**Design Document for Magic Dates (Week 7 - Assignment #2)**

**Overview**

The application is meant to check if a date is magical, which means the year is a product of the day and month. The application uses a basic logical check to determine if the day and month entered in the text boxes by the user are equal to the year. There is also an exit button and dynamic labels that update with each click of the “Submit Date” button.

**Components and Processing**

The user is expected to enter two digits for the day they want, two digits for the month, and two digits for the year. The program converts and establishes integer variables for the text box data the user enters.

The program uses string concatenation to confirm with the user the date they input. This is meant to allow the user to correct the date themselves, if needed.

The application will then perform a logical check on the number of digits in the text box for the year. If it is equal to four or more digits, the app will show an error message that states:

“Error, please input the year's last two digits”

Assuming the user inputs the data properly, the program moves to the inner logical check to determine if the integer variables (dayDate, monthDate, and yearDate) are equal after multiplication. If the math checks out

**Input and Output**

The user is expected to input strings, and the program will convert them to perform a logical check.

**Testing**

The application will return an error if the user does not enter the year as two digits.

The program will also crash if the user inputs too many digits in the text boxes, since the integer conversion can only handle 32-bits of data now.