Game Genres

INTRODUCTION TO GAME GENRES:

SIMULATION, SPORT, FIGHTING, CASUAL, SANDBOX, EDUCATIONAL, PUZZLE, ONLINE,

Simulations

- Simulations require a substantial amount of depth.
  - Often, a great deal of research is required in developing good simulations.

- Simulations tend to focus on one piece of equipment or activity and mines that experience for all its worth.
  - If you do not capture this well, your simulation is in big trouble.

Simulations

Racing simulation

War plane simulator

Simulations

Life Simulation
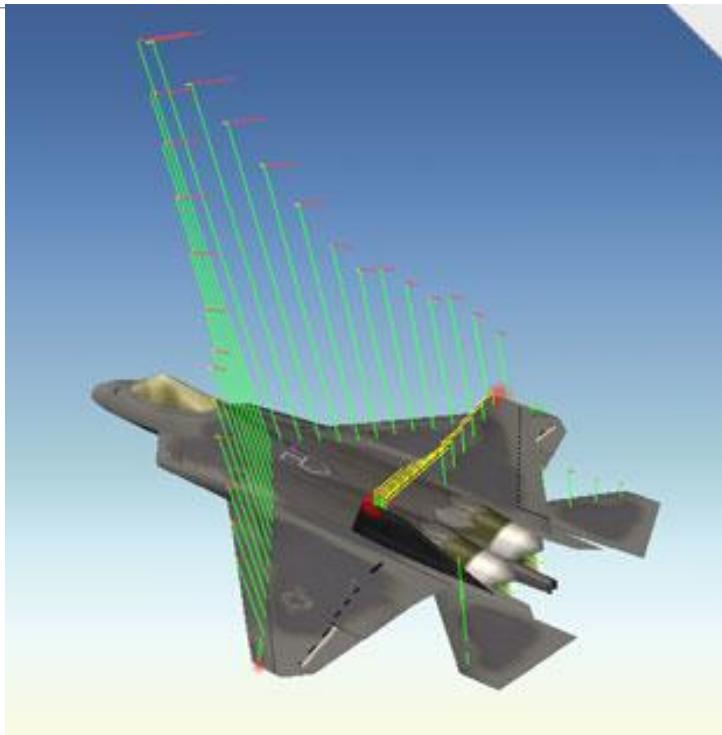
Farm Simulation

Simulations: Hard-Core vs. Casual

- Having a good point of view is crucial.
  - The player must be able to see the action well in order to respond to it.

- Typically have a choice of first or third person.
  - First-person:
    - Tend to be faster paced and more immersive, but cannot easily "identify" with the character.
  - Third-person:
    - Good for action-adventure games as you can better see the character as he or she is being controlled.

    - Also allows one to better identify with character, which is important if emphasis in the game is placed on the main character (e.g. Lara Croft, Mario, …).

Simulations: Hard-Core vs. Casual

Screen shot from X-Plane, showing lift and drag vectors calculated in real time. This game has a devoted community of flight enthusiasts and developers who are striving to make it the most realistic flight simulator ever. In fact, flight characteristics are calculated in real time from aircraft design data.

Simulations: Hard-Core vs. Casual

Screen shot from Microsoft Flight Simulator. Real world weather data can be downloaded from the Internet in real-time, and your position and heading can be used to render accurate star maps, giving a very realistic feel to the game. Nice touches for both the casual and the hard core.

Simulations: Interface

- The more functionality a game has, the more complex the interface becomes.

- Even for hard-core simulations, the interface should be kept as simple as possible, however.
  - It may have a lot of controls and options, but the interface should still look clean.
  - If the interface is cluttered, the game will become difficult to use.

Simulations: Interface

Picture of Microsoft Flight Simulator on 9 computers and 13 monitors.
Wideview software was used to split the game image. Such a nice interface
that the player even needed a seatbelt to be strapped in place!

Simulations: Interface

Picture of the Real Virtual Car. Not to be outdone, racing fans have built a racing simulator in a Renault Megane, complete with steering wheel, pedals, a gear shifter, and gauges that work!

Sports Games

- People that play sports games tend to be fans of the sport.

- They are usually well versed in the rules of the game, its history, and the athletes currently involved in the sport.

- It is important to give a good portrayal of the sport in your game, because they will notice it and will not be pleased otherwise.

Sports Games: Know the Game

- It is critically important to get the rules and traditions of the sport done right.
  - ◦ Consult the official rule book when designing the game, and use it frequently.
  - ◦ Check the history books and follow them.

- Knowing the rules does not mean you cannot let the players change them!
  - ◦ The player should be able to customize the rules or turn off rules that they do not want applied in their own games.

Sports Games: The Meta-Game

- A sport is not just played on the field or in the arena … it is also played from the bench and in the front office.
  - Coaching decisions.

  - Management decisions.

  - Owner decisions.

- It would be nice to have all of these features in a game.
  - If they are not included, make sure that the user knows this from the box.

Sports Games: The Meta-Game
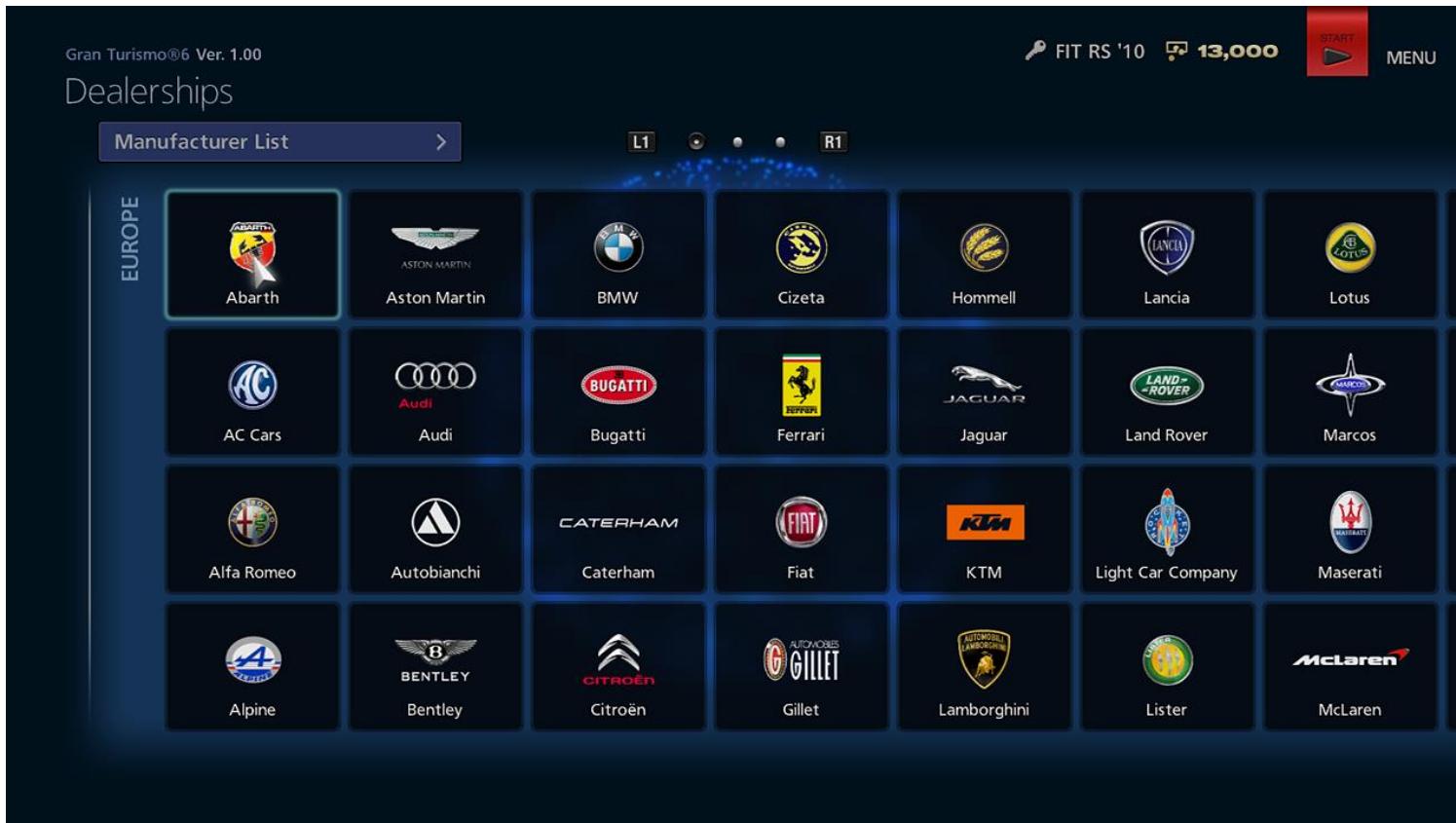
Screen shot from Madden NFL 11. This Madden series of football games has long had a good collection of meta-game features.

Sports Games: Licenses

- The whole genre is filled with licensing issues. You need written permission to use:
  - Different stadiums, tracks, arenas, and other venues
  - Team names, logos, uniform design, …
  - Player names, likenesses, signature moves, …

- Basically, anything that can be construed
as taken from real life will likely need to be licensed in some way.

- Remember that licenses cost money and must be cleared by both budget and legal staff.

Sports Games: Licenses

Screen shot from Gran turismo 6, The official cars licenses

Sports Games: The Look

- Sports games lead all other genres in the realistic depiction of human motion.
  - Be ready to incorporate motion capture into your design, schedule, and budget.

- Managing the camera is also complex.
  - Sometimes focus must be on a single part of the game area, but at others it must encompass the entire field of play.
  - No matter what, the player must be able to see all of the action needed at the time!

- Also consider special visuals to enhance your game including environment conditions, sweat, hair motion, player attitude, and so on.

Sports Games: Features and Interface

- Keep the interface simple and well tuned to the sport being played.

- Allow players to update statistics, rosters, and perhaps import their own data into the game.

- Include real-word ambience in the game.
  - This includes stadium and arena music, spectator noise and activities, and so on.
  - If you capture these rituals, you will also entertain and captivate the player.

Screen shot from PES 2015. The fan noises, singing, and other stadium ambience makes you feel like you are part of a real soccer game, and not just a video game.

Fighting Games
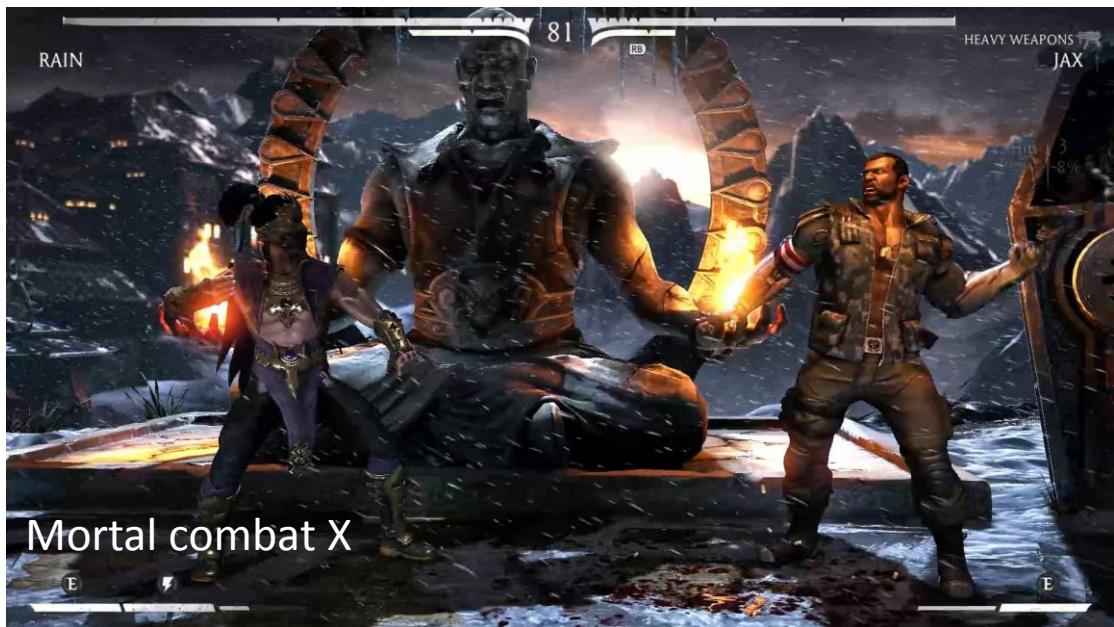
- Fighting games are simple and direct, yet they can be very engaging.
  ◦ The goal is create quick bursts of swift and intense action, followed by more of the same.

- The characters and their moves must be well balanced.
  ◦ If one is unstoppable, everyone will play him.
  ◦ If another is too weak, no one will.
  ◦ Either is evidence of poor game design.

- It is also important to manage the damage inflicted by the characters on each other.
  ◦ Fights should neither be too short nor too long.

Street fighter v

Tekken 7

Mortal combat X

injustice gods among us

Fighting Games: Visuals

- Visuals in fighting games are important.
  - The focus is tight (on the two fighters, and the portion of the arena they are fighting in), so they better look good!
  - Each character must have a unique look and distinctive moves that are interesting to watch.
  - The animations must be smooth and fluid.

- Pay attention to weapons and special audio and graphical effects.
  - They can add a lot of impact to the game.

Fighting Games: Moves

- The player should start with a set of easy-to-learn moves.
  - Punches, kicks, and blocks.
  - Walking, running, ducking, and jumping.

- Each character should also have special moves that are learned over time and through practice.
  - Individual moves or combinations.
  - Finishing moves and signature moves.

Screen shot from Mortal Combat X Finishing

Screen shot from Mortal Combat X Move list

Fighting Games: The Right Difficulty

- It is very important to get the right level of difficulty into a fighting game.
  - On their first attempt, just about any player should be able to defeat the first opponent (or at least come very close) .
  - At the same time, they should not be able to get very far until they hone their skills and timing and master more complex moves.

- If a game is too hard, players will be discouraged from playing it.

- If it is too easy, there is no challenge or replay value, and they won't want to play it either.

Casual Games

■These tend not to be very deep games.

■Casual games are often played in short bursts.
  ◦ On a lunch hour, or break for example.
  ◦ The player wants to get in, have quick fun, and get out as easily as possible.

■A simple and clean interface is important.
  ◦ They do not want to be encumbered to play.

■If the game is an adaptation of a real-world game, it should be faithful to those rules, allowing for player customizations as well.

■Licensing may also be an issue.

Happy chef 2

Casual Games: Tips

- Do not make the game too difficult.
  - No casual game has failed because it is too easy, but plenty have failed because they were too hard.

- Do not assume that the player knows anything about their computer or has the latest hardware.
  - Keep requirements low, avoid 3D if possible, and avoid extra software requirements, plugins and so on.

- Selling a casual game can be tricky …
  - Portals help raise visibility and awareness that you cannot get on your own.

  - Price carefully … if it is too expensive, it won't sell, but if it is too cheap, people will assume it is garbage.

  - You might want to use a "try-then-buy" approach, or some other upselling technique to get your game out there first, and then generate sales.

Casual Games: Tips

- Be careful in selecting your theme … most casual players prefer non-violent games.

- Give the player lots of rewards for playing (points, bonuses, etc.). It gives the player incentive to play, and can make the game seem easier.

- When giving feedback, do so in a positive way and not a negative one!

- Avoid giving the player lots of text to read through to play.

- Remember that the player is likely playing the game to relax, and is not looking for stress, frustration and a huge challenge.

- The less interested and experienced a person is with games, the more you should listen to their comments about your game.

Sandbox Games

- You must design a compelling activity that is fun for the player, without forcing a lot of direction on them.

- Some important tips:
  - Give the player a huge variety of interesting building blocks to use, especially if it is a world-building game.

  - Make it easy for the player to keep track of everything in the game. Design a simple interface, and let the player zoom in for detail, or out for the big picture.

Minecraft

The sims 4

Grand Theft Auto V

Zoo Tycoon 3

Sandbox Games: More Tips

- **More tips:**
  - The interface should allow the player to easily jump around the game world.

  - The graphics should allow the user to easily distinguish between units and convey status information.

  - The heart of the game is a complex set of interrelated rules and subsystems that determine how the computer reacts to the player.

  - Give the player instant feedback on all activities.

  - Occasional disasters can be a good thing.

  - If the game is real-time, let the player vary the speed of events in the game.
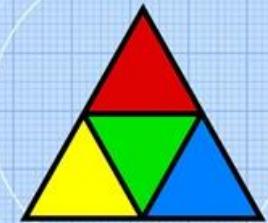
Educational Games

- The goal of these games is to teach a specific body of knowledge to the player.
  - You must know what this is at the start and build the game around it, and not the other way around!

- Some tips:
  - Have clear goals for the player.
  - Consult curriculum documents in designing the content of the game.
  - Targeting the game is important, including the background knowledge of the player and their level of maturity.
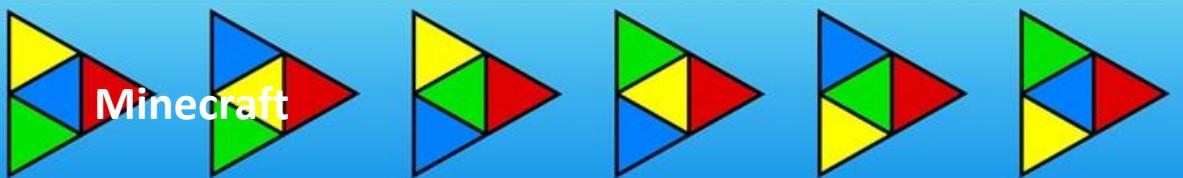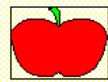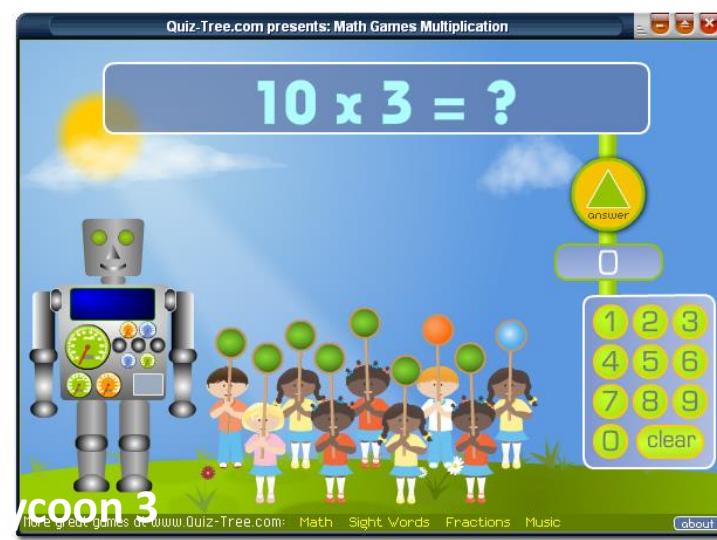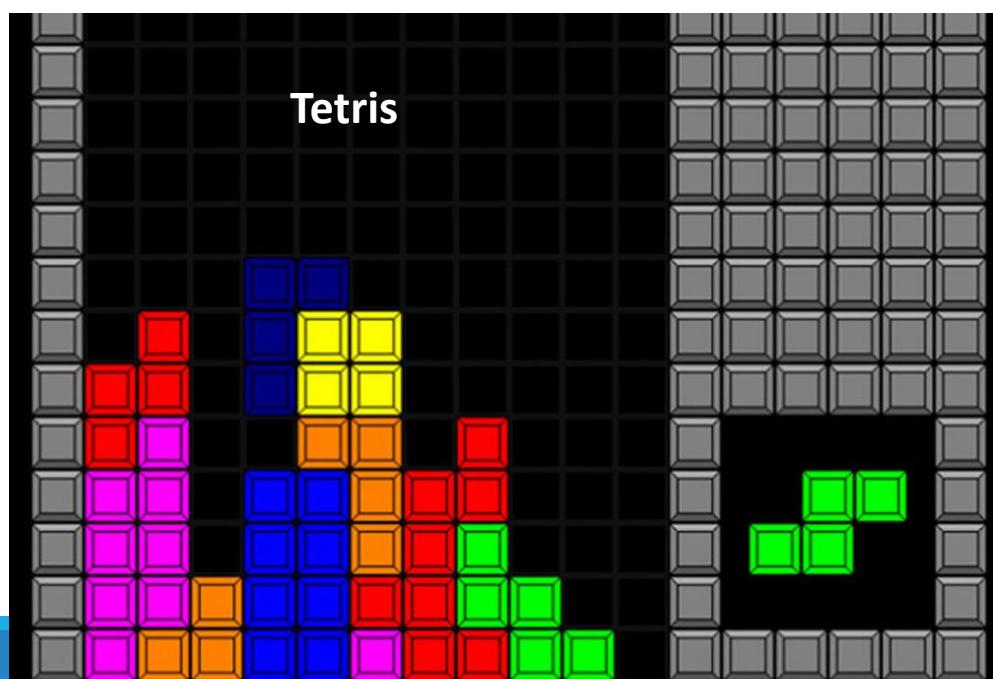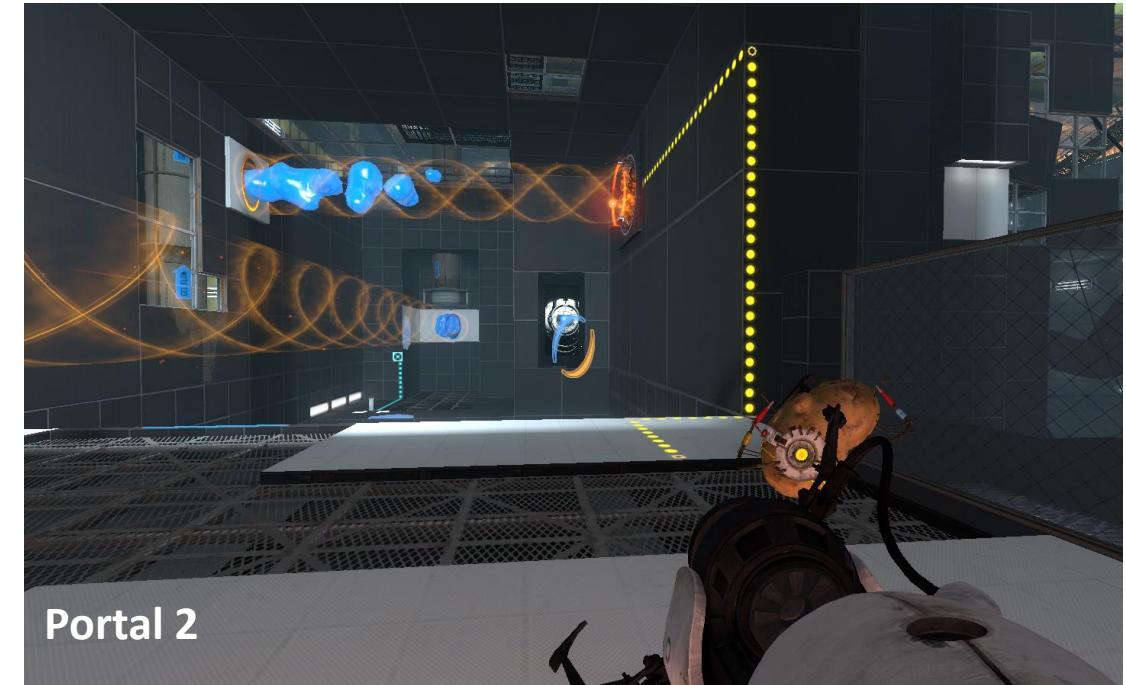
Educational Games: More Tips

- **More tips:**
  - Interactivity is vital to children. Everything they do should have a visible reaction.

  - The interface must be simple and clean. Keep in mind that young players may not have the motor skills for precise maneuvers in the game.

  - Engage emotions and wrap educational content into goal-oriented behavior.

  - Reward and encourage the player often.

  - Do not shy away from conflict, but steer clear of violence and violent behavior.

  - Be sure to avoid inappropriate content … remember that parents will be purchasing this!

Puzzle Games
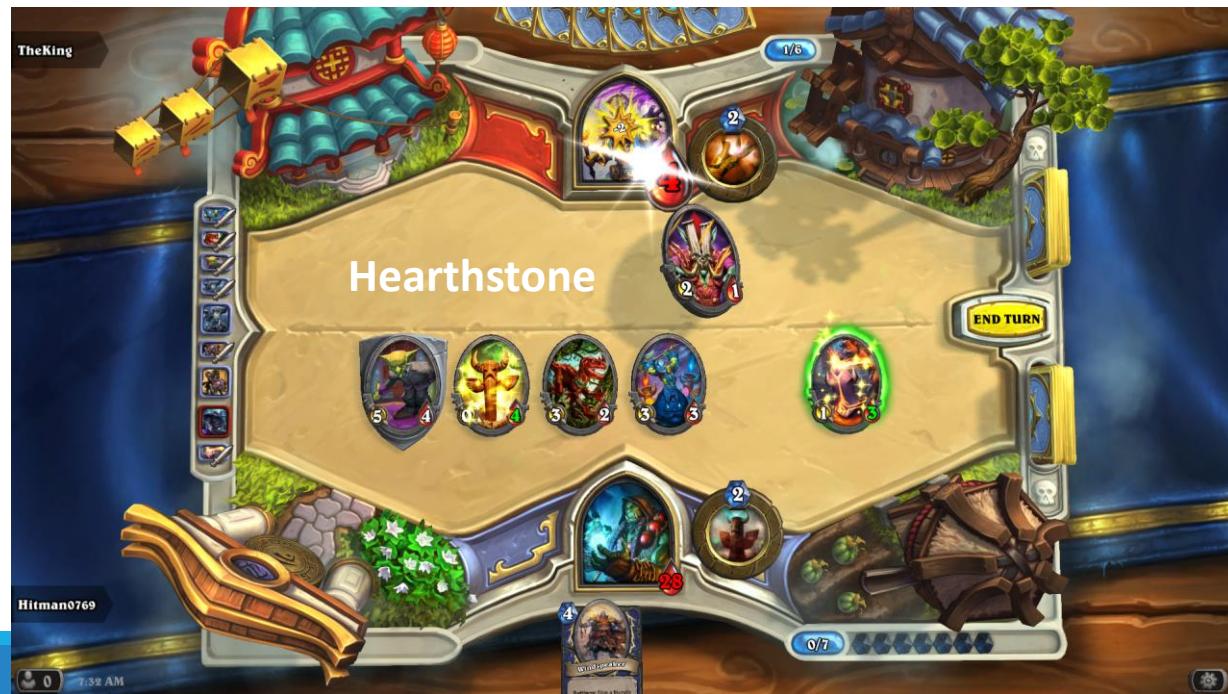
- The challenge is not in designing a single brain teaser, but in creating a puzzle or set of puzzles that appeals to a wide audience.
  - Start with the kind of puzzle you like, but remember that people have different tastes.

- Your goal is to not make the player feel stupid.
  - Your goal is to provide a challenge, and to help the player overcome the challenge.

- Make sure to provide a range of difficulties in the puzzle or puzzles to be solved, including some simple ones and some incredibly difficult ones for the expert player as well.

Portal 2

Tetris

Online Games

- Almost any kind of game can also be online if it allows network play.
  - Consult the design issues for other genres as necessary.

- How will money be made from the game?
  - Selling game units?
  - Selling subscriptions to the game?
  - Pay per play or per hour?
  - Advertisements? (More likely on web-based games)

Dota 2

Travian

Hey day

Hearthstone

Online Games: Stick to the Rules

- It is important to ensure that everyone in an online game sticks to the game rules.
  - This not only includes the players, but the provider of the game service.

- Violating the game rules has several negative effects on the game:
  - It breaks the immersive experience being developed and nurtured in the game.
  - It removes faith that players had in the game to behave according to expectations.
  - It just is not fair. Plain and simple.

Online Games: Network Services

- Would like it to seem as if all players are playing on the local system.
  - Must reduce lag or latency effects.
  - If it affects gameplay, it is an issue. If not, you may be able to ignore it.

- The game must also allow drop-outs and drop-ins as much as possible.

- You must also consider the other services offered with the game.
  - Updates, new content, player matching, community services, multiple distributed services, and so on.

That's it for the genres

- There are a lot more computer game genres like
  - Rush
  - Tower defense
  - Train Simulation
  - Any combination of the genres mentioned in this lecture!

  - But I think you got an overall understanding of different genres and their attributes.