

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

3 Laboratory work implementation

3.1 Tasks and Points

Here should be the list of the implemented tasks.

3.2 Laboratory work analysis

<https://github.com/TUM-FAF/FAF-141-Alexei-Dariev> Details in the README

3.3 Prove your work with screens

Should be added 1 pic/screen for each implemented functionality.

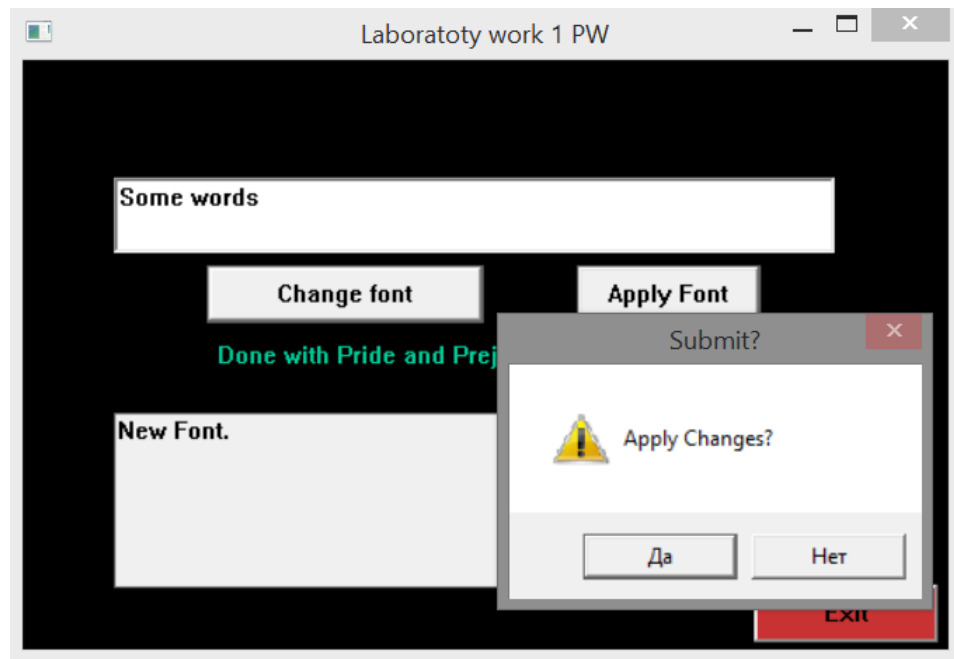


Figure 3.1

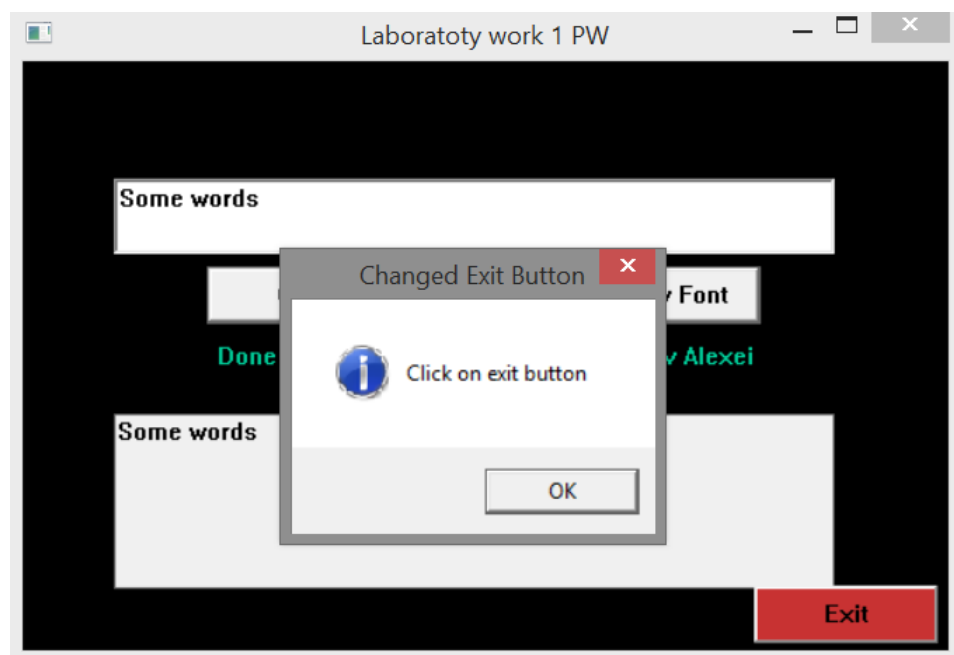


Figure 3.2

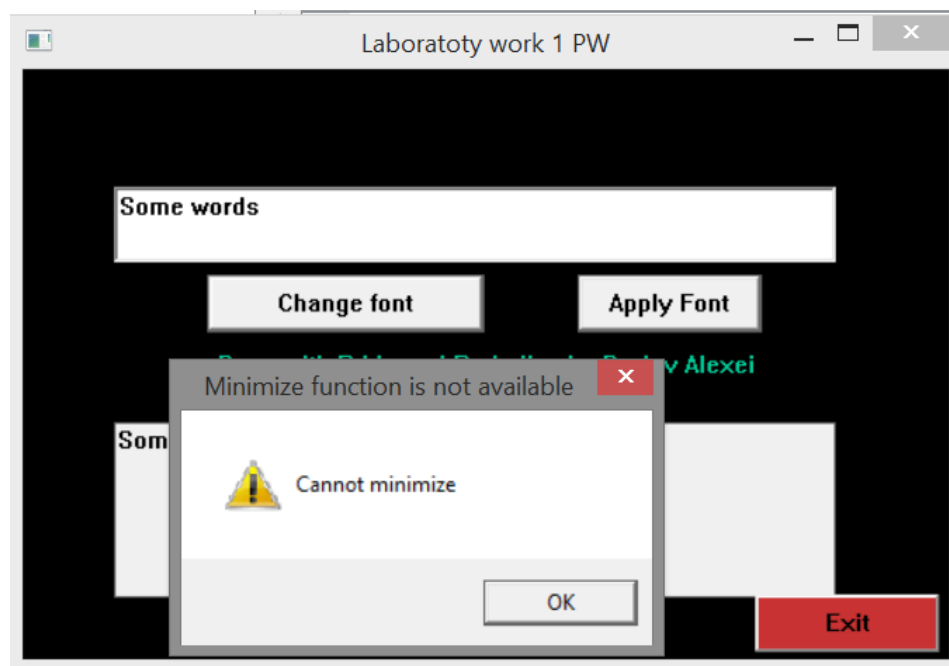


Figure 3.3

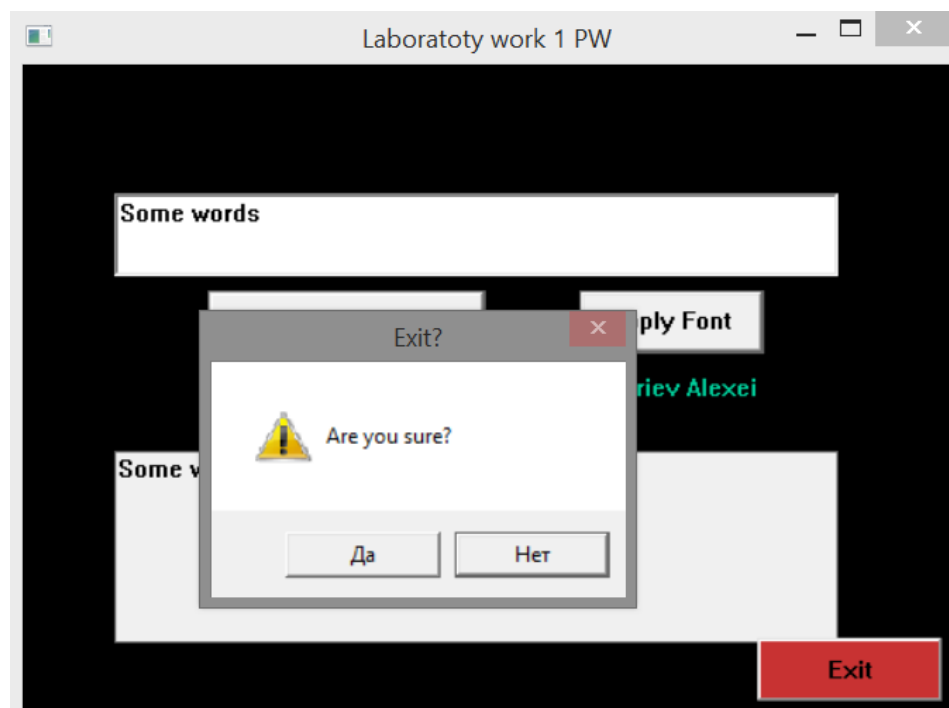


Figure 3.4

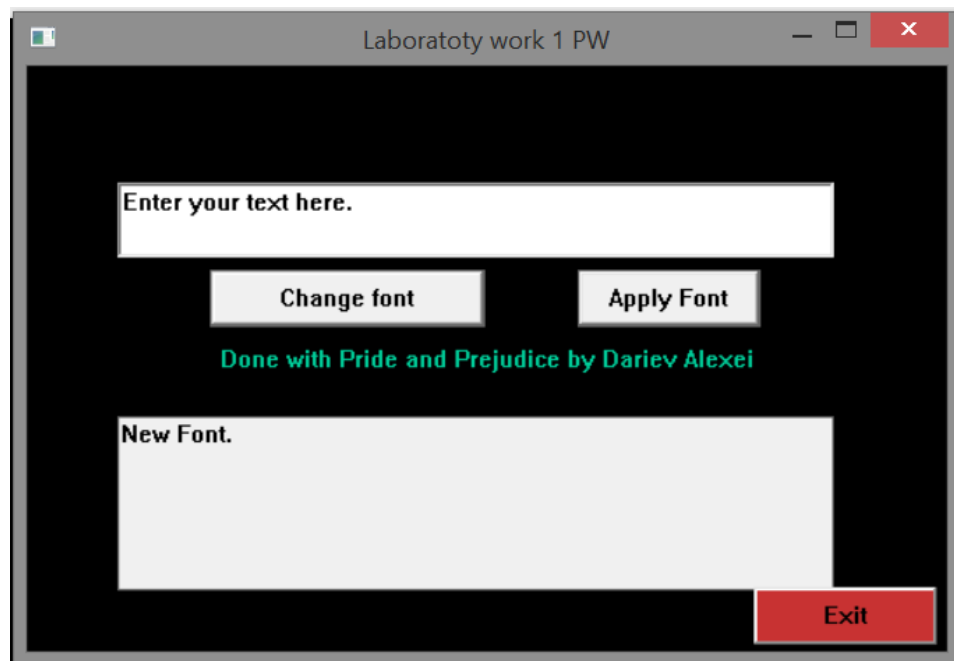


Figure 3.5

Conclusions

In this laboratory work I've studied how to work with basic win32 API functions, like adding a buttons, applying different actions for them, printing a message on the window itself, perform different actions with text box such as changing it's font, size and so on. If we will go further we can add a top-level menu and make different actions with it. Well I think this is a good introduction into app design.

References

- 1 Aldebran Robotics, *official page*, www.aldebaran.com/en
- 2 Timo Ojala, *Multiresolution gray-scale and rotation invariant texture classification with local binary patterns*, 2002
- 3 Biometric, www.biometricupdate.com/201501/history-of-biometrics