

CIS 300

Introduction to Computer Game Design

<http://www.cis.cornell.edu/courses/cis300/2005sp>
<http://www.cs.cornell.edu/projects/game>

Lecture 2: The Nature of Games
 Spring 2005

Announcements

- Reading Assignments:
 - Chapter 1 of R&A for today
 - Chapter 2 of R&A for Wednesday 1/26
 - Chapter 23 (pp. 313-327) of S&Z for Friday 1/28
- Reminder – We're looking for more artists!

What is a game?



Hopscotch Rules:
 Use chalk to draw a hopscotch pattern on the ground or use masking tape on a floor. Create a diagram with 8 sections and number them. Each player has a marker such as a stone, beanbag, bottlecap, shell, button, etc.

The first player stands behind the starting line to toss her or his marker in square 1. Hop over square 1 to square 2 and then continue hopping to square 3, turn around, and hop back again. Pause in square 2 to pick up the marker, hop in square 1, and out. Then continue by tossing the stone in square 2. All hopping is done on one foot unless the hopscotch design is such that two squares are side-by-side. Then two feet can be placed down with one in each square. A player must always hop over any square where a marker has been placed.

A player is out if the marker fails to land in the proper square, the hoppers steps on a line, the hoppers loses balance when bending over to pick up the marker and puts a second hand or foot down, the hoppers goes into a square where a marker is, or if a player puts two feet down in a single box. The player puts the marker in the square where he or she will resume playing on the next turn, and the next player begins.

Sometimes a dome-shaped "rest area" is added on one end of the hopscotch pattern where the player can rest for a second or two before hopping back through.

What is a game?

YoYo's

Natural or Engineered YoYo's are more fun to play a great eye on, one professional, keeping an eye on both.



General Contest Rules
 For the 1A and 2A divisions, all compulsory tricks completed on the first attempt receive 5 points. If necessary, a successful second attempt receives 3 points.

For the Sport Ladders, one attempt per trick is allowed. One missed trick will be forgiven and the second miss retires the player. The score will be based on the highest completed trick with the highest first missed trick breaking ties.

A trick is complete when the string is fully wound around the axle and back in the hand. A yo-yo must be caught with one hand, the hand that originally threw the yo-yo, and not trapped against the body. More than five inches of string remaining outside the yo-yo when caught is considered a miss. No string misses or floppers are allowed on any tricks.

A trick starts and finishes within the trick box. A player must keep feet planted unless the trick requires movement. If a player's feet leave the trick box during a trick it is considered a miss.

A throw made within the trick box counts as an attempt. Outside the trick box a player may only toss a throwdown, spinner, forward pass, a single loop, a single hop the fence, or string adjustments (excluding UFO) prior to attempting that trick. Practicing a contest trick outside the trick box during the judging session is considered a miss.

A player may adjust the yo-yo and string. An unintentional broken or knotted string may be replaced. A yo-yo may not be dismantled during the judging session.

A yo-yo must be able at all time to sleep a minimum of 3 seconds and a judge may request to test any yo-yo at any time.

Any yo-yo may be used. The same yo-yo must be used for all tricks. A judge has the discretion to allow a similar replacement yo-yo to be used if the original yo-yo is damaged.

Good sportsmanship is expected. Interfering with another contestant may cause disqualification.

A player in the finals who is not sure if their music is appropriate for a public competition should have it reviewed in advance of their performance.

An appeal must be discussed with the judge before the end of the judging session. No video challenges will be allowed.

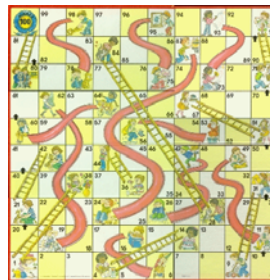
A judge's decision is final.

What is a game?



Instructions: Rotate sections of the Rubik's Cube so that each face is a solid color.

What is a game?

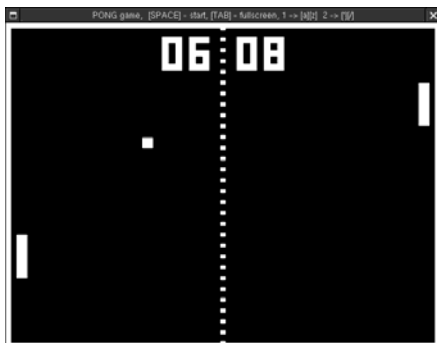


Amazon.com

Be the first to move your child-shaped playing piece from square one to square 100 on the Chutes and Ladders game board--but watch out! If you land on the square that shows you ate too much candy--Ouch!--you get a tummy ache and slide down a chute to a square a few numbers below. But if you end your turn on a good-deed square, such as helping sweep up a mess, you'll be rewarded by a ladder--climb up the board.

A fantastic follow-up to *Candy Land*, Chutes and Ladders is ideal for younger children who are still learning to take turns and just beginning to recognize numbers (the spinner stays in the single digits). It's also a gentle introduction to the higher numbers as players climb to 100 at the top of the board. And, thanks to all those chutes and ladders, it's got enough excitement to keep your 7-year-old on the edge of her seat. English and Spanish instructions are included; no reading is necessary to play. Chutes and Ladders is for two to four players. --Julie Ubben

What is a game?



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What is a game?



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What is a game?



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Definitions of Games

- Rollings & Adams: A **game** is a form of *interactive entertainment* where *players* must overcome *challenges*, by taking actions that are governed by *rules*, in order to meet a *victory condition*.
- Salen & Zimmerman: A **game** is a *system* in which *players* engage in *artificial conflict*, defined by *rules*, that results in a *quantifiable outcome*.

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What is game design?

- Rollings & Adams - **Game design** is the process of:
 - *Imagining* a game.
 - *Defining* the way it works.
 - *Describing* the elements that make up the game.
 - *Transmitting* that information to the development team.
- Salen & Zimmerman - **Game design** is the process by which a game designer creates a game, to be encountered by a player, from which *meaningful play* emerges.

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What about fun?

- Games are designed to *entertain*. Above we've described what game design is, but not what *good* game design is.
- How do we create *good games*?
- What makes a game *fun*?

Really, the most fundamental question is:

- *Why do people play games?*

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Reasons to Play

- To be entertained by a story
- To be challenged
- To socialize with players
- To prove superiority
- To escape reality
- **Core gamers** and **Casual gamers** play differently, and for different reasons.
 - **Core gamers** play lots of games, always to the finish. They want hard games, and will tolerate frustration.
 - **Casual gamers** play for enjoyment, and will stop when the game stops being fun. They want challenge, but only reasonable challenge, and rarely twitch challenge.

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Bartle's Four Types

- Richard Bartle wrote a paper on MUD players that describes for types of players:
 - **Achievers:** Want to overcome obstacles and accumulate rewards.
 - **Explorers:** Want to discover and understand the game world and its mechanics.
 - **Socializer:** Want to interact with other players, and possibly role-play.
 - **Killers:** Want to use the game to cause distress to other players.(These correspond to suits: Diamonds, Spades, Hearts, and Clubs)
- He was referring specifically online play, but the model also applies to single player games.

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Examining Game Design

- Rollings & Adams' **Areas of Game Design**
 - **Core Mechanics:** The rules that provide the foundations of gameplay.
 - **Interactivity:** The mechanisms by which the player plays the game
 - **Storytelling and Narrative:** The source of (dramatic) tension that compels players to play.
- Salen and Zimmerman's **Game Design Schemas**
 - **Rules** is *formal* schema focusing on the intrinsic mathematical structures of games.
 - **Play** is an *experiential* schema emphasizing the player's interaction with the game and other players.
 - **Culture** is a *contextual* primary schema highlighting the cultural contexts into which and game is embedded.

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Design Decisions

- **Challenges** – What are the obstacles that the player must overcome? What is the fundamental *gameplay*? What is the victory condition?
- **Setting** – What is the nature of the *game world*?
- **Interaction Model** – How does the player affect the game world?
- **Perspective** – How does the player see the game world?
- **Player Role** – Who or what is the player in the world?
- **Game Modes** – How are the challenges put together, and what is the surrounding interaction context?
- **Story** – What story will the player experience?

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Next Time

- The genres of games
- Types of challenges
- Where ideas come from

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