IMGD 1001: Fun and Games

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Outline

- What is a Game?
- Genres
- What Makes a Good Game?
What is a Game? (1 of 3)

☐ Movie?
  ■ No *interaction*, outcome fixed

☐ Toy?
  ■ No *goal*, but still fun!
  ■ Players can develop own goals

☐ Puzzle?
  ■ strategy and outcome is the *same* each time

"A computer game is a software program in which one or more players make decisions through the control of game objects and resources, in pursuit of a goal."

Based on notes from Mark Overmars
What is a Game (2 of 3)

☐ A Computer Game is a Software Program
  ■ Not a board game or sports
  ■ Consider: chess vs. soccer vs. WoW
    ○ What do you lose?
    ○ What do you gain?

☐ A Computer Game involves Players
  ■ Think about your audience; the game is not for you
    but for them.
  ■ Don’t just think about your story or the graphics or the
    interface, but consider the players.

Based on notes from Mark Overmars
What is a Game (3 of 3)

- Playing a Game is About Making Decisions
  - Ex: what weapon to use, what resource to build
  - Can be frustrating if decision does not matter
  - Want good gameplay (major topic later)

- Playing a Game is About Control
  - Player wants to impact outcome
  - Uncontrolled sequences can still happen, but should be sparing and make logical

- A Game Needs a Goal
  - Ex: Defeat Ganandorf in Zelda
  - Long games may have sub-goals
  - Ex: recover Triforce first, then Sword of Power
  - Without game goals, a player develops his/her own (a toy)
What a Game is *Not* (1 of 2)

- **A bunch of cool features**
  - Necessary, but not sufficient
  - May even detract, if not careful, by concentrating on features, not game

- **A lot of fancy graphics**
  - Games need graphics just as hit movie needs special effects, but neither will save weak idea
  - Game must work without fancy graphics
  - Suggestion: Should be fun with simple objects

"When a designer is asked how his game is going to make a difference, I hope he ... talks about gameplay, fun and creativity – as opposed to an answer that simply focuses on how good it looks." – Sid Meier (*Civilizations, Railroad Tycoon, Pirates*)
What a Game is *Not* (2 of 2)

- **A series of puzzles**
  - Most games have them, but they are not the game

- **An intriguing story**
  - Good story encourages immersion, but will mean little without good gameplay
  - Example: *Baldur's Gate* is a linear story.
  - Going wrong way gets you killed.
  - Not interactive: interaction in world all leads to same end.

Based on notes from Mark Overmars
Games are Not Everything

☐ Most important
  ■ Is it fun, compelling, engaging?

☐ Computers are good at interactivity
  ■ Allow for interactive fun

☐ Examples:
  ■ SimCity
    ☐ Very compelling, but mostly no goals.
    ☐ More of toy than a game, but still fun.
  ■ Grim Fandango
    ☐ Good visuals, story, etc., but need to do puzzles to proceed
    ☐ Could have skipped to just watch story
    ☐ Would still have been fun without the gameplay.

Based on notes from Mark Overmars
Definition Revisited

"A computer game is a software program in which one or more players make decisions through the control of game objects and resources, in pursuit of a goal."

What’s missing from this definition?
Welcome to the Entertainment Business!

“To be boring is the worst sin of all.”

Stanley Kubrick
Group Game: Game Types

- Break into groups based on month of birth (combine so at least 2 in each group)
- Spread out so can talk without others hearing
- Brainstorm all game genres you can think of
  - Provide an example of each!
- Round-robin by group, say one genre on list
  - What other group has this? Show hands
  - If no-one else has it, you get a point!
  - Everyone, decide distinguishing features
- Team with most genres not on anyone else’s list, wins!
Game Types

- What are some types of games?
- What separates them from others?
Arcade Games

- Reaction and speed are the most important aspects of the game
  - Examples: scrolling shooters, maze games like *Pacman*, paddle games like *Breakout*, *Pong*

- Relatively easy to make
- Normally 2D graphics
- Good first games to build!

Based on notes from Mark Overmars
Puzzle Games

- Clever thinking is the most important aspect
  - Many maze games are based on puzzle solving, rather than on reaction time

- Other examples include board games and sliding puzzles

- Normally 2-dimensional

- Often include a timer

- Relatively easy to create
  - Except when played against a computer opponent
  - Artificial Intelligence can be harder

- Ex: How to program the computer to play chess?
Role-Playing Games

- Steer a character through a difficult world
  - Examples are *Diablo* and *Baldur's Gate*

- Development of character to learn new skills, becoming more powerful, and finding additional and better weapons

- Opponents become more powerful as well

- Can create 2D or 3D

- Generally harder to make because must create the mechanism of character development

- Also normally need large world

- Good level design is crucial
Strategy Games

- Real-time (RTS) or turn-based
- Player only indirectly controls the character
  - Tactics less important than Strategy
- Examples include *Age of Empires*, *Warcraft III*...
  - Also, usually "God Games", such as *Black & White*
- Generally take a lot of time to create
  - Require many different game objects, each with animated images and specific behavior
Adventure Games

- Game is about adventure and exploration
  - Story line is often crucial
- Can be 2D or 3D
- Actions easy (just move)
- Difficulty is in making exploration/adventure interesting
  - Interesting, funny, and surprising story line
  - Corresponding artwork
- Artists’ role is crucial
Third-Person Action/Platformer

- Player directly controls a game character (avatar) through a hostile world
  - *Tomb Raider, Prince of Persia, Onimusha*

- Often, not much emphasis on character development

- Fast action and discovering the game world

- Some have story line, other adventure game aspects

- Can be 2D or 3D

- Can sometimes be created easily

Based on notes from Mark Overmars
First-Person Shooters

- 3D version of many arcade-style games (move and shoot)
- Emphasis is on fast-paced action and reaction speed, not on cleverness and puzzle solving
- Many examples: Doom, Quake, ...
- Need to be 3D
- Relatively difficult to create because of models
Sports Games

- Real-life sport, made virtual
- Ideas, rules in place
- Making realistic, challenging, fun like sport can be difficult
Racing Games

- Really, special type of sports game
  - But pervasive enough to get own category

- Drive a vehicle, as fast as possible, or sometimes for exploration, or combat

- Either realistic...
  - *Formula 1* or *Grand Turismo*

- ...or focused on fun (arcade)
  - *Midtown Madness* or *Ridge Racer*

- Both 2D or 3D
Simulators

- Try for realistic representation
  - Ex: flight simulators, *Trainz*

- Other simulations include world simulation
  - Ex: *SimCity* or *SimEarth*

- Relatively difficult to create since getting details right a challenge

Based on notes from Mark Overmars
Party Games

- Variety of types
  - Ex: Mario Party, DDR, Karaoke, Guitar Hero

- Social aspects important with participants in the same space

- Allow for rapid change of turns

- Allow for disparate abilities (beginners and experts, both have fun)
Educational Games

- Entertainment games are great at teaching...how to play the game!
- Educational games are designed to teach player knowledge or skill that is valuable outside the game
  - Ex: math, reading, problem solving
What Games are Played?

- **Console gamers:**
  - Action (30%)
  - Sports (20%)
  - Racing (15%)
  - RPG (10%)
  - Fighting (5%)
  - Family Ent. (5%)
  - Shooters (5%)

- **PC gamers:**
  - Strategy (30%)
  - Children's Ent. (15%)
  - Shooters (15%)
  - Family Ent. (10%)
  - RPG (10%)
  - Sports (5%)
  - Racing (5%)
  - Adventure (5%)
  - Simulation (5%)

The Entertainment Software Association (ESA)
Outline

- What is a Game?
- Genres
- What Makes a Good Game? (next)
What Makes a Good Game?

- "A great game is a series of interesting and meaningful choices made by the player in pursuit of a clear and compelling goal."
  - Sid Meier

- "Natural Funativity"
  - Survival-skill training
  - Need to have player develop a set of skills with increasing levels of difficulty
  - Putting them to the test = mission, quest, level, etc.
  - Prize at the end (or in the middle)
Structure of Games

- Movies have linear structure
  - No choice by viewer

- Games must provide "interesting and meaningful choices"
  - Otherwise, user is not in control

- Random death is frustrating!
Convexity of Game Play

- Need to provide choices

**FIGURE 2.1.6 A series of convexities.**
Flow

► Getting the balance right is the key to success

M. Csikszentmihalyi, "Flow, The Psychology of Optimal Experience"

FIGURE 2.1.8  A better flow.

Chapter 2.1, Introduction to Game Development
Convexity + Flow

Utilizing both can lead to a great game

FIGURE 2.1.9  Better flowing through convexities.
Other Thoughts

- Theatre:
  - Show, Don't Tell

- Games
  - Do, Don't Show

- Hal Barwood on Cut Scenes
  - Cut, edit, and cut some more until the writing is just as brief and concise as possible. At that point, the scene is probably about twice as long as it should be.