

## Assignment: Validating input

Regular expressions are a powerful way to determine if a user's input is valid, but also to detect certain patterns in a text. This assignment consists of small tasks requiring you to use the `Regex`-class to explore these benefits. Make use of the start-up project to create an application that follows the user interaction.

### User interaction

A user should be able to do the following things:

- By clicking one of the buttons in the `GroupBox Regex: IsMatch`:
  - A string is supplied and checked if it is a valid (dependent on the button):
    - Phone number. A regional phone number can only exist out of digits and spaces  
E.g. `06123456789` and `06 123 456 789` are valid, while `0612E456789` and `06-123456 789` are not valid.
    - Dutch phone number. A Dutch phone number must start with `+31` followed by 9 digits  
E.g. `+31612345678` and `+31401234568` are valid, while `316123456789` and `+31 612345 6790 12345` are not valid.
    - Street name. A street name can only exist out of letters, a `.` (dot) and spaces.  
E.g. `Rachelsmolen` and `John F. Kennedylaan` are valid, while `R@chelsmolen` and `John F. Kennedylaan 50` are not valid.
    - Address. An address follows the same format as a street name and in addition has a house number. A house number must start with a digit and may end with a letter.  
E.g. `Rachelsmolen 5` and `John F. Kennedylaan 50a` are valid, while `Rachelsmolen` and `John F. Kennedylaan a` are not valid.
  - Show a message whether the input is valid/invalid.
- By inputting a pattern in `GroupBox Regex: Match` and conforming:
  - The amount of matches found in the `TextBox` should be shown in a `MessageBox`;
    - E.g. if the pattern is `ipsum`, a count of 5 should be displayed, if the pattern is `[a-zA-Z]{10,12}`, a count of 33 should be displayed.
  - The inputted pattern should also be added to the `ComboBox`.