**ANALYSIS (USER-LEVEL) USE CASE**

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| **USE CASE NAME:** | Calculation | |
| **ACTOR(S):** | Student | |
| **DESCRIPTION:** | Student checks work with calculator | |
| **REFERENCES** | Student learning | |
| **TYPICAL COURSE OF EVENTS:** | Actor Action | System Response |
|  | **Step 1**  Student enters their equation |  |
|  | **Step 2**  Student selects the operation |  |
|  | **Step 3**  Student enters expected result |  |
|  | **Step 4**  Student uses “check” button | **Step 5**  Receive input from button |
|  |  | **Step 6**  Verify all fields for actor input are complete |
|  |  | **Step 7**  Read user input values |
|  |  | **Step 8**  Read selected operation method |
|  |  | **Step 9**  Solve equation |
|  |  | **Step 10**  If solution is the same as actor’s expected result  Output “You are correct” |
|  | **Step N**: This use case concludes when system prints output |  |
| **ALTERNATE COURSES:** | **Step 6**  Inform actor of missing fields VIA output | |
|  | **Step 10**  Solution is not the same as actor’s expected result. Output “You are wrong" | |
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| **PRE-CONDITION:** | Student has answered Equation | |
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| **POST-CONDITION:** | N/A | |
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| **ASSUMPTIONS:** | Student has attempted the equation at least once | |
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