BDSA - Assignment0 - Documentation

Robin Ask Rohr Halberg (halb)

6. September 2021

The Main-method contains a while-loop, which runs while a value *run* is true. Within this loop, the Main-method asks the user for an input. This input is then sent to the GetInputAnswer-method. This method will return a string, which will be output to the user, unless the string is "exit", in which case the *run* value is changed and the loop and program ends.

When the GetInputAnswer-method recieves the input string, it will first attempt to parse it to an integer. If unsuccessful, the input string will be checked. If the input string is "exit", the input string is returned. Otherwise, a message string asking the user to please enter an integer will be returned. If instead the parsing was successful, the resulting value is checked for being above 1582. If it is not, a message string will be returned asking the user to input a number above 1582. If the number is within the the valid time frame, it is sent to the IsLeapYear-method. If this returns true, the string "yay" is returned to the Main-method. If false, "nay" is returned.

The IsLeapYear-method recieves the integer, and first tests if it is divisible by four. If the integer is not divisible by four, the method returns false. It then checks whether it is divisible by 400. If yes, the integer is a leap year, and the method returns true. If the integer is instead divisible by 100, it returns false. If, after this, the method has not yet returned, the integer is a leap year, and the method returns true.

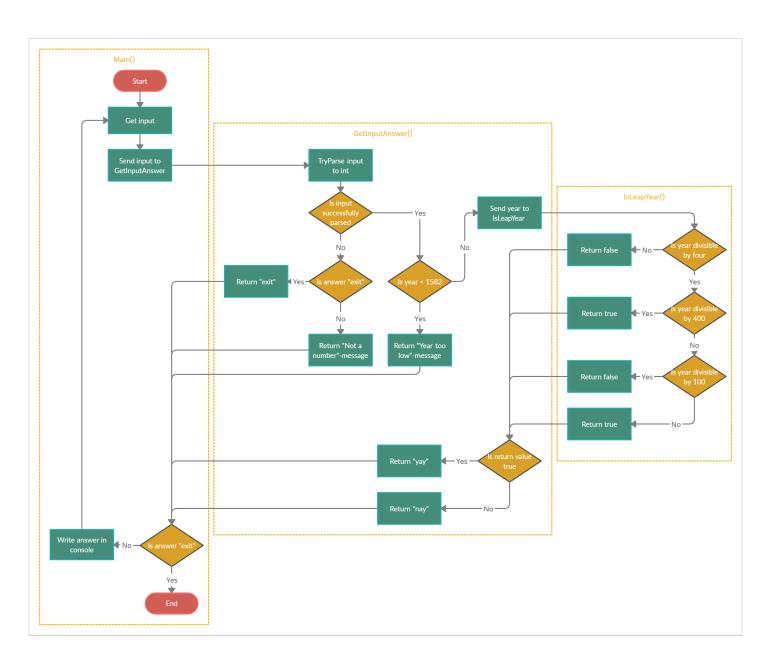


Figure 1: A chart describing the program process