Assignment00

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The LeapYear algorithm starts by requesting a user input, along with the instructional text "Enter year". By using a Try-Catch block, it checks if the user input is convertible into an Int, and in that case runs the UI method. If the Try-Catch block catches an exception, an error message is displayed and the user can try again.

When the UI method is run, it checks if the given year is equal to or later than 1582, if it is so, the IsLeapYear method is run, and the result is displayed in form of "yay" or nay". If the year is below 1582, an error message is displayed and the user can try again.

The IsLeapYear method checks if the year is divisible by 4 and if so, it checks if it's divisible by 100 and if so, it checks if its divisible by 400. It then returns a boolean corresponding to whether the year is a leap year or not, according to the given rules.

The LeapYear algorithm can be seen on Figure 1 below

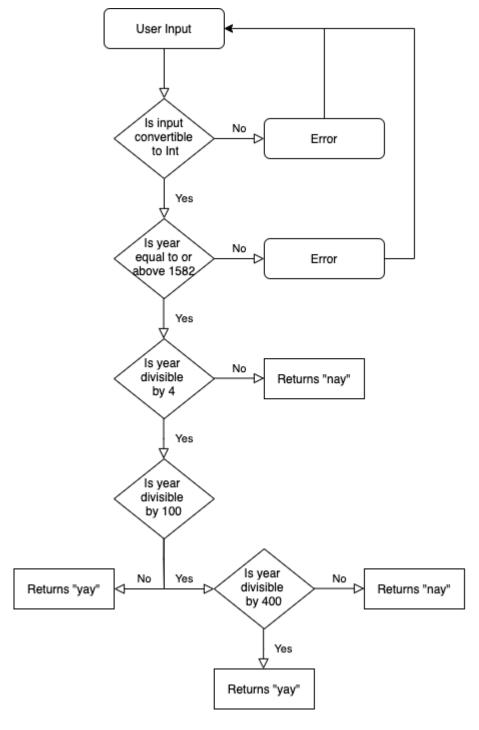


Figure 1: Flow diagram of LeapYear algorithm