## Requirements

The calculator has the following keys: 0..9, ., +, -, \*, /, ±, =, C, CE and 1-operand keys: 1/x, x ,

sqrt. In any situation the calculator has to produce a correct result defined by the well-known arithmetic rules. If the calculations is impossible the calculator has to display information helping the user to resolve the erroneous situation, like:

• On encountering a division by 0 the display should read "Cannot divide by 0" and typing the key “C” should reset the calculator.

• On calculating the square root value of a negative operand the display should read "Wrong operand".

• On erroneous operand or operation keys the display should read “Reset (C) to continue” or “Clear (CE) to continue” as appropriate.

Of course, any situation can be cleared using the main reset key “C”.

## High level requirements:

* + Performance
  + Scalability
  + Reliability
  + Availability
  + Serviceability
  + Maintainability

## Low level requirements:

* + Authentication
  + Authorization levels