LUDOLOGY
Psychology Of Fun

ANNOUNCEMENTS

• Join Discord
• Game Ideas are due tonight 11:59 PM
  • Submit up to 3 ideas
  • Less than 300 characters each
  • Submit them here: https://forms.gle/kRwpHV5SEiU2xa3A
• Game Jam #2 happening on Saturday, September 21st
  • BA 3200 10am - 4pm

DEFINITION OF A GAME

• People play games because they experience emotions that are closely related to the main factors of happiness.
• It’s hard to define what a game is.
• There are 4 elements that constitute a game.

ELEMENT #1

Having a clear goal

EXAMPLE
Nidhogg

EXAMPLE
Lovers in a Dangerous Spacetime
ELEMENT #2

Having a set of rules

EXAMPLE
Pac Man

ELEMENT #3

Willingness to overcome obstacles or challenges

EXAMPLE
Mario Maker

ELEMENT #4

Continuous Feedback

EXAMPLE
GTA 3
EXCEPTIONS

Not everything that fits is a game

EXAMPLES

HOW TO BUILD A FUN GAME

Finding the Fun

STEP #1

UNDERSTANDING FUN GAMES

• We will help you identify features and avoid bias.
• Then we start testing and collecting evidence:
  • Case studies.
  • Expert analysis.
  • Empirical research.

THE PRODUCER’S ROLE

• Understand what will make a game fun
• Know gamers
• Know game inside out
• In many cases, they are responsible for managing the team
  • Communicating goals and priorities
  • Organizing tasks and team members
THINK LIKE A PRODUCER

• How does one begin to make a “fun” game?
• Start by asking these questions:
  • What is your audience?
  • What kind of game are you creating?
  • What kind of experience are you creating?
  • What resources are available?
  • What budget is available?

HOW PRODUCERS SUCCEED

• Not everybody is meant to be a producer
• Have a vision
• Communicate that vision
• Incorporate team feedback

NOBODY WANTS TO MAKE A BAD GAME

GAMES ARE NEVER FINISHED, JUST RELEASED

STEP #2

Creating an Experience

OTHER EXAMPLES
HOW DO YOU MAKE A FUN GAME?

• This is the approach in most game companies:
  1. Consider your audience.
  2. Determine what kind of experience you want to create.
  3. Construct that experience, layer by layer.

CONSIDER YOUR AUDIENCE

THE GAME DESIGN PROCESS

1. Start with a good mechanic
   • One good level
   • Tutorial
   • Extensions

2. Establish a solid UI
   • Controls
   • Communication & Rules
   • Progress & Feedback

3. Make it challenging
   • Know your audience
   • Optimal flow
   • Balance
   • Playtesting

4. Polish the look & feel
   • Immersion & Consistency
   • Stimulation
   • Music & Sound

GAME MECHANICS

• Game mechanics refer to the elements your game uses to engage the player
• Gameplay usually refers to the experience that you want your players to have.
  • Employ game mechanics in order to achieve it
• What are examples of fun (or good) game mechanics?

BUILDING THINGS

DESTROYING THINGS
CONCEPT BEFORE CONTEXT

- Always start with a game mechanic that is fun to do.
- Build your game around that.
- This is what makes it difficult to build games around existing IP.
- Unless interacting with the IP itself is the fun part of the game!

DO ONE THING WELL

- You want your game to be unique
  - Draw from successes of other games
  - Use what works, but have some novel elements that stand out
  - Avoid temptation to look too hard at existing games.

TESTING THE BEST IDEAS

- Your idea might be fun in theory. How do you verify this in practice?
- 1. Start with an innovative idea.
- 2. Build quickly.
- 3. Playtest.
- 4. Iterate.
  - Identify elements to keep, discard the rest
  - Go to step #1 if the game is not working.

A GAME IS MORE THAN A SET OF FEATURES

- A set of game features
  - Creating a good game
  - A set of game features
- Creating a good game

FEATURE CREEP

What gamers consider “fun” (according to Metacritic.com)

- Interesting storyline
- Action and/or violence
- Co-op gameplay
- Lots of playable characters
- Elaborate arsenal
- Great graphics
- DLC

What game companies do to make their games “fun”

- Amazing graphics
- Familiar characters
- Popular gameplay styles
- Stimulating atmosphere
- Sex and violence
- Killer soundtrack
- Cinematics
- Capture what made the original popular

STEP #3

Constructing the Game
FROM IDEA TO EXECUTION

• Most games have the potential to be fun.
• There are general rules (like these ones) that help people make sure that the game doesn’t fail.
  • That’s why critiques are good; to find these mistakes before it’s too late.

EXAMPLE
Guitar Freaks VS Guitar Hero

GUITAR FREAKS
• Released in 1999
• Gameplay: Players press plastic buttons and strum a plastic filter on a guitar-shaped controller in time with the game’s music.
  • Players able to raise the guitar in the air for extra points

GUITAR FREAKS
• Play version bundled with a guitar controller manufactured by Red Octane.
• Red Octane partnered with Harmonix
• Added 2 more buttons
• Added a whammy
• Voila, I present to you: Guitar Hero (2005)

GUITAR FREAKS VS GUITAR HERO

• Why was Guitar Hero more successful (or more fun)?
  • Note Highway
  • Licensing
  • Guitar Hero franchise has generated over $2 billion
  • Red Octane acquired by Activision for $100 million in 2008

LAYERS OF A GAME

• Each game layer builds on the layer before
• Consider the order of layers
• UX > UI
  • Creating an effective user experience means establishing key game elements:
    • Controls
    • Communication & Rules
    • Progress & Feedback
  • Find things your players hate, and get rid of them!

• Controls need to reflect gameplay.
  • Gave rise to specialised devices:
    • Wiimote, Kinect, Rock Band instruments.

• If the players want to do something, let them do it.

• Key items to communicate:
  • Controls
  • Actions
  • Objectives
  • Motivation
  • Rewards

• Feedback can be through text, audio, sound, music or the level itself.
  • The more cues, the better
EXAMPLE
Prince of Persia

PROGRESS & FEEDBACK
• If the player is doing well, tell them.
  • ALL THE TIME!
• Constant feedback is critical
  • Reinforcing behavior
  • Indicating Progress
  • Providing stimulation
• Feedback needs to be both visual and auditory.

EXAMPLE
Rock Band

REWARDS
• Rewards reinforce behavior and add gameplay.
  • Challenge + Rewards = Addiction
• As with other game elements, rewards can take several forms:
  - Sensory Content
    • Music & Sounds
    • Cutscenes & animations
    • Advancing storyline
  - Items
    • Loot or money
    • Weapons, items & upgrades
    • Unlocks
  - Positive Reinforcement
    • Points or score
    • Achievements
    • Leveling Up
    • Beating bosses
    • Social rewards

EXAMPLES
ACHIEVING OPTIMAL CHALLENGE

- The challenge of games is what turns them from simply interactive to addictive.
- Several different types of challenge elements
  - Example: enemies and bosses
- Optimal flow
  - Technique for increasing difficulty level
  - Helps player acquire and enjoy new skills
- Difficulty elements
  - Reflex skills
  - Enemies vs bosses
  - Adaptive AI

EXTENSION TO BASIC MECHANIC

- Tutorial levels
  - Once you perfect a basic level, keep simplifying it until you can’t anymore
- Extensions
  - Further levels are created when you consider other applications of the basic mechanic
  - Examples?

BALANCE

- Balance is necessary when multiple options are available
  - No character has an unfair advantage
  - Each player type can win multiple ways with multiple characters

PLAYTESTING

- Testers can spot potential issues that developers aren’t able to anticipate

CHALLENGE IN DIFFERENT FORMS

- Introduce the challenge element depending on audience and domain of the game
- Examples:
  - Strategy games:
    - Problem solving
    - Using environment
    - Cooperation
  - Resource management games:
    - Ammo/items
    - Health
    - Money
    - Time
• Immersion ≠ Realism
  • Need for both realism and "unrealism"
  • As long as it is consistent
• Achieving immersion:
  • Well-designed environment
  • Visual cues
  • Physics
  • Interactive/destructible
  • Freedom
  • Customization
  • e.g. Sims

• Stimulation might be the most obvious game component for most people. It is connected to the senses:
  • Visual & auditory
    • Graphics, soundtracks, responsive environment
  • Physiological arousal
    • Adrenaline, Physical activity, humour, emotional response
  • Examples: DDR, Kinect, Fear, Five Nights at Freddy's
MUSIC & SOUND

- Have you ever played a game with no sound?
- Music is the best way to establish mood and tone
- What is this track telling you?

TIME

- Prototype early, and always have something working
- All of these factors can be enhanced to the fullest, given unlimited time
- Time has to be considered and allocated to a game, just like any other
- Beware feature creep!

WHAT CAN MAKE A BAD GAME

- Bad controls
  - Bad interface
  - Cryptic user menus
- Bad planning
  - Bad definition for user
  - Not replanning
  - Spirit of commerce
- Poor graphics
  - Depressed assets
  - No challenge
  - Poor
  - Unrealistic games
- Not meeting expectations
  - Diverging from past versions
  - Not meeting user expectations
  - Vacant art definition
  - Irrelevant game
  - Unharnessed potential
  - No target audience
- Severe penalties
  - Weak characters
  - Severe death
- Game play
  - Annoying graphics and sound
  - Unrealistic environment/characters (bad graphics)
  - Irrelevant content