

Documentation

TEAM MEMBERS:

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Design

The calculator:

**2Arrays of button (operations) :**

Button[][] ***operation***={{ **new** Button("%"),**new** Button( "+") },

{ **new** Button("√"),**new** Button( "-")},

{**new** Button("3√"), **new** Button("\*") },

{ **new** Button("="),**new** Button( "/") }}

Button[] ***Operation***={**new** Button("^2"),**new** Button("^"),

**new** Button("mod") , **new** Button("n!"), **new** Button("log"),**new** Button("logz")}

**Array of button (numbers) :**

Button[][] ***numbers***={{ **new** Button("1"), **new** Button("2"),**new** Button ("3") },

{ **new** Button("4"), **new** Button("5"), **new** Button("6")},

{ **new** Button("7"), **new** Button("8"), **new** Button("9") },

{ **new** Button("0"), **new** Button("."), **new** Button("←") }}

**Array of button (functions) :**

Button[][] ***FUN***={{ **new** Button( "Inv") ,**new** Button( "C")},

{ **new** Button("sinh"), **new** Button("sin") },

{ **new** Button("cosh") , **new** Button("cos") },

{ **new** Button("tanh"),**new** Button("tan")}}

**Text Field**

**Border Pane**

**Grid Panes inside the Border Pane**

Action

setOnAction

function named event call putOntAction function which do any action input from calculator by user

when we press on the buttons moved to implementation phase

Implementation

1- **outtext**

This function takes input from user as string

apply operation on the inputs such as deleting the last character written and clear all thing written .

call another function

return result as string

2- **performequation**

This function takes input from user as string

apply operation on the inputs such as performing the addition , subtracting , multiplication , division , sin , cos , tan , sin h , cos h , tan h , square root , cube root , a number with any power , inverse , factorial , log2 , log , modulus

it enable an exception in the case of division by zero.

return result as string

test

