IMGD 1001 - The Game Development Process: Anatomy of Level Design

by

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(with lots of input from Mark Claypool!)

Outline

- Thud!
- A walkthrough of a Quake II level
  - q2dm1 -- "The Edge"
- A walkthrough of some level design decisions for 5 Card Dash
- A few heuristics

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But First...

- IMGD New Student Welcome Event!
- Tonight, 5-7pm
- Fuller Labs 320
- Contests and Prizes!
- Bring your DS-Lites!

Thud!

- What did you come up with?

QuakeII-DM1

☐ Video (Q2DM1_Layout.avi)
- level layout and architecture

Architecture

☐ Two major rooms

☐ Connected by three major hallways

☐ With three major dead-ends

☐ No place to hide

☐ Forces player to keep moving
- Camping is likely to be fatal

Placement

- Cheap weapons are easy to find
- Good weapons are buried in dead ends
- Powerups require either skill or exposure to acquire
- Sound cues provide clues to location
  - Jumping for powerups
  - Noise of acquiring armor
- Video (Q2DM1_Weapons.avi)

Result

- A level that can be played by 2-8 players
- Never gets old
- Open to a variety of strategies

5 Card Dash

☐ Changing gears just a bit...

☐ A casual game
  ◾ Poker crossed with Tetris

Levels are individual puzzles

☐ The designer's challenge
  ◾ Devise a sequence of levels that makes the player feel successful
  ◾ AND challenged
  ◾ WITHOUT losing them to boredom or frustration
    ☐ Remember *Flow*?

☐ Video (5CD_Intro.avi)

5 Card Dash Levels

☐ Level 1: introduce the concept
  ■ Easy minimum hand
  ■ Easy required hands
  ■ Add some prompts along the way -- but not all at once

☐ Level 2:
  ■ More prompts with new features
  ■ Still easy

5 Card Dash Levels (cont.)

☐ Level 3
  ■ Add wildcards
  ■ Prompt bonus cards
  ■ Teach a straight

☐ Level 8
  ■ Prepare for level 9

☐ Level 9
  ■ Same as 8, but:
    ☐ facedown cards
    ☐ sequential goal
    ☐ Video (5CD_Level9.avi)

Heuristics for Level Design

- ☐ Figure out what you're trying to "teach"
  - ■ Make sure the level design expresses a need for that skill
- ☐ Provide incentives for the "right" behavior
  - ■ Powerups, weapons, etc.
- ☐ Keep *Flow* in mind
  - ■ Don't introduce too much at one time
  - ■ Let people practice skills from time to time

Heuristics (cont.)

- ☐ Design for the game's features and capabilities
  - ■ If you introduce, say, a new sniping weapon
    - ☐ Give it a long-distance target to practice on immediately
    - ☐ Create a level where it's the most important weapon
    - ☐ Then it's available to the player as a standard tool
  - ■ If the engine bogs down in large outdoor areas...don't design one!