

# Lab Activity – 1

## Objectives

- To learn TextBoxes
- To learn Labels
- To learn Buttons
- To learn event mechanism
- To learn .dll usage

## Exercise

Design and implement an application that takes student number, first name, last name and text for exercising. In order to collect this data and create an application, design a user interface with textboxes, labels, and button.

- ❖ Student number (label&textbox)
- ❖ First name (label&textbox)
- ❖ Last name (label&textbox)
- ❖ Test text (label&textbox)
- ❖ Run (button)
- ❖ Output (label&textbox)

Student number must be an integer (it will give an error anyway) with a defined length of eight digits. First and last names should consist of only letters, the length is unimportant. Letters and numbers are intended to be used in the test text. Apart than the conditions given, the application shouldn't permit entries. Functions for calculating the quantity of letters and integers in the test text should be written or utilized as an exercise.

You will receive a separate .dll file containing the test function, and you are expected to add it as a reference and figure out what functions it contains on your own. Student number, first and last names, the quantity of letters and numbers in the test text, as well as the score achieved in the result of the test function, should be properly shown in an output window that will also be added. Lastly, the text boxes should be configured so that they contain your information when the application launches.

For example:

Input:

Student number:	12345678
First name:	any first name
Last name:	any last name
Test text:	Lo1rem ip2sum do6lor si7t ame4t

Output:

Student number: 12345678 First name: any first name Last name: any first name Quantity of letter in test text: 22 Quantity of number in test text: 5 Student score: 80
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## What is Expected

- Create proper user interface
- Check student number (only integers, 8 digits, example: 20230001)
- Check student first and last names (only letters)
- Configure that textboxes are filled when the application launches
- Count the test's letters and numbers.
- Import .dll file and use test function for evaluation
- Properly show what is requested
- Apply object-oriented programming principles
- Report simply with step-by-step images and explanations of what has been completed
- Upload report (only .pdf) and **complete project file** (only .zip/.rar)
- The titles of the report and project files will be "<student number>\_<student name>\_lab<no>.<file format>"  
(for example, 152120230000\_firstname\_lastname\_lab1.pdf)  
(for example, 152120230000\_firstname\_lastname\_lab1.zip)
- Cheating is at your own initiative, but you also accept the consequences!