Lecture 2:
Game Design
What is Game Design?

Game design includes developing and considering the following aspects of a game:

- Concept
- Genre
- Setting (often including map/level design)
- Characters
- Premise and storyline
- Audience and player motivation
- Game mechanics and game play
- Mood and atmosphere
- Look and feel – graphics and sound
Common Genres

There is a huge variety in computer games, but we can classify the majority of them:

- Action/Shooter games
  - Emphasis on fast action and reflexes, shooting things (Doom, etc.)
  - Stealth games are similar, but with an emphasis on not being detected and being cunning.

- Strategy games
  - Focus on planning, resource management
  - Can be either real-time strategy (RTS) and turn-based strategy (TBS)

- Racing games
- Sports
- Adventure/Role playing
- Arcade/Platform
- Online games
- There are many variants and combinations of these, and some games that don’t fit well.
So how do you design a game?

Learning game design is not easy

- It is roughly similar to learning to write fiction.

- Most game designers say that the most important thing is to play many games.
  - And to keep a critical eye as you do.
  - What do you like? What not? What works well? Why?
  - Watching others play games and listen to their opinions is important too.
What do game designers recommend?

The following is a collection of quotes from top game designers.


- Four top game designers were interviewed:
  - Chris Avellone, Obsidian Entertainment
  - Cliff Bleszinski, Epic Games
  - Ken Levine, Irrational Games
  - Akira Yamaoka, Konami

**Levine:** Game designers have a weird job. At root, it is their responsibility to ensure that a game is fun to play. The problem with being a game designer is "fun" is an extremely relative term. I remember playing Midnight Club 2 recently on the Xbox and thinking, "I could never design this game in a million years." I have no idea what makes sports games fun. But for some reason, I have some insight into what makes strategy games, shooters, and RPGs fun...probably because they're the kind of games I enjoy playing.
What do game designers recommend? (cont)

Ken Levine: I remember being really surprised to learn about how technical game design was. A lot of people tell me: "I've got a great idea for a game." Frankly, who gives a crap? A great idea is meaningless. A great idea that leverages your existing technology, gets the team excited, is feasible to do on time and budget, is commercially competitive, and, last but not least, floats the boat of a major publisher… Now you have something.

Avellone: We're working on Neverwinter Nights 2 right now (most everyone at Obsidian is, although we have 10-15 people working on our next project, which is not a sequel). The way design usually works is that we blue-sky a vision document for the game's key features and fun factor. Then we make it more realistic, turning it into a "creative design doc" that the programmers break down into a schedule.
What do game designers recommend? (cont)

Bleszinski: Going from the original creative vision to what the game is eventually going to be…it isn't always about making the best game possible. It's about the tradeoffs you decide on as a designer. You're making the best game possible with $x$ people, $y$ months, and with $z$ dollars. It's like playing an RPG where you have 20 points to allocate to strength, dexterity and intelligence. You can't have it all.

You have to pick, what are the things you're going to do well in this game? There are three to five things we're going to do that no one has ever seen, that we're going to do better than anyone else, and commit to it. You start off with your grandiose design of what your first game in a new franchise is gonna be. And you have 800 million ideas. Ultimately you wind up with a fraction of them. If you have enough ideas, you've got plenty of material for the sequel. If you do a good enough job on the first game and establish the franchise, you'll have plenty of ideas for the rest of the games.
What do game designers recommend? (cont)

**Levine:** Game development is an extremely iterative, collaborative process. A designer who sits off in a corner by himself writing a game design doc is going to be pretty shocked at the reaction he gets when he gives it to the team to "figure out." Great games are great because they leverage *all* the tools at hand: people, technology, design, art, etc.

**Yamaoka:** We, the development team, hold meetings and spend a lot of time until we reach a consensus of opinion. We talk about everything from the promotional side of the game to very philosophical topics...like "crime and punishment," for instance, in Silent Hill 2. [We] discussed pain and anguish of a human being until everybody fully understood their part in the game development. My job is to make sure everything is shared within the team, from the theme of the game to individual opinions, so that the team can work efficiently. And this responsibility will continue until the game is complete.
What do game designers recommend? (cont)

• **Chris Avellone:** Well, technology facilitates design and storytelling. Just like design, there are only so many programming resources to devote to tackling design issues, so you have to choose your battles and scale back your design so it falls within the technology requirements for your platform (console or PC) and your programming resources (it's great to have a 50-page spec on how radiation will work in a game, but it's much better if you leverage the existing code for poison and save the programmers two weeks of work).

• Also, there's the temptation to throw every fun element you can think of into a game, and this just isn't feasible. You need to use all your programming assets to reinforce the fun factor and the key design elements of your game (preferably combat and gameplay), or focus on tools that allow more people (especially nonprogrammers) to implement content without taking programmers down.
What do game designers recommend?
(cont)

**Bleszinski:** I've really seen the value in iteration. Fun is the sum of its parts. It's hitting the button and feeling the responsiveness and seeing your character move and jump. It's pulling the trigger and seeing the nice muzzle flash. It's seeing the enemy react when you shoot him. It's seeing the enemy react to the fact that you're trying to shoot him and seeing the AI dynamically adjust. All these things coming together.

**Levine:** I've grown to trust those around me more. I remember I once heard a designer say that he wished they had a machine that could literally transform thoughts and ideas into game designs. To me that would defeat the purpose of working in games: collaboration.

The market has also changed. Certain genres that were around when I got my start are pretty much gone now, and new ones have evolved. Game designers who don't obsessively play games are not game designers.
What do game designers recommend? (cont)

**Yamaoka:** My approach has changed from creating a traditional "video game" method to creating content on an interactive media system. In today's world of gaming, the range of age and type of players has broadened, so greater creativity is required from the game designer. One single approach will not be enough. You have to go beyond the traditional approach of creating video games [by], for instance, making it into a joint project with other media, like with film and music.

**Chris Avellone:** I enjoy working on RPGs, hands down, mostly because the story and world and characters have a higher importance than many other games (this trend is changing, however). Any genre is generally cool: sci-fi, fantasy, postholocaust. I've worked on them all and enjoyed them. I wouldn't mind doing a modern-day RPG, however.

I think it's more likely you'll be working on licensed properties in the industry than original intellectual properties. Obsidian's been lucky in the licenses we've been able to work with (Neverwinter and KOTOR2), and licenses carry the advantage of having a tone, world, and parameters established for you from the outset. The advantage of IPs is you have your own sandbox to play in, and the approval process is your own.
Yamaoka: The skill to communicate with others is very valuable, because you have to cooperate with a lot of people to finish a project. Creators often have egos that they need to control in order to go in the same direction with the team. Also, being aware of content on other media is helpful as a game creator.

Bleszinski: You need to understand most of the disciplines that are involved. You need to be an avid game player. You need to be a big picture guy, as far as paying attention to pop culture and relationships, and life, in general. Real life experience does make you a better game designer. If you go skydiving or scuba diving that will make you a better game designer.
Levine: I wouldn't count on lucking out like I did. The way into game development is very clear, however: QA. Get a job in quality assurance. Unlike most industries, the gaming equivalent of "starting in the mailroom" actually puts you in the thick of the action. There is no better way to get an understanding of what makes games tick. There's no better place to observe design elements that read brilliantly on paper but turn into crap when they hit the screen (which happens more often than not). And there's no better place to figure out how to fix those design elements when everything goes pear-shaped.

In terms of skills and personality, I'd suggest the following:

Learn how to write a document. I generally structure all my docs in a reverse-pyramid style. I start at the top, with a single sentence: "Freedom Force is a real-time heroic tactical RPG which allows players to grow and manage their own team of superpowered heroes." Then I expand that thought out to a paragraph. Then a page. Then two pages. And so on. Write a document assuming that no one cares what you have to say. The reader is not in your head. They will not come to you. You have to bring it to them. How? Be clear. Be concise. Be entertaining. Keep your concepts based on things they understand and relate to. And, for God's sake, watch those proper nouns. Nobody ever liked a game design document because the designer had worked out the family tree of the villain back 27 generations.

And play a lot of games. Even bad ones. In fact, especially the bad ones. If you can't find one useful idea from every game you play, you're not looking hard enough.