Numeric Converter

Functional Requirements Specification

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1. Purpose and Overview
   1. The purpose of the Numeric Converter is to allow users to seamlessly convert valid, positive Roman numerals to standard Arabic numbers, up to 3,999, and convert standard Arabic numbers to positive Roman Numerals, up to 3,999.
2. Program Scope
   1. The Numeric Converter is intended to be run on a user’s computer as a standalone program. It should not draw any information directly from any other program or file.
3. Reliability
   1. The program must be accurate in its translations between Arabic numbers and Roman numerals. A lack of accuracy will lead to misinformation and potentially inaccurate future calculations in other programs.
4. Availability and Distribution
   1. The program will be available on Github.com for free download.
5. User Interface
   1. The program will be simplistic enough that any user with basic computer skills will be able to navigate the program, only requiring knowledge on the mouse and keyboard, basic window controls, and what Roman numerals and Arabic numbers are.
   2. The sole, primary interface will have an area to input the Arabic number or Roman numeral that the user wants to be converted to their respective match, a method to initialize the conversion, and an area that will show the value returned from the conversion.
6. Operating Environment
   1. Hardware – The program must be able to operate on a PC using at least the Windows XP operating system, at least a keyboard (a mouse is strongly advised), and almost any modern display.
   2. Software and Dependencies – The program should run on at least Windows XP, and should require nothing else being installed. This should be a standalone application.
   3. Network Connectivity – This program should be able to be run completely offline, and should not require any connection to the internet or any sort of network, except for the initial download.
   4. Memory and Storage – The program must operate with less than 512 MB of memory, 1GHz of processing power, and 4.5 GB of disk space.
7. Security Requirements
   1. The program will not contain sensitive material, and won’t connect to any network, so there is no need for any additional security.
8. Error Handling
   1. The program must give feedback to the user on any input of theirs that they may be doing that is incorrect (i.e. attempting to convert “4001” should return an error telling the user that Roman numerals on a standard computer can’t handle that value)