Visual Studio Community 2015

## Times Table

* Design the Window
* Add VB Code to the button objects



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1. Create a new ‘WPF Application’
2. Add the following objects to the MainWindow design:
2 X Button
2 X TextBox
1 X Label


3. Rename the names of the buttons and the text boxes to ‘btnShow’, ‘btnClear’, ‘txtNumber’ and ‘txtOutput’. Also, change the text displayed on these buttons and clear any default text from the text boxes.
4. Add some suitable text to the label
5. Select the Clear button then double click it. This will bring up the VB Code window. Add the follow for the clear button:

 Private Sub btnClear\_Click(sender As Object, e As RoutedEventArgs) Handles btnClear.Click

 txtOutput.Text = ""

 End Sub

1. When executed, this will look for a ‘Subroutine/Procedure’ called Output. Create the Subroutine called Output. Place cursor after the ‘End Sub’ of the ‘btnShow’ Sub and press enter. Now type the following:

 Sub Output(Value As String)

 txtOutput.Text += Value + vbCrLf

 End Sub

1. In the btnShow Sub, add the following code:

 Private Sub btnShow\_Click(sender As Object, e As RoutedEventArgs) Handles btnShow.Click

 Dim enteredNum As String = txtNumber.Text

 Dim n1 As Int16 = Convert.ToInt16(enteredNum)

 Dim ans As Int16

 For n2 As Int16 = 1 To 12

 ans = n1 \* n2

 Output(n2.ToString() + " X " + enteredNum + " = " + ans.ToString())

 Next

 End Sub

1. Execute the program with *sensible* data and then try and crash it!
2. Amend the btnShow code to cope with some of the errors:

 Private Sub btnShow\_Click(sender As Object, e As RoutedEventArgs) Handles btnShow.Click

 Dim enteredNum As String = txtNumber.Text

 Dim n1 As Int16

 If IsNumeric(enteredNum) Then

 n1 = Convert.ToInt16(enteredNum)

 Else

 Return

 End If

 If n1 < 2 Or n1 > 12 Then

 Return

 End If

 Dim ans As Int16

 For n2 As Int16 = 1 To 12

 ans = n1 \* n2

 Output(n2.ToString() + " X " + enteredNum + " = " + ans.ToString())

 Next

 End Sub