# Personal SRS Doc – CS 2450-X02 Milestone 3

## Functional Requirements

1. Application must accept a text file as user input.
2. Application will only accept text files that reside in the same directory as the project.
3. Application must be able to parse the text file, one line at a time.
4. Application must use a dictionary with key/value pairs to store instructions.
5. Application has an Accumulator register to hold special values.
6. Application can read stored values from files as executable codes.
7. Application can perform arithmetic (addition, subtraction, multiplication, division) on values stored in memory and the Accumulator register.
8. Application can execute every operation in memory from beginning to end without interruptions, except for operations that require user input.
9. Application can execute every operation in memory one instruction at a time, waiting for user interaction before proceeding.
10. Application will be able to display all its memory to the user.
11. Application will log all executed commands.
12. Application will be able to save its current memory by opening a text file and writing to it.
13. Application can hold and interpret both positive and negative numbers.
14. Application accepts user input for operations that prompt it.
15. Application notifies user of errors/invalid operations.

## Non-Functional Requirements

1. Application must be executable in any operating environment that Python is available.
2. Kivy must be used for GUI design.
3. Application will be able to accept keyboard and mouse inputs.