

In this assignment, you will implement the Scan Line Algorithm for the Gz library. With your provided API functions, the main application will read series of triangles from the text file **Tris.txt**.

All the data you need for this assignment is put in the zip file hw2.zip. Check the file **handout.pdf** for some overview of the assignment. Except some files already provided in assignment 1, there are other files have been updated, please check them:

File	Description	Type
Gz.h	Updated to support Gz::begin(GZ_TRIANGLES)	Incomplete
Gz.cpp		
Tris.txt	An input text file contains the list of triangles. You can figure out the format by reading the source code in file main.cpp or check the description below.	Data files
TeaPot.bmp	The sample bmp-format results. Note that you are supposed to generate a result looks like this file, but not exact pixel-by-pixel.	

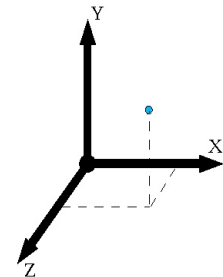
Notes:

1. Format of the file **Tris.txt**

- First line contains the number of triangles
- A group of 3 consecutive lines contains information about 3 vertices of a triangle. Two groups are separated by a blank line.
- Each line in a group contains information about vertex, includes coordinates (x y z - 3 real numbers), and color (RGBA - 4 real numbers).

2. Coordinate system convention

In assignment 1, you were not required to follow any convention about the coordinate system. However, from assignment 2, you must use the coordinate system described in the figure beside.



3. Submission requirements

You must submit all your source code, project files (MSVC project or makefile), and your results. The grading of your submission does not only depend on your result, but also depends on how well you implemented the algorithms. TA may test your implementation by changing some options, changing the source code of the main program, or changing the data file.