

## **Functional Requirements**

1. The program should have a tool to select a file for the UVSim.
2. The program should have a start button, to start the simulation.
3. The file's content, should be loaded into memory.
4. The program should have an exit button, to close the entire UVSim app.
5. The program should have a stop button to stop running the file.
6. The program should display the memory.
7. The memory should display the addresses and the words for each address side by side.
8. The program must have a defined and visible area to add input when prompted.
9. The program should have a place where it can display the current value of the accumulator.
10. The program should have memory that can store up to 100-words.
11. The program must read line by line the words in memory unless a branch operation performs a jump.
12. The program must perform the specified operation, If the word contains an operation defined in the BasicML vocabulary.
13. A halt instruction must stop the program
14. A branch instruction must perform a jump to the address specified.
15. The program should have a defined and visible area to display the word when a write operation is executed.

## **Non-Functional Requirements**

1. The program must run on the following operating systems: Microsoft, Linux, MacOS.
2. The programs must not run files that contain data not related to BasicML vocabulary.
3. The program should not take more than 20 min. to be installed.