

Create a 3D Building Model using Blender

Prompt

The goal of this exercise is for you to practice generating 3D objects using the editing tools in Blender. You will specifically generate a building object. At this point, you do not need to apply any materials or lighting: you only need to build out the geometry.

Deliverables

1. Provide a brief description of the building you are trying to create. For example, is it a single-family home, a factory, an office building, an apartment building, an academic building, etc.? Is it modelled from a real building or from scratch? Did you use any reference data, such as images of existing buildings. Make sure to provide links to any source materials.
2. Upload the .blend file that contains your model.
3. Upload an STL file of the 3D model that could be used for 3D printing.

Points

Up to 20 points will be assigned based on the quality of the work. Note that it is not assumed that you will create a highly polished product, such as something that would be created by an architect or a 3D artist. However, the created object should be detailed. Make sure to include doors, windows, and other surface features. Also, make sure that the sizes and relative dimensions of the components of the building make sense. The building should be adequate to include in a simple 3D rendering of a landscape. Factors that will be considered include:

1. Quality/completeness of the provided write-up
2. Submitted files should open and work properly
3. Overall quality of the 3D models
4. Inclusion of common building components (doors, windows, etc.)
5. Reasonable relative sizes of components
6. Quality of the geometry (no self intersection, correct face orientations, etc.)