Foundations of Interactive Game Design (80K)

week three, lecture one
Today

• Quiz
• Prior 80K game demo
• Game history
• Game concepts and innovation
• Grow a Game cards
• What’s coming up
• May not get through it all
Remember: You need a partner this week

If you don’t have one, use the class forums, be willing to change sections, etc
Quiz
Which does Fullerton not recommend for brainstorming?

A: Put it on the wall
B: No criticism
C: State a challenge
D: Playful environment
E: None of the above
Where does Fullerton recommend starting after you have an idea?

A: Focus on the game system
B: Focus on the game’s drama
C: Focus on the target audience
D: Focus on the technical platform
E: None of the above
Our changed rules for Bartok did not result in ...

A: one made the game outcome feel more random
B: one made the gameplay feel more chaotic
C: one made the game more theme-driven
D: one made the gameplay feel more strategic
Demo: Deathscaper

by John McGrath
& Dillon Kasper
A piece of game history

We’ll cover more over time
Output from: OXO

9 8 7  MOUNDS AND CROSSES
6 5 4  BY
3 2 1  A S DOUGLAS, C.1952

LOADING PLEASE WAIT...

EDSAC/USER FIRST (DIAL 0/1/2/3/4)
DIAL MOVE:

Clear  Reset
Start  Stop

Single E.P.
Genre: emulation of tabletop games

Now usually “casual games” (like Solitaire)
Genre: Sports Games
emulating non-tabletop games
Spacewar! demo

Keyboard controls:

a s d f
k l ;‘
Spacewar!

- There were earlier computer/video games. But they simulated non-computer games: Checkers (1952), Tic-Tac-Toe (1952), Ping Pong (1958)

- In *Spacewar!* we see a vocabulary of computer games first emerge: navigation, projectiles, simulated gravity

- Huge influence on future games (e.g., Atari founder Bushnell’s *Computer Space*, 1971)
Spacewar!

- *Spacewar!* was also a feat of technology (tech demo for PDP-1) and open source
- *Spacewar!* also shows games as media — science fiction (don’t forget Sputnik) not traditional game simulation
- *Spacewar!* also is an important social game — called first multiplayer, spread in lab culture led to “*Spacewar! Olympics*” via *Rolling Stone*
Notice anything?

The first games all come from universities and national labs
Remember *Pong*?
Pong started the arcade boom

Which is where we’ll pick up in our next discussion of computer game history
As a designer, why study game history?

- Understanding how the medium’s vocabulary developed (like film’s)
- Knowing what has already been done, and worked well, learning from success/failure
- Seeing how fundamental types of gameplay emerged and evolved is a great place to start brainstorming a new game
For example
Orbient

- Gameplay originally developed (as Orbital) for Nintendo’s “bit Generation” series for the Game Boy in Japan — no U.S. release

- Orbient is available as a Wii download, part of the “Art Style” series

- Uses one element pioneered by Spacewar! as a centerpiece of play: gravity.
Orbient

• This is an example of one kind of innovative game you could create this quarter.

• Game Maker includes support (and the site offers tutorials) for many standard game elements — waiting to be explored.

• What if, instead of gravity being used for navigation, a game used thrust-based navigation for combat? What about projectile-base navigation?
Or what if Orbient’s gameplay was more fine-grained?
Osmos, Eddy Boxerman, Dave Burke, 2009
What’s needed to design something innovative?
Player centric design

- You are creating an aesthetic experience for the player – all design considerations must flow from the questions:
  - What does the player *do*? (mechanics)
  - What experience (dynamics) does this create for the player (aesthetics)?
- You are not your own typical player
- The player is not your opponent
Iterative design

• Rapid iteration, with something working all along the way, is a widespread design idea

• Fullerton calls the designer “an advocate for the player” — but it’s easy to lose sight of new player’s perspective

• Her approach: rapid iteration, with input from playtesters at every possible step
Playcentric design

• Start with player experience goals — aesthetics — e.g., need to trust and distrust other players (strategic), always almost out of control movement (feel), etc

• Generate ideas, formalize ideas, test ideas, evaluate results

• Eject, repeat cycle, or accept current ideas

• Brainstorming, prototyping, design, production, testing
Your game projects
Your goal

• A game of the sort that does well at festivals, conferences, contests...
• A game you can explain in 30 seconds
• A game you can demo in 3 minutes and play in under 30 minutes
Game innovation

• One level is mechanics innovation
  • You can change the action
  • You can change the larger system to which it is articulated

• Another level is theme innovation
  • Largely-familiar mechanics w/ new theme
Changing the action

- Adding a new action
- Changing how action works
- Re-defining fundamentals of the genre (platformer space)

*Portal*
Changing the system

• Familiar action in new system context is a new mechanic
• Two player to single, turn based to continuous, etc
• A way to revisit classics

Plasma Pong
Consider these *Pong* variations
Bit.Trip Beat, Alex Neuse, Mike Roush, et al, 2009
Plasma Pong, Steven Taylor, 2006
Pongs, Pippin Barr, 2012
Upcoming

- Noah will post Friday reading (and more syllabus updates) really soon
- Team selection document due in section
- One page mechanics analysis due in section
- Tutorial #2 due in section
- Game concept due next week
- Physical prototype due next week