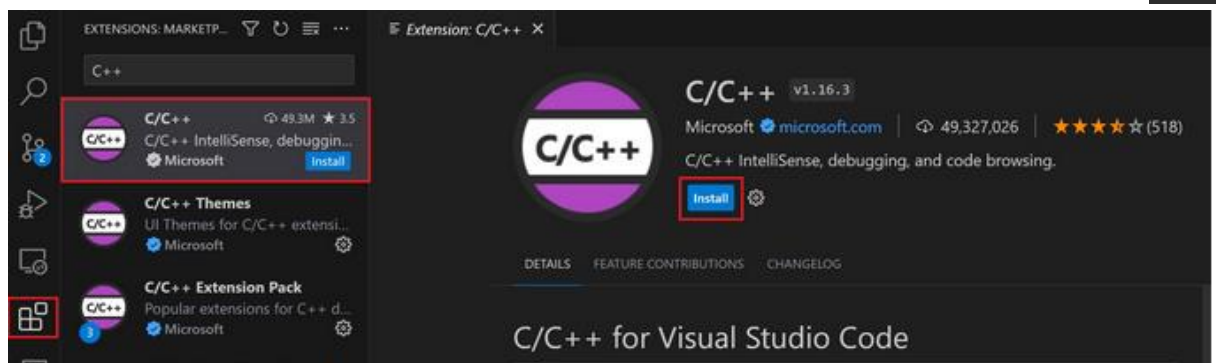


Setting up VSCode for Compiling C Code

1. Download VSCode: <https://code.visualstudio.com/download>

2. Set up for compiling C:

- How to set up for C/C++ guide: <https://code.visualstudio.com/docs/languages/cpp>
- Install the C/C++ extension
 - Use the icon at the bottom of the toolbar in VSCode to select the Extensions view.
 - Search for 'c++'.
 - Select **Install**.



- Check if you have a C++ compiler installed
 - Open a new VSCode terminal window using `Ctrl+Shift+``
 - Type `g++ --version` to check for the GCC compiler (use this for Windows or Linux)
 - Type `clang --version` to check for the Clang compiler in MacOS
- If no compiler is installed, install the GCC compiler (Windows):
 - Windows: Use MSYS2 <https://www.msys2.org/> to install MinGW-x64
 - Follow the instructions on the webpage above carefully, **completing all 9 steps**.
- If step 8 above failed to show the gcc compiler it may be because it has not been added to the system PATH
 - Make sure that the compiler has been added to the PATH. Follow the instructions in step 7 of the 'Installing the MinGW-w64 toolchain' instructions here: https://code.visualstudio.com/docs/cpp/config-mingw#_prerequisites
- Check if the debugger was installed by typing `gdb --version` in the terminal window.
 - If the debugger was not installed use the MYSYS2 terminal to run the following command: `pacman -S mingw-w64-x86_64-gdb`
- Linux and MacOS should already have either gcc or Clang installed. If not, see the instructions in the setting up guide: <https://code.visualstudio.com/docs/languages/cpp>

- Install the C/C++ Runner extension:



This enables:

- Building programs in both release and debug mode.
- Building individual files in a folder (Ctrl + Shift + B)
- Building and linking all the files in a folder (use the cog symbol in the bottom toolbar)

3. Install git - <https://git-scm.com/downloads>

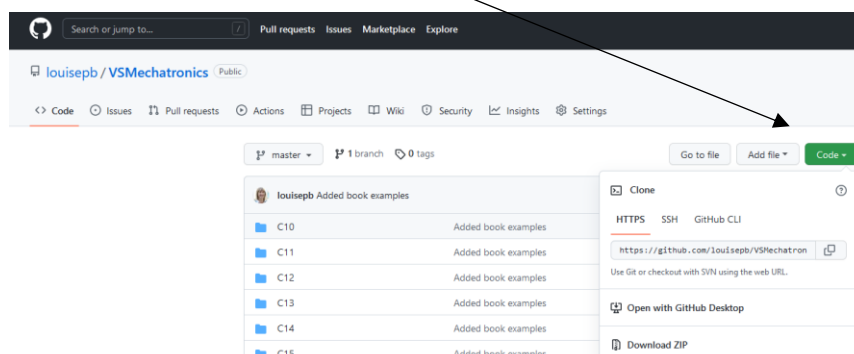
- Add your name and email address to .gitconfig
 - Open either 'Git CMD' or 'Git Bash'
 - Set up your user name and email address by typing the following commands into the git terminal (substituting your own name and email):

```
git config --global user.name "John Doe"
git config --global user.email johndoe@example.com
```

- This should be sufficient to set up git for use with VSCode but further information can be found here: <https://git-scm.com/book/en/v2/Getting-Started-First-Time-Git-Setup>

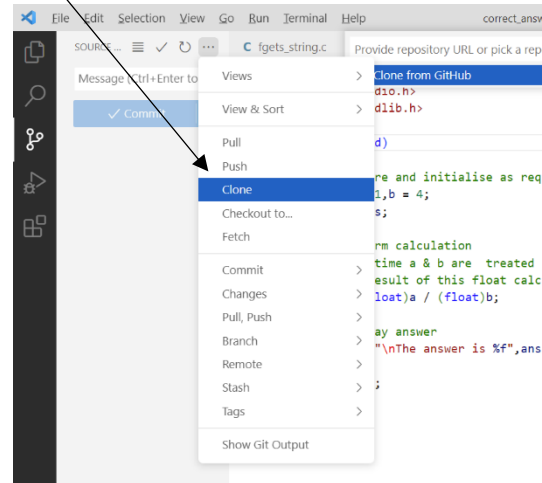
4. Download the code used during the course:

- Clone the VSMechatronics repository
 - Go to: <https://github.com/louisepb/VSMechatronics.git>
 - Select the green 'Code' button



- Use the 'Copy' button to copy the repository path

- Select the Source Control icon in the VSCode toolbar
- Select ... at the top right of the 'Source' window and then select the 'Clone' option:



- Paste the copied link into the central bar where requested to provide a repository URL.

5. Create a GitHub account <https://github.com>

- Use your nottingham.ac.uk email address as this will allow you to have free private repositories (as an academic account).
- Use the Publish Branch button to create a remote copy of your repository in your GitHub account (make it private if you don't want others to be able to see your work).

