Version: 1.0

Written by: Blake Hoelle

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1. Purpose and Overview
   1. The purpose of Number Conversion 2018 is to give users the ability to enter either a Roman numeral and convert to Arabic, or allow the user to enter an Arabic number and convert that to a Roman numeral.
   2. Number Conversion 2018 will offer a simple to use two-step process for converting between Arabic and Roman numeral numbers. Just type the value you wish to convert and click the appropriate button for what you want to convert to, the end result is then displayed for the user.
   3. Number Conversion 2018 will calculate thousands of conversions with a single click.
   4. The program will consist of five windows forms.
2. Program Scope
   1. Number Conversion 2018 is intended to be run from the user’s PC.
   2. Number Conversion 2018 is a five form Application for converting between Roman numerals and Arabic numbers.
   3. Form one connects to forms 2 and 3. Form 2 Connects to form 4, and form 3 connects to form 5.
   4. The main form will have a single button that does 3999 Roman numeral to Arabic conversions in a click.
   5. Two forms will allow the user to keep past conversions in a list box, after the conversion has taken place.
   6. Accessible from the two forms listed above are two quicker convert forms, forms that also perform conversions then display them for the user. But doesn’t save conversions in a list box.
3. Reliability
   1. The program must launch and run with proper error handling, so crashes can’t stop the program from working.
   2. The only two button clicks on the form must contain try and catch blocks, with proper exceptions to stop the program from force crashing, and to help the user understand the mistake they made.
4. Distribution and Availability
   1. The program will be available to the public for free and distributed via internet download through one or more sites.
   2. The program will support a variety of hardware options, to keep the program accessible.
5. User Profile
   1. The program is intended for any average computer user that understands what a Roman numeral and Arabic number is. The user will have the ability to input a value, and click one button to find out what it converts to.
   2. The user is able to store conversions for the derations of the session.
6. Operating Environment
   1. Hardware – The program must be able to operate on a PC meeting the requirements for the Windows 7 operating system, equipped with standard mouse and keyboard inputs and a 1024 x 768 color display.
   2. Software and Dependencies – The program should run Windows 7 or later. No special installation other than downloading the program required.
   3. Network Connectivity – Not necessary for Number Conversion program.
   4. Memory and Storage – The program must operate between 50MB or memory and 100MB of free hard drive space.
7. General Definitions
   1. Input – The user first input a Roman numeral or an Arabic number is entered into the single textbox on the form.
   2. Conversion buttons – Second, the will chose from one of two buttons, one to convert Arabic to Roman. The other to convert Roman to Arabic.
   3. Output – After an input and button click, the singular conversion displays in a output label.
8. Supporting Data
   1. Roman numerals – all roman numerals output by the application must be an actual Roman numeral, and accurate to the Arabic input value before it.
9. Sensitivity
   1. The data entered into the program is not stored anywhere, nor is it personal information. The user conversions can be deleted permanently with the Clear button on the form.
10. General Requirements
    1. The program must provide a user interface consisting of a singular form that will allow the user to write a conversion input on the form, then output a conversion with a singular button click.
    2. The program must not force close on the user.
    3. The program must be usable by the non-technical user.
11. Output and Reporting Requirements
    1. The program must report the number conversions obvious and clear to the user.
    2. Must be able to handle Roman numerals and Arabic characters up to 3999.