The program is to be used to teach students about machine language. It's a simulator that we are building for them.

Number	Functional Requirement	Description
1	Functional	The user should have access to a list of commands available for the program
2	Functional	User Friendly GUI, it should be intuitive for the user.
3	Non-Functional	There could be a tutorial given for those that have not used a simulator before
4	Non-Functional	The program could keep a log of attempts and projects run through the simulator for grading in the future.
5	Functional	Give a user the ability to get a viewable form that shows their success with the simulator.
6	Non-Functional	Improve the code in the background so that other languages besides machine language could potentially be worked with as well.
7	Functional	Exporting information into other document types for sharing of data and information could be implemented.
8	Functional	Validation of the input from the user. For example if a mathematical equation isn't possible, such as dividing by 0, then a message can be issued to the user.
9	Non-Functional	For programs that could be more resource heavy, a counter or progress bar could be implemented so a user knows when the program is working through the problem.
10	Non-Functional	Each user will have their own registry of programs and attempts through the simulator.
12	Functional	Each user will have access to their own list of programs and each attempt that they make through the tutorial or through assignments
13	Functional	Different "spike" assignments to help teach new ways to use the simulator and to help teach different languages.

14	Non-Functional	Possible connection to schooling services like canvas for direct connection to grading for teachers
15	Functional	Test the output of the code against the answer to the problem.