Министерство науки и высшего образования РФ

Федеральное государственное автономное образовательное учреждение высшего образования «Национальный исследовательский университет ИТМО»

Факультет информационных технологий и программирования

Лабораторная работа №2

Работа с VSCode.

Выполнил студент группы № М3102

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Подпись:

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Текст лабораторной работы

- 1. Download Visual Studio Code
- 2. Configure to run and debug code (java, python or c++).
- 3. Develop a project (file reading/ basic console calculator)
- 4. Write a system of tests to your programm
- 5. Learn Visual Studio Code CLI: list 10 or more basic commands
- 6. Develop 5 snippets
- 7. Learn and list popular HotKeys
- 8. Get your code documented with https://marketplace.visualstudio.com/items?itemName=cschlosser.doxdocgen (or analogues)
- 9. Set FiraCode (or some)
- 10. Set this up

https://marketplace.visualstudio.com/items?itemName=MS-vsliveshare.vsliveshare (and/or any different extension or built-in options in IDE for sharing your code and for session routine)

Отчет

- 1. Done
- 2. Done
- 3. Simple project:

https://github.com/Lopa10ko/ITMO-cyberculture-2021-2022/blob/main/console_calculator.py

4. System of tests:

https://github.com/Lopa10ko/ITMO-cyberculture-2021-2022/blob/main/unittesting console calculator.py

5. Visual Studio Code Command Line Interface (VSCode CLI)

VSCode has a pre-built shell command interface. You have to press Ctrl Shift P and type "shell command" to set your (code) up. After that you pretty much are powered up, because all you have to do is open the prompt shell and start your workflow.

Here is a list of useful commands in CLI:

>code -hhelp	Get all the options of CLI in one place
>code -ddiff <file> <file></file></file>	Compare two files with each other
>code aadd <folder></folder>	Add folder(s) to the last active window
<pre>>code -ggoto <file:line[:char]></file:line[:char]></pre>	Open a file at the path on the specified line and character position
>code -nnew-window	Force to open a new window
>code -rreuse-window	Force to open a file or folder in an already opened window
>code -wwait	Wait for the files to be closed before returning
>codelocale <locale></locale>	The locale to use (e.g. en-US or zh-TW)
>codeuser-data-dir <dir></dir>	Specifies the directory that user data is kept in. Can be used to open multiple distinct instances of Code

>codelist-extensions	List the installed extensions
>codeinstall-extension <extension-id[@version] <br="">path-to-vsix></extension-id[@version]>	Install extension

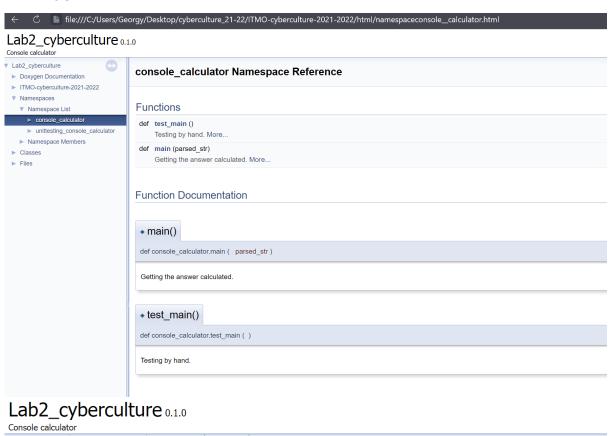
6. Snippets

```
{
1
2
        "Assert equal": {
3
            "prefix": "ase",
            "body": "self.assertEqual(${1:expected}, ${2:actual}${3:, '${4:message}'})$0"
4
5
        },
        "New enum": {
6
            "prefix": "enum",
7
            "body": [
8
9
                "from enum import Enum\n\n",
                "class ${1:MyEnum}(Enum):",
10
                "\t\"\"\${2:Docstring for $1.}\"\"",
11
                "\t${3:FIRST_ENUM} = \"some_value\"",
12
13
                "\t${4:SECOND_ENUM} = \"some_other_value\"",
                "\t$0"
14
15
            ],
            "description": "Code snippet for enum definition."
16
17
        "try:except:else:finally": {
18
19
            "prefix": "tryef",
            "body": "try:\n\t${1:pass}\nexcept${2: ${3:Exception} as
20
    ${4:e}}:\n\t${5:raise}\nelse:\n\t${6:pass}\nfinally:\n\t${7:pass}$0",
21
            "description" : "Code Snippet for a try/except/finally with else statement."
22
        },
        "if __name__ = \"__main__\"": {
23
            "prefix": "ifmain",
24
            "body": "if __name__ = \"__main__\":\n\t${1:main()}$0",
25
26
            "description" : "Create implicitly all the code at the top level using the
     _name__ special variable."
27
        },
28
        "New class": {
29
            "prefix": "class",
            "body": [
30
31
                "class ${1:ClassName}(${2:object}):",
                "\t\"\"\${3:docstring for $1.}\"\"\",
32
                "\tdef __init__(self, ${4:arg}):",
33
34
                "\t\t${5:super($1, self).__init__()}",
                "\t\tself.$4 = $4",
35
                "\t\t$0"
36
37
38
            "description" : "Code snippet for a class definition."
39
        },
40
   }
```

7. Hotkeys

Rename All Occurance	Ctrl + F2
Delete current line	Ctrl + Shift + K
Create a new file	Ctrl + N
Save as	Ctrl + Shift + S
Move line up/down	Alt + Up/Down Arrow
Show all commands	Ctrl + Shift + P
Stop terminal command	Ctrl + Alt + C
Close editor on file	Ctrl + F4
Quick open view	Ctrl + Q
Custom .py in terminal	Alt + Z
Format file	Shift + Alt + F
Zen mode	Ctrl + K Z
AltTabing	Ctrl + Tab

8. Doxygen



Description

Main Page Related Pages Classes ▼

Doxygen Documentation

An example Python program demonstrating how to use Doxygen style comments for generating source code documentation with Doxygen.

Files ▼

9. https://fonts.google.com/specimen/Fira+Code

10. Liveshare

