**USE CASE DIAGRAM DESCRIPTION**

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| Use Case Title: Calculator |
| Primary Actor: User of the calculator |
| Level: Kite (summary) |
| Stakeholders: User of the calculators, Programmers |
| Precondition: User opens up the calculator program |
| Minimal Guarantee: Rollback of any failed calculation |
| Success Guarantee: The solution to the calculation |
| Trigger: Starting to type in an equation |
| Main Success Scenario:   1. User types in an equation. 2. User clicks the equal button. 3. Calculator calculates the equation. 4. Calculator gives result to the equation. |
| Extension:  1a. Error message appears because invalid equation was inputted.  1a1. User clicks the clear button and starts over.  1a2. User closes program.  2a. Too big of a number error appears.  2a1. User clicks the clear button and starts over.  2a2. User closes program.  2b. Too small of a number error appears.  2b1. User clicks the clear button and starts over.  2b2. User closes program.  3a. Calculation is interrupted.  3a1. Calculation is rolled back to the beginning. User starts over  3a2. Calculation is rolled back to the beginning. User closes  program. |