Geometry  
o The scene must contain user created geometry, not just loaded  
models.

o This geometry must correctly lit and textured.

o Additionally, the geometry could demonstration transparency and use of depth sorting.

o Demonstration of procedurally generated shapes/primitives. Generated shapes should be lit and textured correctly.

o User created geometry should demonstrate use of vertex arrays  
(beyond model loading).

• Lighting

o The scene must show lighting from multiple lights of different types, colours and some animated.

o Consider how your scene will use mix of light sources.

o These light sources could be animated or made user controllable.

• Camera and Interaction  
o The scene must contain a working camera. The user must be able to  
manipulate the view through using the mouse and keyboard to control  
the camera.  
o Additionally, you should provide multiple cameras each with a different  
control scheme such as limited controls, procedurally controlled views,  
tracking controls or different camera types (such as 3rd person).  
o User interaction (controlling objects in the scene other than the  
camera).

• Hierarchical Modelling

o A clear example of Hierarchical modelling and animation through  
hierarchical means (with use of the matrix stack).

• Advance features

o Demonstration of shadows and use of the stencil buffer.

• A wireframe mode.

• The application code should be carefully designed and constructed showing  
appropriate use of classes and well commented.

Credits  
  
"Low Poly Rat" (https://skfb.ly/ouEyx) by Tyler Lazzareschi is licensed under Creative Commons Attribution (http://creativecommons.org/licenses/by/4.0/).