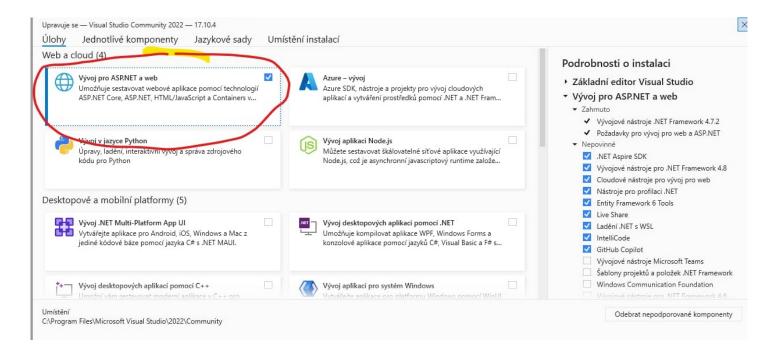
# How To?



Jan Jůza

### How to start?

- 1. Visual Studio Community 2022 with installed ASP.NET (first option in installer)
  - English language only
- 2. Add keyboard
  - Programátorská
  - (or) English US
- 3. Account on github.com
- 4. Install GitHub Desktop
- 5. Account number: 2379758017/3030



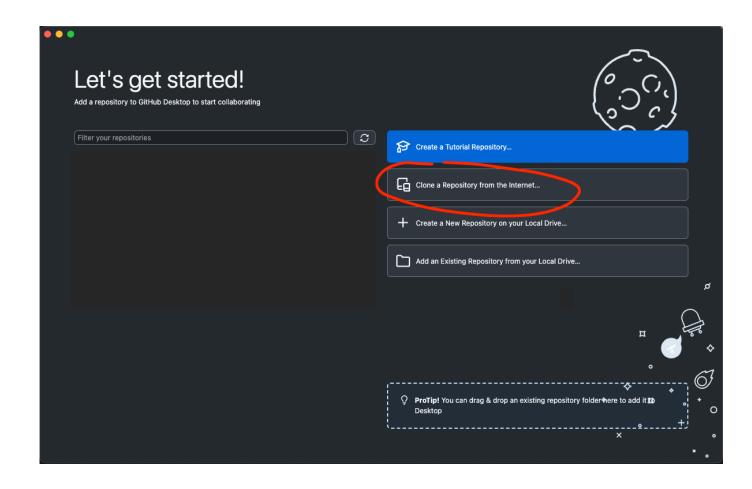
### Shortcuts

- **Left ctrl + z**: undo last change
- Left alt + enter: "magic" shortcut, opens menu with actions related tu current cursor position
- Left alt + mouse click + mouse move: block text selection
- Left ctrl + x: cut selection or line
- Left ctrl + d: copy selection or line (VS does not support this by default)
- **Left ctrl + tab**: quick switching between files
- Left ctrl + f: text search in file
- Left ctrl + left shift + f: text search in solution
- Left ctrl + h: text search and replace in file
- Left ctrl + left shift + h: text search and replace in solution

# Get exercises Step 1

#### Open GitHub Desktop

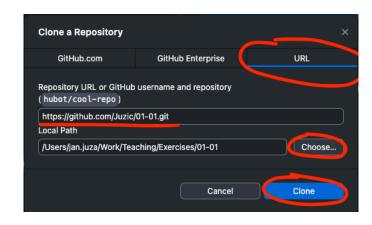
- 1. Press button 'Clone ...'
- 2. Then there will be downloaded updates



### Get exercises Step 2

#### Fill exercise details

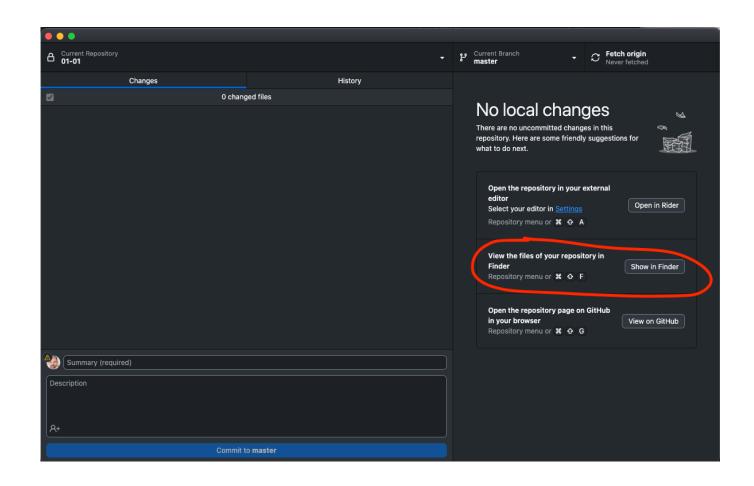
- 1. Choose tab. 'URL'
- 2. Write exercise url
- 3. Choose directory where to download
- 4. Press button 'Clone'



## Get exercises Step 3

#### Open downloaded exercise

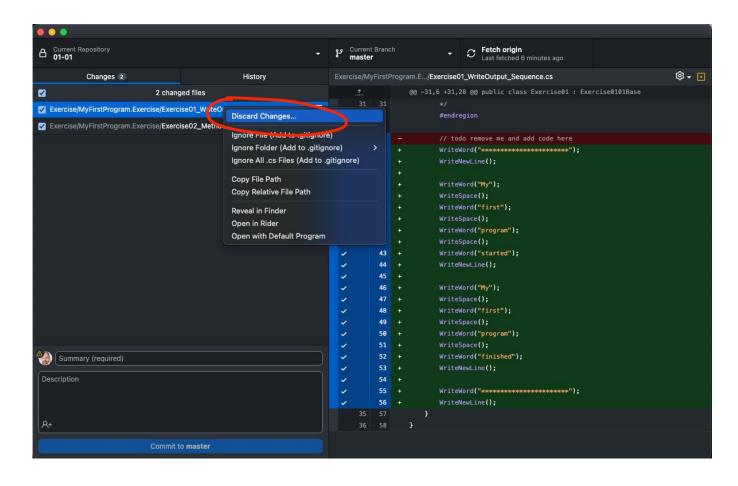
- 1. Press button 'Show in explorer'
- 2. Open '.sln' file



### Go back to original state of exercises

Open GitHub Desktop, when there will be some changes to exercise code, this changes will appear here

- 1. Right click on exercise file(s)
- 2. Click option 'Discard changes...'
- Exercise will be returned back (your code will be lost)



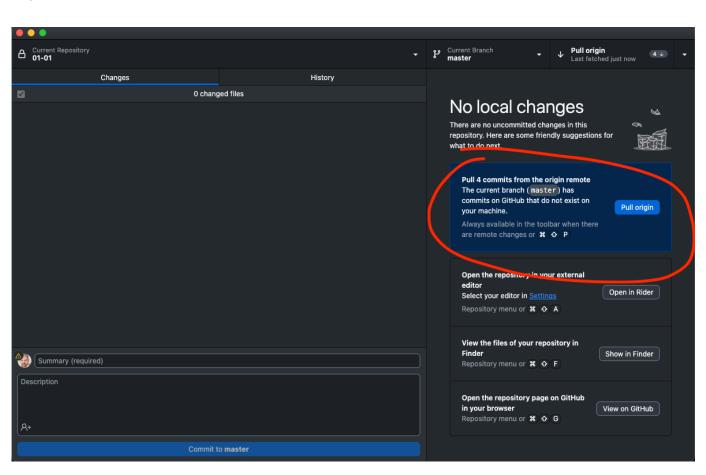
### Get latest updates of exercises

If there will be updated exercises, for example improved or added some exercise,

there will appear that area automatically

1. Press button 'Pull origin'

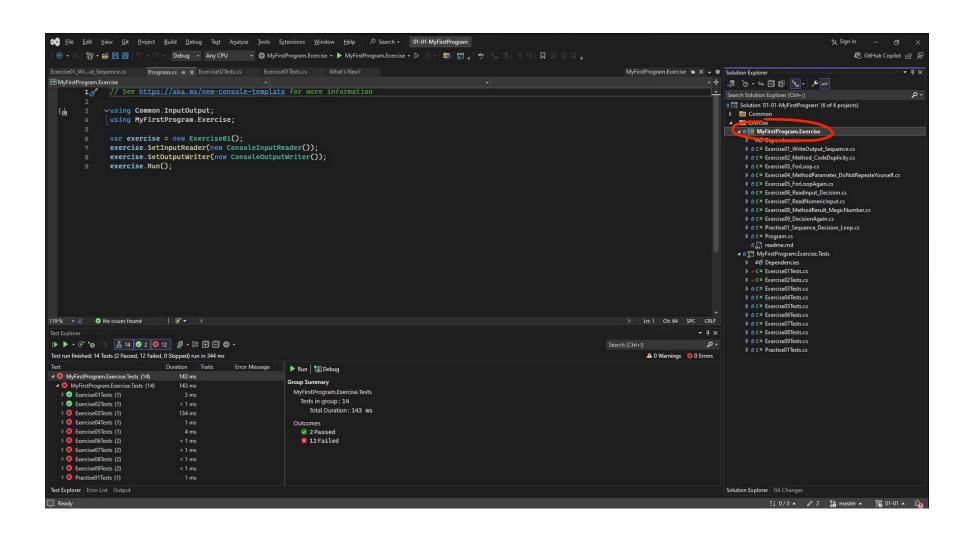
2. Then there will be downloaded updates



## Running exercise in console Step 1

#### In Visual Studio

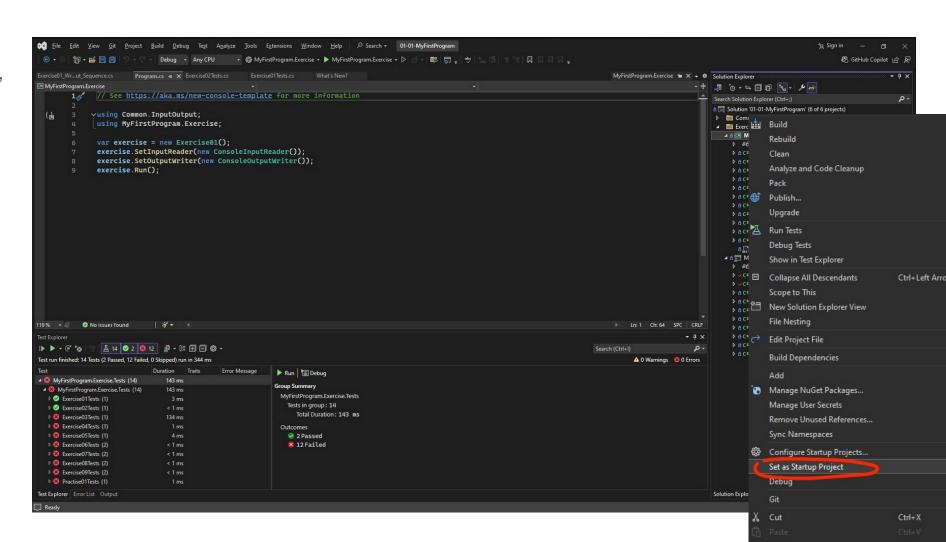
 Right click on project (needed only once)



### Running exercise in console Step 2

#### In Visual Studio

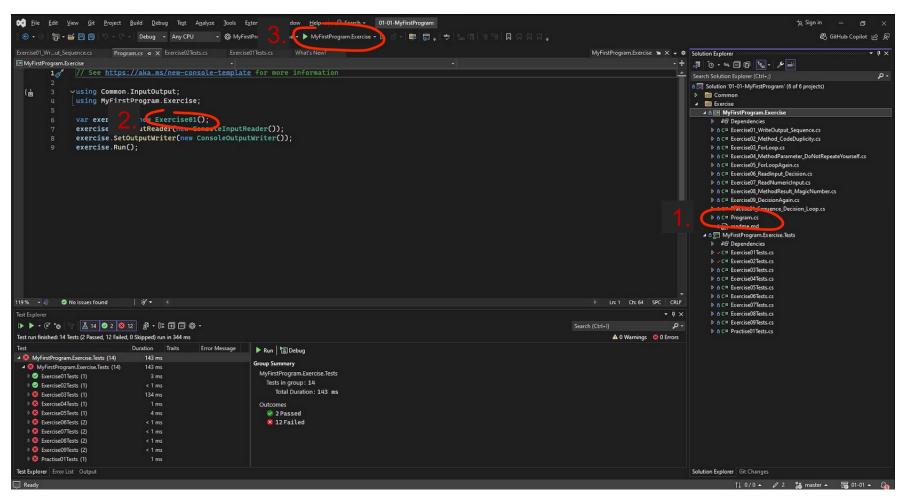
Click option 'Set as ...'
 (needed only once)



## Running exercise in console Step 3

#### In Visual Studio

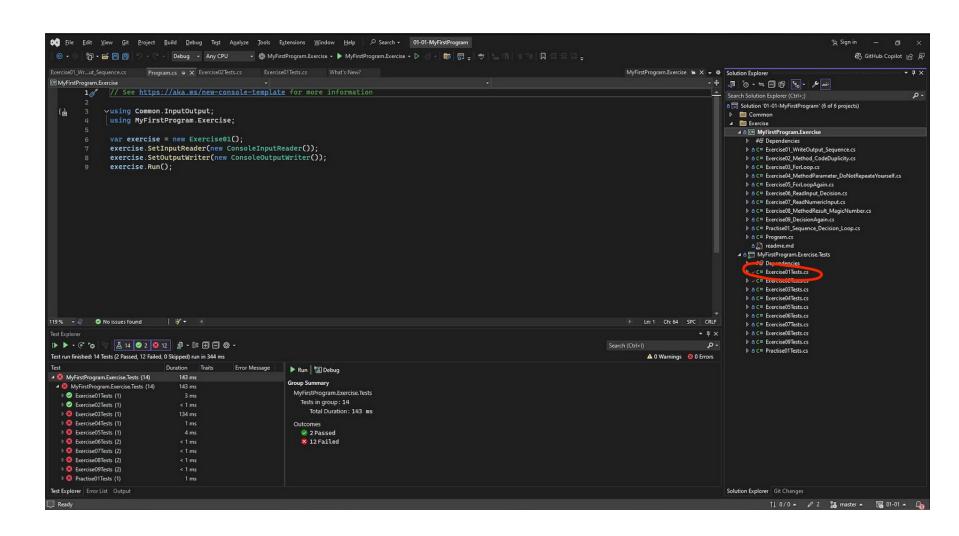
- 1. Go to 'Program.cs'
- 2. Choose exercise
- 3. Start console application



### Running exercise test Step 1

#### In Visual Studio

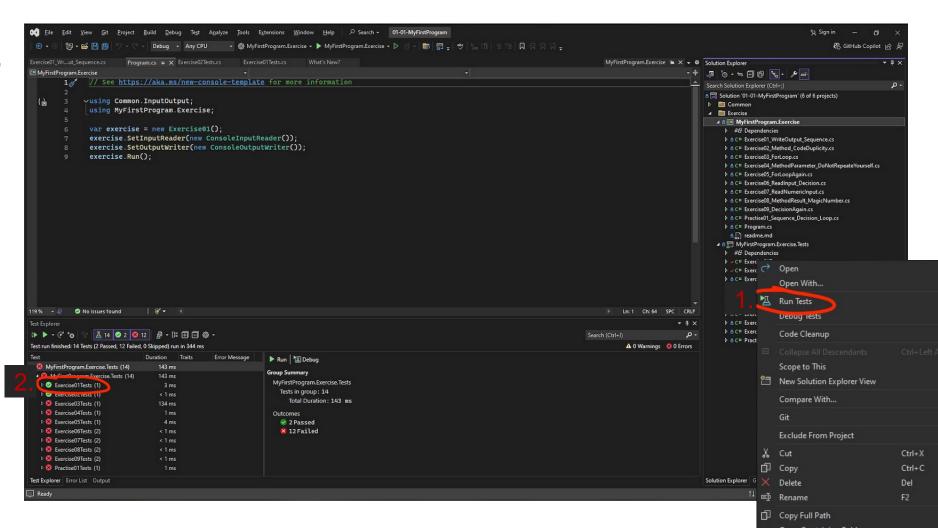
Right click on related test file



### Running exercise test Step 1

#### In Visual Studio

- 1. Click option 'Run Tests'
- Watch test result



## Common traps in code – semicolon ';'

Semicolon ';' is everywhere where code is not followed by curly brackets '{'

- Be careful, it easy to put semicolon to place where compiler will not report error,
  and it changes significantly behavior of program
- Luckily wherever semicolon is needed, compiler will always report error

### Common traps in code – numeric value overflow

If value **overflows** in numeric types, such as byte, int, long and others, no error is reported and in variable is unexpected value, this will cause wrong behavior of application