Faculty of Computers, Informatics and Microelectronics

Technical University of Moldova

WINDOWS PROGRAMMING (ANDROID)

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

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).

d) Add 2 buttons to window: one with default styles, one with custom styles (size, background, text color, font family/size).

e) Add 2 text elements to window: one with default styles, one with custom styles (size, background, text color, font family/size).

f) Make elements to interact or change other elements (2 different interactions) (ex. on button click, change text element color or position).
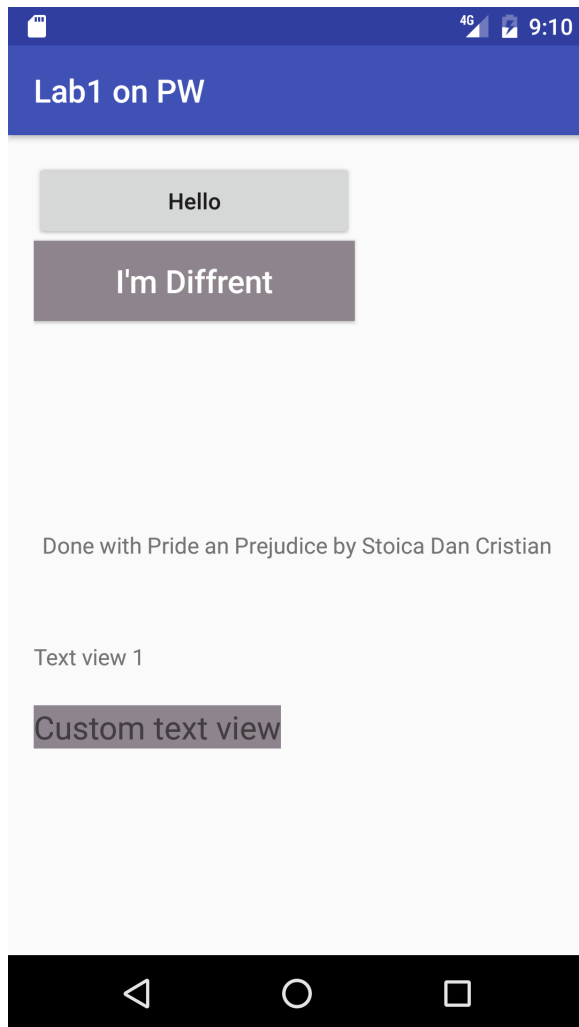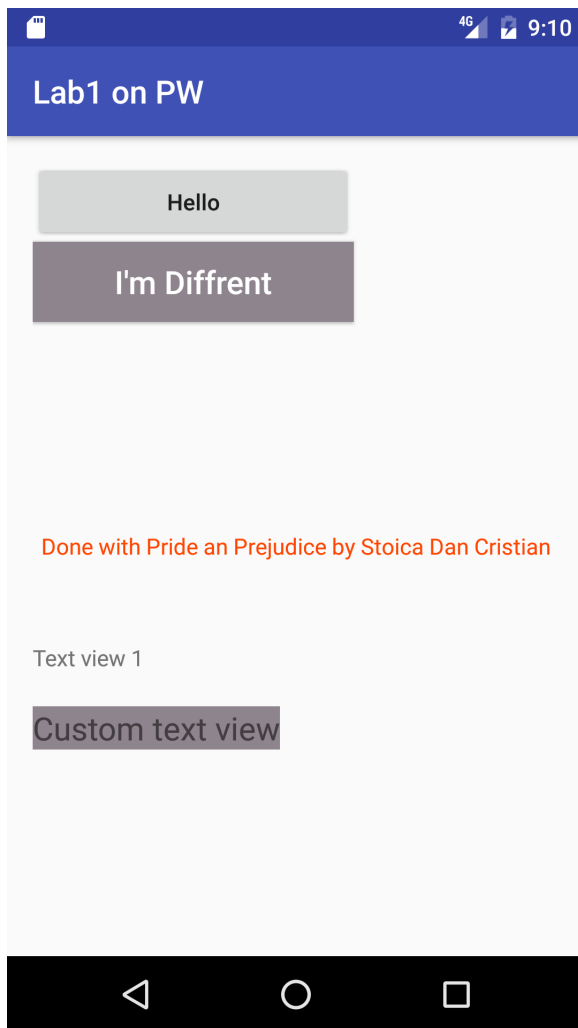
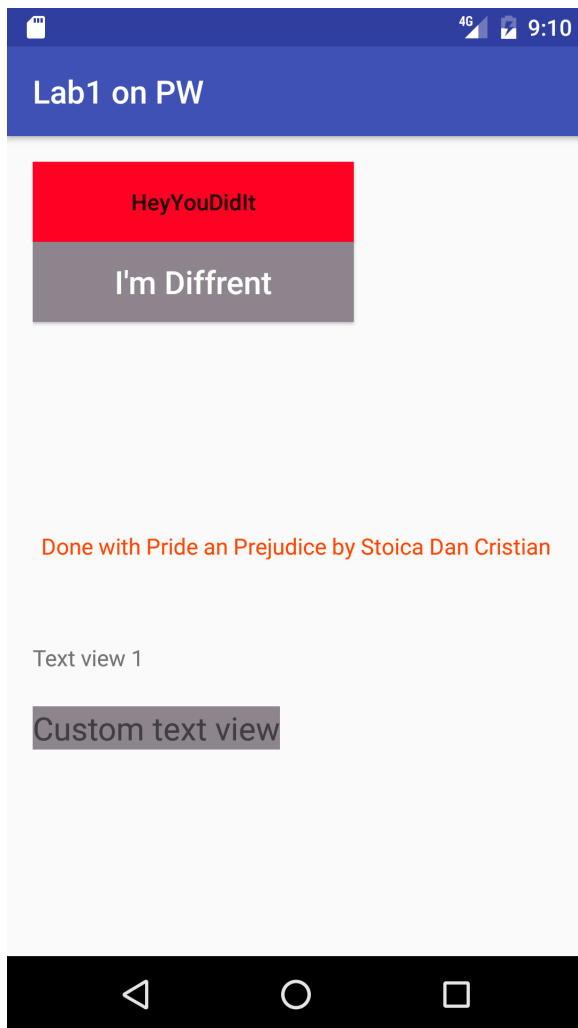### 3.2 Laboratory work analysis

Link to my GitHub repository :
`https://github.com/stoicadan1995/WP/tree/master/LAB_1/Lab1onPW`

I have developed an application which has the following features: it has a text centered in the middle, which re-centers on resize, it has two text views one with default style and one with custom style, it has two buttons one with default style and one with custom style both with actions, 1 changes it's color and text and the second 1 change the text color.

3.3 Prove your work with screens

Lab1 on PW

Hello

I'm Diffrent

Done with Pride an Prejudice by Stoica Dan Cristian

Text view 1

Custom text view

HeyYouDidIt

I'm Diffrent

Done with Pride an Prejudice by Stoica Dan Cristian

Text view 1

Custom text view

Conclusions

In this laboratory work we've studied the basic and window's possibilities of Android window and gained the basic skills of operating with some starting android developer features such as adding text with different styles and also adding some button which on-click have different actions.

References

1 Android Developers Guide, *official page*, https://developer.android.com/guide/index.html

2 StackOverflow, *official page* , http://stackoverflow.com/

3 LaTeX Tutorial, *youtube page*, https://www.youtube.com/watch?v=SoDv0qhyysQ