

FACULTY OF COMPUTERS, INFORMATICS AND MICROELECTRONICS

TECHNICAL UNIVERSITY OF MOLDOVA

## WINDOWS PROGRAMMING

### LABORATORY WORK #2

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## **Advanced Form Elements. Child Windowses. Basics of Working With Keyboard.**

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## **Laboratory work #1**

### **1 Purpose of the laboratory**

Gain knowledge about basics of event-driven programming, understanding of windows class.  
Also understanding of the process OS messages.

### **2 Laboratory Work Requirements**

#### **– Basic Level (grade 5 - 6) you should be able to:**

- a) Create a Windows application what will display a dialog box on some event (ex. on clicking some button)
- b) Add a system menu to your application with at least 3 items (add actions to that items)
- c) Hook keyboard input. Add 2 custom events for 2 different keyboard combinations (ex. change window background on ctrl+space) (vertically and horizontally)

#### **– Normal Level (grade 7 - 8) you should be able to:**

- a) Realize the tasks from *Basic Level*.
- b) Add a scroll bar that will change any visible parameter of any other element (color of a text) OR other 2 scroll bars that will manage main window size or position

#### **– Advanced Level (grade 9 - 10) you should be able to:**

- a) Realize the tasks from *Normal Level*.
- b) Customize your application by adding an icon and using different cursor in application
- c) Add a listbox and attach some events when any element is accessed (clicked)

Link to my git repository,<https://github.com/LordOfNightmares/WP-LABS>

## 2.1 Laboratory work analysis

The features added to my window are:

- 2 Buttons which change their font in dependence of whenever you push them one of the buttons being custom
- The buttons change the background color and change the font.
- A text line that is centered inside the window.

On the following pics below i show example of program execution.

## 2.2 Prove your work with screens

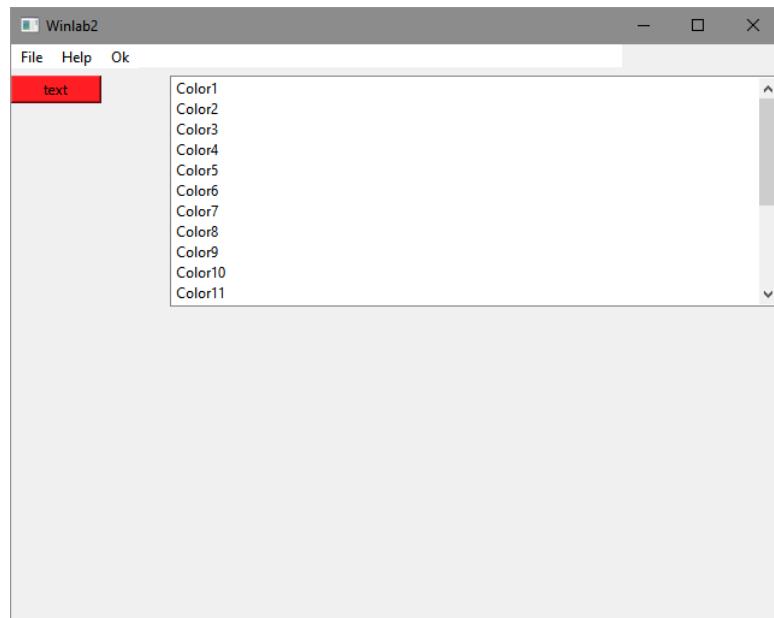


Figure 2.1 – Default

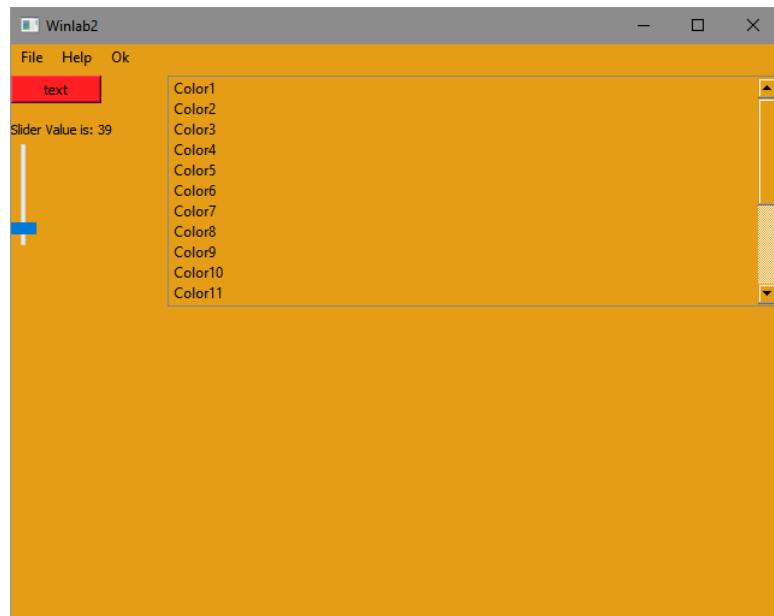


Figure 2.2 – Button

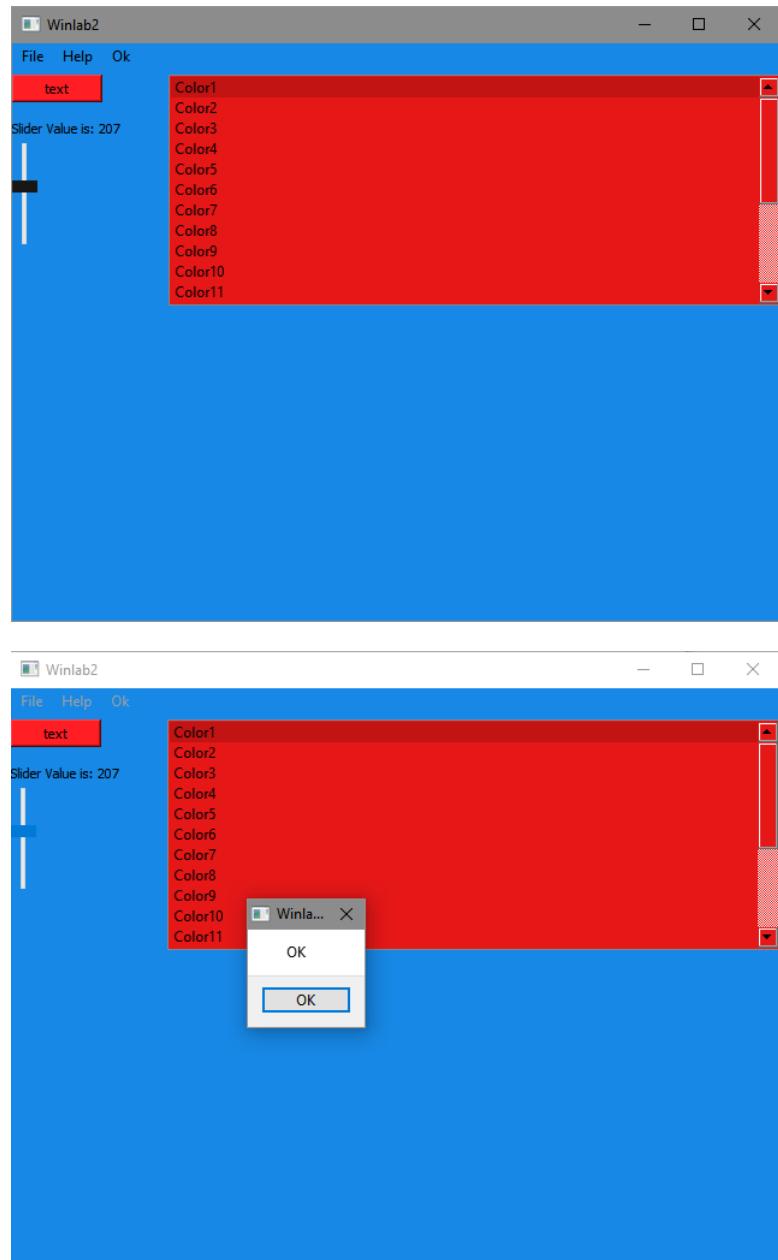


Figure 2.4 – about

## **Conclusions**

I learned how to change the behaviours of a window and how to change its properties ,to add keyboard command controls a scrollbar a listbox menu and add dialog boxes.

## **References**

- 1 Qt Examples And Tutorials,<http://doc.qt.io/qt-5/qtexamplesandtutorials.html>
- 2 Google,<https://www.google.com>