



Computer Science and Games: *Just For Girls!*

Game Design:
What is a Game?

What is a game?

Rules + A Goal = A Game

Interactive activity for play

Done in a pretending world

Challenges to reach the goal

Actions to take to face challenges

How do games entertain?

Brainstorm!

What do you find fun about games?

What do others find fun?



How do games entertain?

Gameplay: challenges and actions



<http://image.importtuner.com/f/miscellaneous/import-tuner-challenge-video-game/1018181+w478+cr1+re0+ar1/import-tuner-challenge.jpg>

How do games entertain?

Aesthetics (how it looks and sounds)



http://images.tomshardware.com/2007/02/20/the_50_greatest_female_characters_in_the_history_of_video_games/zelda.jpg

How do games entertain?

Good storytelling



http://www.geocities.com/gimmie_a_name_dammit/Final_Fantasy_7_-_Aeris_Dying_1.jpg

How do games entertain?

Risks and rewards



<http://www.thesimszone.co.uk/editorials/index.php?ID=42>

How do games entertain?

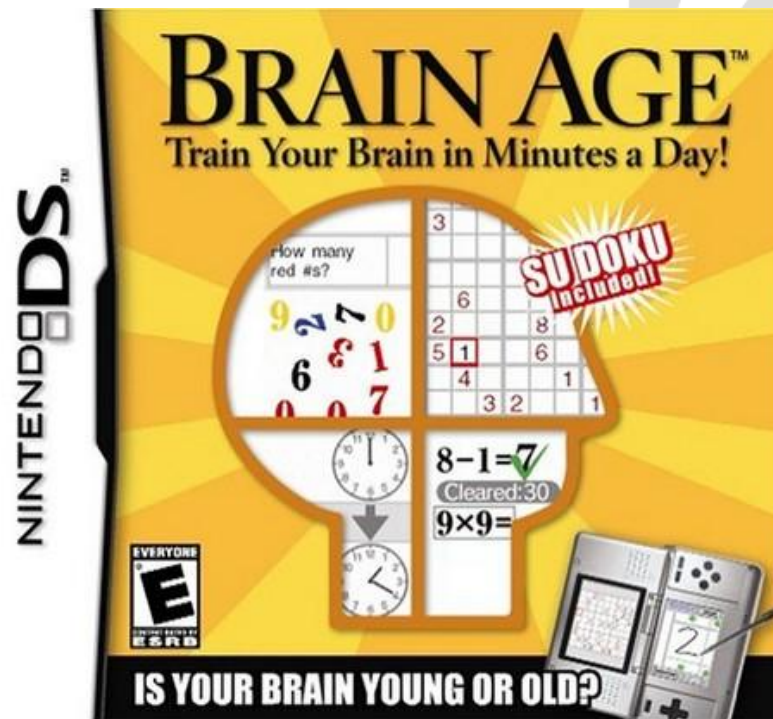
Novelty: something completely different



<http://www.techshout.com/images/wii-tennis.jpg>

How do games entertain?

Learning



<http://www.gametab.com/images/ss/ds/5245/box-1.jpg>

How do games entertain?

Socializing



http://prblog.typepad.com/strategic_public_relation/images/secondlife_1.jpg

Time to Play!

Auditorium

<http://www.playauditorium.com/>



Game Genres



Brainstorm!

What types of games are there?

What are their characteristics?

Game Genres

Action: Physical challenges.



Yoshiart.com

<http://yoshi.2yr.net/pics/super-mario-64-ds-all.jpg>

Game Genres

Strategy: Tactical or logistical challenges.



<http://www.gameogre.com/reviewdirectory/upload/Age%20of%20Empires.jpg>

Game Genres

Role-playing: Exploration, puzzles, tactical.



<http://www.armchairempire.com/images/Reviews/playstation/final-fantasy-origins/final-fantasy-origins-2.jpg>

Game Genres

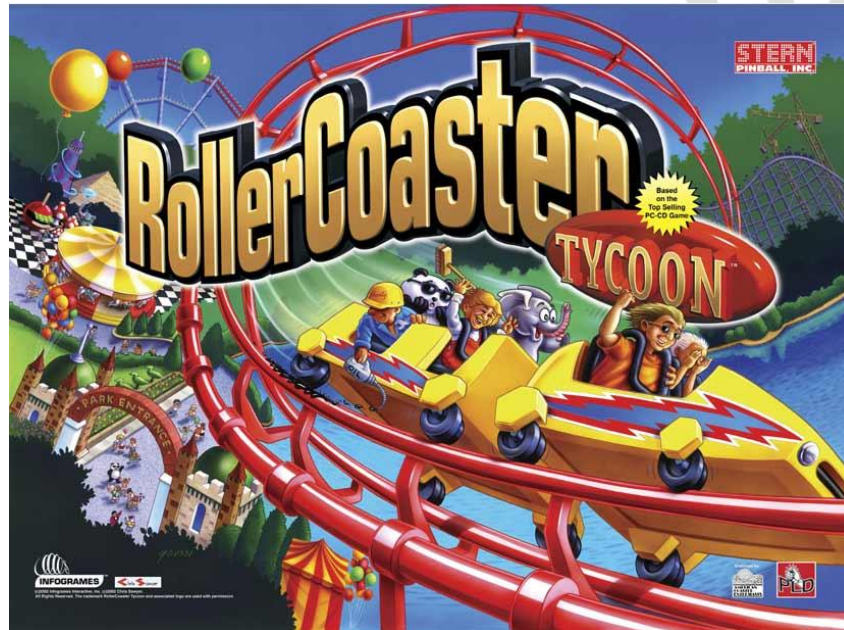
Sport and vehicle sims: Physical and tactical.



http://upload.wikimedia.org/wikipedia/en/f/f1/Need_for_Speed_Underground_2.PNG

Game Genres

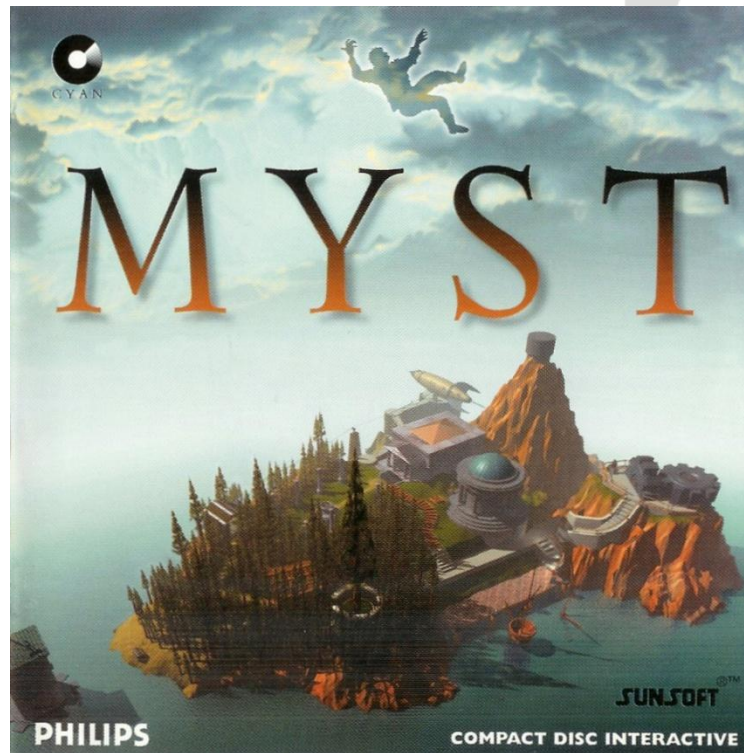
Construction and management: Economic and conceptual challenges.



<http://www.premier-md.com/images/Pinball%20Machines/Roller%20Coaster%20Tycoon/RCTbackglassL.jpg>

Game Genres

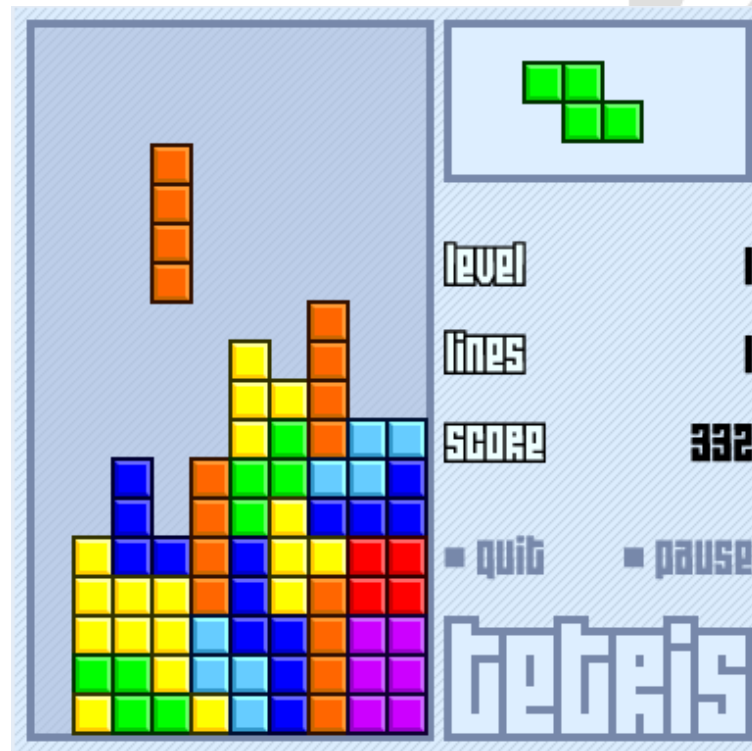
Adventure: Exploration and problem-solving.



http://www.blackmoonproject.co.uk/boxart/games/myst_eurofront.jpg

Game Genres

Puzzle: Logic and conceptual challenges.



http://www.socialfiction.org/img/tetris_big.gif

Game Genres

Which is your favourite genre? Come up with a cool game idea in that genre!

Action: Physical

Strategy: Tactical or logistical

Role-playing: Exploration, puzzles, tactical

Sport and vehicle sims: Physical and tactical

Construction and management: Economic and conceptual

Adventure: Exploration and problem-solving

Puzzle: Logic and conceptual

Time to Play!

i saw her standing there

<http://www.newcave.com/game/i-saw-her-standing-there>



Computer Science and Games:

Just For Girls!

Game Design:
Game Worlds

What is a Game World?

The place the player pretends to be.



<http://coco.raceme.org/videogames/zelda/images/hyrule.jpg>

Physical Dimension

Spatial dimension (2D, 3D)



<http://cache.gizmodo.com/assets/resources/2007/12/sonic.png> and

http://www.games32.com/web4/games_catalog/games/Sonic-And-The-Secret-Rings-WII/images/md_23795.jpg

Physical Dimension

Scale



<http://www.videogamesblogger.com/wp-content/uploads/2007/08/my-sims-icecream-screenshot-big.jpg> and
http://images.apple.com/downloads/macosx/games/demos_updates/images/thesimshouseparty_20070608172504.jpg

Physical Dimension

Boundaries



http://img.gamespot.com/gamespot/images/2006/291/reviews/933696_20061019_screen003.jpg and
http://www.dignews.com/admin/screenshot/super_mario_galaxy_10.jpg

Time Dimension

Normal time, variable time, or player adjusted time



<http://www.dugena.co.uk/dugena/pocketwatch2107585m.jpg>

Environmental Dimension

Physical surroundings, culture, detail



http://www.gamesfirst.com/images/content/2005_11/1131898129_ss3.jpg

Emotional Dimension

Influence feelings, entertainment over fun



<http://www.rpgfan.com/pics/papermario2/art-001.jpg>

Ethical Dimension

Moral decision making



<http://joshkim.org/2008/11/05/buy-fallout-3-now/>

Time to Play!

The Love Letter

<http://axcho.com/theloveletter/>

Activity

Get into groups of 2-3 people.

Pick a game that you have all played (or at least seen).

Describe that game in terms of these dimensions.

Share with the class.

The Dimensions:

physical (2D/3D, scale, boundaries), time,
environmental (physical surroundings, culture, detail),
emotional, ethical



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Game Design:
Game Play



Tips for Making Games Fun

Gameplay first, *always*

Think of player

Know your audience

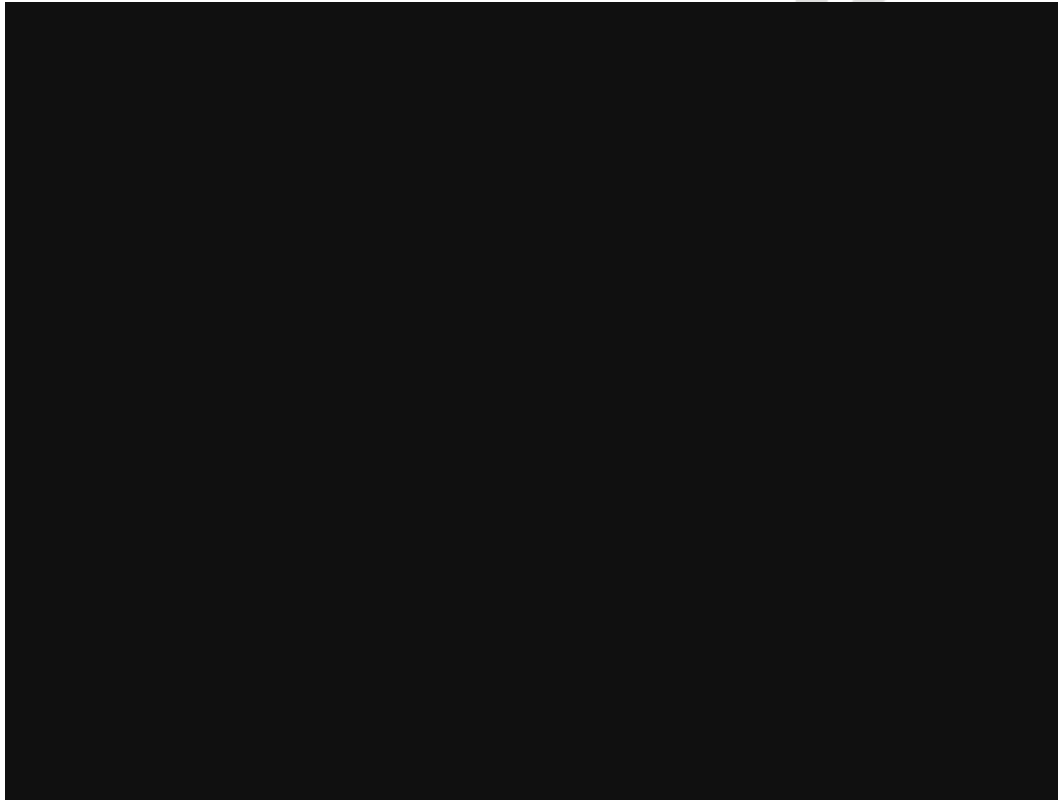
Automate parts that aren't fun

Strive for beauty

Have discoverable challenges

Multiple ways to win

Female Audience



<http://www.youtube.com/watch?v=R8ZVZRsy8N8&feature=related>

Time to Play!

The Storyteller

<http://www.ludomancy.com/games/StoryTeller.html>

Credits

Notes by your instructor Gail Carmichael:

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<http://gailcarmichael.com/>

Notes partially based on:

Fundamentals of Game Design, Ernest Adams and Andrew Rollings

The Game Maker's Apprentice, Jacob Habgood and Mark Overmars

The Design of Everyday Things, Donald Norman

Gender Inclusive Game Design: Expanding The Market, Sheri Graner Ray