Tim Elvart
11/10/17
EECS 672 Project 3 Report

For this project, I decided to expand on my project 2. I had an initial goal that I was going to modify the look of the house in the center to be extremely detailed and not just 4 walls with a roof and a door. Obviously I spent more time working on the lighting model, so the house makeover will be upcoming in project 4.

There isn't much that is different other than the addition of the complete phong model and the campfire model, and another tree behind the house. There are no interactive controls other than switching the projection type and the dynamic viewing.

The project meets the requirements in that all of the interactive viewing controls work as they are supposed to. The complete phong local lighting model has been implemented in the fragment shader and is supported appropriately by CPU side code. I believe the lighting environment in this scene produces a pleasant image to look at.

A major difficulty of this project came from completing the fragment shader. If there is something not right in the code, the whole project will not work correctly. While it is easy to go back line by line to figure out what is causing the shader to not get built correctly, it would be helpful if we had some kind of compilation log kind of how we compiled OpenCL in 690 last spring.
Another difficulty was determining the normal vector to the smoke trails on top of the campfires. I came up with a kind of workaround to get the desired grayish color. It works in the environment for this scene but I wouldn't want to leave it like that if I was going to use the same model in other scenes.