Exercise 1

Client-Server project eLibrary

Phase 1. Starting prototype (eLibrary_v1)

Create a folder eLibrary_v1 where you have to create the starting prototype.

1.1. On the server side: Create a project "eLibraryServer"

Step 1.

Create a new project with name - "eLibraryServer". Choose "***Windows->Class Library***".

Step 2.

<u>In the project</u>: Rename the empty class "class1" with name **"DAL" -** *data access library***.** This class will contain functions for database access.

Step 3

Close the project **"eLibraryServer".**

1. 2. On the client side: Create a project "eLibraryClient"

Step 1

Create a new project with name - "***eLibraryClient***". Choose ***Windows->Windows Application.*** Create it in eLibrary_v1 folder.
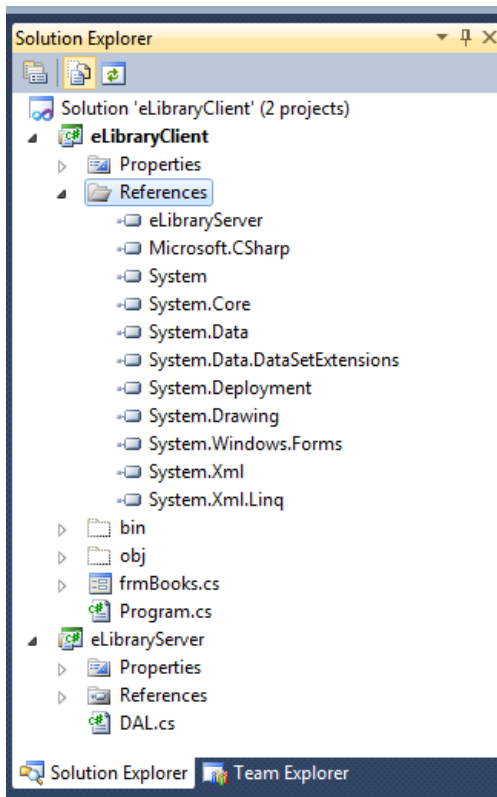
Step 2

Rename the default form "Form1" to "***frmBooks".*** Write a title of the form: property *text* =**List of books**

Step 3

In solution explorer add the existing project **eLibraryServer.** *File->Add ->Existing Project*

Step 4

<u>In solution explorer:</u> Choose the project **eLibraryClient** and *add Reference to* **eLibraryServer** Click on the icon "show all files". Check whether the eLibraryServer project is listed.

Step 5

- On eLibraryClient project, add a MDI form: **Add >New Item >Form** with name "frmMain".

  Rename the form attributes:
  Text= My e-library
  IsMdiContainer = True

  Choose the main form frmMain for stating form.

- On eLibraryClient project, add a dialog form: **Add >New Item >AboutBox**
  Name= frmAbout
  Text= About

Step 6

  In the frmMain form:
- Add a main menu (control MenuStrip) with the following elements :
  - *File*
    - *Connect Server (mnuServer)*
    - *Exit (mnuExit)*
  - *Books*
    - *Show books (mnuBooks)*
  - *Help*
    - *About…(mnuAbout)*

- Implement exit from the system and open the modal form frmAbout.
- On the menu element "*Connect Server*", write a message box with text "This is not a ready function!".

Step 7

- In the class frmMain define a variable:
  ```
  private frmBooks FormBooks;
  ```

- Create a method for Load event on frmMain form:

```
private void frmMain_Load(object sender, EventArgs e)
{
    FormBooks = new frmBooks();
    FormBooks.MdiParent = this;
    FormBooks.WindowState = FormWindowState.Maximized;

}
```

- Create a method for Click event on the menu item mnuShowBooks:

```
private void mnuBooks_Click(object sender, EventArgs e)
{
    if (FormBooks==null || FormBooks.IsDisposed)
    {
        FormBooks = new frmBooks();
        FormBooks.MdiParent = this;
    }
    FormBooks.BringToFront();
    FormBooks.WindowState = FormWindowState.Maximized;
    FormBooks.Show();
}
```

Step 8

Form frmBooks:
- Add a control *DataGridView*
  Choose *Anchor> Top, Bottom, Left, Right* from the properties of the control *DataGridView.*

  Add a *label* with name *lblBooks* and text"*List of books*", above the gridview.
On the left side of the gridview control add the following controls:
- *ListBox* *with name* **listBookTypes**
- *Label* with name **lblBookTypes** and text "*Select a category*"

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