GUI

Project II
termin do 29.V.2019

15 may 2019

Prepare a window application based on framework *Swing*, implementing an advanced graphic calculator. Application interface should contain the following modules:

- regular numeric calculator tab - numerical version, allowing to perform all the basic arithmetic operations (addition, subtraction, multiplication, division, square root, percent calculation, etc. In the data input section, you can select and execute operations by clicking the appropriate interface buttons.
- graphic calculations tab - allowing to enter the polynomial equations (multiple instances of them) and presenting graphic charts of these polynomials.

"Memory section" should allow user to:

- enter polynomial functions using a dedicated dialog box, verifying the correctness of the entered expression
- store all the introduced polynomial functions in the collection
- display all stored polynomials from the collection, using a dedicated graphical component. Its interface should contain:
  - checkbox - showing if the polynomial is displayed,
  - text transcript of a polynomial given i.e.: x∧3+2x∧2+x,
  - color picker area - to pick up a color to draw a given polynomial;
- button to add another polynomial;
- button to remove indicated polynomial.

This calculator should allow performing mathematical operations in various numerical systems (binary, octal, decimal and hexadecimal).

Your work in the form of the working application should be presented by 29.V.2019 during the classes.

No later than 15 minutes before the beginning of classes, a text file with the name of the group number, student number and the extension `.java` should be placed in the „students" folder. This file should contain all the classes used in the project.