WHAT IS GAME DESIGN?

- Use of interaction and aesthetic principles to create a compelling interactive experience
- Interdisciplinary area of study and practice
  - HCI
  - Design
  - Art
  - Business/Economics
- Few “pure” design positions in game development
  - Scripting often required
  - Understanding system limitations helps
  - Nobody likes the “idea” guy :)}
THINKING ABOUT GAME DESIGN

- Game design is a nebulous, ill-defined space
  - “Game” is a broad term
  - “Design” is a broad term
- Game design varies wildly depending on intended audience, monetization strategies, budget etc
ARE THESE GAMES?
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WHAT DO THESE GAMES HAVE IN COMMON?
MDA FRAMEWORK

- Mechanics-Dynamics-Aesthetics (MDA) framework created to:
  - Encapsulate all forms of gaming
  - Analyze design aspects in context of game’s intentions
  - Provide a common language for design discussions
MDA DESIGN CONSIDERATIONS

- Mechanics
  - In-game actions
  - Control mappings
  - Responsiveness

- Dynamics
  - Intended experience
  - Emergent strategies
  - Engagement

- Aesthetics
  - Look and feel
  - Emotive experience
  - Player expectations
MECHANICS

- Particular components of a game
  - Data representation of systems
  - Algorithmic representation of play
- Define the rules of play and response to player input
  - Controls
  - Win-lose conditions
  - Intermediate systems
MECHANICAL CONSIDERATIONS

- In-game actions
  - What does the player actually do?
  - What is the novelty?
  - What is the player expectation?

- Control mappings
  - Are the player actions ergonomic?
  - Do the controls follow conventions of genre?
  - Are controls remappable? (the answer should be yes!)

- Responsiveness
  - How do the controls respond?
  - How do the interactions feel?
CASE STUDY: DEVIL MAY CRY 3

https://www.youtube.com/watch?v=L8mf-NV2fgw&t=64s
https://www.youtube.com/watch?v=xdOPZ Fu-GU0&t=63s
DYNAMICS

- Run-time behavior of mechanics based on player input
  - Holistic system encapsulating mechanics
  - Creates novelty within play
- Interactions and experience of given play through
  - Scope of player choices
- Breadth of player strategies
DYNAMICAL CONSIDERATIONS

- Intended experience
  - How should the player interact with the world?
  - How do its systems create interest?
  - What is the scaling in terms of difficulty?

- Emergent strategies
  - How does player choice change game outcome?
  - What are the timings and flow?

- Engagement
  - What engages the player?
  - How does player attention ebb and flow?
  - What is player expectation in terms of play cycle?
CASE STUDY: STAR CRAFT 2

https://www.youtube.com/watch?v=7nAgHxykgLw

https://www.youtube.com/watch?v=Kbwk2vwXNyU
AESTHETICS

- Intended emotional response to the game
  - Visuals/Audio
  - Overall “feel” during play
- Sets tone of game
- Creates “fun” in game
  - Exploration
  - Narrative
  - Challenge
  - Fellowship
  - etc...
AESTHETIC CONSIDERATIONS

- Look and feel
  - What is the framework for the emotional response?
  - How does this change over the course of the game?

- Emotive experience
  - What emotional spectrum makes the game’s “fun”?
  - What is the range of expected player emotion?
  - How does the game create emotional investment?

- Player expectations
  - How does the game meet expectations?
  - How does the game break expectations?
CASE STUDY: ICO

https://www.youtube.com/watch?v=kSRllwXDBB4
CASE STUDY: SPEC OPS: THE LINE

https://www.youtube.com/watch?v=-b7TaLjdXMc&t=6s
GAMES AS DESIGN

- Games are inherently a designed experience
- Good design is generally invisible
- There is no such thing as “wrong” user interactions
  - Empathy for players promotes better design
- Every interaction should contribute to the overall experience
- Games should be made with a purpose
  - Why are you making a game?
  - Why should someone play your game?
- Consider game design decisions holistically and critically
  - Play-testing and user studies invaluable in feedback loop
REFERENCES

- Hideo Kojima’s GDC 2009 Keynote <https://www.youtube.com/watch?v=7Pq1Jyr6ffU>