

Project – Advanced Crowd Simulation

DATE DUE: Phase 1 Class 15, Phase 2 Class 19

Proposal DUE: Class 7

DATE ASSIGNED: Class 1

Goals:

To learn how to use and understand crowd simulations, including creating an environment and interaction with objects or agents. The emphasis for this Project is to create a demo reel quality crowd simulation.

Requirements:

Phase 1 will include a completed environment, agent selection and testing, roughed out layout/behavior, testing of enhanced features such as interactions, fuzzy logic, etc.

Phase 2 will focus on creating the final rendered simulation

Considerations:

The scene should be complex enough to serve as a good context for the goals of the assignment. A simple scene where the proper crowd techniques are used would be better than a very complex scene not properly completed.

You should allow time for this assignment to apply lighting, *simple* shaders, and rendering. **Make sure that you can render it, do test renders as you are building to avoid any surprises.**

Use PBR (Physically Based Rendering) in Mantra (optionally Arnold).

You will be required to **present and explain** your work in class on the due dates for each phase.

Submissions guidelines:

The project will be submitted as a directory, **F17_T450_P_LastnameFirstname_Title/**

This directory should contain the following:

- **F17_T450_P_LastnameFirstname_Title.hipnc**
- **F17_T450_P_LastnameFirstname_Title.pdf** - a breakdown of your project as you would describe it to a fellow houdini user. It is very important to be able to explain your work. See the template in the class notes top table.
- **F17_T450_P_LastnameFirstname_Title.exr** (or png, or tga, **NO tifs please!**). This image should be rendered in high resolution (1280 X 720 pixels). Other aspect ratios accepted.
- **[optional] F17_T450_P_LastnameFirstname_Title.mov** (include a title slate)
- Additional information required:
 - **reference/** Reference, Reference, Reference – a directory called reference containing small images in jpeg format and a file named **sources.pdf** (includes appropriate URLs) If you are using your own artwork please scan and place it in the reference folder.
 - **textures/**

Important note: Adherence to these naming and format conventions constitutes 5% of your grade. This is the naming convention that will be used for all projects. Failure to comply will also affect your professionalism grade.

Grading: refer to the grading rubric