

FACULTY OF COMPUTERS, INFORMATICS AND MICROELECTRONICS
TECHNICAL UNIVERSITY OF MOLDOVA
EVEN-DRIVING PROGRAMMING
LABORATORY WORK #1

WINDOW. WINDOW HANDLING. BASIC WINDOWS FORM ELEMENTS

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1 PURPOSE OF THE LABORATORY WORK

In this laboratory work we will get knowledge about basics of even-driving programming, understanding how work with messages and adding controls to modify the window, text or font.

2 LABORATORY WORK REQUIREMENTS

Mandatory Objectives

- Choose a Programming Style Guideline that you'll follow
- Create a Windows application
- Add 2 buttons to window: one with default styles, one with custom styles (size, background, text color, font family, font size)
- Add 2 text elements to window: one with default styles, one with custom styles (size, background, text color, font family, font size) [one of them should be something funny]
- On windows resize, one of the texts should "reflow" and be in window's center (vertically and horizontally)

Objectives with Points

- Add 2 text inputs to window: one with default styles, one with custom styles (size, background, text color, font family, font size) (1pt)
- Make elements to fit window on resize (1 pt) (hint: you can limit minimal window width and height)
- Make elements to interact or change other elements (1 pt each different interactions) (0-2 pt) (ex. on button click, change text element color or position)
- Change behavior of different window actions (at least 3). For ex.: on clicking close button, move window to a random location on display's working space (1 pt)
- Write your own PSG (you can take existent one and modify it) and argue why it is better (for you) (1 pt)

3 LABORATORY WORK IMPLEMENTATION

3.1 Tasks and Points

All set requirements have been implemented in the windows window.

3.2 Laboratory Work Analysis

After reading the some Sections about Windows Programming by Charles Pretzold , I tried to implement some features to my window.

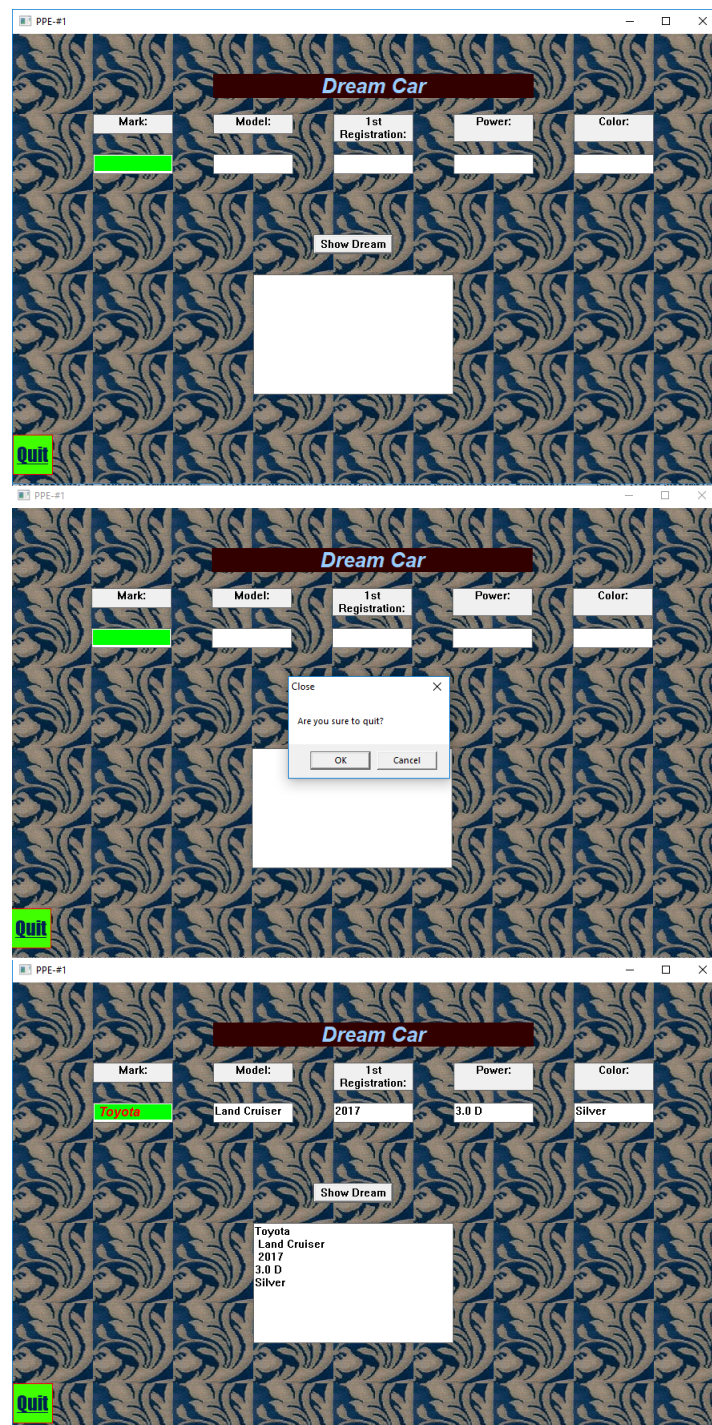
First of all I tried to just open a Win32 API with some simple text that should be displayed in the middle of the screen. After that I started to implement my tasks in Win32 API.

So, my Win32 API has the folloeing features:

- Buttons, default style and modified.
- Text Elements,default style and modified(font size, text color).
- Reflow text, buttons.
- Text inputs, default and modified.
- Set the minmal size of the Win32 API.
- On closing the window get another message.
- Using the own PSG.

I used the my PSG, but I realize that my code should be clear not only for me , but for others. Why I used my? Each of us have for example his manner of declaration of function and for each is hard to learn another method of writing a code.

3.3 Screens



CONCLUSION

In this laboratory work I obtained skills to operate with windows library and doing a Windows Application and to do some features in this.

I learned a lot of functions for editing the content in my WinApi , I understood how useful is cxClient and cyClient to positionate a element in WinApi(I stayed with them a lot of time).Also, WM cases that is very easy to operate with them.

I had some problems to load a music on my Application, I tried to solve but I couldn't.

This laboratory was very interesting and help me to learn the basics of Even-Driving Programming and gained skills to perform my own WinApi.