CIS 3368 Advanced Information Systems Development

Spring 2020

Project-Library Management System

Assume that you are asked to develop a library management system for our University. The library has two types of users.

1. Admin, who enters books, journals, and CDs, and manage user access.
   1. Creates data bases for:
      1. Books
      2. Media (CDs)

You can use only one database to store both books and Media with an additional column of type to identify whether an item is a book or Media

* 1. The database(s) may contain at least an ID (ISBN), Title of the book (or Media), Author, Location (call no), and quantity (Number of items)
  2. There will be a database for the users to keep an account of number of items a user has checked out. If a user tries to check our more than his limits the system should not allow that.
  3. This table should be updated when an item is checked out it should reflect in the book’s database. The available number of books or Media with the same title should be updated.

1. Users of the library
   1. Students
      1. Under graduate
      2. Graduate
   2. Faculty
   3. Staff
2. Lending Policy

|  |  |  |  |
| --- | --- | --- | --- |
| Users Types | Lending Period | Item Limit | Media Item Limit |
| Under Graduates | 6 weeks | 5 items | 3 media items |
| Graduate Students | 15 weeks | 8 items | 6 media items |
| Faculty | Unlimited | Unlimited | Unlimited |
| Staff | 6 weeks | 8 items | 6 media items |
| Alumni | 6 weeks | 4 items | 2 media types |

1. The system should provide a login window for a user with fields for cougar Id and a password.

After login, the user should be able to enter a book title or Media title and check for availability, if the item is available, then he can check out. If the item is not available, he will be asked “do you want to check any other item?”. If the user answered yes, he will be provided with the checkout window. If he answers no, then the system will exit by closing the window.

1. A user can have the option view his checked-out items.
2. Feel free to design the system. It should be functional. Creating UI can use be done either as
   1. JavaFX application
   2. Or a web client using Spring boot

Important: No tolerance for Cheating in any form. You should cite any Internet resources and your Own work if you used it.

Notes:

1. The list number 1 is to be submitted as Assignment 3. You need to complete the Admin functionality. The deadline to submit your Assignment 3 is April 12th.
2. Use the Git-Hub Class room repository to submit your Assignment-3

<https://classroom.github.com/a/kdqzqD1k>

1. The Last commit to push your assignment 3 should be before its due date.
2. You can use the Assignment 2 submission codes for the users’ database.
3. The project submission is due on April 27th
4. We will provide you the GitHub Class room link for your project soon.
5. A readme file should be provided on how to run you project.
6. Deliverables:
   1. Complete code with incremental commits and pushes on Git Hub-Classroom
   2. A 4 to 8 pages report with
      1. Introduction
      2. Methodology
         1. Software used with versions
         2. UI design
         3. Programming logics used
      3. Conclusion