Foundations of Interactive Game Design (80K)

week two, lecture three
Today

• More on Atari VCS (Combat, Pitfall!, and River Raid)
• Game definitions revisited
• Assignments: tutorial #2 and team selection
• Discussion of rules starts next week
Atari VCS returns
Combat Demo
Combat

Missile: high rez
Sprite: high rez
Playfield: low rez
Entire game on one screen

Only other element is *Pong*-style ball
How is this possible?
Atari VCS

- No frame buffer
- Key component: the Television Interface Adapter ("Stella")
- Drawing line-by-line, calculating in horizontal/vertical blanks
- How to create *Pitfall!*?
Pitfall!

• A founder of the “platformer” genre, 1982
• VCS required drawing each line — so moved high-resolution sprites during every frame (two sprites are tree details and Harry, etc)
• Also moved ball graphic during drawing to create vines that are on same line
• Technical and game design tour de force, created by one person: David Crane
Pitfall! Demo
River Raid

- Carol Shaw, Activision, also 1982
- Also pushed platform boundaries
- Also defined genre conventions
- Let’s take a look...
River Raid

• It scrolls — like tutorial! (One of the first vertical scrollers for any platform, big challenge on VCS)

• Fuel gauge (or points)

• Carol Shaw one of the first women in computer game design
You don’t have to push your platform this far.

But thinking carefully about your platform’s capabilities and affordances is part of your job as a game designer.
Game definitions revisited
Defining “game”

A “system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome”
— Katie Salen and Eric Zimmerman
Defining “game”

- Since S&Z’s book published, Juul’s Half-Real
- Widely-cited and employed definition
- Definition’s sources touch on:
  - Game as formal system
  - Game’s relationship to player
  - Game’s relationship to the rest of life
Defining “game”

A “rule-based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable.”

— Jesper Juul
Rules
Variable, Quantifiable Outcome
Valorization of Outcome
Player Effort
Player Attached to Outcome
Negotiable Consequences
Game definitions

• Are often presented as “consensus” definitions based on surveys of previous game scholarship

• Can be interesting to think about, intellectually

• But: consistently marginalize things that should be central. For example...
The Sims is not a game

- “The #1 best selling game of all time.”
  — Electronic Arts, 2004

- But The Sims doesn’t meet formal definitions. Such games “have emergent quantifiable goals but usually no single overriding outcome.”
  — Katie Salen and Eric Zimmerman

- “Open-ended simulation games such as The Sims change the classic game model by removing the goals, or more specifically, by not describing some possible outcomes as better than others.”
  — Jesper Juul
Beyond the margins

- fantasy and vertigo games
- poker and blackjack
- *The Sims* and *SimCity*
- *Dungeons & Dragons* and *GURPS*
- *EverQuest* and *World of Warcraft*
- *Dogz* and *Electroplankton*
What makes the borders?

- Juul says this definition applies to a 5,000 year history of games.
- Many game scholars agree.
- But a new group (e.g., Pearce) argues these definitions based on a history of boys’ play as “games” and girls’ play as “not games.”
- A broader frame would change definition.
For this course

• We will consider the idea of computer games something *broader* than the output of the industries, not narrower

• All software that “invites and structures play” — that is *playable*

• We will be much more interested in “how is this played?” than “is this a game?”
Next week
Second assignment
Tutorial #2

- Due in section, graded there (again)
- Covered in this week’s sections — also in detailed tutorial online (link from syllabus) through “Scores, lives, and damage” section
- Required customization: change one interface element
- If you can: Complete, add something more
Third assignment: team selection

- Also due at next week’s sections
- Submit on paper
- Include all info listed on syllabus page: http://www.soe.ucsc.edu/classes/cmps080k/Winter09/project.html#team
Sources of help

- The class forums (linked from syllabus)
- TA office hours (listed on syllabus)
- If all else fails: emailing your TA