CppPrimitiveRenderer has a similar layout to AIE’s Bootstrap library.

In the CppPrimitiveRenderer folder you will find the CppPrimitiveRenderer Solution which contains the base library source code, as well as a demo application project which utilizes it and shows it being used in a real time application.

The folder “Pre-Compiled Example Executable” Contains the demo app compiled in release mode for x86 (I did not have time to create compatibility with all other modes which would require all different libraries). This should run by extracting and double clicking.

Other wise to read, compile and launch the project and use the library, open the solution file with visual studio and use either Debug x86 or Release x86 to build, compile and run the solution.

Brief.docx is the word document created before production of this project outlining my designs and expectations.

Challenges, changes and requirements.docx is the word document created after the production of the project outlining:

* Issues encountered while integrating this complex system
* Performance of the system
* Any required changes for the system to function as intended

**How to operate the example application:**

Use **W, A, S and D** to move forwards, left, back and right.

Use **SPACE and LEFT CTRL** to move up and down.

Use **Mouse Movement** to rotate the camera and change heading direction

Use **Left Mouse Button** to add the “Point Sphere” primitive to be rendered where the camera is looking

Use **Right Mouse Button** to add the “Cube” Primitive to be rendered where the camera is looking

Primitives are randomized at the time of spawning them

Spheres and cubes are given random color values and random radius/dimensions.

Press **E** to toggle pausing the application. When paused, you can use the cursor to move, close, resize or minimize the window.

Press **ESCAPE** to close the application.