Today

- Introduction
- Overview and Administrivia
- Form groups
CSE 125: Spring 2007

- Instructor
  - Geoff Voelker (voelker@cs.ucsd.edu)
  - EBU3B 3108
  - Hours: M 3-4pm, W 4-5pm
    - Email, can also drop by

- TA
  - Kristen Kho (kmkho@ucsd.edu)
  - Veteran from Spring 2006
  - Office Hours TBD

History

- This course is modeled after a UW course
  - Created by John Zahorjan (UW prof) and Dennis Cannady
    (MS program manager (VisualBasic))
  - Dennis was the original inspiration for the goal & style of the
    course, John chose games
  - I was the TA for the first two classes ('97, '98)
    - (10 years already??)

- UCSD
  - Have taught a version at UCSD since 2001
  - Projects are on the Web (for those hosted here at UCSD)
  - Some promos on Web site, too:
    - UCSD TV segment, FoxNews, short promo
Software System Design and Implementation

- Why isn’t this course titled, “Game Design and Implementation”?  
  - There are many other factors to game design that we will not touch on (e.g., AI, playability, etc.)  
    » More on this later  
- By the end of the course, you’ll hopefully realize that what you learned in doing the project will apply to any large software project that:  
  - Is distributed, has performance constraints, has real-time constraints, has actual users other than the developers, etc.  
  - The game is motivation :-)
- Another perspective: This course is an opportunity to apply everything you’ve learned in the major

Class Format

- Lectures  
  - First week or so: Intro + tips and techniques
- Group meetings  
  - Once a week meetings (30 mins) with us in lab  
  - Groups and individuals will submit progress reports  
  - We will discuss progress, problems, plans, changes  
  - We can fit schedules  
    » Try to use class periods  
    » Try to be contiguous across groups  
    » We’ll organize by email
- Guest lectures  
  - Hopefully Rockstar San Diego, Sony Online Entertainment, perhaps others (High Moon?)
## Class Sketch

- Specification, schedule, milestones: 1.5 weeks *(1-2)*
- Preliminary development: 2 weeks *(3-4)*
- Project development: 4 weeks *(4-8)*
- Spec freeze, alpha testing: 1 week *(9)*
- Beta testing: 1 week *(10)*
  - Ship at end of beta testing
  - Demo at seminar
- Review document: 1 week *(11)*
  - Due during Finals week
- Guest lectures sprinkled in

## Your “Final”

- We will have a seminar, open to the public, where each team will demo their game
  - Four players drawn from the group and the crowd
  - Makes you look like totally awesome cool hackers
  - But it’s also “for real” → everyone will be watching!
    » (Last thing you want is a blue screen of death…)
- Friday afternoon of last week of class
  - Afternoon of Friday, June 8
- Written project report due at end of finals week
  - Low key, hard part is over with
Atkinson Hall Auditorium

- We’re going to do the demos in the Atkinson Hall (Calit2) auditorium
  - High-res projector (higher resolution than our video cards)
  - 24 channel surround sound

Facilities and Platforms

- Class lab: EBU3B B220
  - P4 3.2 GHz w/ 2 GB memory
  - ATI x300 128 MB video cards
    » We’ll demo on an ATI x1900 @ 1600x1200 resolution
  - Windows XP, DevStudio.NET, WinCVS
  - MilkShape3D, 3D Studio Max
  - DirectX 9.0c (should be latest version)
- You should be able to work from home, too
  - WinXP from MS
    » Not sure whether Vista is a good idea or not
  - DevStudio.NET from MS
  - WinCVS from http://www.wincvs.org/
  - Note: MS software for personal use, NOT for resale
Lab Use

- We used to have an exclusive lab for the class
- The new labs cannot be physically secured (fire doors)
- Problem…
  - Previously did not have to worry about items walking away
- Consequences
  - We’ll have to lock up books, accessories
  - No Xbox :-(

Speaking of Labs…
Books

- From Microsoft
  - No great DirectX book that I’ve found
  - “Game Programming Gems” (1—5)
    » Copies in the lab
- Recommended (from Steve Rotenberg)
  - “3D Game Engine Design” by David Eberly
  - “Real-Time Rendering” by Thoman Moller and Eric Haines
- Recommended (from Joey Hammer and Kristen)
  - See the course web site (under syllabus)
- I can always buy more books
  - Let me know if there are some we should get

Art

- Obtaining art
  - Troll the Web
  - There is artwork for many games out there
  - Usually in some kind of “standard” format
    » Produced from modeling software
  - Can usually load directly into game using DirectX functions
  - If not, look at the code in the game editors to help figure out how to manipulate
  - Kristen can provide many tips, too
- Find an artistic friend
  - Seriously…has happened successfully in the past
Speaking of Art...

And More Art...
Intellectual Property

- Speaking of trolling the Web…
- Many things are posted as “use freely”
- But if it isn’t
  - Ask before using…just takes an email, and people are usually flattered to have their stuff used

- Also, note that you own the copyright on the code that you write – not UCSD
  - Because you pay for your education
  - Not the same for grad students, staff, or faculty
- You can do whatever you want with your project

Group Web Pages

- Each group will maintain web pages for their project
  - Schedule, milestones, comments, pictures, blatherings, etc.
- Think of your group Web page as a living design document for your project
- More to come
  - Once we get the groups established
Collaboration and Competition

- Everyone is in this together
- I want you to help each other out, even among groups
  - Especially solving bugs
  - Share code tips
    - E.g., this is how I created a frame buffer with these properties…
  - But not classes, modules, or files
    - Each group has to develop
- How?
  - Email (there will be a class list)
  - In the lab – the lab is there for your exclusive use

Grading

- A non-goal of the course is to worry about grades
  - Everyone can get an A in the class…
  - …as long as you contribute
- We will be meeting with each group weekly
  - We will be able to determine whether you are a functioning and contributing group member
- Marital problems
  - Come to me if the group is having “issues”
    - The earlier, the better
  - We will solve these problems as a group
  - Working to support a group, engaging, and compromising are all part of your grade – do not compartmentalize
Groups

- Form groups of 5-6
  - Choose team members
    » Primary constraint: Need graphics people on each group
  - Choose a team name
  - Choose a team representative
- Working in pairs very worthwhile

For Next Time...

- Meet with your groups
- Start discussing what you want your project to be
  - Look at the projects that have been done in the past
- Kristen will lecture on strategy and tips
- And the countdown begins…
Questions

- Any questions?