SRS Final Group

Functional Requirements

1. The system shall open a file from specified input.
2. The system shall display an error if the input file fails to open or doesn’t exist.
3. The system shall have labelling of controls.
4. The system shall read .txt files.
5. The system shall iterate through the files commands/inputs and process each value based on the operator, the first two digits, and the operand, the second two digits (n).
6. The system shall have a GUI with a run button.
7. The system shall have a GUI with a quit button.
8. The system shall add the accumulator value with the nth value of the list then store it in the accumulator if the system finds an add operator.
9. The system shall subtract the accumulator with the nth value of the list then store the result in the accumulator if the system finds a subtract operator.
10. The system shall truncate the accumulator down to 4 digits if the result of the addition or subtraction is more than 4 digits.
11. The system shall multiply the accumulator with the nth value of the list then store the result in the accumulator if the system finds a multiply operator.
12. The system shall divide the accumulator with the nth value of the list if the system finds a divide operator.
13. The system shall truncate the accumulator down to 4 digits if the result of the multiplication or division is more than 4 digits.
14. The system shall jump to the nth element in the list if the system finds a jump operator.
15. The system shall print all elements of the list, then the value of the accumulator once the program finds a halt command or reaches the end of the list.

Non-Functional Requirements

1. The system can support up to 100 elements in the list (memory.)
2. The system shall have README.txt to explain how to use the system.
3. The system shall have documented the classes within the system.