Installing the C version of MuJoCo 2.2.1 on windows and compiling/running code

(A) Installing MuJoCo and loading a model file

A1) Navigate to https://github.com/deepmind/mujoco/ releases and download the windows installation, <u>mujoco-2.2.1-</u> <u>windows-x86\_64.zip</u> Unzip this file and put it in a good location (e.g., Documents)

A2) Navigate to bin folder and double click "simulate". This will open up a GUI.

A3) To load a model, go to the model folder and drop an xml, say humanoid.xml onto the open window. If everything worked fine, you should see a humanoid in the window

(B) Compiling the C programs provided by Deepmind

B1) Assuming you have done A1) above

B2) Download the Visual Studio Installer (select community version) here: https:// visualstudio.microsoft.com/downloads/

Once the installer has downloaded, run it. When prompted

to choose programs, choose the one that says "Desktop development with C++" (see screenshot below). Please restart your computer after installation.



B3) Now we will get some additional libraries to compile and create executables for mujoco on windows. Go to https://github.com/glfw/glfw/releases and download the latex version for Windows (usually glfw-3.x.x.bin.WIN64.zip). Unzip the file.

Now we will drag and drop some files from the glfw folder to mujoco

i) Copy the entire `include/GLFW` subdirectory to `mujoco/ include/GLFW`.

ii) Copy glfw3dll.lib from the subdirectory corresponding into your compiler (here the compiler is lib-vc2022) to `mujoco/lib/glfw3dll.lib`.

iii) Copy glfw3.dll from the subdirectory corresponding into your compiler (here the compiler is lib-vc2022) to `mujoco/ bin/glfw3.dll`.

B4) We will open the x64 shell to compile and run MuJoCo. Go to: Start (bottom left corner) -> Visual studio -> x64\_Native Tools Command Prompt. (see screenshot below)

	Inunderbolt Control Center
	🕥 Tips
	V
	Video Editor
	Visual Studio 2022 ^ New
	Developer Command Prompt for VS New
	New Developer PowerShell for VS 2022 x64 Native Tools Command P
	<b>x64 Native Tools Command Prompt</b>
	x64_x86 Cross Tools Command Pro New
	x86 Native Tools Command Prompt New
	x86_x64 Cross Tools Command Pro New
	Visual Studio 2022
8	Visual Studio Installer
D	Voice Recorder
	w
	C Weather
Ś	Windows Accessories
Ф	Windows Administrative Tools 🛛 🗸

From this shell navigate to the sample folder. Then type make.

B5) Navigage to bin folder. (cd .. followed by cd bin). Then type simulate. Now you can do A3) above

C. Writing your own programs and running them

C1) Download the template\_mujoco221\_win.zip.

C2) In mujoco-2.2.1 make a new folder called my\_project. Unzip the template\_mujoco221\_win.zip.

C3) Copy the two dlls in the bin folder. They are mujoco.dll and glfw3.dll and paste them in C:\Windows\System32

C4) In terminal navigate to template file. Type run\_win and you should see a window opens and a cube falls on the floor.

C5) See the file how\_to\_use\_template on how to use the template to develop your own code.