Blender - How to get started

This was tested with Blender 2.65 and using a HPL3 redist folder.

Open a new project. Don't create any new objects or materials.

Select the cube and press TAB to switch to Edit Mode. The cube should change in appearance so that you can see the selected vertexes. Rotate the view around and make sure all vertexes are selected. None selected vertexes are black and selected are white, the lines and faces between selected vertexes are orange. You select a vertex by right clicking on it, use shift to click and make multiple selections.

Extra info: To easily select all the vertexes you can press the button at the bottom of the 3D view window that has a cube with clearly visible white vertexes, this will toggle off/on selecting only visible or all vertexes in a selection. Press B to be able to click and drag out a selection box over the cube to select all its vertexes.

With all the cube vertexes selected, press U and choose Unwrap.

Press SHIFT-F10 to switch to the “UV/Image Editor”. In the UV/Image Editor, at the bottom of the editor window, click the Image menu and select Open Image. Navigate to the HPL3 folder and select a .dds image. Important! Make sure that the selected .dds image has a .mat file or else it will not work in the game. You should now see the texture behind a orange semi-transparent box in the editor window.

Go back to the 3D view by pressing SHIFT-F5. Make sure you are in Edit Mode (TAB toggles between Object and Edit) and with the cube selected, press CTRL-T to triangulate it.

Extra info: See Work-around: Triangulate export for a method where you only temporary triangulate objects on export, which is what you want when doing proper modelling later.

To see if the cube has the texture properly applied, at the bottom of the 3D view next to the large Edit Mode button, press the button with a circle and switch the viewport shading to “Texture”. You should now see the texture on the cube.

With the cube selected go to the File menu and choose Export → Collada. Navigate to a folder within the HPL3 folder structure (to minimize chance of error, select the same location as the .dds image). Important! Before you export, make sure that the Export COLLADA settings are all unchecked EXCEPT “Selection Only” and “Include UV Textures” that should be checked.

Extra info: You can save the Export settings for easy loading in the future using the + button next to the Operator Presets in the Export COLLADA section.

Open the HPL3 ModelViewer.exe and click the Load Model button, then navigate to where you exported the Collada file and open it. You should now see a magnificent textured cube.

Blender wish-list

- Option to triangulate in the COLLADA export menu (see solutions for work-around).

- Up axis settings for COLLADA, or preferably dealing with it automatically on import/export (currently importing object with Y up flips it 90 degrees).
- Units settings for COLLADA.
- Relative paths for COLLADA.

Work-around: Triangulate export

1. Go to modifiers (the wrench icon) in the properties panel.
2. Add a Decimate modifier (listed in Generate category), no need to change settings or to apply it.
3. When you export, check the “Apply Modifiers” option. This will triangulate the mesh for the COLLADA file export, but not the mesh in your blender project.