*CS148 Summer 2016 Reading Assignment - Meshes, Surface Topology*

Please read Chapter 12 of Shirley, and answer the following questions.

1. Why do we create and use unified mesh structures instead of just simple lists of triangles?

2. What’s one problem we could cause if we allowed for non-manifold mesh structures?

3. True or False: For all manifold meshes, there exists a consistent ordering of triangle vertices.

4. On average, how much space do we save by using shared vertices in mesh data structures?

5. In a proper mesh data structure, what run-time on *n*, the number of triangles in a mesh, should you expect to encounter when looking up neighboring triangles of any given triangle?

6. Name two use cases for spatial data structures.

7. How long did it take for you to (a) read the material and (b) answer these questions?