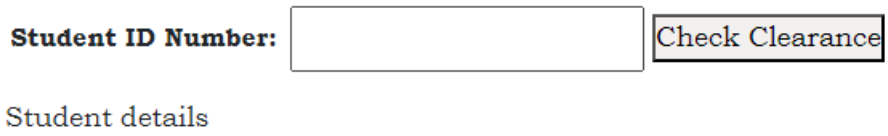
Office Staff

HoD CSE Department

Print Div

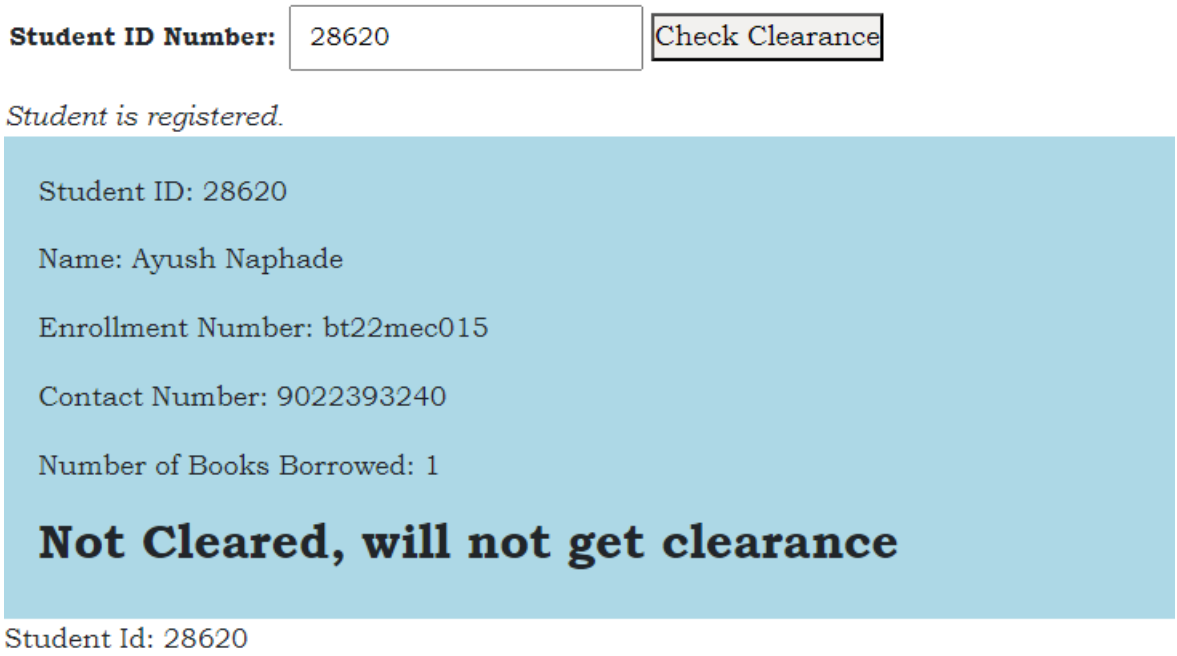
Click on to either print it or save it as pdf.

b. Check Student's clearance report:
This is very important functionality.
Click on Check Student's Clearance Report , a page like the following will open:



Put ID Number and click on check clearance, if all book are returned it show like the following:

Otherwise it show like the following:



Showing the number of books borrowed.

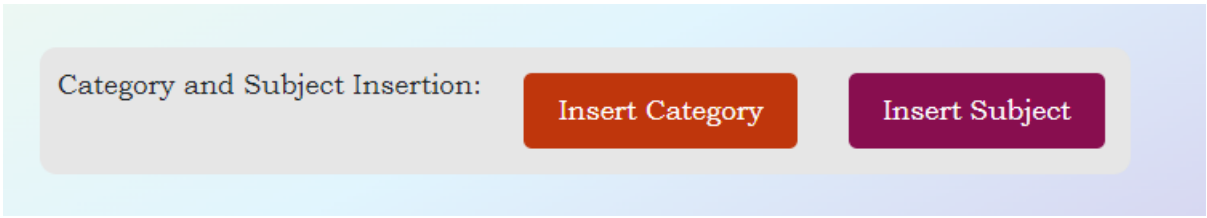
IN THIS WAY, WE FINISH DEPARTMENT RELATED FUNCTIONALITIES.

8. INSERTING NEW CATEGORIES AND SUBJECTS

a. Inserting a category:

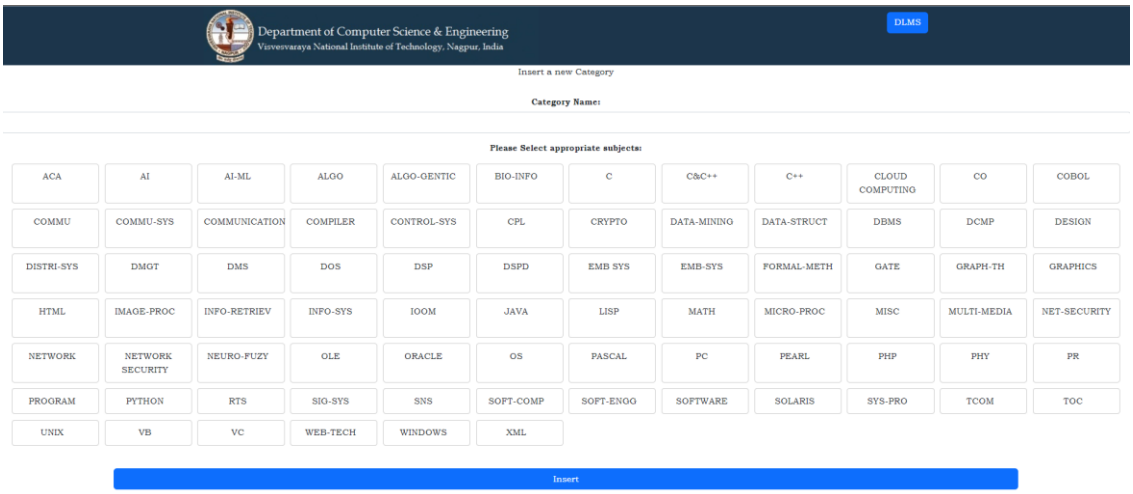
i. Go to home page.

ii. Observe this section:



iii. Click on **Insert Category**

iv. Page appears like the following:



v. Put a category name and select appropriate subjects that are under that category.

vi. Click on Insert.

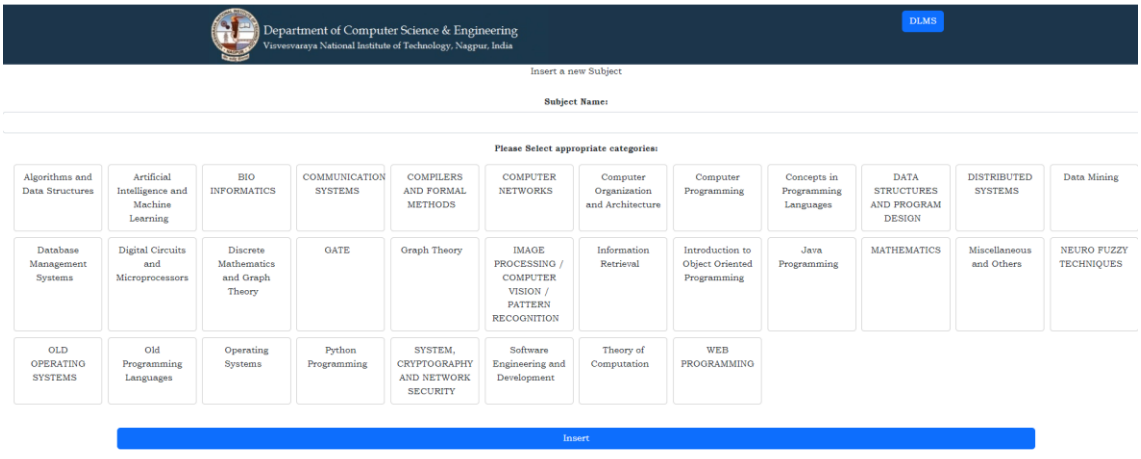
IN THIS WAY, CATEGORY IS INSERTED.

b. Inserting a subject:

i. Go to Home page.

ii. Click on **Insert Subject.**

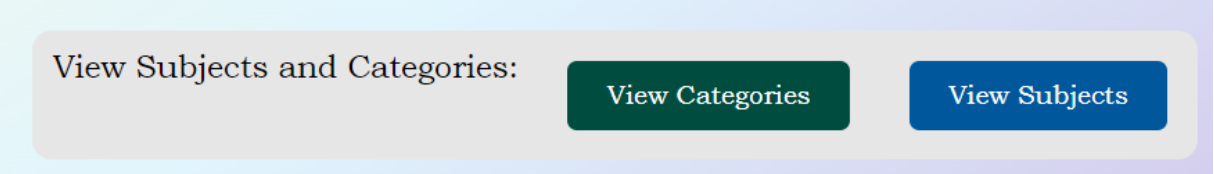
iii. Page appears like the following:



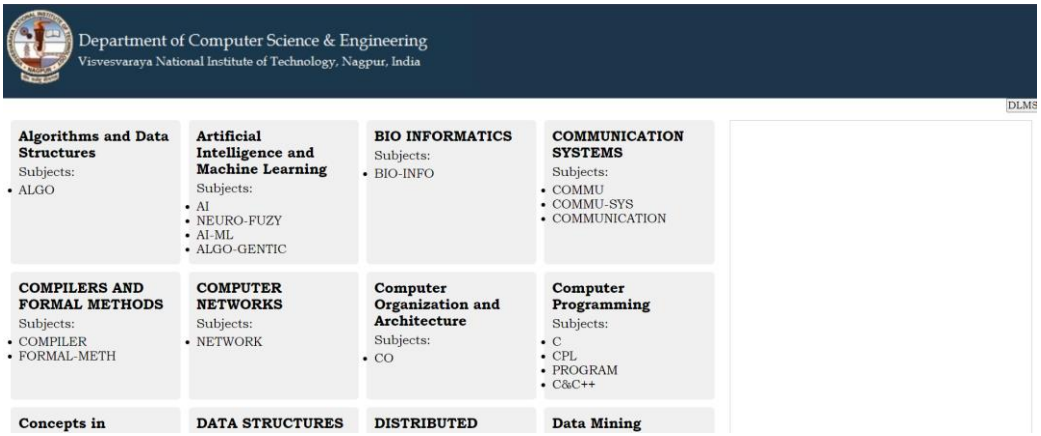
iv. Write subject name and select appropriate categories.

v. Click on Insert.

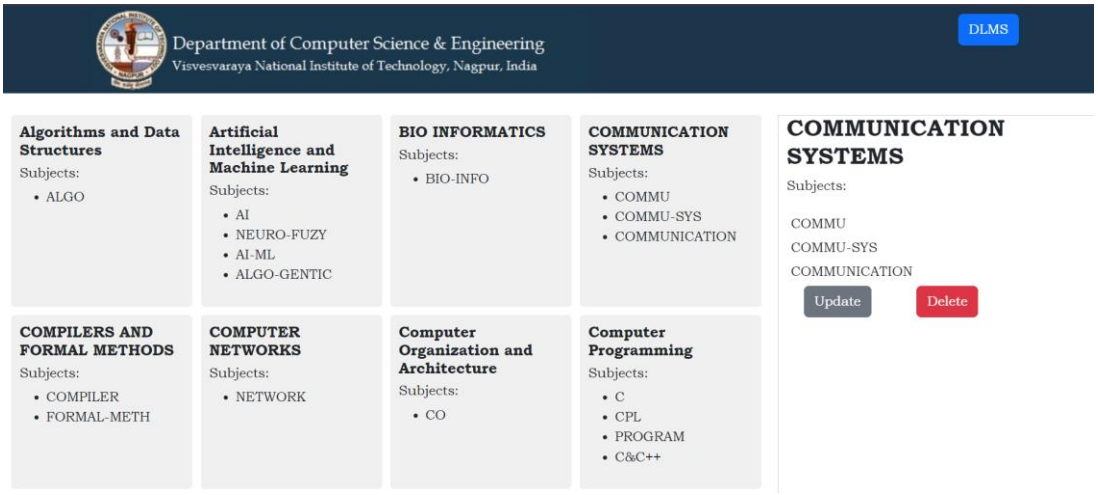
IN THIS WAY, SUBJECT IS INSERTED.



c. View Categories:
   i. Go to Home page.
   ii. Click on **View Categories.**
   iii. A page will open looking like:

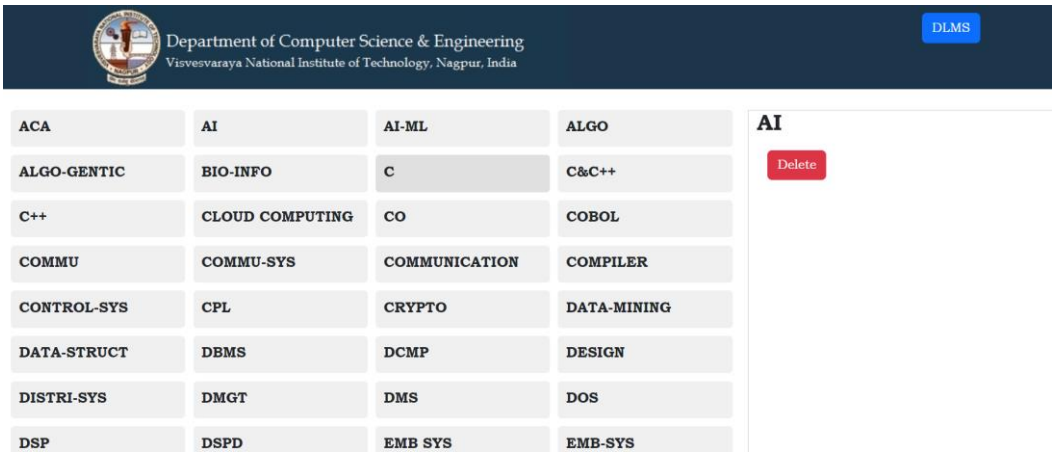


   iv. Click on a Category to view details like the following:



It shows **update** and **delete** options.

d. View subjects:
   i. Go to Home page.
   ii. Click on **View Subjects.**
   iii. A page will open looking like:



   iv. It shows list of subjects clicking on which we have only **delete** option.

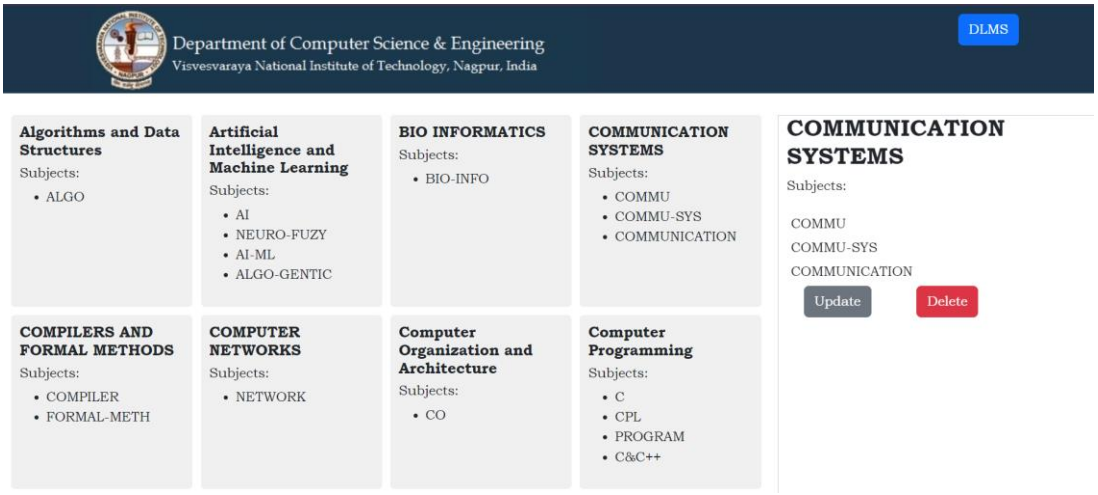
9. UPDATING CATEGORIES:

i. Go to Home page.

ii. Click on **View Categories.**

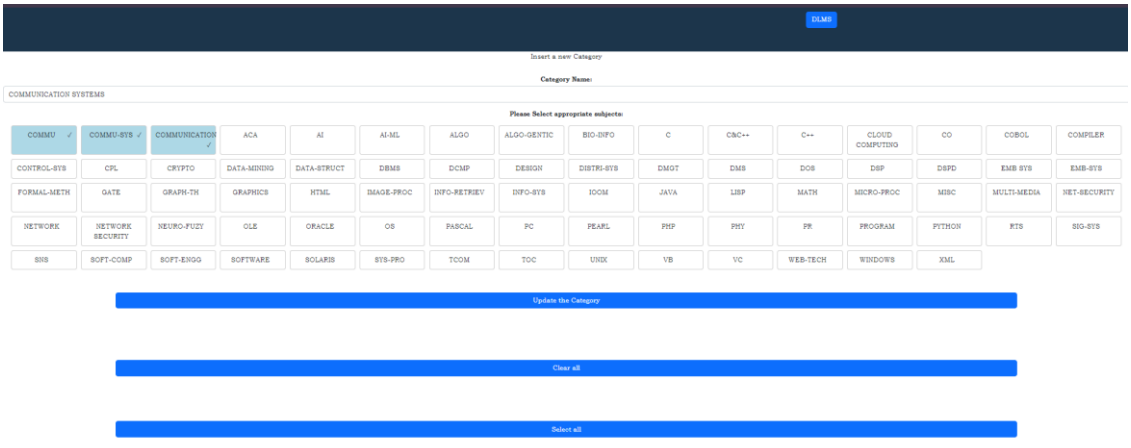
iii. A page will open looking like:

iv. Find a category to update and click on it to view details like the following:



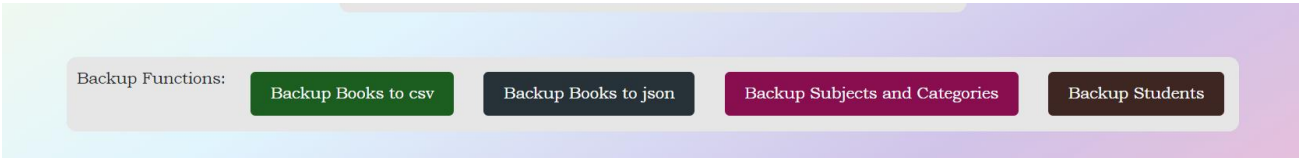
It shows **update** and **delete** options.

v. Click on update button, page opens like the following:



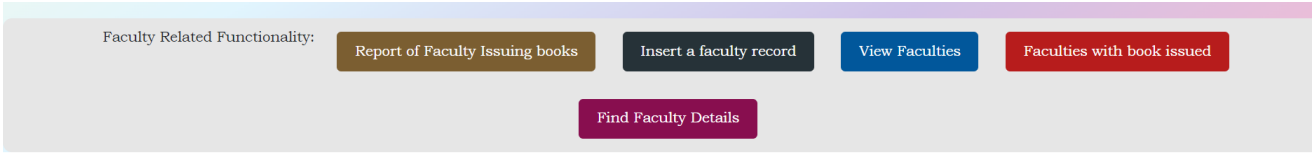
Check or uncheck subjects and update appropriately by clicking on Update the Category.

IN THIS WAY, CATEGORY CAN BE UPDATED.



These are various backup functions, it is advisable to backup once a week.

11. FACULTY RELATED FUNCTIONALITIES



For maintaining difference between faculty and student it is kept, the functionalities are similar to that of student. Faculty has to be registered and given unique id, then issuing can be done.

IN THIS WAY, WE END THIS MANUAL.

IN CASE OF ANY PROBLEM, PLEASE CONTACT ME:
Phone number: 9637095711
Email id: sshejole132@gmail.com

THANK YOU