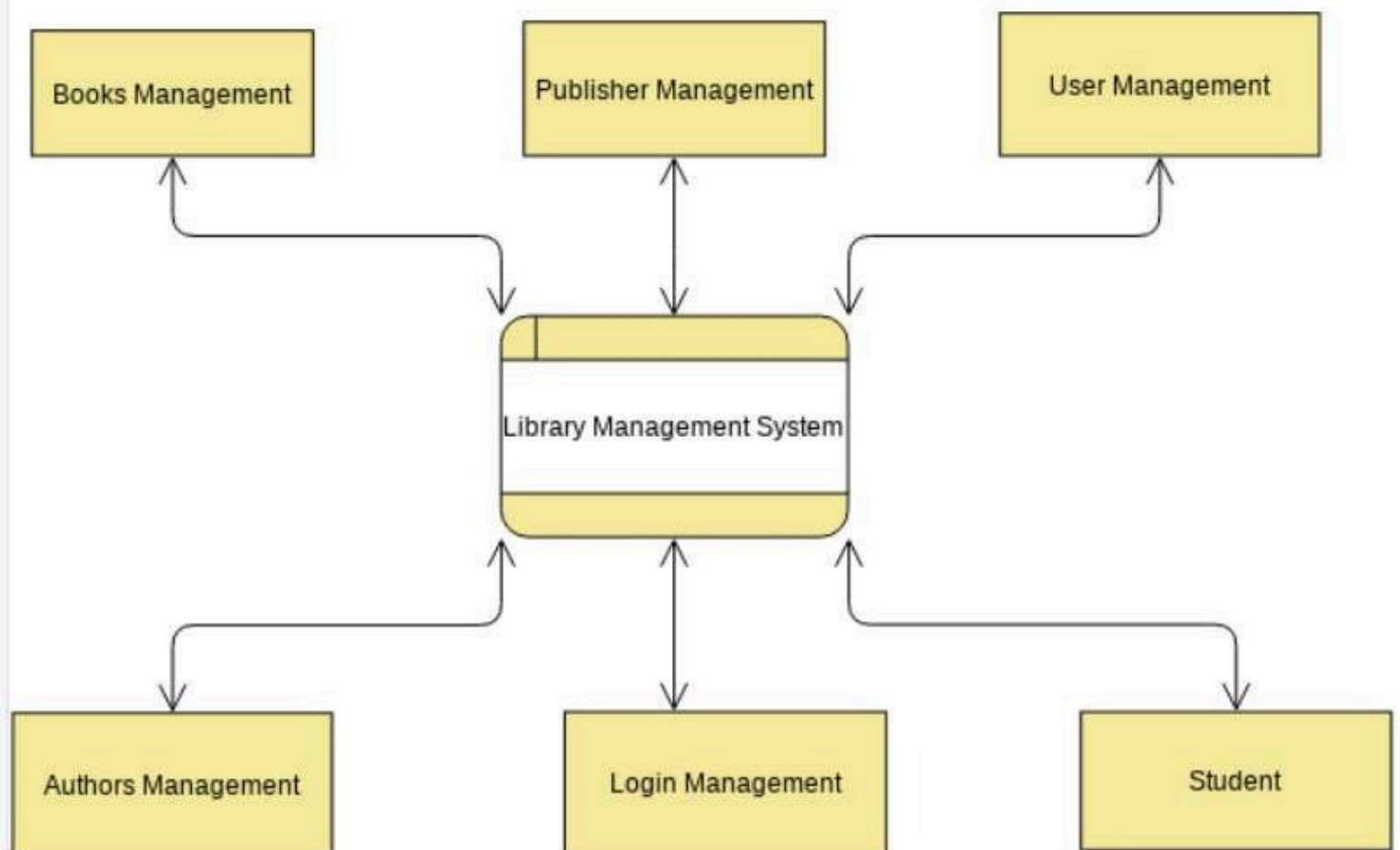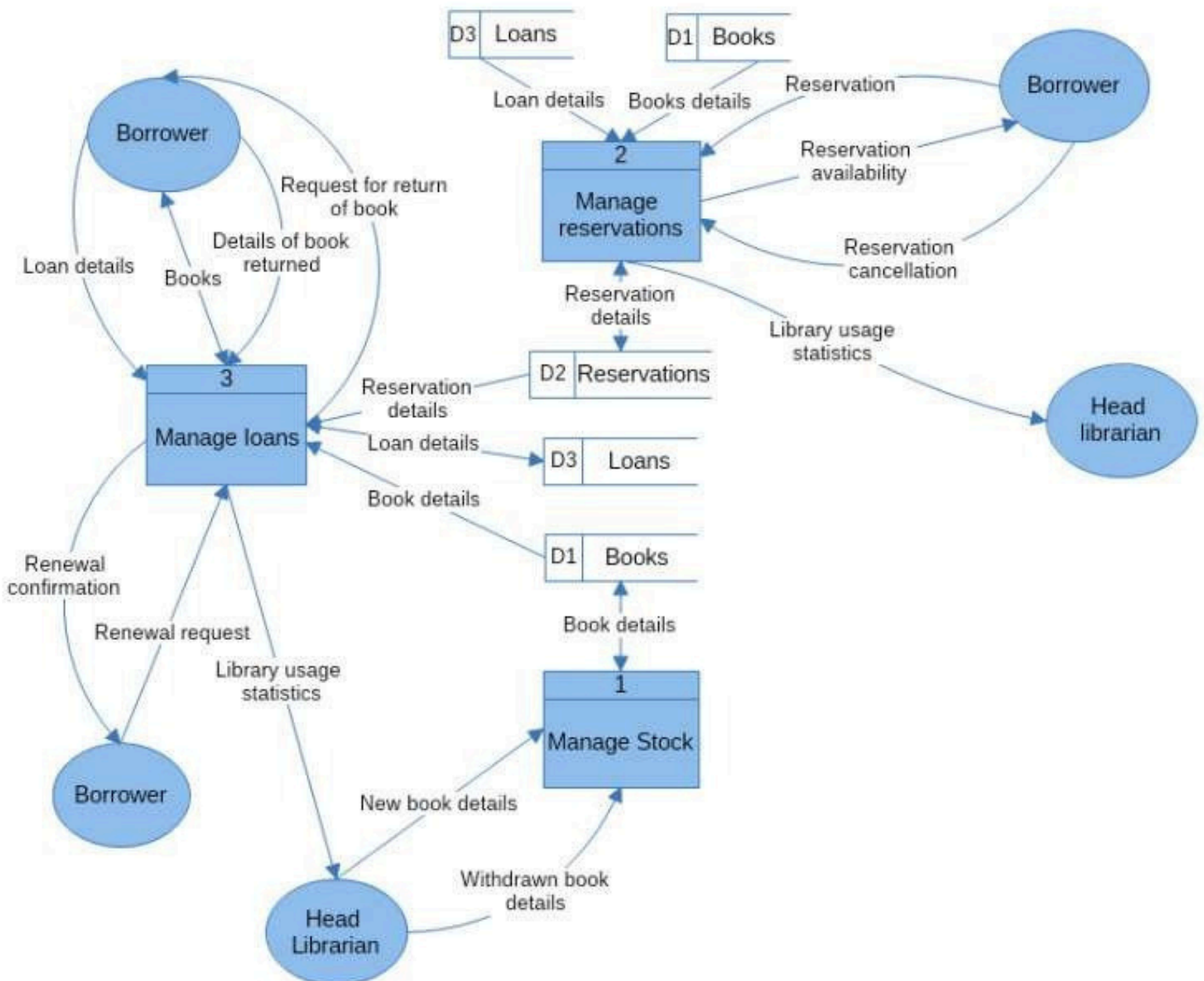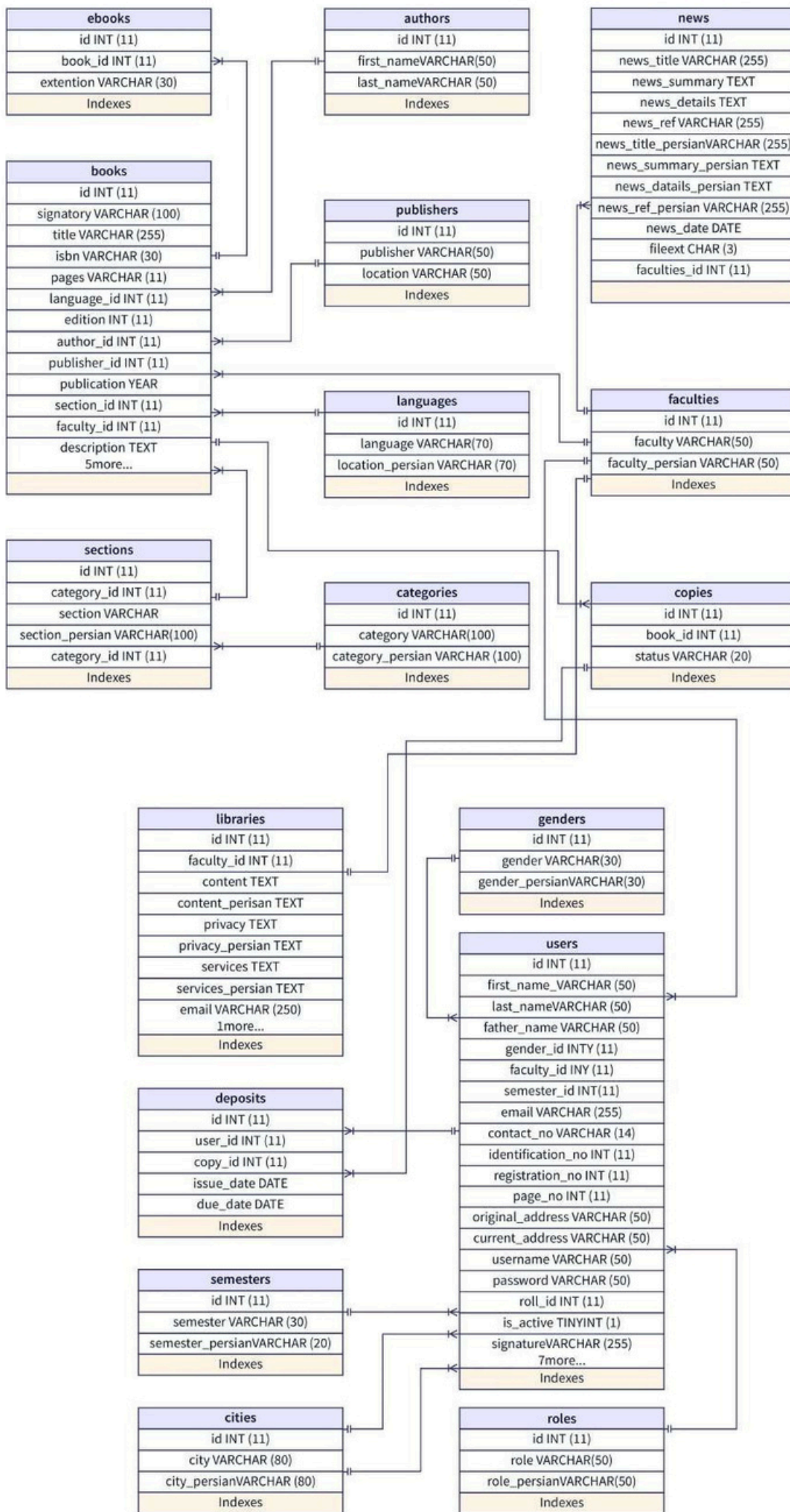# Data Flow Diagram for level 0 for Library Management System
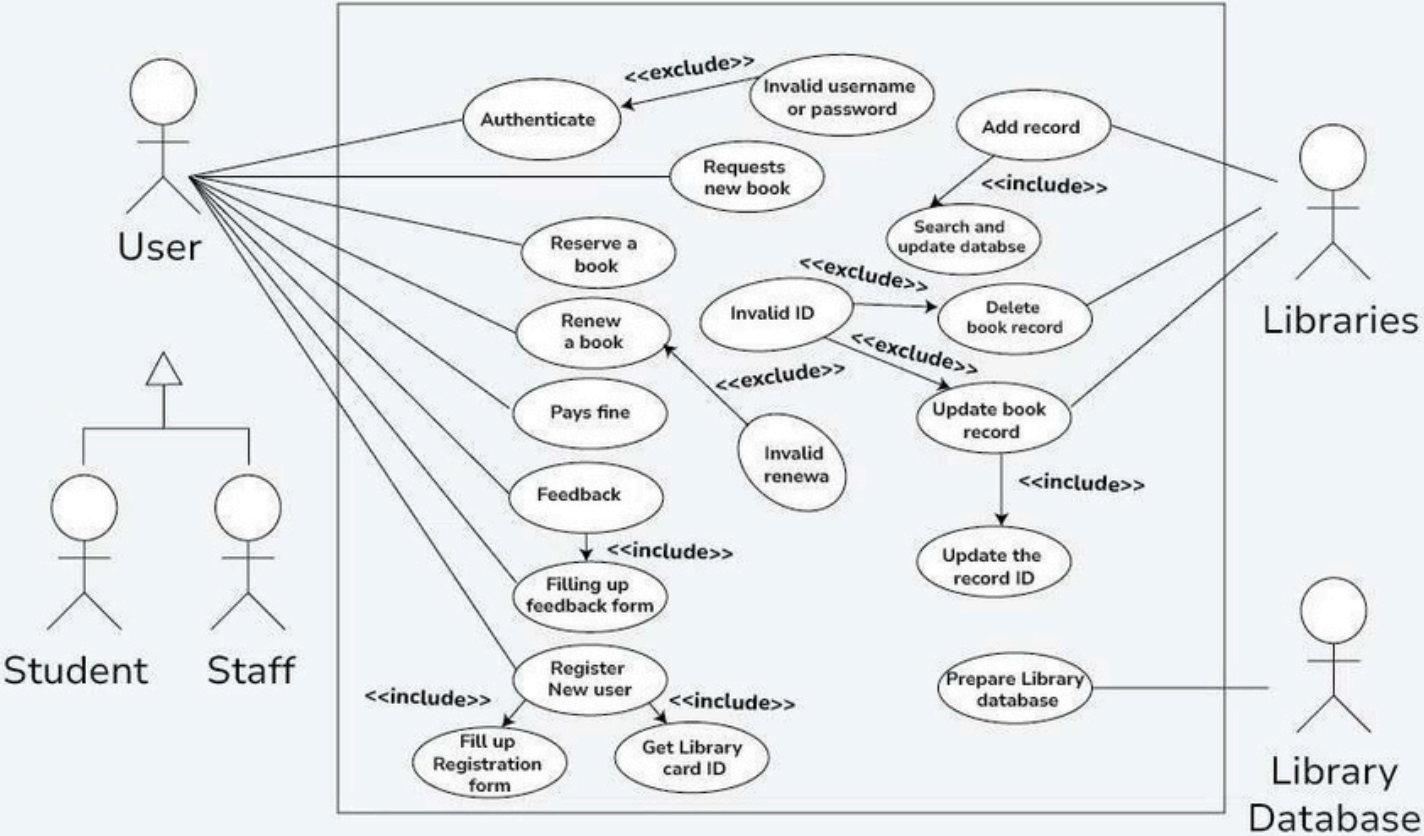
Library System Data Flow Diagram (Level 1)

ER DIAGRAM OF LIBRARY MANAGEMENT SYSTEM

ebooks
id INT (11)
book_id INT (11)
extention VARCHAR (30)
Indexes

authors
id INT (11)
first_nameVARCHAR(50)
last_nameVARCHAR (50)
Indexes

news
id INT (11)
news_title VARCHAR (255)
news_summary TEXT
news_details TEXT
news_ref VARCHAR (255)
news_title_persianVARCHAR (255)
news_summary_persian TEXT
news_datails_persian TEXT
news_ref_persian VARCHAR (255)
news_date DATE
fileext CHAR (3)
faculties_id INT (11)

books
id INT (11)
signatory VARCHAR (100)
title VARCHAR (255)
isbn VARCHAR (30)
pages VARCHAR (11)
language_id INT (11)
edition INT (11)
author_id INT (11)
publisher_id INT (11)
publication YEAR
section_id INT (11)
faculty_id INT (11)
description TEXT
5more...

publishers
id INT (11)
publisher VARCHAR(50)
location VARCHAR (50)
Indexes

languages
id INT (11)
language VARCHAR(70)
location_persian VARCHAR (70)
Indexes

faculties
id INT (11)
faculty VARCHAR(50)
faculty_persian VARCHAR (50)
Indexes

sections
id INT (11)
category_id INT (11)
section VARCHAR
section_persian VARCHAR(100)
category_id INT (11)
Indexes

categories
id INT (11)
category VARCHAR(100)
category_persian VARCHAR (100)
Indexes

copies
id INT (11)
book_id INT (11)
status VARCHAR (20)
Indexes

libraries
id INT (11)
faculty_id INT (11)
content TEXT
content_perisan TEXT
privacy TEXT
privacy_persian TEXT
services TEXT
services_persian TEXT
email VARCHAR (250)
1more...
Indexes

genders
id INT (11)
gender VARCHAR(30)
gender_persianVARCHAR(30)
Indexes

users
id INT (11)
first_name_VARCHAR (50)
last_nameVARCHAR(50)
father_name VARCHAR (50)
gender_id INTY (11)
faculty_id INY (11)
semester_id INT(11)
email VARCHAR (255)
contact_no VARCHAR (14)
identification_no INT (11)
registration_no INT (11)
page_no INT (11)
original_address VARCHAR (50)
current_address VARCHAR (50)
username VARCHAR (50)
password VARCHAR (50)
roll_id INT (11)
is_active TINYINT (1)
signatureVARCHAR (255)
7more...
Indexes

deposits
id INT (11)
user_id INT (11)
copy_id INT (11)
issue_date DATE
due_date DATE
Indexes

semesters
id INT (11)
semester VARCHAR (30)
semester_persianVARCHAR (20)
Indexes

cities
id INT (11)
city VARCHAR (80)
city_persianVARCHAR (80)
Indexes

roles
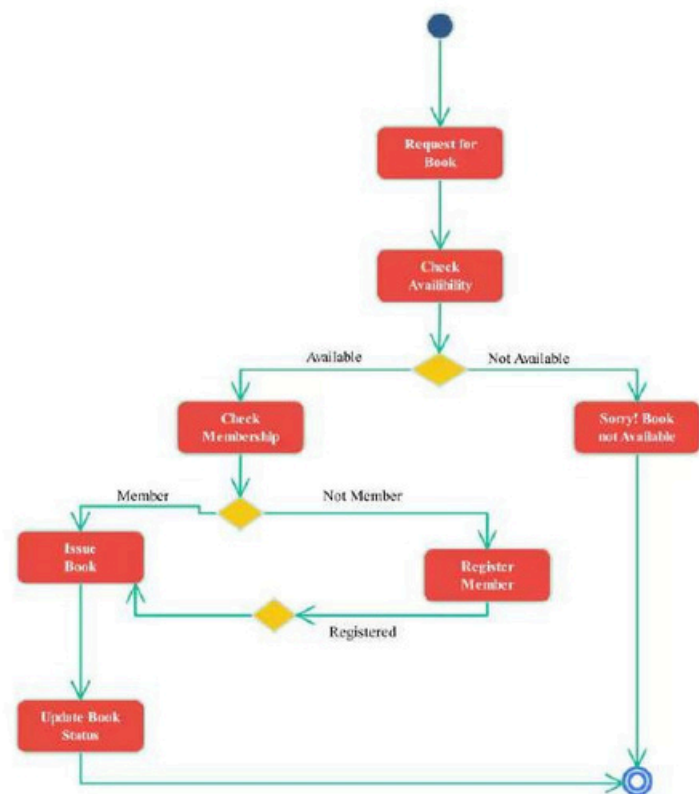| |
|---|
| id INT (11) |
| role VARCHAR(50) |
| role_persianVARCHAR(50) |
| Indexes |

Use Case Diagram of Library Management System

Sequence Diagram For Library Management System

Activity Diagram For Library Management System

Use case Diagram For Library Management System

Person
- -name
- +whoyouare()

Book
- -book_ID
- -author
- -name
- -price
- -status
- -edition
- -date_of_purchase
- +get_title()
- +get_author()
- +change_owner()
- +get_owner()
- +display()
- +update_status()

Author
- -books
- +new_book()
- +show_book()
- +whoyouare()

Reader
- -books
- +purchase_book()
- +borrow_book()
- +return_book()
- +show_book()
- +whoyouare()

Library
- -books
- -readers
- +get_books()
- +get_reader()
- +new_book()
- +lend_book()
- +take_back_book()
- +show_book()

Librarian
- -name
- -password
- +search_book()
- +verify_member()
- +issue_book()
- +calculate_fine()
- +create_bill()
- +return_book()

issues ▶   1   *

Book
- -book ID
- -author
- -name
- -price
- -status
- -edition
- -dateofpurchase
- +get_title()
- +get_author()
- +change_owner()
- +get_owner()
- +display()
- +update_status()

◀ requests   *   *

member_Record
- -member_id
- -type
- -date_of_membership
- -no_books_issued
- -max_book_limit
- -name
- -address
- -phone_no
- +get_member()
- +inc_book_issued()
- +dec_book_issued()
- +pay_bill()

Journals

StudyBooks

Magazines

Student

Faculty