

Model

Package in package "

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Model
Version 1 Phase 1.0 Proposed
123 created on 10/14/2022. Last modified 10/14/2022

Basic Class Diagram with Attributes

Package in package 'Model'

Basic Class Diagram with Attributes
Version 1.0 Phase 1.0 Proposed
123 created on 10/14/2022. Last modified 1/23/2019

Basic Class Diagram with Attributes diagram

Class diagram in package 'Basic Class Diagram with Attributes'

Basic Class Diagram with Attributes
Version 1.0
123 created on 10/14/2022. Last modified 10/14/2022

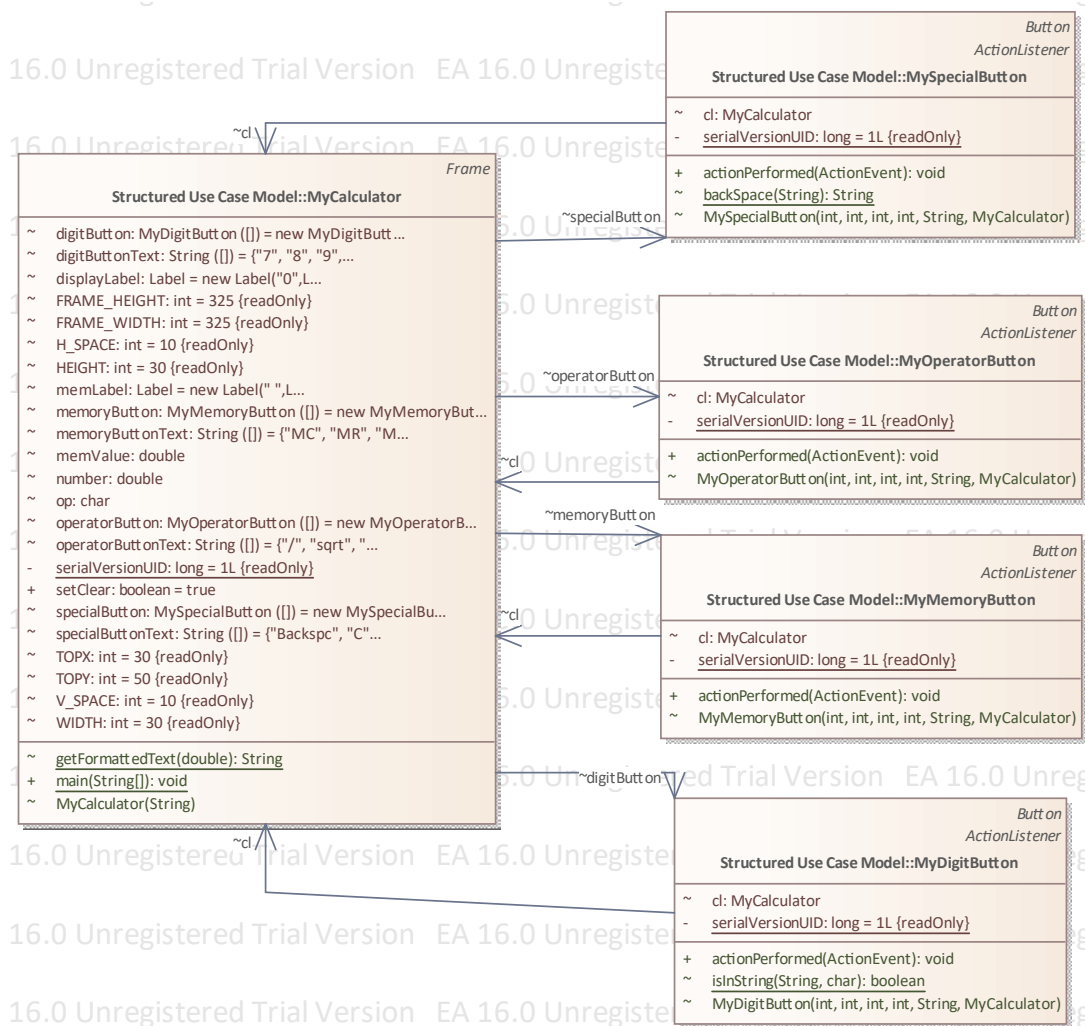

















Figure 1: Basic Class Diagram with Attributes







MyCalculator







Class in package 'Structured Use Case Model'

MyCalculator
Version 1.0 Phase 1.0 Proposed
123 created on 10/13/2022. Last modified 10/13/2022
Extends Frame




ATTRIBUTES	
<p>◆ digitButton : MyDigitButton Package = new MyDigitButton[digitButtonText.length]</p> <p>[Is static False. Containment is Not Specified.]</p>	
<p>◆ digitButtonText : String Package = {"7", "8", "9", "4", "5", "6", "1", "2", "3", "0", "+/-", "." }</p> <p>all the buttons to be used in the calculator is defined</p> <p>[Is static False. Containment is Not Specified.]</p>	

ATTRIBUTES	
 displayLabel : Label Package = new Label("0",Label.RIGHT)	[Is static False. Containment is Not Specified.]
 FRAME_HEIGHT : int Package Const = 325	[Is static False. Containment is Not Specified.]
 FRAME_WIDTH : int Package Const = 325	[Is static False. Containment is Not Specified.]
 H_SPACE : int Package Const = 10	[Is static False. Containment is Not Specified.]
 HEIGHT : int Package Const = 30	[Is static False. Containment is Not Specified.]
 memLabel : Label Package = new Label(" ",Label.RIGHT)	[Is static False. Containment is Not Specified.]
 memoryButton : MyMemoryButton Package = new MyMemoryButton[memoryButtonText.length]	[Is static False. Containment is Not Specified.]
 memoryButtonText : String Package = {"MC", "MR", "MS", "M+" }	[Is static False. Containment is Not Specified.]
 memValue : double Package	[Is static False. Containment is Not Specified.]
 number : double Package	[Is static False. Containment is Not Specified.]
 op : char Package	[Is static False. Containment is Not Specified.]
 operatorButton : MyOperatorButton Package = new MyOperatorButton[operatorButtonText.length]	[Is static False. Containment is Not Specified.]
 operatorButtonText : String Package = {"/", "sqrt", "*", "%", "-", "1/X", "+", "=" }	[Is static False. Containment is Not Specified.]
 serialVersionUID : long Private Const = 1L	[Is static True. Containment is Not Specified.]
 setClear : boolean Public = true	

ATTRIBUTES	
	[Is static False. Containment is Not Specified.]
 specialButton : MySpecialButton Package = new MySpecialButton[specialButtonText.length]	[Is static False. Containment is Not Specified.]
 specialButtonText : String Package = {"Backspc", "C", "CE" }	[Is static False. Containment is Not Specified.]
 TOPX : int Package Const = 30	[Is static False. Containment is Not Specified.]
 TOPY : int Package Const = 50	[Is static False. Containment is Not Specified.]
 V_SPACE : int Package Const = 10	[Is static False. Containment is Not Specified.]
 WIDTH : int Package Const = 30	[Is static False. Containment is Not Specified.]

ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package operatorButton (Class) MyOperatorButton
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package digitButton (Class) MyDigitButton
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package specialButton (Class) MySpecialButton
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package memoryButton (Class) MyMemoryButton
 Association (direction: Source -> Destination)	
Source: Public (Class) MyDigitButton	Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination)	

ASSOCIATIONS	
Source: Public (Class) MyMemoryButton	Target: Package cl (Class) MyCalculator
✎ Association (direction: Source -> Destination)	
Source: Public (Class) MySpecialButton	Target: Package cl (Class) MyCalculator
✎ Association (direction: Source -> Destination)	
Source: Public (Class) MyOperatorButton	Target: Package cl (Class) MyCalculator



OPERATIONS	
 getFormattedText (temp : double) : String Package [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 main (args : String[]) : void Public [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 MyCalculator (frameText : String) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	

MyDigitButton




Class in package 'Structured Use Case Model'

in this class

MyDigitButton
 Version 1.0 Phase 1.0 Proposed
 123 created on 10/13/2022. Last modified 10/13/2022
 Extends Button, ActionListener

ATTRIBUTES	
 cl : MyCalculator Package [Is static False. Containment is Not Specified.]	
 serialVersionUID : long Private Const = 1L [Is static True. Containment is Not Specified.]	






ASSOCIATIONS	
✎ Association (direction: Source -> Destination)	
Source: Public (Class) MyDigitButton	Target: Package cl (Class) MyCalculator
✎ Association (direction: Source -> Destination)	


ASSOCIATIONS	
Source: Public (Class) MyCalculator	Target: Package digitButton (Class) MyDigitButton
OPERATIONS	
 actionPerformed (ev : ActionEvent) : void Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 isInString (s : String , ch : char) : boolean Package [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 MyDigitButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	

MyMemoryButton

Class in package 'Structured Use Case Model'

MyMemoryButton
 Version 1.0 Phase 1.0 Proposed
 123 created on 10/13/2022. Last modified 10/13/2022
 Extends Button, ActionListener

ATTRIBUTES	
 cl : MyCalculator Package	[Is static False. Containment is Not Specified.]
 serialVersionUID : long Private Const = 1L	[Is static True. Containment is Not Specified.]
ASSOCIATIONS	
 Association (direction: Source -> Destination) Source: Public (Class) MyMemoryButton Target: Package cl (Class) MyCalculator	
 Association (direction: Source -> Destination) Source: Public (Class) MyCalculator Target: Package memoryButton (Class) MyMemoryButton	
OPERATIONS	
 actionPerformed (ev : ActionEvent) : void Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	



OPERATIONS
 MyMemoryButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]



MyOperatorButton



Class in package 'Structured Use Case Model'

in this class all the arithmetic operations like addition,subtraction,division,will be performed

MyOperatorButton
Version 1.0 Phase 1.0 Proposed
123 created on 10/13/2022. Last modified 10/13/2022
Extends Button, ActionListener

ATTRIBUTES
 cl : MyCalculator Package [Is static False. Containment is Not Specified.]
 serialVersionUID : long Private Const = 1L [Is static True. Containment is Not Specified.]

ASSOCIATIONS
 Association (direction: Source -> Destination) Source: Public (Class) MyOperatorButton Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination) Source: Public (Class) MyCalculator Target: Package operatorButton (Class) MyOperatorButton

OPERATIONS
 actionPerformed (ev : ActionEvent) : void Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 MyOperatorButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

MySpecialButton

Class in package 'Structured Use Case Model'

all the special button like backspace is added in the calculator



MySpecialButton

Version 1.0 Phase 1.0 Proposed
 123 created on 10/13/2022. Last modified 10/13/2022
 Extends Button, ActionListener




ATTRIBUTES

 cl : MyCalculator Package	[Is static False. Containment is Not Specified.]
 serialVersionUID : long Private Const = 1L	[Is static True. Containment is Not Specified.]

ASSOCIATIONS

 Association (direction: Source -> Destination)	
Source: Public (Class) MySpecialButton	Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package specialButton (Class) MySpecialButton

OPERATIONS

 actionPerformed (ev : ActionEvent) : void Public	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 backSpace (s : String) : String Package	[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 MySpecialButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package	[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Structured Use Case Model

Package in package 'Model'

Structured Use Case Model
Version 1.0 Phase 1.0 Proposed
123 created on 10/13/2022. Last modified 11/14/2017

Structured Use Case Model diagram

Class diagram in package 'Structured Use Case Model'

Structured Use Case Model
Version 1.0
123 created on 10/13/2022. Last modified 10/13/2022

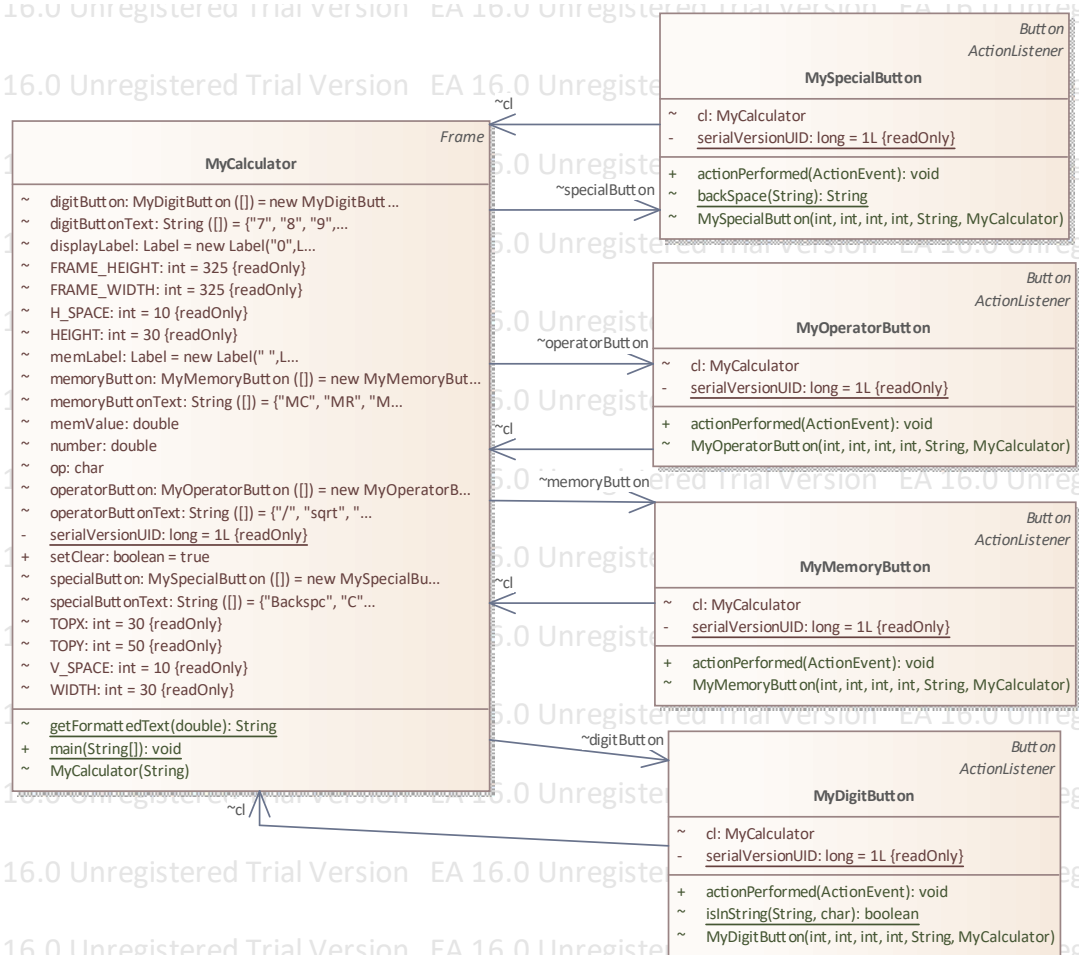








Figure 2: Structured Use Case Model

MyCalculator


Class in package 'Structured Use Case Model'

MyCalculator
Version 1.0 Phase 1.0 Proposed
123 created on 10/13/2022. Last modified 10/13/2022
Extends Frame

ATTRIBUTES	
 digitButton : MyDigitButton Package = new MyDigitButton[digitButtonText.length] <div>[Is static False. Containment is Not Specified.]</div>	
 digitButtonText : String Package = {"7", "8", "9", "4", "5", "6", "1", "2", "3", "0", "+/-", "." } all the buttons to be used in the calculator is defined <div>[Is static False. Containment is Not Specified.]</div>	
 displayLabel : Label Package = new Label("0",Label.RIGHT) <div>[Is static False. Containment is Not Specified.]</div>	
 FRAME_HEIGHT : int Package Const = 325 <div>[Is static False. Containment is Not Specified.]</div>	
 FRAME_WIDTH : int Package Const = 325 <div>[Is static False. Containment is Not Specified.]</div>	
 H_SPACE : int Package Const = 10 <div>[Is static False. Containment is Not Specified.]</div>	
 HEIGHT : int Package Const = 30 <div>[Is static False. Containment is Not Specified.]</div>	
 memLabel : Label Package = new Label(" ",Label.RIGHT) <div>[Is static False. Containment is Not Specified.]</div>	
 memoryButton : MyMemoryButton Package = new MyMemoryButton[memoryButtonText.length] <div>[Is static False. Containment is Not Specified.]</div>	
 memoryButtonText : String Package = {"MC", "MR", "MS", "M+" } <div>[Is static False. Containment is Not Specified.]</div>	
 memValue : double Package <div>[Is static False. Containment is Not Specified.]</div>	
 number : double Package <div>[Is static False. Containment is Not Specified.]</div>	
 op : char Package <div>[Is static False. Containment is Not Specified.]</div>	

ATTRIBUTES	
 operatorButton : MyOperatorButton Package = new MyOperatorButton[operatorButtonText.length]	[Is static False. Containment is Not Specified.]
 operatorButtonText : String Package = { "/", "sqrt", "*", "%", "-", "1/X", "+", "=" }	[Is static False. Containment is Not Specified.]
 serialVersionUID : long Private Const = 1L	[Is static True. Containment is Not Specified.]
 setClear : boolean Public = true	[Is static False. Containment is Not Specified.]
 specialButton : MySpecialButton Package = new MySpecialButton[specialButtonText.length]	[Is static False. Containment is Not Specified.]
 specialButtonText : String Package = { "Backspc", "C", "CE" }	[Is static False. Containment is Not Specified.]
 TOPX : int Package Const = 30	[Is static False. Containment is Not Specified.]
 TOPY : int Package Const = 50	[Is static False. Containment is Not Specified.]
 V_SPACE : int Package Const = 10	[Is static False. Containment is Not Specified.]
 WIDTH : int Package Const = 30	[Is static False. Containment is Not Specified.]

ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package operatorButton (Class) MyOperatorButton
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package digitButton (Class) MyDigitButton
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package specialButton (Class) MySpecialButton


ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package memoryButton (Class) MyMemoryButton
 Association (direction: Source -> Destination)	
Source: Public (Class) MyDigitButton	Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination)	
Source: Public (Class) MyMemoryButton	Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination)	
Source: Public (Class) MySpecialButton	Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination)	
Source: Public (Class) MyOperatorButton	Target: Package cl (Class) MyCalculator
OPERATIONS	
 getFormattedText (temp : double) : String Package [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 main (args : String[]) : void Public [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 MyCalculator (frameText : String) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	




MyDigitButton

Class in package 'Structured Use Case Model'

in this class

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Version 1.0 Phase 1.0 Proposed
123 created on 10/13/2022. Last modified 10/13/2022
Extends Button, ActionListener




ATTRIBUTES	
 cl : MyCalculator Package	[Is static False. Containment is Not Specified.]




ATTRIBUTES	
 serialVersionUID : long Private Const = 1L	
[Is static True. Containment is Not Specified.]	
ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) MyDigitButton	Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package digitButton (Class) MyDigitButton
OPERATIONS	
 actionPerformed (ev : ActionEvent) : void Public	
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 isInString (s : String , ch : char) : boolean Package	
[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 MyDigitButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package	
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MyMemoryButton

Class in package 'Structured Use Case Model'

MyMemoryButton
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 Extends Button, ActionListener

ATTRIBUTES	
 cl : MyCalculator Package	
[Is static False. Containment is Not Specified.]	
 serialVersionUID : long Private Const = 1L	
[Is static True. Containment is Not Specified.]	
ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) MyMemoryButton	Target: Package cl (Class) MyCalculator






ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package memoryButton (Class) MyMemoryButton
OPERATIONS	
 actionPerformed (ev : ActionEvent) : void Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	
 MyMemoryButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	


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in this class all the arithmetic operations like addition,subtraction,division,will be performed

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 cl : MyCalculator Package	[Is static False. Containment is Not Specified.]
 serialVersionUID : long Private Const = 1L	[Is static True. Containment is Not Specified.]
ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Class) MyOperatorButton	Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination)	
Source: Public (Class) MyCalculator	Target: Package operatorButton (Class) MyOperatorButton
OPERATIONS	
 actionPerformed (ev : ActionEvent) : void Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]	



OPERATIONS
 MyOperatorButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]



MySpecialButton




Class in package 'Structured Use Case Model'

all the special button like backspace is added in the calculator

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 serialVersionUID : long Private Const = 1L [Is static True. Containment is Not Specified.]

ASSOCIATIONS
 Association (direction: Source -> Destination) Source: Public (Class) MySpecialButton Target: Package cl (Class) MyCalculator
 Association (direction: Source -> Destination) Source: Public (Class) MyCalculator Target: Package specialButton (Class) MySpecialButton

OPERATIONS
 actionPerformed (ev : ActionEvent) : void Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 backSpace (s : String) : String Package [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
 MySpecialButton (x : int , y : int , width : int , height : int , cap : String , clc : MyCalculator) : Package [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

