Computer Games Laboratory

I15, Kick-off



Instructors

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Course Goals

- 1. Design & implement your own game project
- 2. Learn and apply central elements of modern computer game design and programming
- 3. Practice "soft skills" and project management
- 4. Reinforce CS and graphics knowledge



Course Goals

• Capstone course: cumulative knowledge transferred to task of creating video game





Prerequisites

- Strong interest in computer graphics and game tech
- Intro (advanced) courses in computer graphics
- Ability and interest to work in teams
- Some artistic skills can help
- Time & motivation

Course Elements

- Lectures: background & basics, structure
- Milestones: delivery deadlines, documentation
- Presentations: get feedback, track progress



Grading

- We will track your performance
 - Each of you: private summary of own contributions
- Project plays most important role
- Criteria:
 - Technical & artistic complexity of project
 - Project plan and milestones met
 - Assignments
 - Presentations
 - Teamwork
 - Creativity



Resources

- Main Website:
 - <u>https://www.in.tum.de/cg/teaching/summer-term-</u>
 <u>25/computer-games-laboratory/</u>
 - Project structure / assignments
 - Lecture slides

— ...

- Wiki
 - Upload your contributions there



Book

http://www.gamedesignworkshop.com/





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Project Structure





Teams

- 3-4 Students per team
- Every member should contribute equally
- Considerations
 - Interests
 - Skills
 - Working hours
 - Meeting locations...

"Design & implement your game"

- But ... that's very challenging!
- Detailed project management
 - Written project document
 - Actual idea/game documentation
 - Progress & timeline
 - Presentations / demos
 - Critiques, mutual feedback
 - Software engineering principles

Organization

- Project structure document (written by us)
- Detailed project notebook (written by you)
- All written documents in the course Wiki
- Written assignments due Mondays at 12:00
- Presentations in class

Iterative Design

Keep game on track



Milestones

- 1. Game idea pitch & formal proposal
- 2. Interim demo
- 3. Alpha release
- 4. Playtesting
- 5. Final presentation

See the Project Structure Document!

Milestone #1

- Game description
 - 1-3 pages (ca. 1500 words)
 - 3 pages sketches / mock-ups
 - Highlight design choices
- Development schedule
 - Layered task breakdown
 - Timeline & milestones
- Assessment
 - Strengths, appeal, criteria for success...

Development Schedule

Layer down your goals

- Functional Minimum
 - Just enough to call it a game...
- Your Low Target
 - The least possible to feel "ok"
- Your Desired Target
 - This is what you're aiming for
- Your High Target
 - If things go extremely well
- Your Extras

- Things you know won't fit, maybe for later...



Development Schedule

Task	Description	Who	Hrs	Actual
1	Brainstorm design	All	4	8
2	Character modeling	Stan	12	26
3	Camera control	Kyle	6	
4	Prepare presentation	All	6	
5	Explosion effect	Kenny	12	

Development Schedule

Task	Wk1	Wk2	Wk3	Wk4		Wk5	Wk6	Wk7	•••
1	Α				P,				
2		L	L		art 3 Du				
3			Т		Je				
•••									

Advice

Think Small!

- Do one thing well
- Make game stand out!
- Better than doing lots of stuff half-way



Big Idea Sheet

Keeps project focused, common ground



Milestones

- 1. Game idea pitch & formal proposal
- 2. Interim demo
- 3. Alpha release
- 4. Playtesting
- 5. Final presentation!

Milestone Dates

- Kickoff lecture (April 14)
- Game idea pitch & formal proposal (Mai 12)
- Interim demo (June 2)
- Alpha release (June 23)
- Playtesting (July 7)
- Final release & presentation (July 22)

Milestone Dates

- Game idea pitch & formal proposal 3w
- Interim demo 3w
- Alpha release 3w
- Playtesting 2w
- Final release ... ca. 2w

Project Structure Document

- Make sure to follow instructions
- Detailed deliverables
- Especially for milestones 1 & 2

Project Critiques

- Get feedback from "outsiders"
- Be constructive...
- Not used for grading!

Forming Groups

- If you already have a group great...
 - Send me the team name, members names and student IDs
- If you don't have a team yet,
 - You may find one now
 - Or send me your name and student ID

• We will sign you into tumonline after the first three weeks

Platform

- No restrictions on development platform!
- But technical contribution has to be clear
- If unsure, talk to us...



Game Theme

• 9 out of 10 designers agree:

"Narrowing focus and imposing limits expands creativity immensely."

- Starting point for visual design
- Avoid stereotypes & cliches
- Justify design decisions against theme!



This years theme

