

**CS 4900****Project:** Quad Solver**Stories****Date:** October 7, 2019**Team**

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**Client:** JKK Consulting**Contact:** John Kapenga**Introduction:**

JKK Consulting is an engineering firm that needs a quadratic equation solver developed. Specifically this will solve the equation  $ax^2+bx+c = 0$ . They would like this developed for a linux operating system. The requirements specify that their solver be as accurate as possible for floating point input up to four significant figures. The solver will take in three floating point values as input and return two real roots as the solution for the quadratic equation or return an error.

**Story #4:** An IT engineer will compile the program using GCC using common flags such as -wall, -std, -c++ etc.

**Story #5:** Unit tests will be conducted on the program to ensure functionality. This consists of configuring the program methodically with various calls and asserts.

Story	Time to Complete	Risk (low - 1 high - 10)	Actual Time	% Complete
S4	2 Weeks	4	TBD	0
S5	8 Weeks	5	TBD	0

## Requirements:

### *Hardware Requirements*

- **OS:** Linux Ubuntu
- **Compiler:** GCC 18.04

### *Technical Requirements*

- Will be run on a single line with inputs separated white spaces
- Coding Standards - TBD
- GCC Example: `qs.o: getit.o`  
`${CC} -o qs qs.o getit.o`
- Line by Line Setup for Unit Testing
- Flags and asserts for Unit Testing