CS 334
Fall 2007
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Due: Friday October 19, 23:59

Assignment 4—Texture Mapping

In a nutshell

Add texture mapping to your renderer.

Details

1. Scene
    - Model a real world scene
    - Take digital photographs and use them as textures
    - Have at least 4 quads each texture mapped with different textures
    - One quad should illustrate tiling
    - Scene should be described in text file
2. Rendering
    - Texture mapping with bilinear interpolation lookup
    - Allow tiling through texture coordinate greater than 1
    - Extra credit 3%: mip mapping
3. Path functionality
    - Create a path by specifying key views and by interpolating between the key views
    - Play back path by rendering scene from views along path (rendering advances automatically without the user's help)
    - Have option of saving frames along path with names <pathname>_<XXXXX>.tif, where pathname is the name of the path and XXXXX is the 0-left-padded 5-digit frame index
    - Extra credit 3%: make movie in popular format (.mpeg, .avi, .mov) from your consecutively numbered stills

Turn in

Use WebCT if possible, if not email URL to zip archive with:

- Source code, including project/workspace/makefiles
- Code should compile, use relative paths
- Include all non-standard libraries (archive size should be <50MB)
- A short REPORT.{pdf|doc} file that describes your user interface, and the extra credit completed, and that includes 3 of your best images.