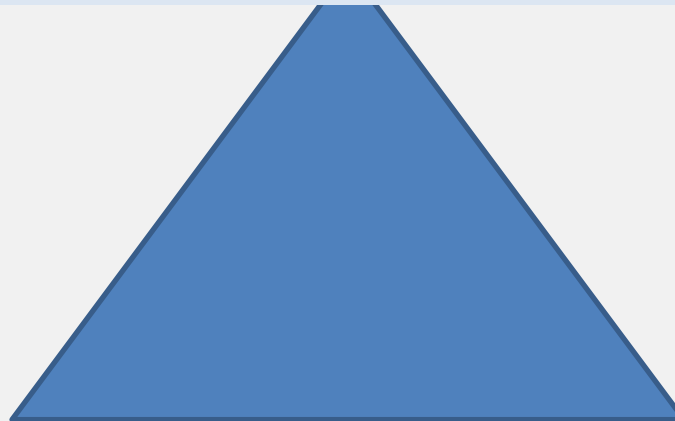# Early Design Process

GDD 450

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See also references at end of slides (if any)

Designing a Game

- Process of Game Design can be described as
  - the successive layering of constraints

Open World

- Even Open World Games have constraints
  - May believe you can do anything

- But
  - Do not have complete freedom
    - Only certain ways players can move
    - A defined set of objects they can interact with
    - AI controlled agents move accordingly to specific algorithms
  - Player does have relatively open set of goals and decisions
    - But there are constraints that create this illusion of "able to do anything"

Constraints

- Constraints anchor your ideas
  - Give a place to begin

- Real World projects
  - Starting place is usually given to you
    - Can be good
    - Provides "initial design" so less "design work" to do

- Here you get to pick
  - So you have more work to do than typical =)

Starting From Scratch

- Limit the amount of time
  - say 48 hours

- Choose subject matter that interests you
  - a theme

- Choose a core mechanic to explore
  - Make a choice = add a constraint
  - Iterations may change it later as needed
  - Do not get stalled in the details

Where to Start

- Need a "core idea"
- Start with
  - **Aesthetics**

- **Aesthetics**
  - what do you want the players to feel
  - how should they react
  - what should the play experience be like
  - now work backwards player experience description
    - what rules will achieve the desired experience/aesthetic

Where to Start

- Need a "core idea"
- Start with
  - Aesthetics
  - **Rule System**

- **Rule or System of Rules**
  - What rules exist around you
  - Can they be made into a game
  - Can the be changed to become a game

Where to Start

- Need a "core idea"
- Start with
  - Aesthetics
  - Rule System
  - **Existing/Proven Design**

- **Existing Design**
  - Use what others have done
  - Adapt and Improve
  - Alter things here and there
  - Re-implement in a different setting
  - Re-implement with a different rule system
  - Re-implement with a different view/perspective
  - Fix what was "wrong"
  - …
  - Make it uniquely different and better

Where to Start

- Need a "core idea"
- Start with
  - Aesthetics
  - Rule System
  - Existing/Proven Design
  - **Technology**

- **Technology**
  - Make use of something new
  - But Not just "new" tech
    - Use something old in a new way
  - Look around
    - What could be used in game
    - What hasn't been used in a game

Where to Start

- Need a "core idea"
- Start with
  - Aesthetics
  - Rule System
  - Existing/Proven Design
  - Technology
  - **Existing Materials**

- **Existing Materials**
  - Use materials from other sources
  - Existing Game Art
  - Existing Game Mechanics
  - Work done by other before you
  - Use unfinished stuff
  - Use parts of parts
  - Check public domain sets
  - Build from what is there

Where to Start

- Need a "core idea"
- Start with
  - Aesthetics
  - Rule System
  - Existing/Proven Design
  - Technology
  - Existing Materials
  - **Narrative**

- **Narrative**
  - Start with a "story"
  - Design rules to fit
  - Many, many stories already written
    - Remember to consider the classics

Where to Start

- Need a "core idea"
- Start with
  - Aesthetics
  - Rule System
  - Existing/Proven Design
  - Technology
  - Existing Materials
  - Narrative
  - **Market Research**

- **Market Research**
  - Find a demographic that could use a game
    - Educational often fits here
  - Pick a topic/genre/something the is "hot pop" right now
  - Look for a "new" hot interface
    - VR, touch screens, holo…
  - Look for opportunities for easy sells

Where to Start

- Need a "core idea"
- Start with
  - Aesthetics
  - Rule System
  - Existing/Proven Design
  - Technology
  - Existing Materials
  - Narrative
  - Market Research
  - **Combinations**

- **Combinations**
  - Start with several of these
  - Aesthetics and Narrative often go hand in hand

Along the Way

- From your start, remember
  - You are adding constraints
  - Shaving off the excess
  - Narrowing down to the essence of your game idea
  - Defining and clarifying the idea
  - Chipping off the stone to reveal the statue
  - This is art
  - Removing/Controlling the noise
to present the picture to your audience

Next Step: Try it out

- Iterate the Design
  - Prototypes and Mockups
    - Will discuss more on this later

- For now
  - Test your ideas as quickly as possible
  - Play through your game
  - Modify as necessary

Mockups: Quick Prototypes

- Use Mockups, aka
  - Paper, cardboard, non-digital, analog
  - Prototypes

- Make your idea playable and testable
  - as fast as possible
  - as little programming as possible
  - easy to change

Why Mockup

- **Making something playable**
  - Forces you to actually **DESIGN the SYSTEM**

- Removes the hand-waving and pretending
  - e.g. this game will have 50 cards
    - the cards will be determined later,
      but will definitely work with the idea
      … honest

Paper Limitations

- Some things can be difficult to test on paper
  - dexterity of players (twitch mechanics)
  - complex calculations
    - and stat tracking
  - animation/eye-candy
    - should not be "required" as part of the game
    - just bonus to an already good game
  - computer user interface
    - But can do a pretend interface layout
    - Human just responds as computer should

Benefits Outweigh Limits

- Benefits
  - Testing the game idea quickly
  - Updating/adapting/improving it quickly

- Strengthens the idea
  - **sets a solid foundation**
  - well worth the investment

End Summary

- Use the above to produce an early Design Document
  - Define the "core" game idea
  - Provide the rules
  - Provide examples of desired art/feel/aesthetics/interface
  - State the desired player experience
  - Setup the narrative/story/theme

- Then reduce to an Inception Document
  - A pitch of the game
  - Short, simple, to the point
    - Done with a deeper understanding of how and what and why the game will be a good game
    - With a useable mockup/prototype for further illustration

Reminders

- Next Class (Friday)
  - You will be giving a presentation on YOURSELF!

- In two classes (Monday)
  - Pitch Presentations!
  - Inception Documents
    - Early version of Design Document

Questions?

- Beyond D2L
  - Examples and information
    can be found online at:
    - http://docdingle.com/teaching/gdd450/

    - *Continue to more stuff as needed*

References

- Some material in these slides was derived/based on material from:
  - Ian Schreiber, Game Design Concepts
  - https://gamedesignconcepts.wordpress.com/
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