

## Assignment 0: set up your Vulkan development environment

Following the tutorial on:

[https://vulkan-tutorial.com/Development\\_environment](https://vulkan-tutorial.com/Development_environment)

Install your own Vulkan development environment. Use it then to create your own project, and compile the file **Assignment0.cpp**

Running the code, should show you the following application:



User can move in the 3D world using the following keys:

ESC – quit the application						
<b>Q</b> : roll left	<b>W</b> : forward	<b>E</b> : roll right	<b>R</b> : up		↑: look up	
<b>A</b> : left	<b>S</b> : backward	<b>D</b> : right	<b>F</b> : down	←: look left	↓: look down	→: look right

Beside the Vulkan library and GLFW (as specified in the tutorial):

<https://vulkan.lunarg.com/sdk/home>

<https://www.glfw.org>

*Assignment0* uses also the following libraries:

GLM – math functions - <https://github.com/g-truc/glm>

STB – load texture images - <https://github.com/nothings/stb>

TINYOBJ – load .obj 3D models - <https://github.com/tinyobjloader/tinyobjloader>

TINYGLTF – load .gltf 3D models - <https://github.com/syoyo/tinygltf>

Since these 4 libraries are all header-only (i.e. they are included in the main code during compilation, and they do not other special install procedure), have been included for convenience in the `headers` folder of the assignment. When setting up the project for this assignment, you can simply add the `headers` folder to its “Additional Include Directories”, to shorten its setup time.

The other three folders, namely `models`, `textures` and `shaders`, contain the graphic components that are used to compose the scene: their content is loaded at run time by the application.