Computer Graphics Project

MTAT.03.316

Spring 2017

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IN THEORY, THEORY=PRACTICE.

BUT IN PRACTICE?
Contact Information

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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 ·7h = 42h = 1.62 credits
    - Presentation – 5h = 0.19 credits
Organization

- Project idea and plan (~1-2 pages) – 15.02
- Milestones – 01.03, 15.03, 29.03, 12.04, 26.04, 10.05
  - 6 in total
  - 2 week long
  - 7h of work each
- Final presentation – 17.05, 24.05
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.
What to do?

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

- Practical work for a thesis
- Although you can't 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!
New Project Ideas

- APT Game Generator projects
  - Meet competent people
  - Have fun together
  - Create awesome stuff

- https://www.facebook.com/groups/GameGenerator/
- http://aptgg.ee/projects
- http://aptgg.ee/team-finder/
- Meetings every Monday at 18:00 in Aparaaditehas
New Project Ideas

- APT Game Generator projects
  - Tribocalypse VR
  - CoLOrigami
  - Melancholy
  - Mind Stone
  - ...

[Images of project ideas]
New Project Ideas

- Previous unfinished CG course projects
  - [https://docs.google.com/spreadsheets/d/1hOX4SufXOnJAJu7_SREENkpovLUjzoPEnjsIOlfv9ZQ/edit#gid=0](https://docs.google.com/spreadsheets/d/1hOX4SufXOnJAJu7_SREENkpovLUjzoPEnjsIOlfv9ZQ/edit#gid=0)
  - VideoROI – display video frame, define masks on it
    richard.meitern@ut.ee
  - Ahhaa 3D RollerCoaster – procedurally generated path
    richard.meitern@ut.ee
  - Lens Distortion Removal – calculate and remove distortion
    hendrik@kalderafx.com
  - Brain Data Visualization – Visualize a rotatable brain
    ilya.kuzovkin@gmail.com
  - Paabel VR – Improve the VR demo for the CGVR lab
    madis.vasser@ut.ee
Inspiration

• SpaceRacer (APT Game Generator)
  • https://protosity.wordpress.com/2015/12/14/spaceracer-game-project-unreal-engine-4/

• Tribocalypse VR (started in Global Game Jam 2016)
  • http://globalgamejam.org/2016/games/totem-games
  • http://fb.com/Tribocalypse

• Mythos of the World Axis (APT Game Generator)
  • https://www.oculus.com/experiences/rift/1221236131237268/

• Games from Ludum Dare 37 and GGJ17
  • http://aptgg.ee/ludum-dare-37/
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)
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!
Project Management

• 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?