

Lecture 5

Game Design

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Game Idea

Invention of Good Games

One of the most difficult tasks people can perform, however much others may despise it, is the invention of good games.

C. G. Jung

Game Development Process

- All games start with an **idea**
- The idea slowly forms into a **design**
 - Concept
 - Mechanics
 - Balance
 - Game Design Document
- The design solidifies into **game components**
 - Code”
 - Visuals
 - Audibles
- Components come together to create the **game**

Ideation

Where do ideas come from?

- Ideas do not come out of thin air
- Ideas originate from your experiences
 - Do something other than playing games
 - Otherwise, you can only clone existing games you have played
- Focus on what you enjoy doing in your life
 - What was an amazing experience you have enjoyed?
 - When was the last time you had extreme fun?
 - What gave you the greatest surprise of your life?

What to do for new ideas?

- Read a book
- Watch a movie
- Play a game
- Visit a new city
- Go on vacation
- Do some sports
- Start a new hobby
- Talk with strangers
- Build/craft/construct something

Csikszentmihalyi's stages of creativity

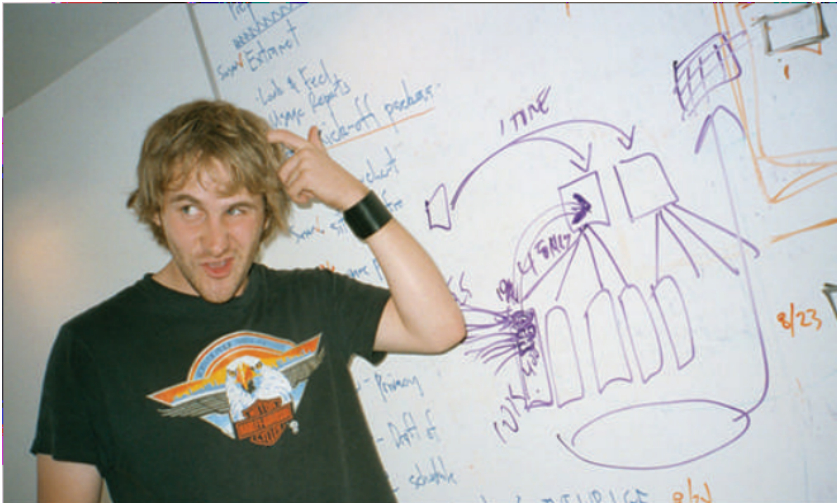
Csikszentmihalyi points to the following stages of creativity:

- *Preparation*: Preparation is becoming immersed in a topic or domain of interest, a set of problematic issues.
- *Incubation*: Incubation is a period of time in which ideas “churn around” below the threshold of consciousness.
- *Insight*: Insight is sometimes called the “aha!” moment, when the pieces of puzzle, or an idea, fall together.
- *Evaluation*: Evaluation is when the person decides whether the insight is valuable and worth pursuing. Is the idea really original?
- *Elaboration*: Elaboration is the longest part of the creative process; it takes the most time and is the hardest. This is what Edison meant when he said invention is 99% perspiration and 1% inspiration.

Game Journal

- Good ideas also originate from your experience with games
- Keep a *game journal* where you record your gaming experiences
 - What are the main features of the game?
 - What did you feel playing this game?
 - What did you like/dislike?
 - Write down your emotions, such as frustration, exhilaration, confidence, uncertainty, pride...
- Discuss your game analyses with your friends

Brainstorming



- Brainstorming takes practice to become good at
- Train yourself in generating *workable ideas*
- Train yourself in generating solutions
- You can brainstorm alone
 - But it is better to do it in a group

Brainstorming Best Practices



- *State a challenge*
 - Design a game where parents lead their children
 - Design a game which played with a single button
- *No criticism*
 - Express and listen to ideas without objections
 - Start your comments with “yes, and...”
- *Try different methods*
 - Change leader, change conversation method, ..

Brainstorming Best Practices



- *Create a playful environment*
 - Find a room/space that triggers creativity, bring toys
- *Write it on the wall*
 - See the clashes, big picture, potential areas of thought
- *Go for lots of ideas*
 - Don't be shy, produce many ideas and leave filtering to another time
- *Do not go for too long*

Research

- Once you have a general idea, start doing research on the topic
 - Read books
 - Watch documentaries
 - Go visit
 - Do practice

Editing and Refining

- Once brainstorming is over, you have many ideas
- It is time to enter “evaluation” phase
- Remove bad ideas
 - *Not matching goals*
 - Doesn't contain the experience you want to pass to the player
 - *Not feasible*
 - hardware and software limitations
 - *No market*
 - Doesn't mean bad exactly, but maybe wait for another year or two
 - *Doesn't feel like it*
 - Sometimes an idea just doesn't feel *likeable*
 - *Budget restrictions*
 - too expensive, too long to do
- Refine better ones

Turning Ideas into a Game

- Many designers at this point choose a *genre* for their idea
 - This usually works as it provides proven mechanics and a known ground
 - You can even innovate new mechanics within the genre
- What if your idea doesn't immediately *fit* into any existing genre?
 - Is it going to be more an RTS or an FPS?
 - Individual genres are *solved problems*
 - Try to come up with new mechanics for your idea

Focus on the formal elements

- The *formal elements* are the underlying mechanics and system of the game
- Here are some questions to ask at this point:
 - What is the player's role and objective?
 - What are the rules and procedures?
 - What actions do the players take and when?
 - What is the conflict in my game?
 - Are there turns? How do they work?
 - How many players can play?
 - How does the game resolve? How long should it take?
- You don't have to fully answer each of these questions at this point
 - Some answers will form during prototyping and design

Focus on the formal elements

- Try to solidify the following at this stage:
 - Define the player's goal(s).
 - What does a player need to do to win?
 - Write down the single most important type of player action in the game.
 - Describe how this functions.
 - Write down the procedures and rules in outline format.
 - Only focus on the most critical rules.
 - Leave all other rules until later.
 - Map out how a typical turn or core loop works. Using a flowchart is the most effective way to visualize this
 - Define how many players can play.
 - How do these players interact with one another?

Concept Document

Writing a Treatment

GAME TITLE

Game Tagline

Game Credits (basically, who made what)

GAME IDEA

- *What is your game about? What makes your game interesting, unique, special, or worth noticing/playing? Try to keep it concise. The minimum would be a short phrase and the maximum would be 3 sentences. Make sure to provide content warnings if needed. (Example: "An orange that becomes sentient tries to run away to avoid becoming juice" or "A long epic about becoming a true hero of the masses that combines rhythm, action, and puzzle game mechanics")*

GAME OBJECTIVE

MAIN OBJECTIVE

- *Why did you make this game? What is the game for or what is its intended purpose? What should the game be able to do? Only ONE main objective is recommended but you could also make up to THREE main objectives. Objective/s can be about how you're making the game for fun, learning, an advocacy, or something else entirely. (Example: "To make the player realise that short games can be fun too" or "To create a relatable experience that would help the player do more introspection")*

GAMEPLAY GOAL/S

- *What kind of gameplay do you want the player to experience? How do you want the player to feel when playing your game? Are you trying to make a hard and challenging game or are you making something more casual and relaxed? When the player is playing your game, how would you like them to react or how would you like them to describe it to their friends? (Example: "To make the player feel compelled to get all the achievements" or "To let the player enjoy the game even after a lot of levels have passed")*

PRESENTATION GOAL/S

- *How do you want the player to feel about the assets they perceive in the game?*

Once you have answers to the above questions and solidified the formal elements of the game, you are expected to write a *concept document* or a *game treatment*.

- *Concept Document* is usually a 1-page short description of your game idea
 - Includes the idea, the experience, maybe some mechanics, target audience,...
- *Game Treatment* is a 3-5 page document that includes a bit more than a concept document

Concept Document

- Game Title
- Game Idea (1-2 sentences)
- The Goal: What is the experience you want your players to feel
- Mechanics: What are the core mechanics and game play elements?
- Target Audience
- Why to do this game?

Game Treatment

A game treatment includes the following:

- *Premise*: This is a brief summary of the game's setting, characters, and conflict.
- *Goals*: This section describes the player's goals in the game. Note that these are not your design goals, but the goals of the player.
- *Mechanics*: This section explains how the game will be played, including the rules, controls, and feedback system.
- *Story*: This section provides a more detailed overview of the game's plot, characters, and setting.
- *Theme*: This section identifies the game's underlying message or message.
- *Target audience*: This section describes the type of player who would enjoy the game.
- *Design Pillars and Experience Goals*: As we've already discussed, these are the team's goals for the project and what players will experience as they play.

Game Treatment

Depending on the type of the game, and optionally, you may also include the following:

- **Level design:** This section describes the layout of the game's levels, including the obstacles, enemies, and puzzles that players will encounter.
- **Art style:** This section describes the game's visual style, including the characters, environments, and objects.
- **Audio:** This section describes the game's audio, including the music, sound effects, and voice acting.
- **Technology:** This section describes the game's technical requirements, such as the hardware and software needed to play the game.

Example template: [Game Treatment Template](#)

Exercise Time

- Create groups of 3-4 students
- Find a game idea that is novel and promising
- Prepare a Game Concept Document for your idea
- Read your game concept to the class
 - Ask for feedback