ARSetupHelp

TechStack:
Windows
Godot + GDExtension API
Python (for Scons)

OpenCV

Remark. Here are some tips and quick version to the Tutorial given in the official documentations..

it is not complete and many things will probably be missing!

Godot + CPP

- 1. Download Godot Engine Free and open source 2D and 3D game engine
- 2. refer to <u>GDExtension</u> <u>Godot Engine (stable) documentation in English</u> or <u>GDExtension</u> <u>C++ example</u> <u>Godot Engine (stable) documentation in English</u>

Python.org Stuff for SCons: A software construction tool - SCons

- 1. If not installed, install python since it is the recommended way to get SCons.
 - 1. There is another way online on the Scons website, but I did not tested it!
- 2. During the installation enable everything with path!
- 3. open a console with pip
- 4. pip install SCons see <u>SCons · PyPI</u>
- 5. if python is setupped correctly one can use the scons -v command
 - 1. if not one need to set the path variable!
 - 2. type in python -mSCons --version or pyVERSION -mSCons --version
 - 3. It will give you a path where scons is installed (in the best case)
 - 4. Try to follow this path and open the respective folder of PythonVERSION
 - 5. And add the path of the Scripts folder to your windows environment stuff
 - 6. Why systempath stuff? if not your command could look like this :D
 - $\label{local-packages-python-software-foundation.Python.3.10-qbz} $$ \frac{p_{ackages}Python-310}\cripts\cons.exe plattforms=windows $$ $$$
 - instead of scons plattforms=windows
- 6. try again with scons -v and it should work

<u>GDExtension C++ example — Godot Engine (stable)</u> <u>documentation in English</u>

First Get a copy of the repository.

If you are versioning your project using Git, it is recommended to add it as a Git submodule:

```
mkdir gdextension_cpp_example
cd gdextension_cpp_example
git init
git submodule add -b 4.x https://github.com/godotengine/godot-cpp
cd godot-cpp
git submodule update --init

cd gdextension_cpp_example
git submodule update --init
```

Alternatively, you can also clone it to the project folder:

```
mkdir gdextension_cpp_example
cd gdextension_cpp_example
git clone -b 4.x https://github.com/godotengine/godot-cpp
```

Afterwards the command <code>godot --dump-extension-api</code> does not work in windows, except you added it as system variable as well (no tested).

The thing that works is to cd to the path where the godot executable is and use windows powershell and type .\Godot_v4.4.1-stable_win64.exe --dump-extension-api, normally just type godot and press TAB will autocomplete the name.

this will generate a extension_api.json file WHERE THE EXECUTABLE IS! move it somewhere closer to the project or into the gdextension_cpp_example folder

in the gdextension_cpp_example folder

```
cd godot-cpp
scons platform=windows custom_api_file=<PATH_TO_FILE>
cd ..
```

now just follow the documentation link

On each change off the src files you need to once again compile everything with scons platform=windows make sure to run the command in Gdextension_cpp_example and not in the sub directory godot-cpp

GODOT Opency

Pls. follow the things written in the official document first!

the opency link extracts an folder and stuff and insert it into the project next to demo, godot-cpp, src

paste them into your project



At least my setup looks like this.

Go to gdextension_cpp_example\opencv\build\x64\vc16 copy the 2 lib files from v16\lib to demo\bin and (optional??) copy the dll files from the v16\bin to demo\bin

depending of your version update the SConstruct file with the correct opency version.