

Game Architecture Final Project Spec

Your mission: Identify and build a substantial piece of game engine technology in four weeks (3/27-4/27). Present your results to the class on April 27 or May 1.

Choosing a Final Project

What you do for your final project is up to you. You will “pitch” the project to the class and instructors on March 30. The pitch involves standing up in front of the class for 2 minutes and talking about what you want to build. Following the pitch, you and the instructors may negotiate on the scope (e.g. the instructors may ask you to add or remove features so that it fits with the general size we want to see in a final project).

Here are some examples of past final projects:

- Dual quaternion vertex skinning
- Inverse kinematics (IK) solver
- Constructive solid geometry (CSG) editor
- Modular particle system and tool

Over this semester we have skimmed over a lot of very deep topics. A good final project could dig into any one of those topics.

You are free to work together in teams on a final project, but be advised that the level of effort expected is N^2 , where N = the number of people on the team. Typically most people do the final project individually.

Doing the Work

There will be no homework assigned in April. The last 2 weeks of class will be “open studio” with no lecture scheduled. Take advantage of all this time to work on your final project. Instructors will be available during open studio and office hours to answer questions, give feedback, etc. Don’t procrastinate. The final project is a marathon, not a sprint.

Presenting Your Work

You will present your final project to the class at the end of the semester. Components of a successful presentation include:

- Roughly 10 minutes long.
- Demonstrates your project visually.

- Explains the technical challenges of your project - expected and unexpected - and your process for solving them.
- Explains shortcomings and/or potential future work and improvements.

Slides are not required, but are likely helpful.

Grading the Projects

Your final project is 30% of your course grade. Grades break down roughly as follows:

- 17 points - Does the project accomplish what you pitched?
- 8 points - Quality of your presentation.
- 5 points - Code correctness and standards.

The instructors reserve the right to award over 30 total points for exceptional project work. Your pitch does not count towards the project grade.