CSE251: Graphics - Spring 2014:

Assignment 3: 3D World Adventure

Intermediate: March 8th, 7 pm., Final: March 19th, 7 pm.

1 The Problem

As mentioned in the class, the third assignment is an extension of Assignment 2., and will be done in groups of 2. In this assignment we will extend what we did to a complete 3D adventure game. The tile world that you developed in Assignment 2 will be a part of the course of the game, as one of the tracks that the person should cross.

The specification of this assignment is intentionally kept short so that you can use your imagination to build on your second assignment. The following section sets up some of the minimum expectations.

2 The World

Create a climbing/jumping course with different obstacles. A part of the world should be the fossil park that you created in Assignment 2. You can use only the code that one of the project partners created (or a combination of the two) in Assignment 3. i.e., you are not allowed to use anything that a member outside your group has created.

Details of the world are left to your imagination. However, you should use some form of texture mapping and shading and different models of lighting in your world.

All the camera positions mentioned in Assignment 2 should be included here also.

2.1 Optional

Feel free to include additional objects, animations, textures, etc. to make the world more realistic and rich. You may have multiple levels in the game. Additional interesting camera views may be provided. You should include at least one moving spot light in a dark part of the course, as well as shading effects.

3 Submission

You submissions should include your source code, a makefile and a compiled executable. You need to include a manual file that describes any additional information that is needed in compiling/executing you code. Do not use any non-standard libraries. It is very important that your manual contains a section on the different techniques you used to create the world. This will be an important factor in deciding your grades.

An intermediate submission is due on March 8th and the final submission is due on March 19th, and evaluation will be done soon after that. The intermediate submission should contain a rough sketch of the complete game that you plan to develop, while the detailed models and interactions of each part could be left rudimentary. The intermediate submission should also contain a spotlight and the shading effects should be visible at some part of the course and character.

4 Grading

Grading will be done based on the quality of the world created, set of techniques used to create the world (note that this should be part of your manual), and your understanding of the problems and techniques as demonstrated during your evaluation.

Happy Gaming !!