

System requirement:

Hardware:

Requires Nvidia RTX GPU.

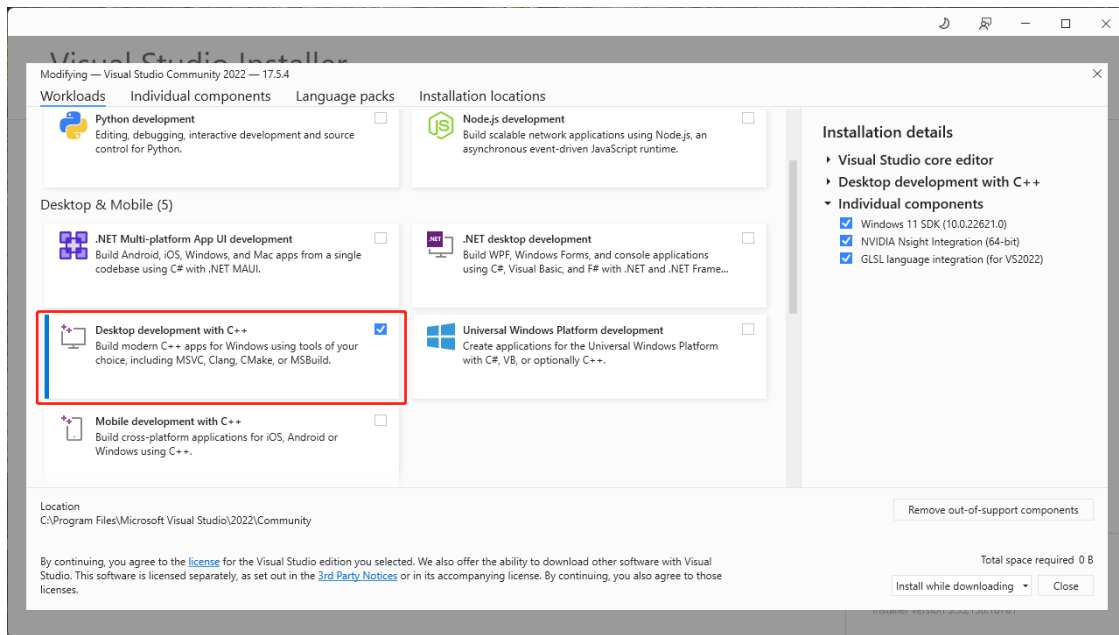
System:

Windows 11 Home/Pro

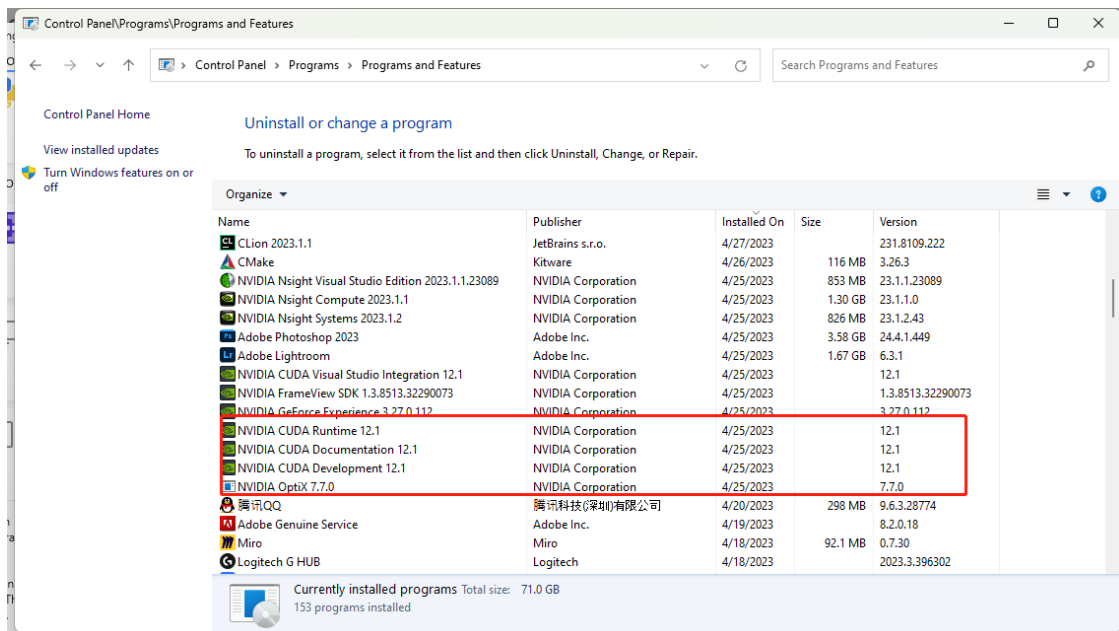
Build Instructions:

1. Please make sure the following components are installed before building process:

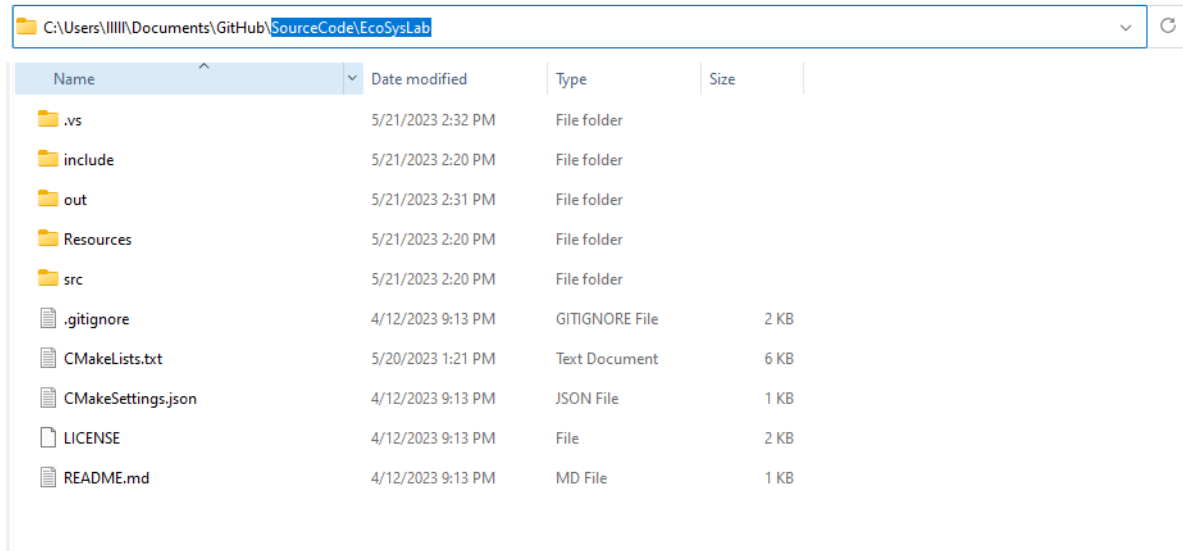
Visual Studio 2022 with “Desktop development with C++” selected:



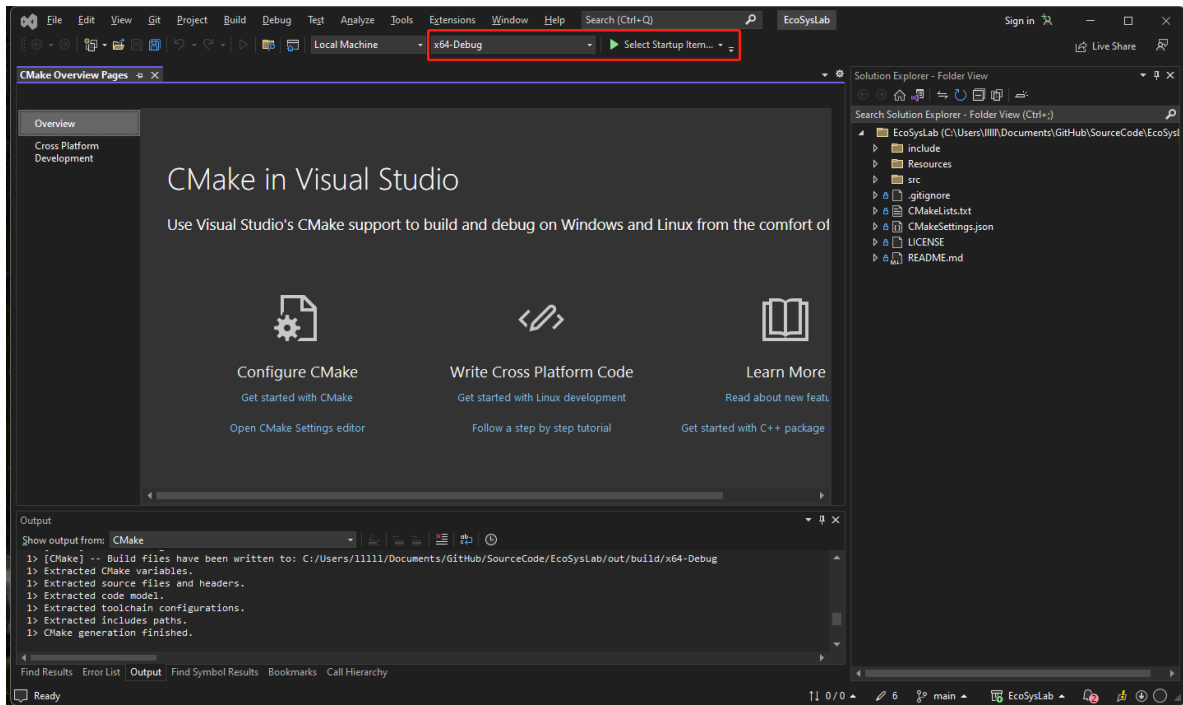
2. CUDA 11.3 ~ 12.1 (Tested on latest 12.1 version) and OptiX 7.7.0 (Since OptiX is constantly changing its API, 7.7.0 is mandatory).



- Open the EcoSysLab folder as a project in Visual Studio 2022. The Visual Studio will automatically recognize it as a CMake project.



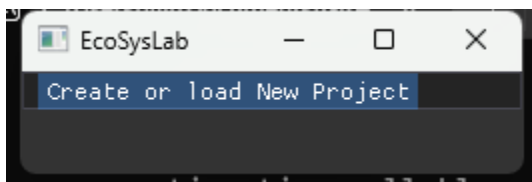
- Wait for a little while until Visual Studio loaded the CMake project, and you should see building configurations are set:



- Open the drop-down menu for building target by clicking the button highlighted with blue box, and select EcoSysLab.exe and click start button marked with red box to start building:

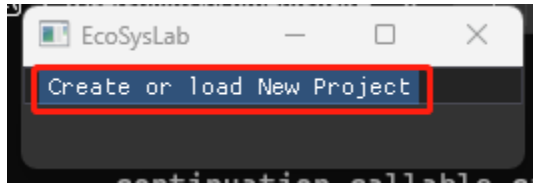


- Once the build is finished, the program will run automatically. You will see a small window as the welcoming window of the framework.

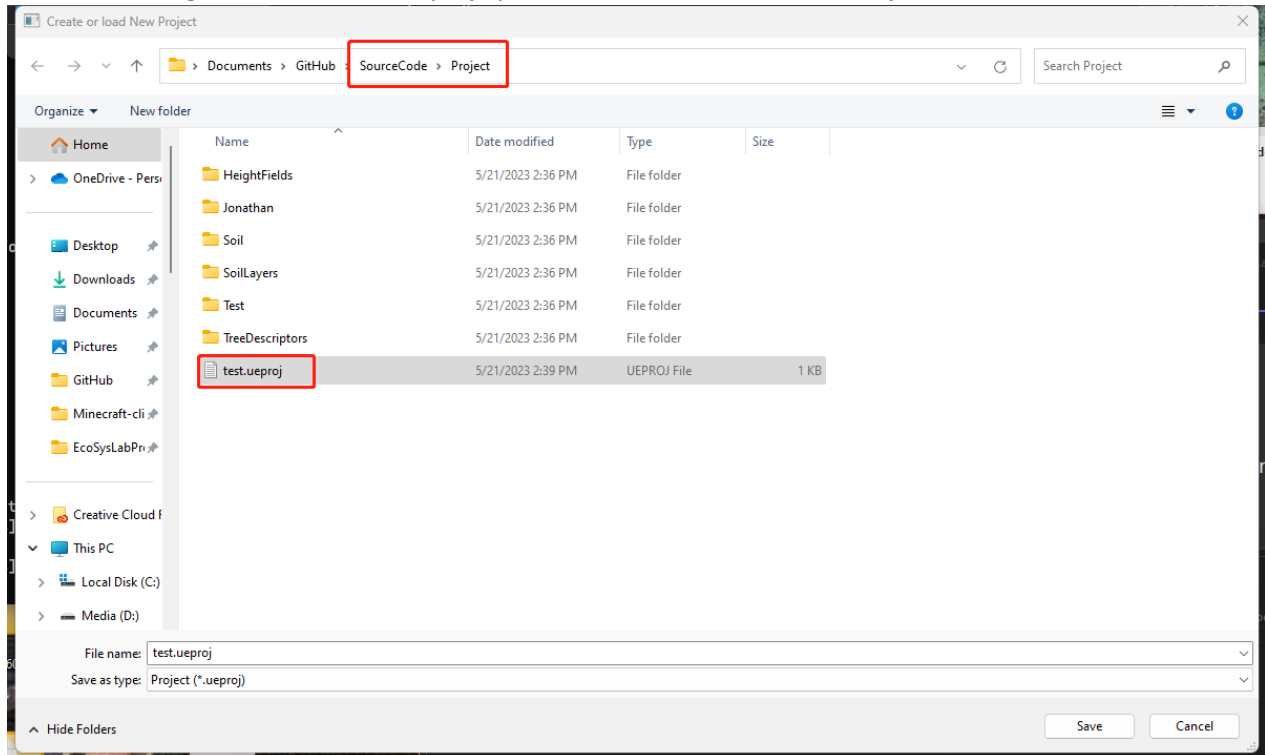


Operation instructions:

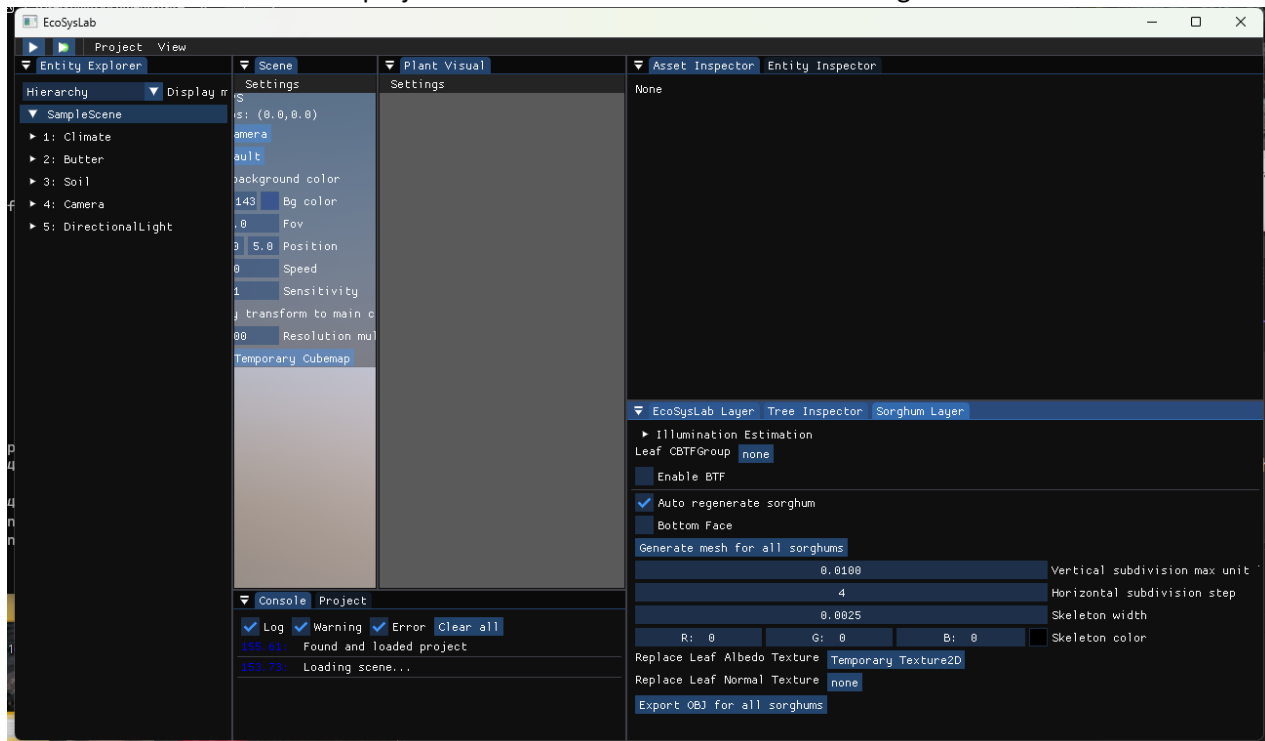
1. Once you have the framework opened, click the “Create or load New Project” button:



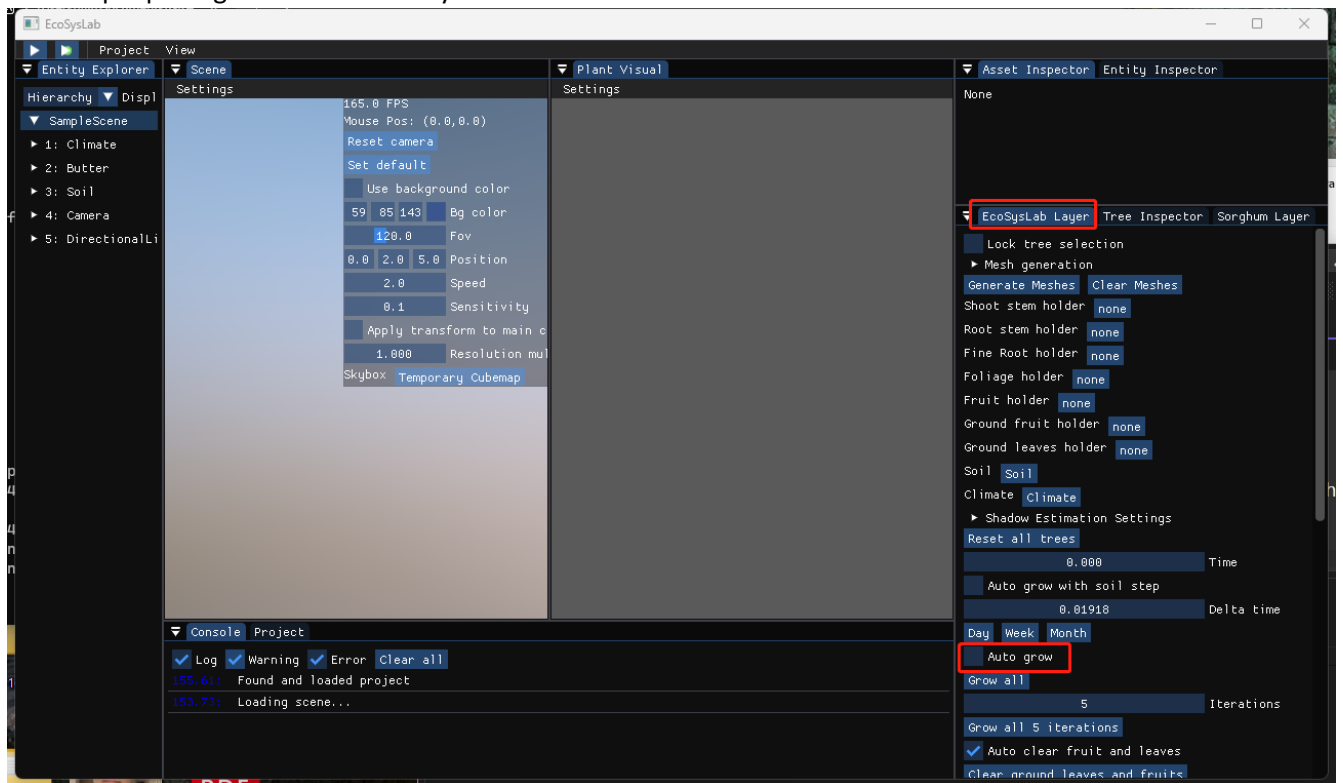
2. In the file dialog, select the “test.ueproj” provided in the /SourceCode/Project folder:



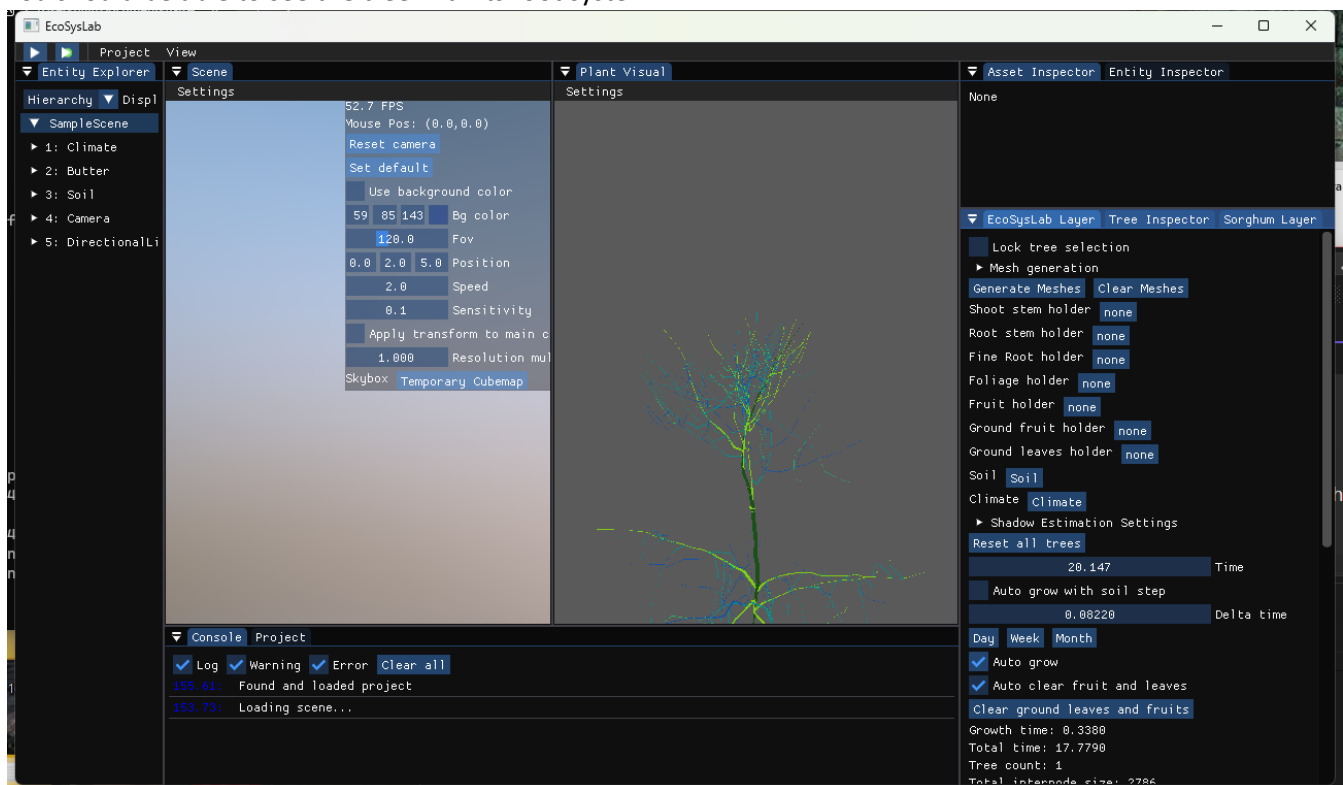
3. You should be able to see the project is loaded and the framework’s running:



4. The project folder comes with a sample scene. Select EcoSysLab Layer panel and check “Auto grow” box to see the sample plant grows automatically:



5. You should be able to see the tree with its root system:



6. Click “Generate Meshes” to generate mesh so the tree will appear in the Scene window:

