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Final Project Proposal

I plan to create a project that will allow the user to explore a large, open-world "haunted forest" type of environment. Essentially, I will be creating a very "bare bones" survival-horror game. I will use my previous assignments/in-class assignments as reference points, but I will create a large amount of new assets that are more appropriate to the setting of the project (cars and rockets aren't very horror-themed). Some of the specialized resources that I will need to create for this project are trees, campfires, cabins, fences, tents, and various forrest appropriate tools (like shovels, axes, rakes, chainsaws, etc). I will create all of the resources in code. The application will allow the user to explore the environment, and have several zones for exploration (so far, I am planning the main forest, a cave area, a campsite and a remote cabin). I predict that the most difficult part of this project will be implementing the collisions for the various objects in the environment.

The current plan is to have the entire environment built, including lighting and textures by the progress report. (I also hope to have a decent start on the collisions by that point as well). The main focus of the project will be building and lighting a more complex, large-scale environment, so the parts of the project that I will definitely complete are the generation of various 3D objects that are appropriate to the setting,

creation of a skybox to create a more realistic scene, lighting the scene, and collisions to prevent the user from clipping through world objects. The following will be stretch goals that I will do only if time allows:

- 1) More dynamic lighting effects (like lightning, realistic fire effects and animations, etc.).
- 2) Advanced visual effects (like running water, rain, fog, etc).
- 3) Implement a HUD, pause menu and potentially save states.
- 4) Implement a flashlight/lantern carried by the player allowing for more immersive exploration
- 5) Implement basic event scripting enemies/adversarial AI (this probably won't get done, since it is not strictly related to graphics).