

# **GRAPHICAL USER INTERFACE DESIGN WITH VB**

## **Course Work 1**

### **There will be Individual Presentations as Course Work 1 Next Lecture**

An interface has four (4) Sections. A Section that can be used to a) Change Screen Color b) Calculate numbers c) Convert and Grade Course Work Marks d) Play Ludikya Game

A snapshot of the GUI together with other information is given below

1. Set your Form to Size (1081,700)
2. The Form title is "MY MULT TASK GUI"
3. A user can change the Background color of the screen by CLICKING on the "Screen Color" label which is coded to implement the RGB color scheme
4. Calculator Section
  - Using a keypad ONLY a user enter any number which appears in the textbox labeled Input
  - A mathematical operator is then selected and input textbox is cleared ready for the next number. As input goes on the expression (string) eg  $12 \times 7 - 5 + 34$  ..... is displayed in the Expression textbox.
  - The "Back" button erases the last number or operator of the string so far created
  - When the "=" button is clicked the result of the expression is displayed in the "Answer" textbox. Note : Mathematical processing takes linearly place left to right ie BODMAS does not apply in the expression eg  $3 + 5 \times 4 - 10 = 22$
  - The "Clear" button clears all the previous Inputs, Processing and Outputs in the Calculator.

## 5. Academics Section

- A user enters marks out of 40 ie maximum score can be 40 and minimum score 0
- As a mark is being entered they are automatically converted to out of 100 and the Grade is displayed based on the grading slab below. Note marks are displayed with no decimal points.

0 - 40	F
41 – 60	C
61 – 69	B
70 - 79	B+
80 – 100	A

- On clicking the “Ne “ Button, the data is copied into the list box. The name in the list box is composed of the first 10 characters of the entered name  
The row number in the list box (1, 2, 3 ....) is generated from your codes as each row is generated

## 6. Ludikya Game

- A player enters text into the “Original Text “ text box. **As each character is entered** the reverse text is displayed in the “Reverse Text” text box. Eg “782 Kampala” in the Original Text is displayed as “alapmaK 287” in the Reverse Text
- Introduce a button to clear both text boxes
- Also for storage purposes, introduce a ListBox to keep the Reversed Text

## 7. Other Specification

- Form Size 1301, 750
- Color Text Boxes 52, 31
- Numeric Pad Buttons 52, 34
- Operator Buttons 34, 31
- Back / Clear Buttons 97, 34
- Name Text Box 196, 31
- Marks and Grade Text Boxes 52, 31
- Marks List Box 602, 292

## 8. Note

- You will need to toggle between VIEW, FULL SCREEN to view full screen when in Development Mode

Form1

**Screen Color**

Red

Green

Blue

1	2	3	+	-
4	5	6	X	/
7	8	9	=	
	0		Back	

Input

Expression

Answer

Clear

**LUDI KYA GAME**

Original Text

Reversed Text

**Academics**

Name

	/40	/100	Grade
SWE	<input type="text"/>	<input type="text"/>	<input type="text"/>
DBP	<input type="text"/>	<input type="text"/>	<input type="text"/>
AI	<input type="text"/>	<input type="text"/>	<input type="text"/>
GUI	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total	<input type="text"/>	<input type="text"/>	<input type="text"/>
Grade			<input type="text"/>

New

Name	SWE	DBF	AI	GUI	Grade
1.					
2.					
3.					