Computer Graphics Project

MTAT.03.316

Fall 2018

Raimond Tunnel

IT Akadeemia

1632

toetab Skype™
IN THEORY, THEORY = PRACTICE.

BUT IN PRACTICE?
Contact Information

• Raimond Tunnel – jee7@ut.ee
Organization

• 3 credits course
  • Contact hours $10 \cdot 1.5h = 15h = 0.58$ credits
  • Individual work (63h):
    – Project idea – 4h = 0.15 credits
    – Project plan and timeline – 12h = 0.46 credits
    – Milestones $6 \cdot 7h = 42h = 1.62$ credits
    – Presentation – 5h = 0.19 credits
Organization

- Project idea and plan (~1-2 pages) – 14.09
- Milestones:
  - **Group1**: 21.09, 12.10, 26.10, 09.11, 23.11, 07.12
  - **Group2**: 28.09, 19.10, 02.11, 16.11, 30.11, 14.12
  - 6 in total
  - 2 week long
  - 7h of work each
- Final demo – 21.12
How to pass?

- Create a project plan
- Set up and achieve your own milestones
  
  Missing those, gets you a strike.
  
  Do not get more than 3 strikes.

- Do a presentation of the final result

  Missing that is an automatic failure.
  
  Not attending fellow students' presentations gets you a strike.
The Final Result

- Some kind of a demonstratable software.
  - Standalone build
- Good project page
  - Clear milestone descriptions and pictures
  - Link to the final build
  - Possible link to the repo
  - Short video of the final build!
What to do?

- Anything you want related to computer graphics.
What to do?

• Practical work for a thesis
• Although you can not get credited twice for the same work...
• ... chances are that the practical work of your thesis is more then the credits given.
What to do?

- Work on some pet project you already have.
- You are working on it in secret anyway, right?
What to do?

• Continue a project from another course.
• For example the CG course.
What to do?

- Take on a new project and learn new things!

*memegenerator.net*
The CGVR Lab Projects
Paabel VR
madis.vasser@ut.ee
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madis.vasser@ut.ee
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madis.vasser@ut.ee

- Learn Unreal Engine 4
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- Learn Unreal Engine 4
- Possibly get your first VR dev experience
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- Learn Unreal Engine 4
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- Get access to the CGVR Lab
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- Learn Unreal Engine 4
- Possibly get your first VR dev experience
- Get access to the CGVR Lab
- Be assisted by professionals (Madis & Ats)
Delta Building Visualization
Delta Building Visualization

• Advance your skills in Unity
Delta Building Visualization

- Advance your skills in Unity
- Get experience working on a non-solo project
Delta Building Visualization

- Advance your skills in Unity
- Get experience working on a non-solo project
- Learn how to optimize in Unity
Delta Building Visualization

- Advance your skills in Unity
- Get experience working on a non-solo project
- Learn how to optimize in Unity
- Possible BSc or MSc thesis!
Inspiration


Reality: B by Kalle Ever

Vrena by Jens-Stefan Mikson

Crazy Doom Dungeon by Diana Algma and Marko Täht

VR Stealth by Andreas Sepp
Project Management

• Have a plan!
  • You can always change the plan.
  • A plan is better than no plan!

• Plan should consists of:
  • What do you want to have done?
  • General steps in what order you do things.
  • Required technologies (if applicable)

• Should not consist of:
  • Detailed descriptions of every milestone...
Project Management

• Milestone
  - What are you going to do in the next 2 weeks?
  - Some specific feature?
  - Include the estimated research time
  - Include the estimated debugging time
  - Make sure you stick to the goals you proposed!
  - Roughly 7h of work.

You can find 7h in 2 weeks, right?
Project Management

- Motivation
  - So you want something done by the end?
  - Do a little bit throughout the semester.
  - Little bit means a new feature in 2 weeks.
  - Does not have to be a big feature ...
  - ... but does have to work!

Milestone is a promise to a client of what will definitely be done and working.
Project Management

• When in trouble: **ASK FOR HELP!**

• Also:
  
  • Keep your milestones very small, but concrete!
  • Do not restart or permanently delete your project!
  • Ask for help from:
    – CGVR lab people (Ats, Madis and Raimond)
    – Fellow students
  • Be positive!
Final Presentation

- Finally you have implemented ~6 features
- This means that you probably have a pretty solid result
- Show this result to others
- Compare it with your original project plan
  - Does not have to match
- Think about how to continue...
Questions?

THANK YOU!

ANY QUESTIONS?
Your Project?

- What do you call it?
- Which group will you be in?
- Want a joint project with another student?