In this assignment you are to create a scene that includes the following elements:

- An enclosed space, such as a kitchen, garage, or classroom including:
    - Floor
    - Three walls
    - Ceiling
- Counters and cupboards, workbenches, desks or chairs as appropriate
- At least 5 objects that would be found in the space such as toolboxes, computers, etc.
- Multiple light sources including at least one artificial and one natural light source
- A camera perspective that allows the user to move around the space, zoom in and out.

1. You may use either OpenGL or Metal.
2. You may use C++, C#, Objective C, or Java
3. You must create separate files for each object in your scene plus one file for aggregating the objects as necessary and one main file.
4. You must provide internal documentation (see below)
5. Provide links to a source control mechanism such as GitHub so that I can check on progress.

<u>Here's how you win at completing Cooper assignments</u>

1. Meeting the requirements of the assignment. 60% of the grade
2. Internal program documentation. 10% of the grade. This must include header blocks for each function as well as running side commentary
3. Appropriately professional code structure and organization. 10% of the grade. This means at the very least, that every class in your application requires its own header and implementation file.
4. Doing 'something' above and beyond. 10% of the grade. But this needs to be a significant something, not a trivial extension.
5. Making your video presentation informative, coherent, and entertaining.

<u>Here's how you lose at completing Cooper assignments</u>

1. Failing to use appropriate features of your programming language of choice. -10%. This means you have to use classes, inheritance, polymorphism etc.

2. Submitting code embedded in a .docx, .pdf, .txt, or any other file format unrelated to programming assignments. -100%. I'm not even going to grade it if you do that. I do not want to see Visual Studio project files. It is ok to .zip or .rar sets of files for convenience so long as when I expand them, I see the correct files. I'm expecting to see:
    1. .cpp, .h, .cs, .java files
    2. One .pptx or .pptm file
    3. One mp4, mov, or other recognizable video file formats.
3. Submitting anything that I can already find on the Internet. -100%. Enough said.