**Design Document for Roman Numeral Converter (Week 7 - Assignment #1)**

**Overview**

The program can convert a number from 1 to 10 into the counterpart in roman numerals (ex: 1 to I, 8 to VIII). When the user inputs a number and presses the submit button underneath the text box, a larger format number will appear in the text box below showing the roman numeral that is equal to the input number.

**Components and Processing**

The app starts by declaring an integer variable named **input** and makes it equal to the user’s text in the text box. This string is converted in the declaration to an integer with the **Convert.ToInt32()** method.

The application then uses **if else if else** decision-making branches, and if the **input** variable is equal to one of the ten cases (1-10) specified, it will display an updated **numberOutputLabel.Text** to the user using the assigned number.

If the program detects a number outside of the range specified, it will display a **MessageBox** to the user that states: **“Input error, please enter a number 1 – 10”**.

**Input and Output**

The user is expected to put in a number with their keyboard into the text box and hit the submit button to see their result.

**Testing**

Testing the app error handling is performing as expected with the following exceptions:

* Any number lower than 1 will display a message box with the error message specified above.
* Any number bigger than 10 will also show a message box and prompt the user to re-input a number in the proper range specified.
* There seems to be a limit on the number of characters the text box for input can handle before the application is forced to close, but I am not sure of the specific amount.