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10/17/16

CS 4900

This program is an interactive command line interface that allows the user to input numbers (a, b, c) from the equation ax2+bx+c=0 in order to find the roots, if they exist, by performing the quadratic equation. It will be written in C, compiled with GCC and run on a Linux based OS.

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| --- | --- | --- | --- |
| Stories | Time Est. | Risk | % Complete |
| Print out a message, via the command line, to the user requesting a, b, and c in the form of an integer, a float/double, or e-notation. Looping until correct input is given. | 10 min | Low | 66% |
| Send those inputted variables to a method/function that performs the quadratic equation. | 10 min | Low | 100% |
| Check for divide by 0 and print out error message if it occurs. | 10 min | Low | 0% |
| Check for non-real roots (NAN, INF, -INF) | 3 day | High | 75% |
| Print out a warning stating that roots are non-real | 10 min | Low | 50% |
| Results should have a precision of IEEE floating point single precision 32 bit. | 3 day | High | 0 % |
| Print out a warning message if Results do not comply with the statement above. | 10 min | Low | 100% |
| Accuracy should also be as high as possible | 3 day | High | 50% |
| Print out a warning message if Results do not comply with the statement above. | 10 min | Low | 100% |
| Print out all real roots to the user using a float/double variable | 10 min | Low | 100% |
| Total Time Est. | 9 days 70 min |  |  |