

Apply Textures to 3D Building Model using Blender

Prompt

Instead of configuring your own materials, you will now use textures created by others to create a more realistic rendering of your building. You can obtain free textures online. I recommend using Poly Haven (<https://polyhaven.com/textures>).

Note: You can use the building created and edited in the prior assignments; however, if you'd prefer, you can create a new building for this assignment.

Note: Do this work in a copy of your .blend file since the next assignment will ask you to use the materials you created in the prior assignment and the ones you will create here.

Note: Use the Node Wrangler plugin to add textures in the Shader Editor. This greatly simplifies the process.

Note: You will need to include texture assets as part of your .blend file. This can be accomplished using File → External Data → Automatically Pack Resources.

Note: You will need to edit the UV Mappings to make the textures fit and scale well with the surfaces of your object.

Note: You will need to configure some lights or add an HDRI to the scene so that you can view how the materials are rendered using Viewport Shading mode; however, you do not need to fully configure your lighting for the scene. Make sure to preview using Cycles. This can be a bit slow, especially without GPU acceleration.

Note: Not all textures are provided for free. However, there are plenty of free options online. So, there is no need to pay for assets.

Deliverables

1. Provide a write up that explains each of the textures you used. Make sure to provide a link to the source data (e.g., a link to the Poly Haven page for the texture).
2. Upload an updated .blend file with the materials configured.

Points

Up to 20 points will be assigned based on the following:

1. Quality of the descriptions and sources of the textures you used
2. You must use at least three different textures; you cannot assign the same texture to all faces of your 3D object
3. Used textures should be effective and make sense
4. UV editing should be used to make sure the scale and alignment of the textures are effective
5. There should be no geometry issues that impact the rendering of the materials (e.g., incorrect face orientation)
6. I should be able to open the .blend file and see the applied textures (all source files should be included)

