Assignment 0

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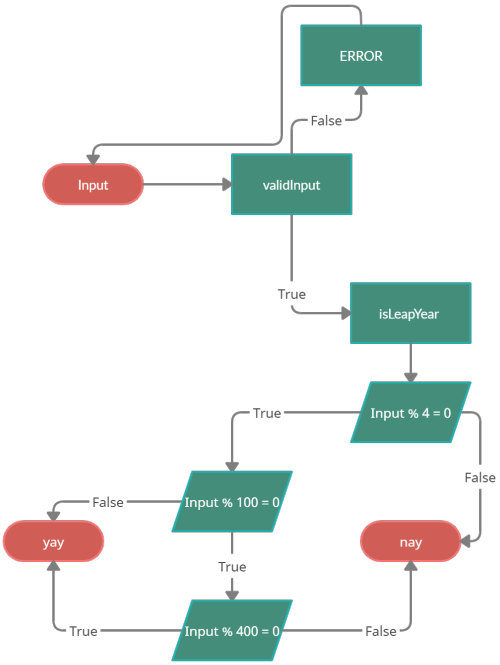
1 Documentation of isLeapYear



UML

1.1 Introduction

The algorithm first checks if the user inputs a valid integer input, which is higher than 1582. In case the user does not use a valid input, the program will shut down with an error message. If it is however valid, the program will call the isLeapYear function.

1.2 isLeapYear itself

isLeapYear first checks if the input value modulo 4 is equal to 0. If it is not the case, it will return false. If it is true, it will check if the input value modulo 100 is equal to 0. If it is not the case, it will return true. If it is the case, it will check if the input value modulo 400 is equal to 0. If it is not the case, it will return false, if it is the case, however, it will return true.

1.3 Wrap up

The return values of the isLeapYear function, determines whether or not the program will output "yay" or "nay", where a true value will output "yay" and a false value will output "nay".