

The Game Development : Genres

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**."

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. Warcraft
 - Ask: What do you lose? What do you gain?
 - Lose: 1) *physical pieces*, 2) *social interaction*
 - Gain: 1) *real-time*, 2) *more immersive*, 3) *more complexity*
- 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*.

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*

□ *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*)

Group Game: Game Types!

- Break into groups based on month of birth (or count off by 5's...)
- Spread out so can talk without others hearing
- Brainstorm all game genres you can think of
 - Provide an example of each! Provide key feature!
- 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 starting point for first game

Puzzle Games

- Clever thinking is the most important aspect
 - Many maze games are based on puzzle solving, rather than on reaction time
- Other examples board games and sliding puzzles
- Normally 2-dimensional
- 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 stuff
- 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

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

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

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

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