

The purpose of this document is to outline the scope of the Quadratic Equation Solver program. The document will include the stories that were discussed in class as well as time estimates and risk estimates for each story. The purpose of the program is to output the real roots of a quadratic equation ($ax^2 + bx + c = 0$). Specifically, the user will input the a, b, and c terms into the program and the program will verify that the terms entered are valid. The program will then output the real roots at single precision accuracy. Below are the stories in further detail as well as the requirements:

Stories	Time	Risk	Actual Time	% Complete
QS will input a, b, c from the user and return the real roots x1, x2 where they exist	4 hr	3	5 hours	100
Program checks for valid input and inform the user of bad input	2 hr	2	1 hours	100
Input should be legal C floats which is IEEE floating point single precision	2 hr	2	2 hours	100
No input of negative infinity, infinity, or NaN (not a number) allowed	1 hr	2	2 hours	100
Return should be to full SP (single precision) accuracy	2 hr	2	2 hours	100
Total	11 hr			

Requirements:

- Runs on Linux
- Compiled with gcc
- Must use command line arguments
- No NDA

- Open Source