CIS 410/510: Project #6B
Due November 4th, 2013
(which means submitted by 6am on November 5th, 2013)
Worth 5% of your grade

Assignment:

1) Using Subversion, checkout the files for this project.
   a. 

2) We are crowdsourcing the marching cubes tables. Your name is associated with 12-13 cases. Find each instance and replace it with the correct answers.
   a. Important note: some cases will not be solvable with what you know now. We will discuss these cases on Weds' lecture. I recommend you all start working, but not spend more than 10 minutes on any case until after Weds' lecture.
   b. Important note #2: ~hank/case_checker can help you figure out if you are right. But it isn't always right. (!) (see note #1 re Weds lecture)
   c. Important note #3: we will need to override the case_checker frequently. We will use the buddy system to do this. If you think the case_checker is wrong, you will consult with your buddy. If your buddy agrees, you will commit the agreed upon cases to SVN.

3) Extend your proj6A.cxx to work with 3D data.
   a. In 6A, you implemented 16 cases to work with 2D quads. As per step #2, you will only be implementing a subset of the cases for 3D, and using other's solutions yourself.
   b. In 6A, you used a module for setting up lines. I have created a new version for setting up triangles (see TriangleList.h).
   c. You should test with the data file test_data.vtk and isoval == 0.5. That will give you over 400 instances of each case.

4) After all of the cases are in, we will have a functional version of marching cubes.

5) Two parts to submission:
   a. Commit the solutions for all of your cases to SVN.
   b. Email me (hank@cs.uoregon.edu) your source code and a screenshot of it working (with isoval == 3.2 and test data proj6B.vtk). Make sure to cross-reference with the correct image posted on the website. Not everyone will have their cases in by Nov 4th, but I anticipate enough committed that your isosurfacer can produce a good picture.

Buddies:
Robert Casteel / Abhijit Alur
James Kress / Nick Chaimov
Hannah Pruse / Mingwei Zhang
Stephanie Labasan / Brandon Hildreth
Monisha Balireddi / Ben Mood
Kevin Beick / Dan Erickson
David Stevens / Pavel Govyadinov
Adam Bates / Jordan Weiler
Matt Larsen / Samuel Li
Paul Elliot / John Wulf
Adam Zucker / Ryan Bleile