Advanced Graphics and Interaction 2014: Lectures 2-3

AGI14 Students @ VIC

Mario Romero
2014/09/05

KTH VETENSKAP OCH KONST

VICSTHLM
VISUALISATION INTERACTION COLLABORATION

Course Schedule

Wed Sept 03 13-15	Lecture 1	Intro
Fri Sept 05 15-19	Lectures 2-3	Group Formation
Wed Sept 10 13-15	Lecture 4	Proposals
Thu Sept 11 10-12	Lecture 5	Feedback on proposals
Mon Sept 15 8-10	Lecture 6	Hello World! Demos
Thu Sept 18 10-12	Lecture 7	ForskarFredag Preparation
Wed Sept 24 14-16	Lecture 8	Demo Day!!!
Thu Sept 25 16-20	Debaser Invation	Setup 16:00 – 20:00
Fri Sept 26 8-18	Debaser Domination	ForskarFredag 2014!!!
Mon Sept 29 8-10	Lecture 9	Reflections of ForskarFredag
Wed Oct 8 13-15	Lecture 10	Agile Development → ComiCon
Mon Oct 13 8-10	Lecture 11	Agile Development 2
Wed Oct 15 13-15	Lecture 12	Aglie Development 3
Wed Oct 29 16-23	Kistamässan Invation	Setup 16:00 – 23:59
Thu Oct 30 – Sun Nov 2 9-19	Kistamässan Domination	COMICON 2014!!!
Tue Nov 4 10-12	Lecture 13	Reflections on ComiCon
Wed Nov 5 10-12	Lecture 14	New groups
Fri Nov 7 15-19	Lectures 15-16	Epson Moverio Workshop
Tue Nov 11 10-12	Lecture 17	Proposals
Tue Nov 18 10-12	Lecture 18	Feedback on proposals. Early hello world dem os
Tue Nov 25 10-12	Lecture 19	Hello world !demos
Tue Dec 2 10-12	Lecture 20	Demo Day!!!
Thu Dec 4 15-18	VIC Invation	Prepare Open House
Fri Dec 5 15-19	Open House	AGI14-VIC Open House

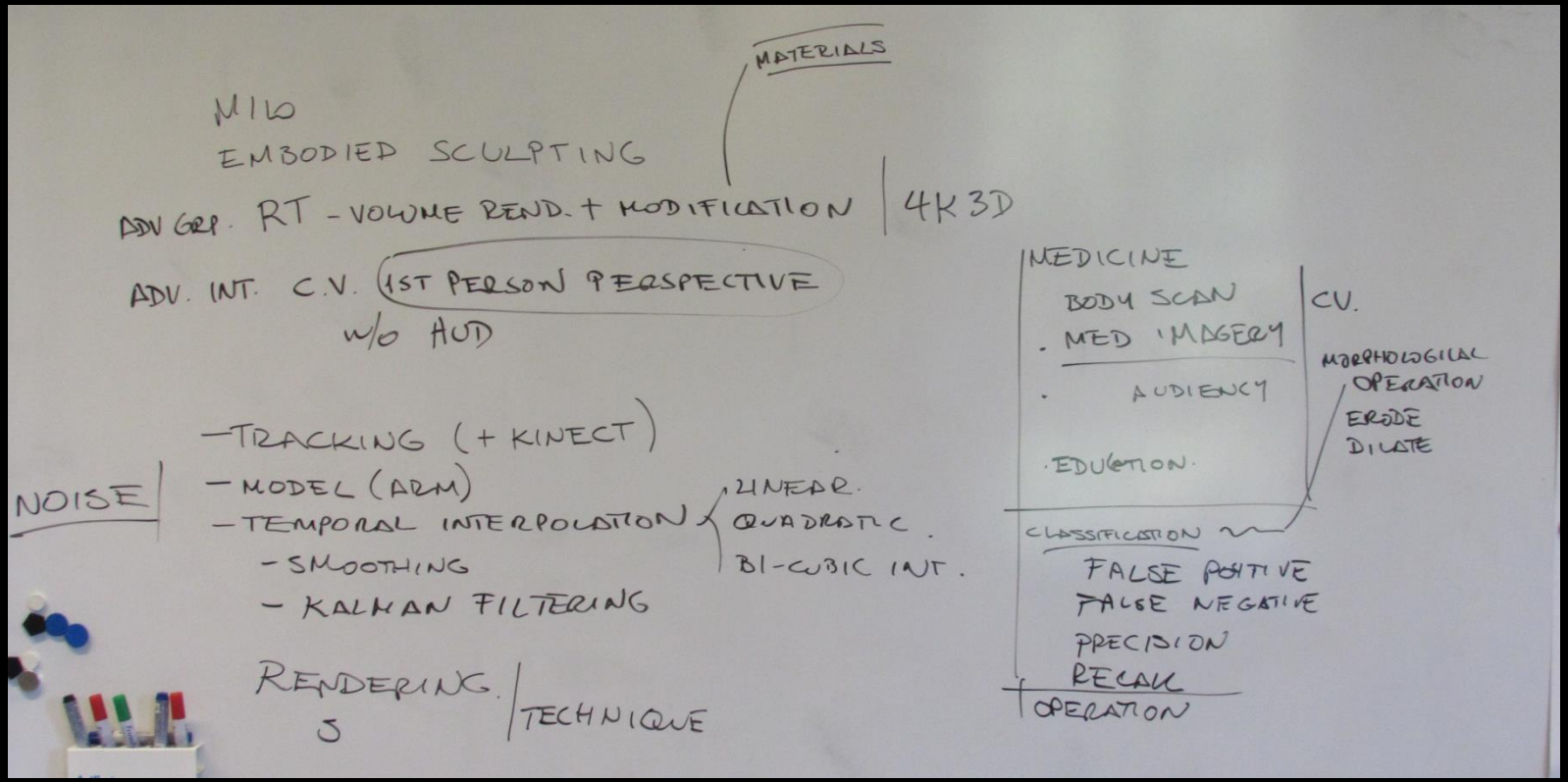
Assignment 1 for today

1. Answer this Survey
2. Watch these videos and answer this survey:
    1. 2012 SIGGRAPH Technical Papers
    2. 2012 SIGGRAPH Emerging Technologies
    3. 2013 SIGGRAPH Technical Papers
    4. 2013 SIGGRAPH Emerging Technologies
    5. 2014 SIGGRAPH Technical Papers
    6. 2013 SIGGRAPH Emerging Technologies
3. Read this six-page paper and answer this survey:
    1. Romero 2013
4. Read this six-page paper and answer this survey:
    1. Romero et al 2014
5. Familiarize yourself with KTH Social and Facebook group pages
6. Think of what you would like to build in AGI14

Agenda

1. Demo: Milo Embodied Sculpting
2. KTH Social and Facebook announcements (Assignment 1.5)
3. Personal Presentations (Assignment 1.1)
4. Questions on Course Structure (Assignment 1.2)
5. Break
6. Presentation SuitMe – Emil Harðarson
7. Group Formation (Assignment 1.1)
8. What is a good Proposal? (Assignment 1.3, 1.4)
9. Break
10. Brainstorming (Assignment 1.2)
11. Break
12. Feedback on Brainstorming
13. Pizza and a Movie

Feedback on Demo



KTH Social and Facebook

Personal Presentations

Questions on Course Structure?

Review of AGI14

- Intended Learning Outcomes:
  1. Collaborate to build original and stable projects that combine methods in advanced computer graphics and advanced human-computer interaction;
  2. Communicate the theory and practice of these methods at a technical and a practical level;
  3. Provide informed constructive criticism to the development of the projects from other teams;
  4. Demonstrate the projects at large public venues to open audiences.

AGI14 Grade Assignment

- Project 1 50%
- Project 2 40%
- Assigments 10%
  - < 100 minutes/week
  - Reading
  - Writing
  - Coding
  - Interacting

Project 1 (50%)

• Proposal	5%	10/9
• Demo	5%	24/9
• Forskar Fredag	10%	26/9
• Deliverable 1	5%	28/10
• ComiCon	10%	30/10
• Open House KTH	10%	5/12
• Deliverable 2	5%	12/12

Project 2

• Proposal	5%	11/11
• Demo	10%	2/12
• Open House KTH	15%	5/12
• Deliverable	10%	12/12

Deliverables

- Working VIC Demo
- Code with good comments
- Webpage
  - Description
  - Photos
  - ”Making of” documentary (2 minutes)
  - Demo Reel (30 seconds)
  - PR Material: logo, trailer, flyers, posters, catalog...
  - User Testimonials

Project 2 – Epson Moverio


MOVERIO
A new way of seeing the world

Project 2

- Fri Nov 7 15-19
- Lectures 15-16
- Epson Moverio Workshop

BREAK

Suit Me

Forming Groups

Algorithm?

Four Groups

Matched Content Interests

Mixed Skills

Mixed Technical Interests

Michelangelo

- Stefan
- Johan B
- Oscar

Leonardo

- Carl
- Anton
- Johan S

Donatello

- Søren
- Philip
- Daniel
- Axel

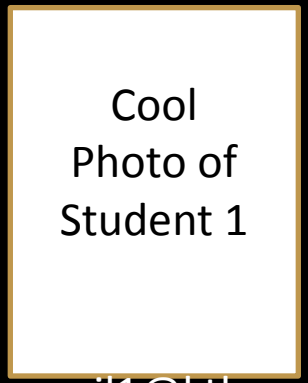
Megatron

- Christoffer
- Mattias
- Ludwig
- Linnea

What is a good proposal?

- Project Goal
- Literature Review
- Work Plan
- Risk Assessment
- Presentation

Proposal for Project 1 Title



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Project 1 Title

Outline

• Motivation	1 minute
• Goals and Challenges	3 minutes
• Related Work	2 minute
• Methods and Techniques	4 minutes
• Discussion	5 minutes
TOTAL	15 minutes

Motivation

- Why is this project interesting to me?
- Why is this project interesting to you?
- What do I want to learn by doing this project?
- Why does the world need this project?
- How does this project make the world a better place?

Goals and Challenges

- Goals
  - What this project accomplishes in the first place
  - What this project accomplishes in 2nd place
  - What this project accomplishes in 3rd place
- Challenges
  - What are the obstacles to attaining goal 1
  - What are the obstacles to attaining goal 2
  - What are the obstacles to attaining goal 3

Related Work (maybe a Table?)

- Similar cool project number one with image
  - Author
  - Year
- Similar cool project number two with image
  - Author
  - Year
- Similar cool project number three with image
  - Author
  - Year

Similar Cool Project 1

- Cool video or image demonstrating the proposal.
- Say what the related project was about and how it is related to your proposed project.
- Clearly state what about your project is different from this project.
- Clearly state why these difference matter.
- Only show a video or figure, no text on this slide.

Similar Cool Project 2

- Cool video or image demonstrating the proposal.
- Say what the related project was about and how it is related to your proposed project.
- Clearly state what about your project is different from this project.
- Clearly state why these difference matter.
- Only show a video or figure, no text on this slide.

Similar Cool Project 3

- Cool video or image demonstrating the proposal.
- Say what the related project was about and how it is related to your proposed project.
- Clearly state what about your project is different from this project.
- Clearly state why these difference matter.
- Only show a video or figure, no text on this slide.

Methods and Techniques

- What methods will you use in your project?
- What devices will you use?
- What libraries will you import?
- How will you connect the parts?
- Will you develop anything new that can be contributed back to the world as code or design pattern, etc?
- What interaction paradigms will you use?
- Will you design new interactions or new algorithms?
- You should talk about these methods and techniques on separate slides using as many visual and video aids as possible, keeping a close eye on your time

Thank you!

Questions?

Student One {email1@kth.se}
Student Two {email2@kth.se}
Student Three {email3@kth.se}
Teacher {email4@kth.se}

For more information go to: www.project1.se

In case they ask

EXTRA SLIDES

Group Members

- Who you are
- Major, graduation year, career goals

Individual Contributions

- Student 1 will do
  - A lot
  - So much
- Student 2 will do
  - A lot
  - So much
- Student 3 will do
  - A lot
  - So much

Anything else

Next Class

- Wed Sept 10 13-15
- Lecture 4 Proposals

BREAK

Brainstorming

- Start with idea
- Think of technology supporting
- Take inventory of hardware and skills
- Test feasibility

PIZZA AND A MOVIE

Thank you!

marior@kth.se

Questions?