

CSE4GPP Assignment Part 1 User Manual

Requirements

Unoptimized

- Graphics card that supports OpenGL 3.1
- At least 64Mb free RAM

Optimized

- Graphics card that supports OpenGL 3.1
- At least 64Mb free RAM
- A CPU that supports SSE 4.1

Installation

None, however the following files must be present for the program to work. These should be distributed with the executable.

- DevIL.dll
- data/font.png
- data/vertex.vp
- data/fragment.fp

Usage

Mouse control

Click and dragging with the **left** mouse button will cause the camera to orbit around the centre of the bottom of the tank.

Click and dragging with the **right** mouse button will cause the camera to zoom in and out.

Keyboard controls

The **+** key on the Numpad will add 1000 spheres to the tank.

The **-** key on the Numpad will remove 1000 spheres from the tank.

The **arrow** keys and **WASD** keys move the white sphere along the X-Z plane.

The **Page Up/Down** and **QE** keys move the white sphere along the Y axis.

The number keys **1** through **9** will change the size (and mass) of the white sphere. The white sphere starts off as the same as key 1.

Acknowledgements

NeHe's tutorials, for the use of the Win32 windows creation code. <http://nehe.gamedev.net/>

Josh Beam's tutorials for shader loading, compiling and usage. <http://joshbeam.com/>