



Midterm exam (A)

Data processing 420-TDD-ID

Name : _____
Identification: _____
Instructor: _____
Date: _____
Start time: _____

- Instructions:
1. Carefully read the instructions.
 2. Create the application
 3. You have 2 hours to complete the exam.

Grade:

Step 1 (30 points)....._____/30
Step 2 (40 points)....._____/40
Step 3 (30 points)....._____/30

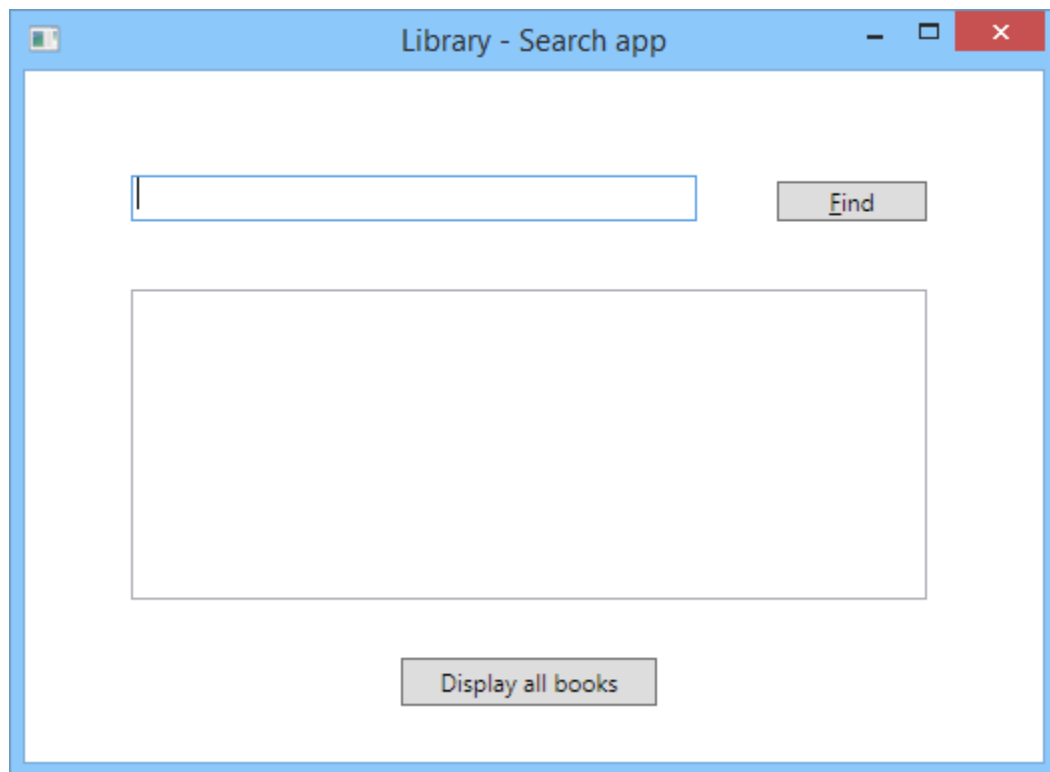
TOTAL ____/100

Your goal is to create a simple search application for a library.

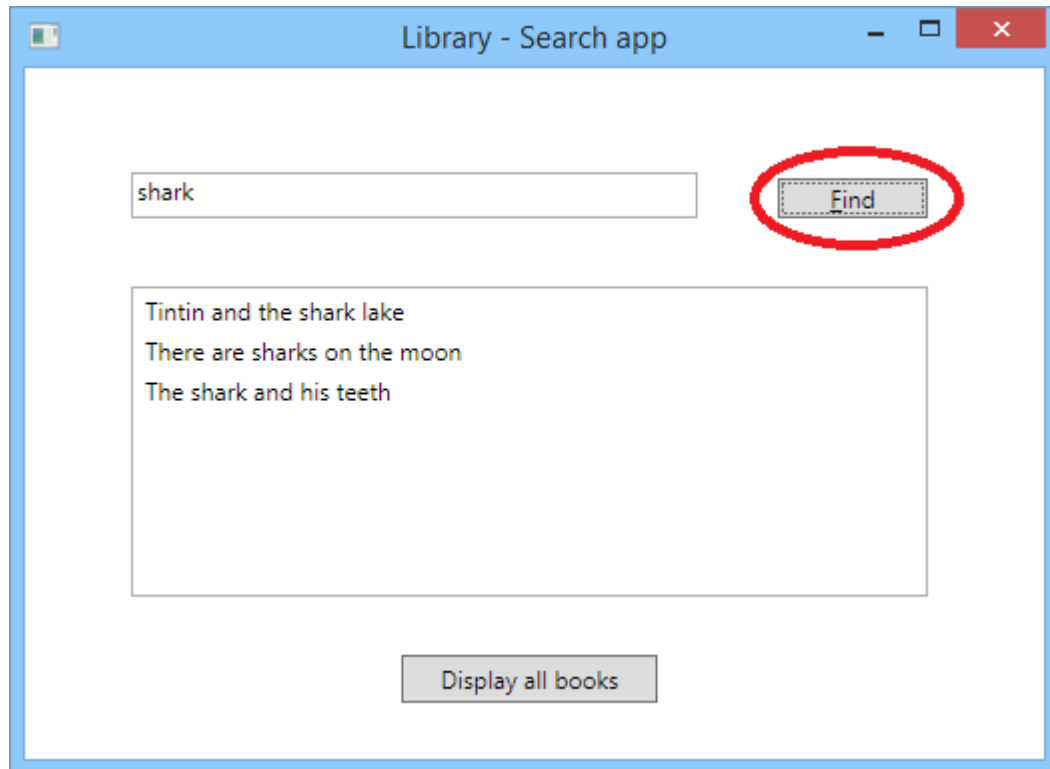
This is an exam, not a project. You cannot ask your instructor or other students for help. You have 2 hours to complete this evaluation. Read the entire document before you start anything! Step 3 might be easier to complete than step 2...

Your instructor will give you the **library.sql** file that you must run in SQL Server to create the database you will use for this exam. The database only has one table, *Books*, which has two columns, *Id* and *Title*.

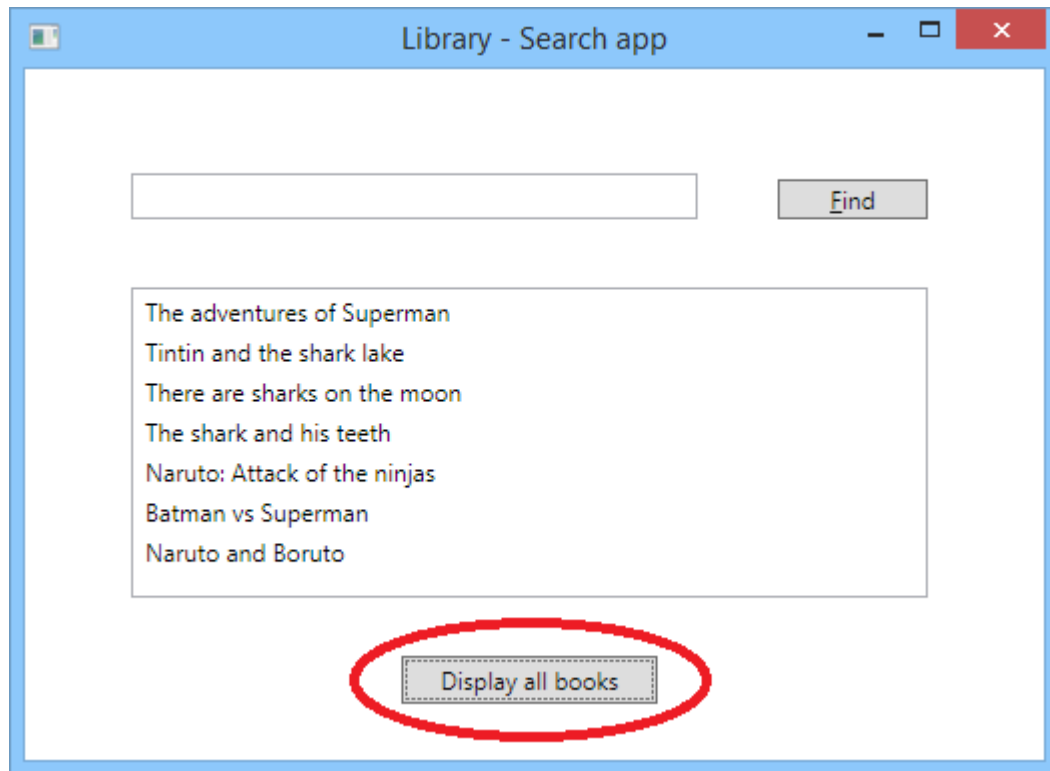
1. Create a WPF project with this interface (30 points):



2. Add code so that when the **Find** button is clicked, all the books that contain the word or expression in the textbox are displayed in the list. For example (40 points):



3. When the **Display all books** button is pressed, all the books in the database should appear in the list (30 points) :



Tips :

- You can add an item in a listbox by using this instruction: **listbox.Items.Add()**
- You can empty a listbox with this instruction: **listbox.Items.Clear()**
- **Don't make it harder on yourself!** You don't need to bind the listbox in the XAML. Instead, you can simply use a **SqlDataReader** object and fill the listbox with a **while** loop.
- It is possible to find all the titles that contain an expression with SQL :
Select * from Books where Title like '%shark%'
- You can establish a connection with this instruction :
`connection = new SqlConnection("server=.; initial catalog=library;
integrated security= true");`
- Even if your code doesn't work 100%, you can still get some points if you are on the right track!