**Worksheet 5 – Part 4:**

**Explain how you obtain and use surface normals and explain how this relates to the surface smoothness when you are rendering a triangle mesh.**

Normals are extracted from the OBJ file. The file is parsed and the information about the entire drawing is stored into **g\_drawingInfo** variable and transferred after into normals buffer. In the end, values are sent to the vertex shader. The surface normal is interpolated and normalized at each pixel and then used in Phong reflection model to obtain the final pixel color. Therefore, normals represent a key factor in surface smoothness.