

Activity 2: String Processing System

Objective

Create a console-based **String Processing System** that allows users to input text and perform various string operations using built-in C# **String** methods.

The system must apply **separation of concerns**:

- **StringService** → Handles string processing logic
- **StringView** → Handles user interaction and menu display
- **Program.cs** → Only creates and runs the view

Required Project Structure

```
StringProcessingApp
|
|— Program.cs
|
|— Services
|   |— StringService.cs
|
|— Views
|   |— StringView.cs
```

Required Methods in **StringService**

Students must use actual C# string methods such as:

Feature	Required String Method
Convert to Uppercase	<code>ToUpper()</code>
Convert to Lowercase	<code>ToLower()</code>
Count Characters	<code>Length</code>
Check if Contains word	<code>Contains()</code>

Replace word	<code>Replace()</code>
Extract substring	<code>Substring()</code>
Trim spaces	<code>Trim()</code>
Reset to original	custom method

2 StringView (Presentation Layer)

This class:

- Displays menu
- Accepts user input
- Calls StringService methods
- Controls the loop

Menu Options

1. Enter Text
2. View Current Text
3. Convert to UPPERCASE
4. Convert to lowercase
5. Count Characters
6. Check if Contains Word
7. Replace Word
8. Extract Substring
9. Trim Spaces
10. Reset Text
11. Exit