For your final project, you are expected to work in pairs. Larger groups are acceptable, but will need to achieve more to show that everyone on the team made a good contribution. Solo projects are also acceptable, but you will be expected to do the same amount of work as a pair, so it may be twice as hard.

The purpose of the final project is to demonstrate that you can independently learn about, understand, and implement advanced animation methods that have not been covered in the assignments. You must implement a method related to character animation (e.g. doing stuff with motion capture data, simulating Lagrangian dynamics, character skinning, flocking behaviour, inverse kinematics, etc.), and also a method related to passive animation (e.g. rigid body motion, other types of particle systems, deformable objects, water waves, etc.). Note that these lists aren’t necessarily exclusive: for example, you can argue that character skinning should count as passive animation, or that a deformable object whose deformation parameters you can control with motion curves is more like character animation.

In addition to your notes from lectures, you may want to get ideas by looking through the course textbook, or through previous SIGGRAPH papers (you can browse online at the ACM Digital Library), or by coming to talk to me.

Teams with more than two people will need to implement more methods, or argue that the methods they have chosen are hard enough that it counts for more.

The showcase for what you choose to implement will either be a short film (think on the order of 10 seconds) or an interactive program (perhaps a game, but other possibilities exist—e.g. an interactive poser that does inverse kinematics and shows the results with skinning).

You are allowed and even encouraged to use external libraries or code I’ve provided in the class, etc. but you must give credit for what you have used. Obviously, if an external library implements an animation method for you, you may not count that as one of your methods.

1 Proposal

The first thing you need to do is figure out who is on your team. The second thing you need to do is figure out what you want to do, and make a proposal to me about it. By 4pm, Friday, November 12, you must finalize who is in your team, and you must have secured my approval for your project. You will lose marks for establishing this later.

Note: your first proposal may not be acceptable. I may have to talk to you about modifying it to something more in line with the course, or something less ambitious. Do NOT leave this to the last day, as it could take some revisions to make this work.

2 Deliverables

By midnight of December 3 you need to send the code you developed for the final project to the course account.

You have two options for grading: either doing a short demo or doing a write-up. If your interactive program doesn’t compile and run on the Linux machines in CICSР or on a Mac OS X box, or your short film doesn’t play on my Mac (e.g. uses some proprietary Microsoft codec), then you will have to do the demo, and you are responsible for providing a machine on which you will do the demo (in CICSР building or nearby).

For the demo: you need to set up an appointment with me (10 minutes should be sufficient) at some time to demonstrate your work. The appointment may be slightly after December 3 if scheduling it before then will not work. In the appointment you will run your program or show your movie, and explain what you did and how you did it.

If you don’t do a demo: you need to email the course account with either a URL to the movie you made or with clear instructions on how to compile and run the interactive program you made. You also must submit a write-up, either in email or on paper, explaining what you did and how you did it.