

**INTERNATIONAL SCHOOL**

**CAPSTONE PROJECT 1**

**CMU-CS 246 BIS**

**USER INTERFACE DESIGN DOCUMENT**

Version: 2.0

**SIMPLE CALCULATOR SYSTEM – SCS**

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# INTRODUCTION

## PURPOSE

* Document the design of user interface of functions of the Calculator System
* Be the primary document driving the implementation of the user interfaces.
* Introduce interface design for the reader. Including the background, content information display, command buttons.

## SCOPE

* This document helps to better understand the interface of the System, detailed specification components and function of the System.
* With this document, the development team can understand the structure and composition to create a consistent and complete system.
* Overview of the stages and modules of the software and create a complete interface.

## SCOPE

This document is intended for the following audiences:

* Technical reviewers including:
  + Product owner
* Implementers, including:
  + Developers.
  + Testers.

# LIST OF USER INTERFACE

## BUSINESS FUNCTION DIAGRAM:

*Figure 1: Business Function diagram*

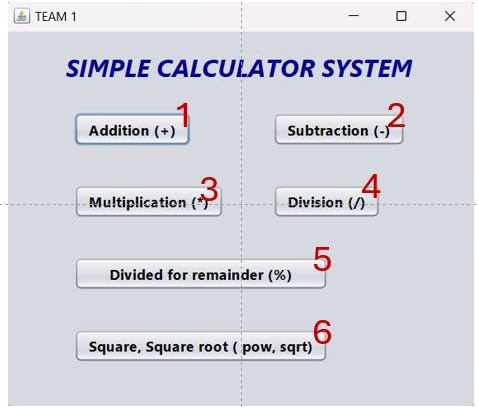
## WEB APP:

|  |  |  |
| --- | --- | --- |
| **User Interface ID** | **UI Name** | **Description** |
| UI-01 | HomePage (Menu) | Displays operator function choices to click for using. |
| UI-02 | Find result of the addition | “+” will be used as the function to allow user to find result of the addition that they have input. |
| UI-03 | Find result of the subtraction | “-” will be used as the function to allow user to find result of the subtraction that they have input. |
| UI-04 | Find result of the multiplication | “\*” will be used as the function to allow user to find result of the multiplication that they have input. |
| UI-05 | Find result of the division | “/” will be used as the function to allow user to find result of the division that they have input. |
| UI-06 | Find result of the division for remainder | “%” will be used as the function to allow user to find remainder of the division that they have input. |
| UI-06 | Find result of the square or square root | “pow, sqrt” will be used as the function to allow user to find result of square or square root that they have input. |

*Table 1: List of Interface*

# DESCRIBE USER INTERFACE

## HOME PAGE

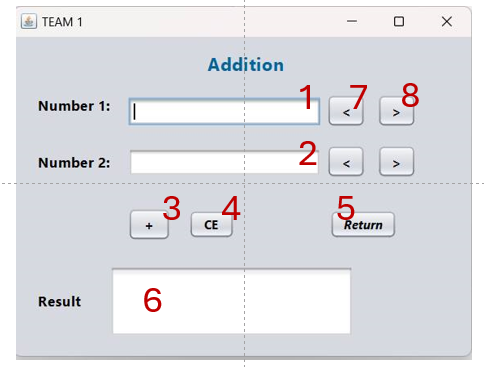
****

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Condition** | **Control Type** | **Target** |
| 1 | Press | Button | Click to go to the addition operator’s interface |
| 2 | Press | Button | Click to go to the substraction operator’s interface |
| 3 | Press | Button | Click to go to the multiplication operator’s interface |
| 4 | Press | Button | Click to go to the division operator’s interface |
| 5 | Press | Button | Click to go to the division for remainder operator’s interface |
| 7 | Press | Button | Click to delete each char right to left |
| 8 | Press | Button | Click to delete each char left to right |

Table 2: Describe User Interface Home page.

## OPERATOR

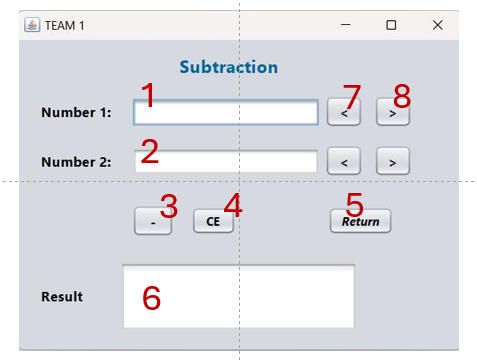
### Addition



|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Condition** | **Control Type** | **Target** |
| 1 | Press | Input text field | Enter first number |
| 2 | Press | Input text field | Enter second number |
| 3 | Press | Button | Click to do the operator |
| 4 | Press | Button | Click to clear all texts in text field |
| 5 | Press | Button | Click to return to Home page |
| 6 | Display | Display text field | Display the result (or notification for invalid input) |
| 7 | Press | Button | Click to delete each char right to left |
| 8 | Press | Button | Click to delete each char left to right |

Table 3: Describe User Interface Addition page

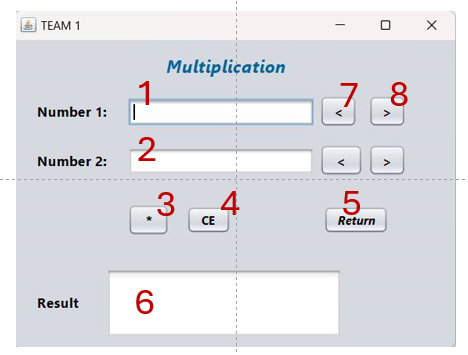
### Subtraction



|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Condition** | **Control Type** | **Target** |
| 1 | Press | Input text field | Enter first number |
| 2 | Press | Input text field | Enter second number |
| 3 | Press | Button | Click to do the operator |
| 4 | Press | Button | Click to clear all texts in text field |
| 5 | Press | Button | Click to return to Home page |
| 6 | Display | Display text field | Display the result (or notification for invalid input) |
| 7 | Press | Button | Click to delete each char right to left |
| 8 | Press | Button | Click to delete each char left to right |

Table 4: Describe User Interface Subtraction page

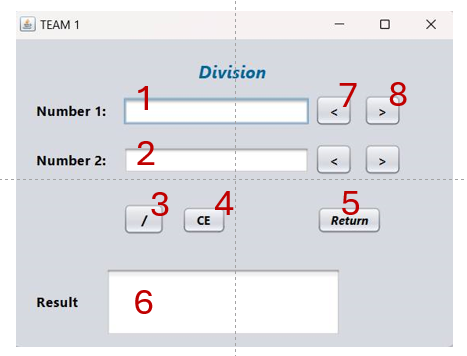
### Multiplication



|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Condition** | **Control Type** | **Target** |
| 1 | Press | Input text field | Enter first number |
| 2 | Press | Input text field | Enter second number |
| 3 | Press | Button | Click to do the operator |
| 4 | Press | Button | Click to clear all texts in text field |
| 5 | Press | Button | Click to return to Home page |
| 6 | Display | Display text field | Display the result (or notification for invalid input) |
| 7 | Press | Button | Click to delete each char right to left |
| 8 | Press | Button | Click to delete each char left to right |

Table 5: Describe User Interface Multiplication page

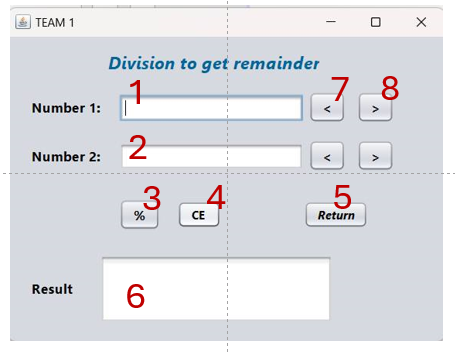
### Division



|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Condition** | **Control Type** | **Target** |
| 1 | Press | Input text field | Enter first number |
| 2 | Press | Input text field | Enter second number |
| 3 | Press | Button | Click to do the operator |
| 4 | Press | Button | Click to clear all texts in text field |
| 5 | Press | Button | Click to return to Home page |
| 6 | Display | Display text field | Display the result (or notification for invalid input) |
| 7 | Press | Button | Click to delete each char right to left |
| 8 | Press | Button | Click to delete each char left to right |

Table 6: Describe User Interface Division page

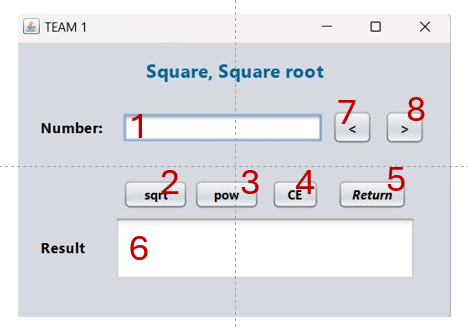
### Division for remainder



|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Condition** | **Control Type** | **Target** |
| 1 | Press | Input text field | Enter first number |
| 2 | Press | Input text field | Enter second number |
| 3 | Press | Button | Click to do the operator |
| 4 | Press | Button | Click to clear all texts in text field |
| 5 | Press | Button | Click to return to Home page |
| 6 | Display | Display text field | Display the result (or notification for invalid input) |
| 7 | Press | Button | Click to delete each char right to left |
| 8 | Press | Button | Click to delete each char left to right |

Table 7: Describe User Interface Division for remainder page

### Division for remainder



|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Condition** | **Control Type** | **Target** |
| 1 | Press | Input text field | Enter a number |
| 2 | Press | Button | Click to do the Square root operator |
| 3 | Press | Button | Click to do the Square operator |
| 4 | Press | Button | Click to clear all texts in text field |
| 5 | Press | Button | Click to return to Home page |
| 6 | Display | Display text field | Display the result (or notification for invalid input) |
| 7 | Press | Button | Click to delete each char right to left |
| 8 | Press | Button | Click to delete each char left to right |

Table 8: Describe User Interface Square, Square Root page