In this assignment you are to illustrate the material in a chapter of the course text.

* Chapter 12: Computer Animation Ates group
* Chapter 13: 3-D Object Representations Cvetovitch group
* Chapter 14: Parametric Continuity Conditions: Windows group
* Chapter 15: Other 3-D representations: Hawkeye group
* Chapter 16: Depth Buffer Method: Jatt group
* **Chapter 17: Illumination Methods: Knights who say Ni**
* Chapter 17: Surface Rendering: Leftover group
* Chapter 18: Texture and Surface Detail Mathods: Now in Technicolor
* Chapter 20: Interactive Input Methods and GUI's: Techies
* Chapter 22: Programmable Shaders: Texit
* Chapter 21:  Global Illumination: The Global Group

What you need to do:

* Develop a PowerPoint presentation that describes the content of the chapter including
  + Conceptual material
  + OpenGL command, where appropriate
  + Illustrative code fragments
* Develop an application that illustrates the implementation of the techniques
  + Make it part of your PowerPoint presentation
  + Include a short video of the application executing in the PP presentation
* Develop a video presentation of no more than 20 minutes that includes the material in your PP presentation together with presentation components from each team member.

Here's how you win at completing Cooper assignments

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.

Here's how you lose at completing Cooper assignments

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.