UASLP

Universidad Autónoma
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**FACULTAD DE
INGENIERÍA**

Wavefront 3D Object File reader.

Computer graphics.
Profesor: Ing. Rodriguez Gonzalez Omar.
grupo: 2807-02.
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1.   Introduction:

This part of the project consist in a reader of .obj extension files. And then print them using OpenGL

 The OBJ file format is one of the most important file formats in 3D printing and 3D graphics applications.
This files are the most common way to represent 3D models.

The OBJ file format stores information about 3D geometry. It can encode not only surface geometry of a 3D model but also store color and texture information. This format does not store any scene information (such as light position) or animations. An OBJ file is usually generated as an end product of the 3D modeling process. The file extension corresponding to the OBJ file format is simply ".OBJ".

The OBJ file format is open source and neutral. It is heavily used for sharing 3D models in graphics applications because it enjoys good import and export support from almost all CAD software. The OBJ file format was originally created by Wavefront Technologies for its Advanced Visualizer application to store geometric objects composed of lines, polygons, and free-form curves and surfaces.

1.1 OpenGL:
OpenGL is a cross-platform API for rendering 2D and 3D graphics. Is one of the most widely used specifications in the industry. Consist of more than 250 distinct functions, used to specify objects operations for making 3D applications.

1. Design:

- **Diseño del Lector: Explicación de un archivo OBJ. Definición del diagrama de clases (o diagrama de   funciones). Explicación de dicho diagrama y de cada clase.   Explicación de las estructuras de datos usadas.**

3.-

● **Pruebas: Explicación de las pruebas realizadas, imágenes de los modelos vistos desde su lector. Listado de problemas encontrados y cómo se solucionaron.**