

FACULTY OF COMPUTERS, INFORMATICS AND MICROELECTRONICS

TECHNICAL UNIVERSITY OF MOLDOVA

WINDOWS PROGRAMMING

LABORATORY WORK #1

Window. Basic window's form elements

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Laboratory work #1

1 Purpose of the laboratory

Gain knowledge about basics of event-driven programming, understanding of window's class and basic possibilities of Win32 API. Also she will try to understand and process OS messages.

2 Laboratory Work Requirements

- **Basic Level (grade 5 - 6) you should be able to:**
 - a) Create a Windows application
 - b) In the middle of the window should be present the following text: "Done with Pride and Prejudice by student name". Replace student name with your name.
 - c) On windows resize, text should reflow and be in window's middle (vertically and horizontally)
- **Normal Level (grade 7 - 8) you should be able to:**
 - a) Realize the tasks from *Basic Level*.
 - b) Add 2 buttons to window: one with default styles, one with custom styles (size, background, text color, font family/size)
 - c) Add 2 text elements to window: one with default styles, one with custom styles (size, background, text color, font family/size)
- **Advanced Level (grade 9 - 10) you should be able to:**
 - a) Realize the tasks from *Normal Level*.
 - b) Make elements to interact or change other elements (2 different interactions) (ex. on button click, change text element color or position)
 - c) Change behavior of different window actions (at least 3). For ex.: on clicking close button, move window to a random location on display working space

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 how the button work after being pressed.

2.2 Prove your work with screens

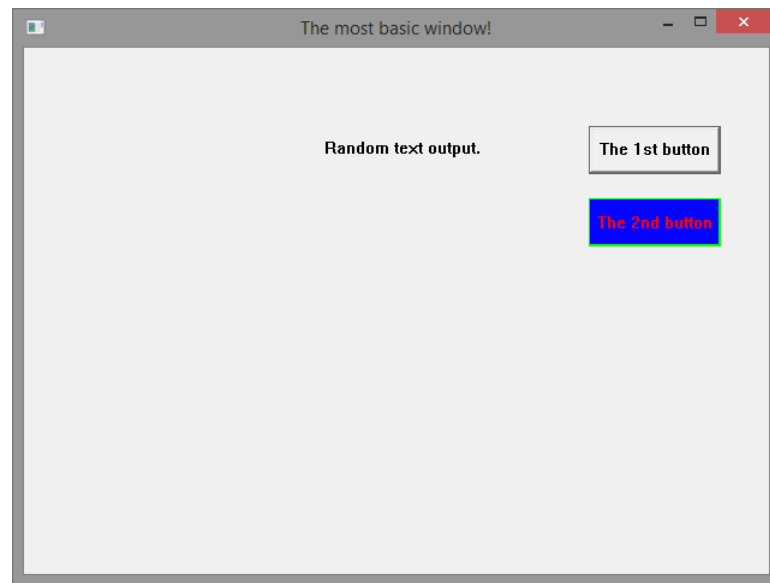


Figure 2.1 – Default

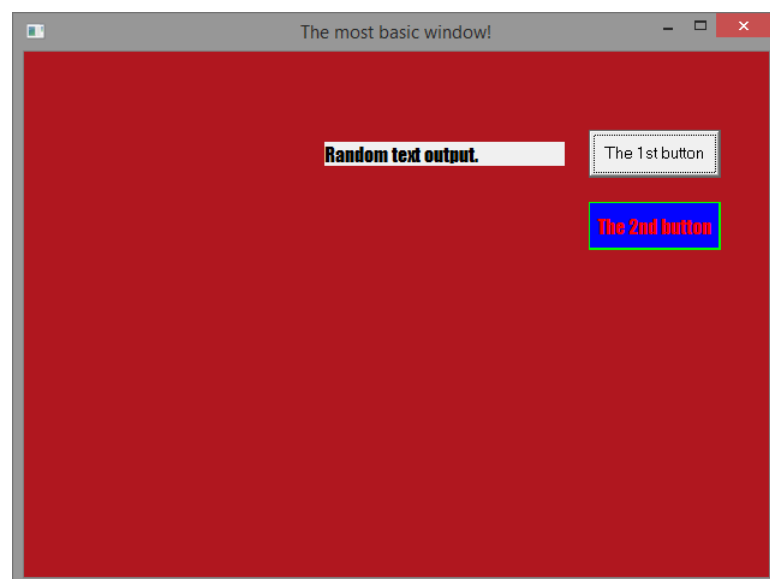


Figure 2.2 – Button 1

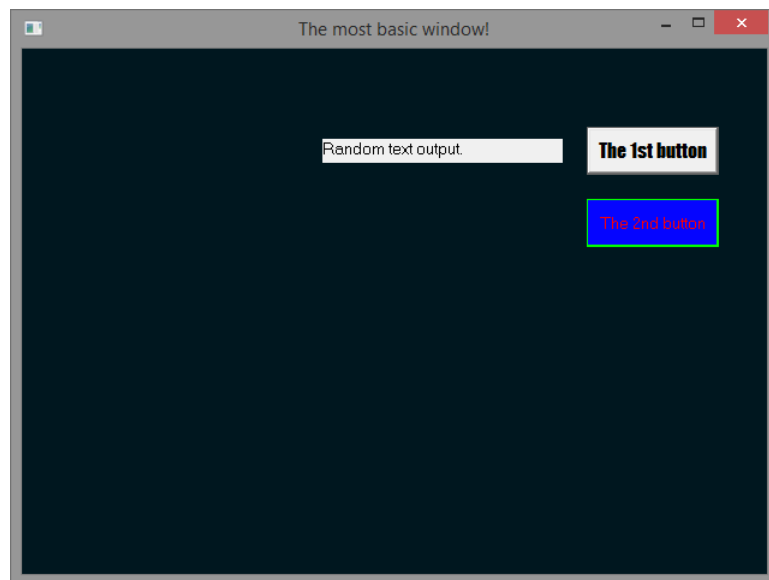


Figure 2.3– Button 2

Conclusions

I learned how the elements of the window are created, how their behavior can be changed. I worked with messages, understood how the elements and their actions are interconnected. This concepts can be applied not only in windows programming, but also in another systems of programming.

References

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