## **Project 2 Ray Tracer is Due February 6<sup>th</sup>.**

You can find the proj2raytracer.zip in the Files folder on Canvas. Work on your project individually.

## **Building Debugging your code**

You should all be familiar with using the IDE of your choice to debug your code. If you did not have this experience before this course, you should now that you have completed project #1. As with project #1, the Makefile and Visual Studio solution file provided configures the project settings for you. The Ubuntu Virtualbox image provided in project #1 is also configured with the correct versions of all libraries and dependencies for the project. To avoid library linking errors, please remember to:

- Clean and re-build ALL libraries distributed with the project at least once on your system to
  make sure that they are compiled with your compiler and with the same library compiler
  options. Specifically, you should erase the debug and release versions of libst.lib and librt.lib and
  then make sure they are re-built. "make clean" and then "make" does this for you in linux.
  Clean and then Build does this for you in visual studio.
- 2. The c++ include and library paths are specified. (this is already done in the Visual Studio solution and Makefile provided).
- 3. Link to all libraries in your main project. . (this is already done in the Visual Studio solution and Makefile provided.

## Set-Up Options \*\*\* You can work together for project and virtualBox set-up ONLY\*\*\*

For this project, you can (1) build the src code as provided OR (2) you can use the set-up you already have with project #1 and simply make some small additions. I recommend option (2) because you have already done the work in project #1 to get your project running and you can simply add the additional code support for project #2. To do option (2):

- 1. Save your old project src structure somewhere so that you can keep it
- 2. Make a new copy of the src structure for this project.
- 3. Replace the Makefile with the new Makefile
- 4. Replace main.cpp with mainsrc\_proj2.cpp
- 5. Replace your Docs and Data folder with the new ones
- 6. Add the librt folder
- 7. Make sure that your librt header and lib paths are set in your IDE and that you link to it (see "Building and Debugging" your code above)