COMPSCI 715S2C 2005
Advanced Computer Graphics

SIGGRAPH 1985 Project

Lecturer: Kevin Novins

Aims:

To study some fundamental topics in computer graphics
To understand the context of more recent research
To develop research, writing and presentation skills.
To work together to enhance individual performance

Overview:

The main purpose of the SIGGRAPH 1985 project is to shore up your knowledge of computer graphics while at the same time exposing you to the primary source literature in the field. You'll be reading about classic techniques from papers that were written when the techniques were new. To gain in-depth understanding, you'll have to read the paper, find other sources on the topic (probably more recent ones), and do some implementation as part of a group project.

Written and oral presentations are meant to share your newfound knowledge with your classmates. Ultimately, the midterm test will gauge your understanding of all of the topics, not just the one that your group studied.

Assessment Overview:

1.0 marks	Group project initial meeting with Kevin (Week 2)
1.0 marks	Group progress meeting with Kevin (Week 3)
2.0 marks	Group preliminary presentation (Week 3)
4.0 marks	Group final written report (Week 4)
4.0 marks	Group final presentations, including final demo (Week 5)

Assessment totals to 12% of the marks for COMPSCI715. In cases of academic dishonesty such as cheating or plagiarism, all these marks are at risk of penalties. Individual participation and preparation in this project counts for another 7% of the marks in the course. The midsemester test will be based on the material in all the groups' projects. It is worth another 4% of the marks in the course.

Lecture Session Calendar:

Tuesday	Thursday	Friday
19 July Introductory Lecture	*21 July* Introduction to Projects	*22 July* Assignment 1 Presentations
26 July Topic Selection	*28 July* No Session	*29 July* No Session
2 August Optional Help Session	*4 August* No Session	*5 August* Preliminary Presentations
9 August Peer Feedback Session	*11 August* Optional Help Session	*12 August* Reports and Code Due
16 August Presentations	*18 August* Presentations	*19 August* Presentations
23 August Q&A Fair	*25 August* Midsemester Test	*26 August* No session

Week One: Introduction to the Course and the Project Topics

During the first week, your main task is to do the "Creative Expression in OpenGL" assignment, which is due on Friday.

On Friday, the list of possible topics for SIGGRAPH 1985 projects will be released. The associated papers will be available from the course afs space. After the session, you should familiarize yourself with the topics and consider which ones you'd like to explore as well as who you would like to work with. By Friday, it should be clear how many groups we'll need and how large they will be.

Week Two: Topic Selection

At the Tuesday session this week, we'll be dividing into groups and assigning each group to a topic. You have a choice of creating your own group or being assigned to a group. If you want to create a group, you have until ten minutes after the start of the session on Tuesday to do so. Anyone not in a group by then will be assigned to a group. Each group will then pick one of the available topics. Each group needs a different topic; clashes in interests will be resolved by randomly assigning priorities to groups.

A sign up sheet will be available on Tuesday for meetings with me. All groups must have a 30 minute meeting on Thursday or Friday. By the time of the meeting, I will expect each group member to have reviewed the topic and found some additional resources. I'll also expect the group as a whole to have a plan for how they are going to divide up the work, what their work will focus on and what implementation work will be done.

There will be no lecture session on Thursday or Friday.

Week Three: Project Progress Meetings and Presentations

On Tuesday and Wednesday this week, I'll meet again with each group to check its progress. Bring along evidence of what you've done thus far – lists of references, bits of code, or pictures. If anything seems to be going wrong with your project, we'll try to fix it at these meetings.

On Tuesday, there'll be an optional question and answer session. This may be a good time to test out your presentation materials on the computer in the lecture theatre.

There will be no lecture session on Thursday.

On Friday, each group will give a presentation explaining its topic and its results so far. Each presentation will be only 3 minutes long (strictly enforced), so be efficient about how your present your material. Not all group members have to be presenters. There will be time for about 3 minutes of questions for each group. Your group will be assessed both on the quality of its presentation and the quality of the questions it asks of other groups.

Submit: Group leaders to submit their groups' preliminary presentation slides by 4:00pm on 5 August.

Week Four: Project Code and Reports Due

On Tuesday there will be a peer review session. All groups are required to bring five printed copies of a substantial draft of their project report. We'll exchange reports and individuals will give feedback for improvement. Since the primary purpose of the report is to educate your classmates, this feedback is important.

On Thursday, there will be an optional question and answer session.

There will be no session on Friday. This is the due day for the projects. In addition to project source code, each group must complete a written report. Details will be provided later. Everything that is handed in will be made available to all students in the course.

Submit: Project leaders to submit all source code for their project and the group's written report. These are due in the assignment drop box by 1:55pm on 12 August. However, to account for minor illnesses and other small catastrophes submissions will be accepted without penalty until 5:00pm on 14 August. No submissions accepted after 5:00pm on 14 August.

Week Five: Group Presentations

Each lecture this week will be devoted to groups' presentations of their projects. Each presentation must include a demo of the groups' software. Presentations will be 10 minutes long with 5 minutes for questions.

By the end of this week, each student must submit a self-evaluation of their project and their own role in it. Details will be provided later. Self-evaluations will be kept confidential.

Submit: Project leaders to submit the slides for their group's presentation to the assignment dropbox by 4:00pm on 19 August. No late submissions accepted. Each student to submit a self-evaluation to the assignment dropbox by 4:00pm on 19 August. No late submissions accepted.

Week Six: Q&A Session and Practice Exam

By this week, everyone should be studying each others' projects for the midterm test, which will be held in class on Thursday.

To encourage your study and information sharing, on Tuesday there will be a required Q&A fair. Each group is to set up an "answer" desk and one group member must be present at that desk at all times. Other group members can circulate to other desks, asking questions of other groups. No session on Friday this week.