**CIS 422**

**User Installation Guide**

1. Software Installation and Setup

This C++ graphic engine is developed from few C++ library. Prior to installation, the user should ensure the following requirements are met:

1, C++ compiler: GCC

2, CMake

3, OpenGL

4, GLEW library

5, SDL library

0.1 Prior Installation of the library and API

0.1.1, Install GCC

This Installation Guide is for the Ubuntu and MacOS user

1, Open the Terminal

Ubuntu:

sudo apt install gcc

MacOS:

brew update

brew upgrade

brew install gcc

brew cleanup

\* “cleanup” removes previous application/dependency revisions saving considerable space)

2, Log-in with the root password, then hit enter

3, Full documentation and more details are on GCC website: <https://gcc.gnu.org/install/>

0.1.2, Install CMake

1, Open Terminal

2, Ubuntu User:

Type following command

sudo apt-get -y install cmake

MacOS User:

Type following command

brew install cmake

3, Full documentation and more details are on CMaker Website: <https://cgold.readthedocs.io/en/latest/first-step/installation.html>

0.1.3, Install OpenGL

4, Install GLEW:

Ubuntu User

Type following command:

sudo apt-get install libglew-dev

MacOS User

Type following command:

brew install glew

<https://www.reddit.com/r/learnprogramming/comments/51u1bg/how_to_install_glew_on_ubuntu/>

5, Install SDL:

Ubuntu User:

Type following command:

sudo apt-get install libsdl2-dev

MacOS User

Type following command:

brew install sdl2

<https://askubuntu.com/questions/626280/fatal-error-sdl-sdl-h-no-such-file-or-directory>

0.1.4, software binary install

Binary installation:

git clone <https://github.com/pork3/sdlengine.git>

1, cd to sdlengine