Foundations of Interactive Game Design (80K)

week one, lecture one
Demo: *Salvage*  
by Jon Holtan  
& Sam Wolpert  

One of last year’s best games
Demo: *The Pleasant Life of Inkus Orbis*

by Nathan Abercrombie & Ryan Toshiro McDonald

One of last year’s best games
If you want to add this class

• Officially, the lecture is full, but 25 more spaces should open tomorrow

• There are 25 spaces open in the sections, mostly in Thursday’s 4:00–5:45pm section

• If you have questions, start by posting to the class forum, which TAs and reader/tutors will monitor: http://forums.soe.ucsc.edu/viewforum.php?f=66
What’s important to a game like *Rock Band 2*?
Technology

Game software

Console

Specialized controllers
Formal system

Rhythm mechanics

Developing context

Collaborative play
Meaningful media

Rock music, well, *rocks*

People have songs and bands they identify with

People like to pretend: air guitar, karaoke, *Guitar Hero*
Social experience

Formal system’s collaborative play

Play in physical space

Formal competition
Understanding computer games
Games are technology

- Physical hardware: consoles (Xbox, Wii, PS3), handhelds (DS, PSP), PCs, arcade cabinets, guitar controllers, etc
- Software engines: Unreal, Source, CryEngine, Flash’s renderer, etc
- Middleware and other components: AI, physics, world management, etc
- Authoring systems: Aurora, Flash, Excel, etc
Games are formal systems

- Game rules: just like card & board games, RPGs, war games, and playground games
- World rules: traditional hide–and–seek gets doors, lighting, gravity (etc) “for free” from the physical world — games have to (and get to) define their own world rules
- Game definitions are based on logical structure
Games are meaningful media

- Games have text, image, sound: metamedium
- Books, albums, and movies are fixed presentations — games are *media machines*
- Games can tell stories, make arguments, do other things media do — traditionally or procedurally
- Tools from other media useful, but need more
Games are social experiences

• We play with other physically present people (Wii, LAN parties, Rock Band)

• We play with other virtually present people (MMOs, Second Life, Xbox achievements)

• Our experiences of games are deeply shaped by our participation in online and offline game cultures
What we’ll talk about

• Games as technologies
• Games as formal systems
• Games as meaningful media
• Games as social experiences
• Understanding games and making games
Making games

• Game design is important — how formal rules and tuned mechanics produce play (often in fictional worlds)

• A way to understand games — and to use understanding of games

• Requires understanding technology, from high-level concepts (e.g., collision detection) to basic computer science (e.g., variables) so satisfies GE requirement
Course overview
Course basics

• Syllabus online: http://www.soe.ucsc.edu/classes/cmpts080k/Winter10/

• Lecture: T/Th 2:00–3:45pm, Media Theater M110

• Labs: weekly, in Baskin Engineering (BE) 109
Grade components

- Making a game: 53% — using Game Maker, no programming experience required!
- Quizzes: 15% — given at lecture, covering readings, lectures, section topics, etc
- Game analysis paper: 15% — using game design and game studies concepts
- Also tutorials (7%) and exam (10%)
Making a game

• 2 person teams, using Game Maker Pro (installed in labs)

• Each team will make a game based on their strengths — some programming, some art, some writing, some theme knowledge, etc

• Sections will teach Game Maker, discuss game design concepts, give feedback, and include help sessions
What can you make with Game Maker?
Game project phases

- Team selection: due week 3
- Concept & physical prototype: due week 4
- Design & schedule: due week 5
- Computational prototype: due week 6
- Progress updates: weeks 6–9
- Playtestable version: due week 9
- Final game: due week 10
Sections

• Each includes one TA and 1–3 reader/tutors (who did well in 80K earlier years)

• This week’s section takes you through everything you need to know for the first assignment (a customized tutorial)

• If you already missed your section this week, attend another:
Sections

Tu 12:00am – 1:45pm, Adam Smith
Tu 4:00pm – 5:45pm, Teale Fristoe
We 3:30pm – 5:15pm, Anne Sullivan
Th 10:00am – 11:45am, Anne Sullivan
Th 12:00am – 1:45pm, Adam Smith
Th 4:00pm – 5:45pm, Teale Fristoe
Lectures

• Readings from *Game Design Workshop* (required text) or available free online — read for Thursday!

• Lectures by professor and visiting researchers/developers

• Lecture slides posted afterward to aid review — don’t need to write down everything on the slides
Science and Engineering Library is developing a collection of computer games. You can check out NES, SNES, N64, PS2, Wii consoles (have 5 each). Along with games of design distinction, you can go to the checkout desk with your student ID to check out games. You might need to reserve a Wii, as it is popular. The classic console lab will feature important historical consoles like NES, SNES, Genesis, PS1, Saturn, N64, Dreamcast, Xbox, GameCube. Soon, you will be able to check out Japanese PS2 consoles. You can get the key from the checkout desk, and the collection includes a deep collection of RPGs and Space Shooters (shmups/STG). Created specifically for this class, so please take advantage of this resource.
Reaching us

- TA email addresses on syllabus
- Office hours to be announced next week
Questions now?
Upcoming

• Attend section this week

• Buy the book, *Game Design Workshop* (2nd edition). It's in stock at Bay Tree

• Read two chapters for Thursday

• Start the first tutorial (due in next section)

• Look over the syllabus, start experimenting with Game Maker — play some GM games?
Finally...

start thinking about games and teams