

Final Project – Assignment #5

Midterm Inspection: March 31st

Due: April 19th and 21st

Objective: Create a real-time 3D game with OpenGL

Three to four person teams: for example,

- 1 – Graphics programmer/ physics
- 2 – Graphics programmer/ audio
- 3 – Graphics programmer/ Project Manager
- 4 – Graphics programmer/ Game Designer

There are other jobs but the point is that EVERYONE will be responsible for a significant portion of the graphics programming

Technical requirements:

- Complex 3D environment (models, textures, etc.)
- Collision detection
- Audio (e.g. OpenAL)
- Narrative – a back story
- Help
- Manual
- **Each person on the team must implement and *code* 1 3D graphics component (e.g. curved surfaces, textures, lens effects, blending, networked play, shaders, lighting, animation, particle systems, etc.)**
- User interactivity

Grads: incorporate additional advanced rendering or interaction functionality: for example, wii-mote interaction, 6dof tracking system, artoolkit interaction, bsp trees, shadow volumes, motion blur, HDR lighting etc.

You can use the following from the web to increase quality:

- 3D Models
- Software: physics/audio/graphics libraries
- Textures

However you must denote them in your report. If you do not, you will get a 0!

Grade: 20% of your final grade.

- 5% project proposal
- 40% technical components
- 20% originality / quality / funness
- 10% webpage and report
- 25% of project grade will be a prototype on **March 31st (Thursday)** showing at least 25% progress (tier 1)

Turn in by February 24th (1 page document):

- Schedule
- Plan broken up into 4 tiers of completeness (which will roughly correspond to grade letters)
- Roles and proposed tasks for each person
- Risky Areas/Backup Plan
- Design document (describe game play, interaction, and graphics)

Code, deliverables, etc are due on the 19th at 2pm:

Either: Post on web (make sure the time stamps are correct, or hand me a hard copy on a cd/dvd, or flash drive.

Final Demo days (April 19 and 21).

- be ready to demo on either day
- Presentation Info:
 1. Maximum 10 minutes preferably less (suggest walk up w/ laptop tested and ready to go)
 2. Show web page
 3. Run game (you don't have to download it from your webpage), play for a few minutes
 4. While playing have group members talk about
 1. the game
 2. the technologies
- Group Report (2 pages) <- link via webpage (DUE: 11:59PM Thursday for ALL groups)
- Individual report (1 page) <- email directly to TA and myself (DUE: 11:59PM Friday)

Group Report

Describe your game, and include technologies incorporated. Discuss what works and what does not work, based on what you originally proposed and any other features you have implemented. Include screenshots or have them on the webpage.

Individual Report

Discuss what ***each person in your group*** worked on.

Divide up 100 points of effort amongst your group members.