CIS 300

Introduction to Computer Game Design

http://www.cis.cornell.edu/courses/cis300/2005sp
http://www.cs.cornell.edu/projects/game

Lecture 5: Documents and Development
Spring 2005

Announcements

- Lab 1 due Friday, 2/11
- New Reading Assignment: Read Chapter 3 (Game Settings and Worlds) of R&A for Monday, 2/7

Overview

- The Traditional Model of Game Development
- Design Documents
- Technical Documents
- Milestones
- The Iterative Model of Game Development
- Our Basic Schedule

The Traditional Model

- The most common approach: document extensively, then design to specification.
- Design and technical documents are pretty much done before any coding starts.
- A very particular timeline for project milestones is followed throughout the development.
- This model is basically a general software engineering model

Design Documents

- The Concept Document
  - For this class, it should be 4-5 pages in length
  - Start with a catchy, one-sentence description
  - Convince us that your idea is good, and feasible
  - Describe:
    - Premise
    - Audience
    - Genre
    - Story
    - Core Gameplay
    - Interesting and Unique Game Elements
  - Communicate the core vision of the game
  - The document is analogous to a resume – it's a short ad
- Details and examples: pp. 15-16, Appendix A of the text

Design Documents (continued)

- The Game Treatment
  - Longer than the concept document: 10-20 pages.
  - A thorough overview of the game
  - Intended for someone who is already somewhat interested
  - Good place for screen mock-ups, concept art, etc.
  - Describes some specific level, enemies, and challenges
  - Fleshes out the setting, story, and characters
  - Provides an analysis of the game, especially with respect to existing games
  - Details all the stand-out aspects of the game
  - Analogous to a portfolio – shows what you can do
- R&A suggest you think of the treatment as what you would put on a webpage to generate interest in the game. For this class, you'll create the treatment as a webpage.

Design Documents (cont'd)

- The Game Script
  - A comprehensive tome detailing all non-technical aspects of the game. 50+ pages
  - Not intended for anyone outside of development
  - Complete details on characters, objects, weapons, enemies, all stats and parameters
  - Complete details on game mechanics
  - Complete details on all levels, and all game modes
  - Complete details on the interface
  - Complete details on the setting and backstory, all text and dialogue, and any supplemental fiction created
  - Enough drawings to know exactly how the game looks
  - In principle, the game script should allow you to "play" the game without a computer
  - In short, the game script has everything

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Technical Documents

- Possible kinds of technical documents:
  - Coding Practices
  - Licensed Properties being used (engines)
  - Asset Management
  - Related Research
  - All projects have a Functional Specification Document
- The Functional Specification Document describes the **Interface** for all modules/classes, the general class structure, and the overall code architecture
- We will require this for this class, but not for a little while

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Milestones

- The Milestone Document is the project timeline.
- Milestones are markers that signify the completion of crucial tasks in the development cycle.
- Milestones are often used by publishers to monitor development, and control the pay schedule.
- Typical Milestones:
  - Project Kickoff
  - Design and Technical document drafts
  - 1st Production Milestone, 2nd Production Milestone, etc…
  - Code Complete
  - Content Complete
  - Zero Bugs
  - Release
- Milestone Descriptions should be very **specific**

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Milestones (continued)

- Each Milestone should have a:
  - Title
  - Description
  - Due date
  - Production timeframe
  - Acceptance test
  - Risk assessment
  - Deliverables list
  - Contributors list
- For this class, we will want a Milestone Document, but it won't be quite so rigid; it will be more iterative.

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The Iterative Model

- In some ways, the traditional model makes no sense. The design of the game inevitably changes throughout development. You can't know what the game should be like until you play it.
- … the solution? Iterate!
- The cycle:
  - Design
  - Implement
  - Playtest
  - Repeat
- In *Rules of Play*, Salen and Zimmerman state that you should be playing your game no later than 20% into your development!
- You should create a prototype as soon as possible, and it doesn't have to use a computer.

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Basic Schedule

Week 1	Form Groups
Week 2	Brainstorm
Week 3	Choose Project
Week 4	Concept Document
Week 5	Milestone Document
Week 6	**1st Prototype**
Week 7	Functional Specification
Week 8	**2nd Prototype**
Week 9	Website
Week 10	**Alpha (Code complete)**
Week 11	Game Script
Week 12	**Beta (Feature Complete)**
Week 13	Testing
Week 14	**Release (Balanced and Tested)**
Week 15	Showcase

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Down the Road…

- First, decide on a project
- In about two weeks, submit your concept document.
- In three weeks, submit your milestone document.
- In about four weeks, show your first prototype.

… This is a hard, fast-paced class. Don't forget that along with your project, there will also be separate reading and writing assignments!

Start things early. **Don't procrastinate!**

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