

**Habib University**  
**CS-355 – Databases (Fall' 2020)**  
**Assignment 01 – Developing GUIs**

**Objective:**

The objective of this assignment is to give students an exposure of GUI development and enable them to work with multiple forms. This assignment will also help them building GUIs for their Database project.

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In this assignment, you will develop two forms in C#.net for searching for books and viewing their details in a library management system. The details of these forms are given below:

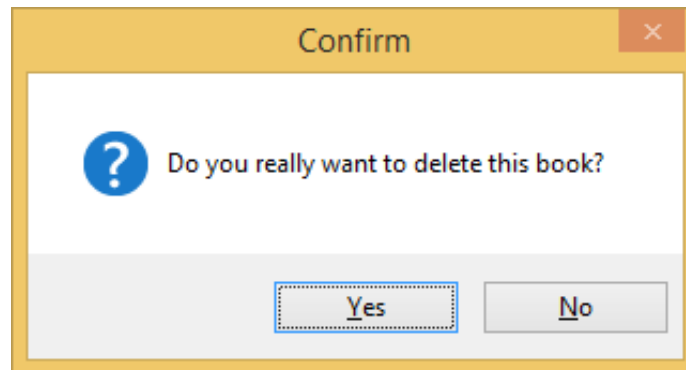
**Search Books Form:**

The given 'Book Search' UI will facilitate user in searching for books using various search criteria.

The image shows a Windows-style application window titled "Book Search". The window has a yellow title bar. Inside, there is a "Search" section with a "Category:" dropdown menu, a "Title:" text box, and an "Issued" checkbox. To the right of the search fields is a "Type" section with three radio buttons: "Reference Book", "Text Book", and "Journal". A "Search" button is located below the "Type" section. Below the search fields is a "Results" section, which is a large empty rectangular area. At the bottom right of the window, there are three buttons: "View", "Delete", and "Close".

The UI will have following functionalities:

- The details of multiple books (provided in Data Population Script) are hard-coded in the code and all these books are displayed by default in 'Results' box when the form is loaded.
- 'Category' combo box will contain the following items:
  - o Database Systems
  - o OOP
  - o Artificial Intelligence
- Users can specify any search criteria such as Category, Type, Title, Issued and press 'Search' to look for the books that come under that criteria. The result will be displayed in 'Search Results' list box in the given format:  
*ISBN | Category | Title*
- 'Delete' button will prompt the user for confirmation of deletion as follows:



On pressing 'Yes' the book will be deleted. Pressing 'No' will keep the book in the system.

- The application will be closed on pressing 'Close' button.
- 'View' button will open 'View Book' form (on top of SearchBook form) shown below where details of the book will be displayed.

### View Book Form:

- View Book form will be loaded with details of the selected book. These details will be shown in view only mode and the user cannot edit any of the details.
- 'Close' button will close the View Book form.

The screenshot shows a window titled "Assignment 1" with standard Windows window controls (minimize, maximize, close). The form inside is titled "View Book Form" and contains the following fields and controls:

- ISBN:
- Title:
- Purchased On:
- Category:
- Sub Category:
- Authors section:
  - Author Name:
  - 
  - A large empty rectangular box for listing authors.
- Type section with three radio buttons:
  - ☐ Reference Book
  - ☐ Text Book
  - ☐ Journal
- Issuance section:
  - ☐ Issued
  - Issued to:
  - Issue Date:
- button at the bottom right.

**Grading:**

The grading of this assignment will be based on the following components:

Forms Design	10 %
Form Loading – Search Books	10 %
Form Loading – View Book	20 %
Search Functionality (Search and display of results)	30%
Delete Functionality	15%
Handling multiple forms	10%
Correct Submission	05%

**Submission Instructions:**

You have to submit the whole solution folder (with .sln file) in zipped format on the LMS. Please make sure that the project can be opened and executed on another machine.