
CSE 167

Discussion 08 ft. Timothy
11/27/2017

Announcements

- Project 4 is tomorrow 11/28(Tue) 2PM!!!
- Instructor/TA evaluation
- The first blog entry is due Monday 12/4 11:59PM!

Contents

- Final project: grading and some topics

Final project

- Teams of 2 or 3
 - If you need to work alone, please contact Jurgen but this will be permitted only in very special cases
- You need to have score 3 skill points per person
- What if we implement more than 3 skill points * n people?
 - Well then, you learned a lot of things! Good for you!
- The only way you can score more than the perfect score is to do extra credit

Final project

Per-pixel illumination of textured polygon

Toon shading

Bump mapping

Glow, bloom or halo effect

Particle effect

Procedurally modeled buildings (no shape grammar)

Terrain map loading

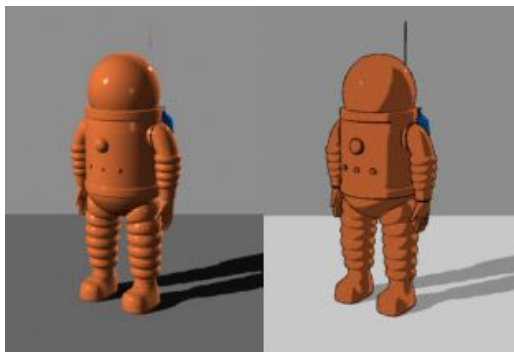
Linear fog (like deprecated glFog)

Rim Shading (only if Toon Shading is not used)

Sound effects

Final project

- Toon/Cel shading
 - When the eye vector and the normal vector is perpendicular, you color it!
 - Also discretize the colors e.g. 0-255 colors should now be quantized into smaller ranges



plastic shader

toon shader

- Rim shading
 - You can't do both of them
 - Highlight the edges. The more edgy it is, the more highlighted it is
 - Which is something to do with eye vector and normal vector!
 - When the eye vector and normal vectors are perpendicular, it should be (darkest/brightest)?



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Rim Shading (only if Toon Shading is not used)

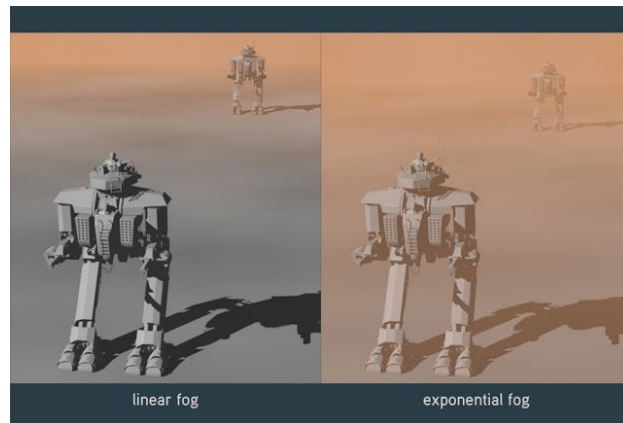
Sound effects

Final project

- Particle effect
 - Base particle(s)
 - Life/death/motion
 - Loop



- Linear fog
 - Compute the distance
 - Introduce a 'fog factor' into the final color



Final project

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Terrain map loading

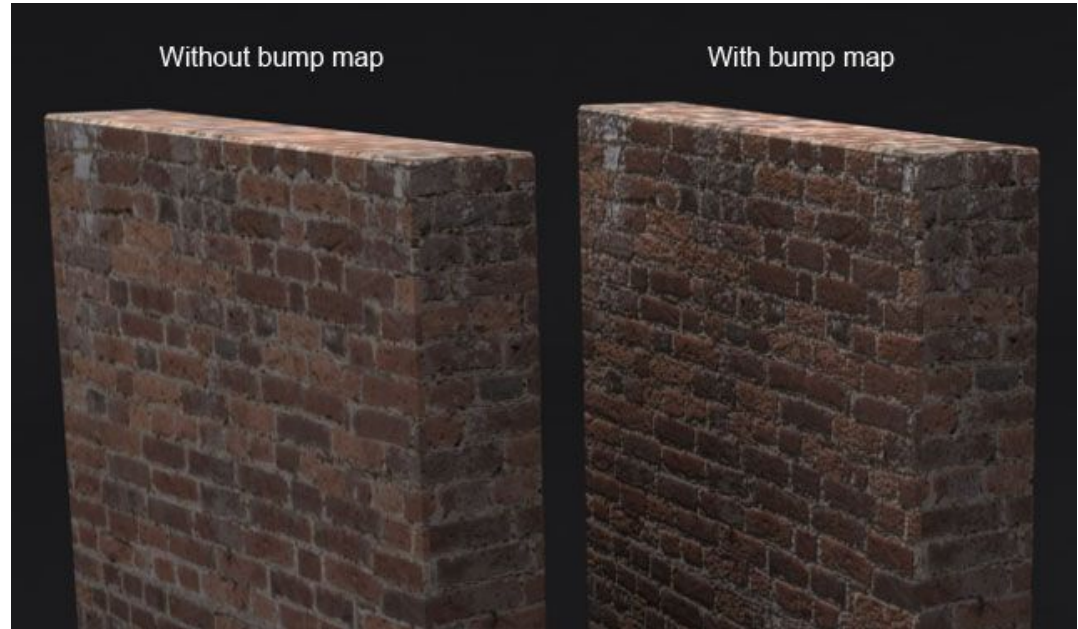
Linear fog (like deprecated glFog)

Rim Shading (only if Toon Shading is not used)

Sound effects

Final project

- Bump mapping
 - Colors + Vertex + Normal
 - Create fake normals
 - The surface is still flat



Demo time

<https://www.youtube.com/watch?v=aZh-CckpKR4&feature=youtu.be>

<https://www.youtube.com/watch?v=arQL7ayVPCK>

<https://www.youtube.com/watch?v=XNSKA9WjGP4>