

# Library Management System

**CSCI 5448**

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# Structure of presentation

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- Framework/Tools used
- Walk-through Demo 1
- Walk-through Demo 2
- Design Pattern Used – Bridge
- Design Pattern Used – MVC

# Framework/Tool used

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- ASP.NET Framework.
- C# as our Object Oriented language.
- Visual Studio as our IDE.
- MS SQL as our Relational Database.

# Walk-through Demo 1

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- Below is one of the Use cases we had in our Part 2.  
Let's see a live demo of that.

<i>Use case name</i>	SearchLibrary
<i>Participating actors</i>	Initiated by <b>Student</b>
<i>Flow of Events</i>	1. <b>Student</b> selects search tab
	2. <b>Student</b> selects category to perform search
	3. <b>Student</b> enters text to search
	4. <b>Student</b> hits search button
<i>Entry Conditions</i>	<b>Student</b> is logged into <b>LibraryManagementSystem</b>
<i>Quality Requirements</i>	Query can be performed on database

# Walk-through Demo 2

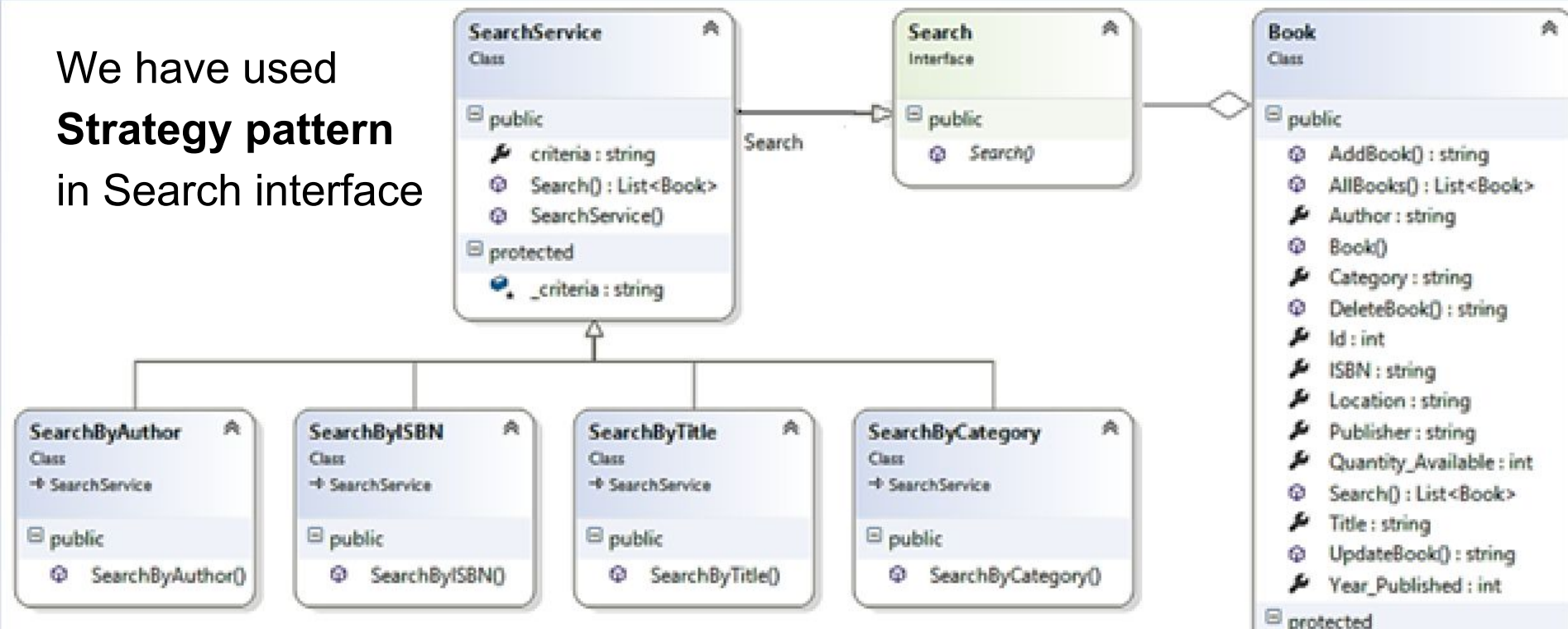
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- Below is another Use case we had in our Part 2.  
Let's see a live demo of that.

<i>Use case name</i>	Update <u>CopiesofBooks</u>
Participating Actors	<b>Administrator</b>
Flow of Events	1. <b>Administrator</b> selects update tab 2. <b>Administrator</b> increments/decrements numbers of book in library
Entry Conditions	<b>Administrator</b> is logged into <u>LibraryManagement System</u>

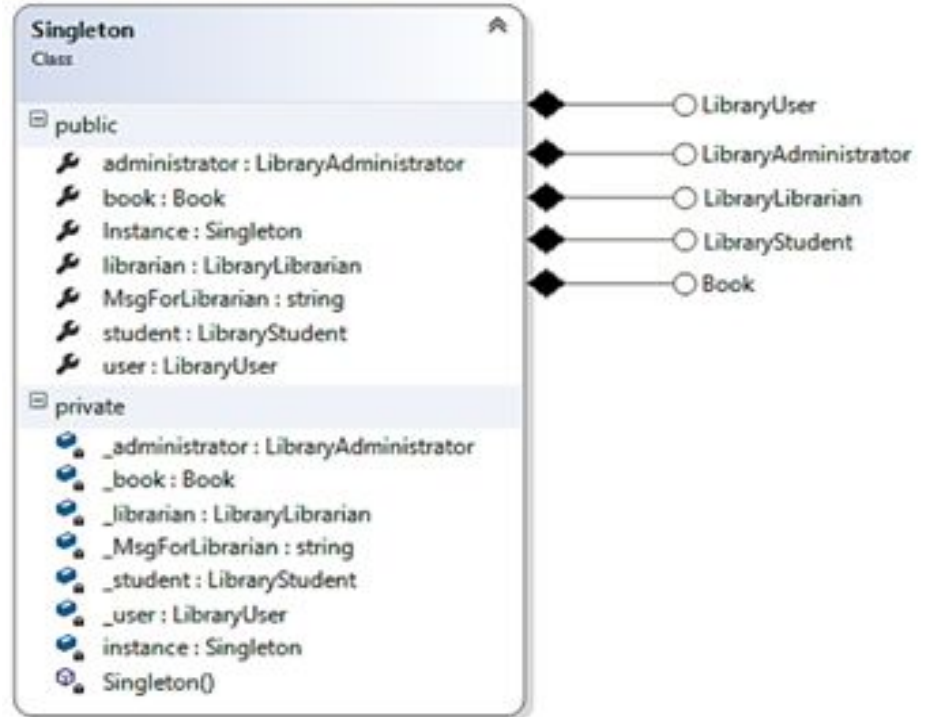
# Design Pattern used - Strategy

We have used  
**Strategy pattern**  
in Search interface



# Design Pattern used - Singleton

Also we have used the **Singleton pattern** to have a single ready instance of all our basic models available at runtime so that we would not have to instantiate each of them every time the controller is called



**Thank you**