

Advanced Software Engineering Lab (CS 480):

Lab 3: Design and build a software which can do basic arithmetic operations (“+”, “-”, “*”, “/”, “^”) with real numbers involving parenthesis (“()”). The calculator software should evaluate properly the mathematic formula based on the precedence of the operators and the parenthesis.

Instructions

- Use any type of programming language to build the calculator software and the corresponding interface. For details check the basic functionality of a calculator.
- All the software changes should be recorded in github or any other type of version control system.
- Create a gantt chart with all the tasks you accomplished during the software building including testing.

Submission guidelines

- An executable file named: Calculator_LastName_Firstname.exe.
- A gantt chart with all the different stages in the software development lifecycle. In order to avoid issues with different software, please take a screenshot of the gantt chart and embed it in a pdf document. Name convention: Gantt_Chart_Lastname_Firstname.pdf.
- A short document describing what type of version control system has been considered, what are the advantages and disadvantages of the versioning system in use, and a proof about the commits. Name convention: Version_Control_Lastname_Firstname.pdf.
- **If the software is not running on the school machines (see lab) the software should be demoed in person BEFORE the deadline using the student’s equipment!**

Grading criteria

1. The calculator should be able to correctly evaluate the mathematic formula. (5p.)
2. The software should check for correct inputs. I.e. “((2+3/)(4/- = “ (3p.)
3. The gantt chart should contain all the phases considered by the developer involving the different software lifecycle stages. (1p.)
4. Usage of a version control system and proper description. (1p.)