

CS435/535 Computer Graphics
Spring 2017
Project #5

Texture Mapping

Due: March 31 by 11:59 pm

The project is to investigate texture mapping.

Modeling

- Build a room with three walls and a floor. The ceiling and one of the walls are removed so a viewer can see the inside of the room well. The exterior of the wall shall be textured with **bricks** and its interior shall be **wallpapered**. The floor shall be carpeted or **wooden**. In the room, there is a simple table that consists of the table top and four legs. You can put texture on the **tabletop** too. **There are multiple picture frames in the room. They can be hung on the walls or standing on the table.** One of the picture frame has to be electronic. That is, it can show multiple pictures and it can be controlled by the user. (Please see the Interaction part for details.)

Viewing

- **There are four possible positions for the viewer, and the viewer can be looking at the center of the room. The viewer shall be positioned behind each wall (including the virtual one that has been removed) at a high place so the viewer is able to see the room clearly. The viewer position can be changed by the user. (Please see the Interaction part for details.)**

Interaction

- There are one button labeled “Next View” to control the position of the viewer. You can the four possible positions in an order. When the button is pressed, the viewer will move to the next position.
- There are three buttons to control the electronic picture frame. The “Play/Pause” button can be used to play a few pictures stored in the frame continuously or pause the play. When it is paused, the “Prev” and “Next” buttons can be used to show the previous and next picture respectively.

Create a directory called *project5* under your *cs435* directory. Move into that directory, create two files: *texmap.html* and *texmap.js* for the project, and add necessary image files.

Submission Requirements:

- Make sure the *project5* directory contain the following files: *texmap.html*, *texmap.js* and all the necessary image files. (Here we assume the *Common* directory is located in the same directory as the *project5* directory, and you do not need to submit the *Common* directory.)

- The title of *texmap.html* should contain CS435, Project #5, your name
- The *texmap.js* file should contain the following information at the beginning: CS435, Project #5, your name, a description of the program. Add other necessary comments whenever a part of the code is not obvious.
- Compress the *project5* directory into *project5.zip* and submit the compressed file as an attachment on Blackboard.