

Calculator Assignment

How To Document

Name: Abdelmoneim Hany Abdelmoneim
Mohamed

ID: 19017359

1. How to run:

Firstly the src folder from angular and the src folder from springboot are included in the zip file, angular being in port 4200 and springboot in port 8080.

The Calculator has an interactive UI with buttons that input numbers on the screen but you can't enter numbers from your keyboard.

There is a blue border that appears on hover so that you can get feedback on whether you pressed a button or not.

2. Supported Operations:

Two Operand Operations: There is an add operation (+), a subtract operation (-), a multiply operation (\times), a divide operation (\div), and a modulus – remainder operation(%).

One Operand Operations: There is a negate operation (\pm), an invert operation ($\frac{1}{x}$), a square operation (x^2), and a square root operation (\sqrt{x}).

Other Operations: There is a delete operation (DEL), a clear operation (CE and C)

3. How to use (Rules and Assumptions):

The calculator works on two or one operand only, which means if there is a complicated expression you should separate it and enter two operands at a time in the calculator.

Two operand operations only work on two operands and you cannot enter two operand operations directly after each other.

Pressing = when there is no input does nothing while pressing equal with a number and no operation will show the number only and does nothing.

You cannot enter more than one decimal point in each operand.

One operand operation only works on One operands only, if there is a operation or a second operand in the expression then the user is presented with an error message (E) and the expression is reset to an empty string.

Dividing by zero is prohibited and if the user does that he's presented with an error message (E) and the expression is reset to an empty string.

Negate button works on the first operand only and changes it's sign.

Delete button deletes the last character in the expression string only.

CE and C button do the same thing which is reset everything to an empty string.