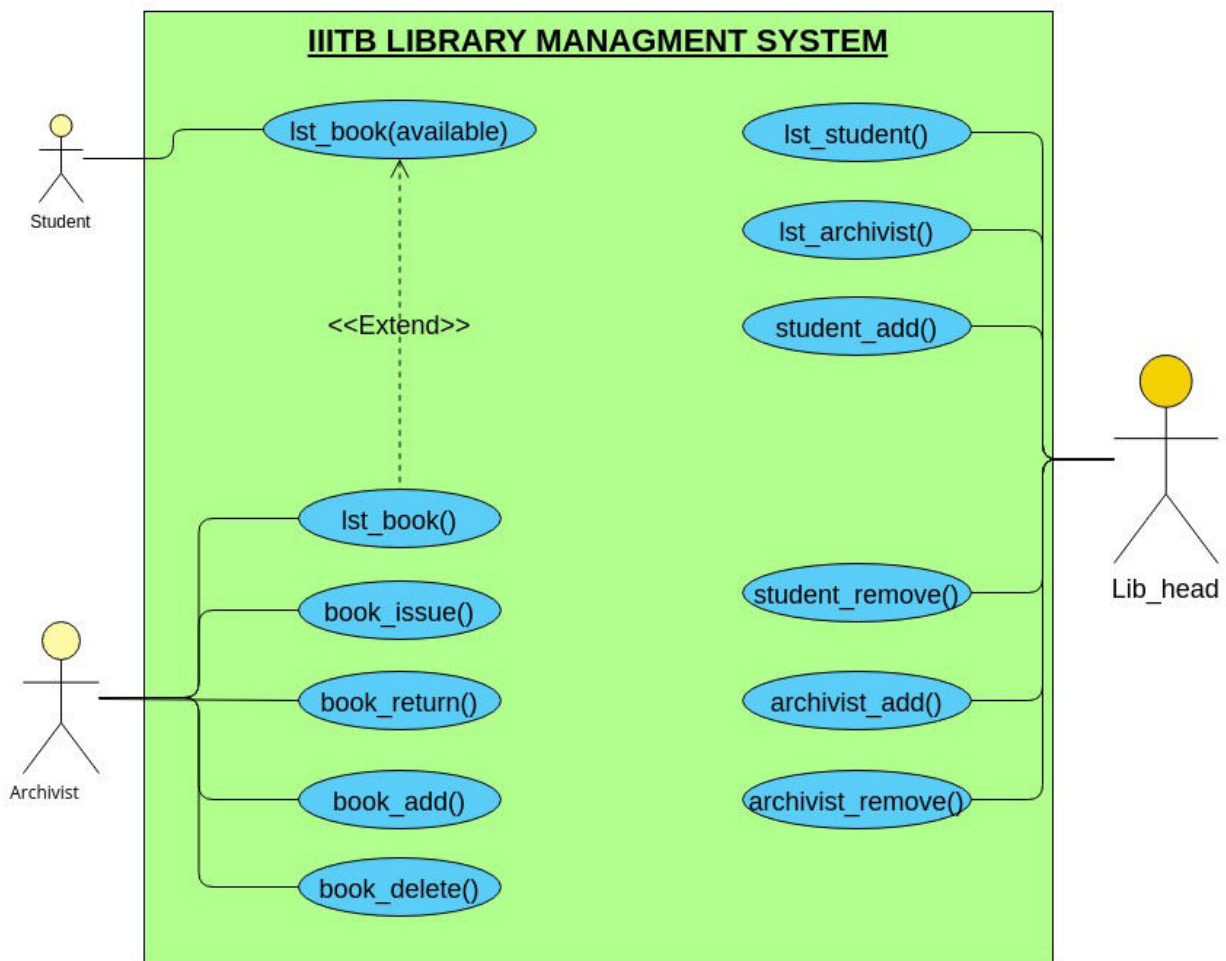


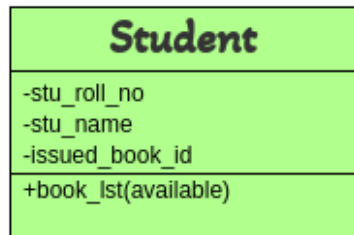
# DBMS Project Report

## (IIITB LIBRARY MANAGEMENT)

### Use Case Diagram

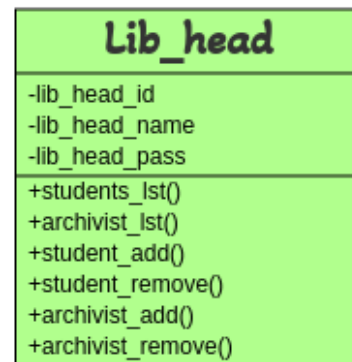
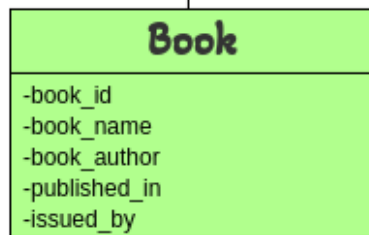


## UML Diagram (Class Diagram)

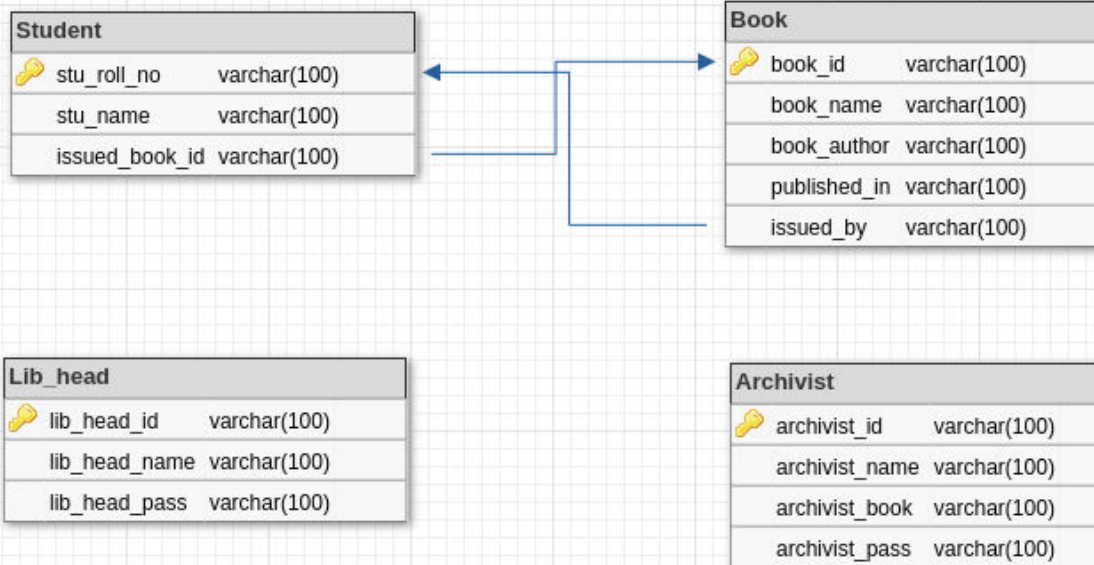


1

1




## OR Mapping



## Output Screenshots

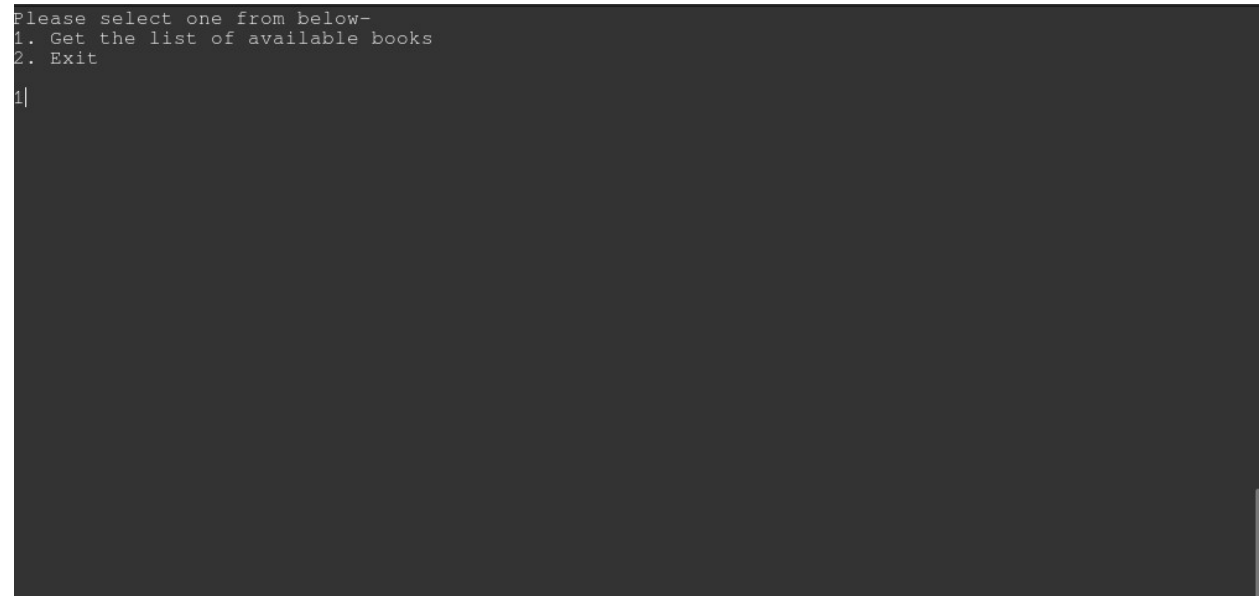
### Main menu

```
Login to the system as a :-  
1. Student  
2. Archivist  
3. Lib Head  
4. Exit  
1|
```

A screenshot of a terminal window with a dark background. The text is white and shows a login prompt 'Login to the system as a :-' followed by a numbered list: '1. Student', '2. Archivist', '3. Lib Head', and '4. Exit'. Below the list, the number '1' has been entered, followed by a cursor '|'. The terminal has a vertical scrollbar on the right side.

### Student Menu

```
Please select one from below-  
1. Get the list of available books  
2. Exit  
1|
```

A screenshot of a terminal window with a dark background. The text is white and shows a prompt 'Please select one from below-' followed by a numbered list: '1. Get the list of available books' and '2. Exit'. Below the list, the number '1' has been entered, followed by a cursor '|'. The terminal has a vertical scrollbar on the right side.

## List of books

List of available books:

Book ID: book1  
Book name: Divergent  
Book author: Chris  
Book published in: 2019  
Book issued by: None

Book ID: book2  
Book name: Insurgent  
Book author: Morris  
Book published in: 2020  
Book issued by: None

Book ID: book3  
Book name: Allegiant  
Book author: John  
Book published in: 2021  
Book issued by: None

Please select one from below-

1. Get the list of available books
2. Exit

|

## Credentials page of archivist

Enter ID: 1  
Enter Password: xyz|

## Archivist menu

```
Please select one from below
1. Get the list of all books
2. Get the list of available books
3. Issue a book
4. Return a book
5. Add a book to the library
6. Delete a book
7. Exit
|
```

## Issuing a book

```
2. Get the list of available books
3. Issue a book
4. Return a book
5. Add a book to the library
6. Delete a book
7. Exit

3
List of available books:

Book ID: book1
Book name: Divergent
Book author: Chris
Book published in: 2019
Book issued by: None

Book ID: book2
Book name: Insurgent
Book author: Morris
Book published in: 2020
Book issued by: None

Book ID: book3
Book name: Allegiant
Book author: John
Book published in: 2021
Book issued by: None

Enter the book ID that you want to issue: book1
Enter your Roll number: IMI2020033|
```

```
Issued Successfully

Please select one from below
1. Get the list of all books
2. Get the list of available books
3. Issue a book
4. Return a book
5. Add a book to the library
6. Delete a book
7. Exit
```

## Adding a book

```
Please select one from below
1. Get the list of all books
2. Get the list of available books
3. Issue a book
4. Return a book
5. Add a book to the library
6. Delete a book
7. Exit

5

Enter the ID of the new book that you want to add to the library: book4
Enter the name of the new book that you want to add to the library: fire
Enter the name of the author of the new book that you want to add to the library: water
Enter publication year of the new book that you want to add to the library: 2018|
```

## Deleting a book

```
Book has been added to the library successfully

Please select one from below
1. Get the list of all books
2. Get the list of available books
3. Issue a book
4. Return a book
5. Add a book to the library
6. Delete a book
7. Exit

6
Enter the book ID that you want to delete from the library: book4|
```

```
Book has been deleted from the library successfully.

Please select one from below
1. Get the list of all books
2. Get the list of available books
3. Issue a book
4. Return a book
5. Add a book to the library
6. Delete a book
7. Exit

|
```

## Credentials page for Library head

```
Enter ID: head1
Enter Password: xyz123|
```

## Library head menu

```
Please select appropriate option-
1. Get the list of registered students in the library
2. Get thte list of registered archivists in the library
3. Add a new student
4. Delete an existing student
5. Add a new archivist
6. Delete an existing archivist
7. Exit
```



## **Instructions to run the code**

Please change the username and password according to your mysql username and password.

Source sql/Lib\_create.sql

Source sql/Lib\_alter.sql

Source sql/Lib\_populate.sql

To run the .java file:

export the classpath as suggested in the how-to-run.odt file.

javac Lib\_Managment.java

java Lib\_Managment

## **Notes**

archivist credentials:

id = 1

pass = xyz

Library head credentials:

id = head1

pass = xyz123

You can delete the database at the end by just running the below code snippet in your mysql terminal:

source sql/Lib\_drop.sql

**Done by:**  
**K. Yash Koushik**  
**IMT2020033.**