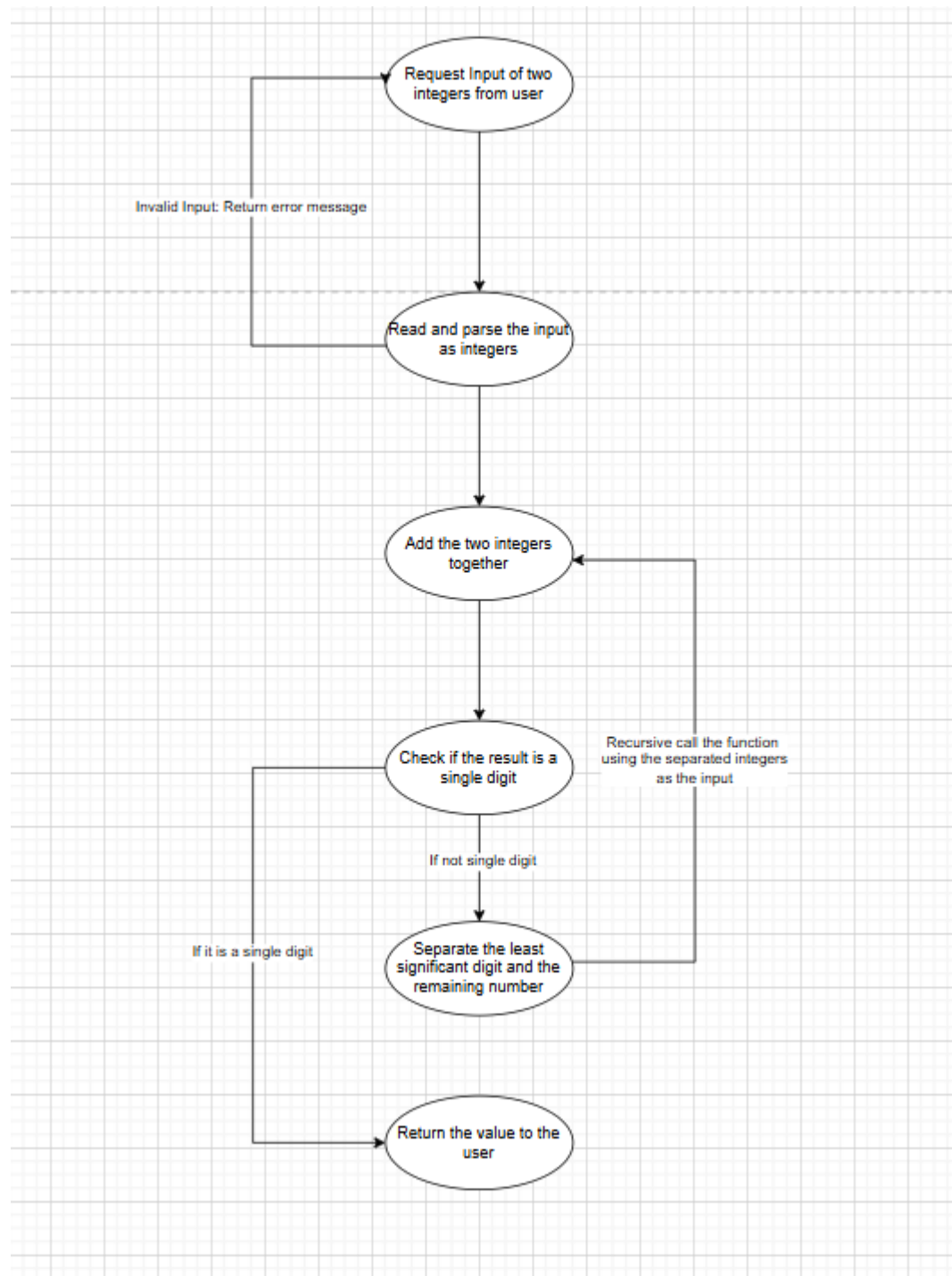


Requirements:

1. The program must use recursion
2. We may assume integers only for the first solution
3. The program must read and accept an input of 2 numbers from an outside user
4. The program must return an accurate single digit value
5. The program may take floating-point/decimal values as an input (optional)
6. The program may be implemented in the language of our choice

Design:



Implementation (C#):

```
internal class Program
{
    // Needs testing/code review

    static int RecursiveAddition(int a, int b)
    {
        int sum = a + b;

        //Check if a single digit
        if (sum <= 9)
        {
            return sum;
        }

        int leastSigDigit = sum % 10;
        int remainingNumber = sum / 10;

        return RecursiveAddition(remainingNumber, leastSigDigit);
    }

    static void Main()
    {
        //User menu needs to be implemented

        Console.WriteLine(RecursiveAddition(80, 53));
    }
}
```

