

Task: WinForms .obj loader with basic UI

Create a WinForms application for loading geometry data from a simplified .obj file. A sample .obj file is attached.

.Obj file structure:

- Each mesh inside the file is represented by a group (g) element
- Each mesh has its own pool of data (vertices / uv coordinates / normals / faces), that is, the faces defined for a group only reference data located between the start of the group and the start of the next group (or the end of file).
- The vertex properties are not aliased: each vertex has its own normal and uv coordinate defined in the file

Requirements:

- Store the loaded data (vertices, normals, uvs, faces) inside the application in a format convenient for manipulating individual elements, e.g. for vertices, store the position etc.
- Non-geometry data (e.g. material definitions) may be discarded
- Show some kind of progress indicator (may be just a text message). Progress based on the number of loaded meshes is enough
- Allow the user to cancel loading after it has started. It is ok to wait for the currently loading mesh to complete before interrupting the operation.
- When the loading is finished, display a list of all loaded meshes. Selecting a mesh in the list should display the following statistics for that mesh:
 - number of vertices
 - number of normals
 - number of uv coordinates
 - number of triangular faces
 - number of quadrangular faces