Topics

Concept & Brainstorming

Some Mechanics (Space, Time, Objects/Attributes/States)In class workOut of class workProject 1Required

Reading

AGD Ch. 12 Mechanics 157-170 (14 pages)

AGD Ch. 7 Idea (20 pages)

PMD Ch. 4 Starting Practices (10 pages)

Optional reading

PMD Ch. 2 Problem Statements (9 pages)

Unit 1.1 reading quiz

Sensation — sense pleasure
fantasy — make believe
narrative — unfolding story
challenge — obstacle course
fellowship — social framework
discovery — unchartered territory
expression — soap box <simcity>
submission — mindless passtime

Puzzles

① Make the goal easily understood

② Make it easy to get started

③ Give a sense of progress

④ Give a sense of solvability

⑤ Increase difficulty gradually

⑥ Parallelism lets the player rest

⑦ Pyramid structure extends interests

⑧ Hints extend interests

⑨ Give the answer

⑩ Perceptual shifts are a double-edged sword 玩家思考方式

Lens #48: The Lens of Accessibility

When you present a puzzle to players (or a game of any kind), they should be able to clearly visualize what their first few steps would be. Ask yourself these questions:

- How will players know how to begin solving my puzzle, or playing my game? Do I need to explain it, or is it self-evident?
- Does my puzzle or game act like something they have seen before? If it does, how can I draw attention to that similarity. If it does not, how can I make them understand how it does behave?
- Does my puzzle or game draw people in, and make them want to touch it and manipulate it? If not, how I can I change it so that it does?

Lens #49: The Lens of Visible Progress

Players need to see that they are making progress when solving a difficult problem. To make sure they are getting this feedback, ask yourself these questions:

- What does it mean to make progress in my game or puzzle?
- Is there enough progress in my game? Is there a way I can add more interim steps of progressive success?
- What progress is visible, and what progress is hidden? Can I find a way to reveal what is hidden?

Lens #50: The Lens of Parallelism

Parallelism in your puzzle brings parallel benefits to the player's experience. To use this lens, ask yourself these questions:

- Are there bottlenecks in my design where players are unable to proceed if they cannot solve a particular challenge? If so, can I add parallel challenges for a player to work on when this challenge stumps them?
- If parallel challenges are too similar, the parallelism offers little benefit. Are my parallel challenges different enough from each other to give players the benefit of variety?
- Can my parallel challenges be connected somehow? Is there a way that making progress on one can make it easier to solve the others?

Lens #51: The Lens of the Pyramid

Pyramids fascinate us because they have a singular highest point. To give your puzzle the allure of the ancient pyramids, ask yourself these questions:

- Is there a way all the pieces of my puzzle can feed into a singular challenge at the end?
- Big pyramids are often made of little pyramids — can I have a hierarchy of ever more challenging puzzle elements, gradually leading to a final challenge?
- Is the challenge at the top of my pyramid interesting, compelling, and clear? Does it make people want to work in order to get to it?

Iteration Eight filters

① Artistic Impulse — Does this game feel right?

② Demographics — Will the target audience like it enough?

③ Experience Design — Is this a well designed game <scrutized by lens>

④ Innovation — Is this game novel enough?

⑤ Business & Marketing — Will this game sell?

⑥ Engineering — Is it technically possible to build this game

⑦ Social & Community — Will the game meet s/c goals?

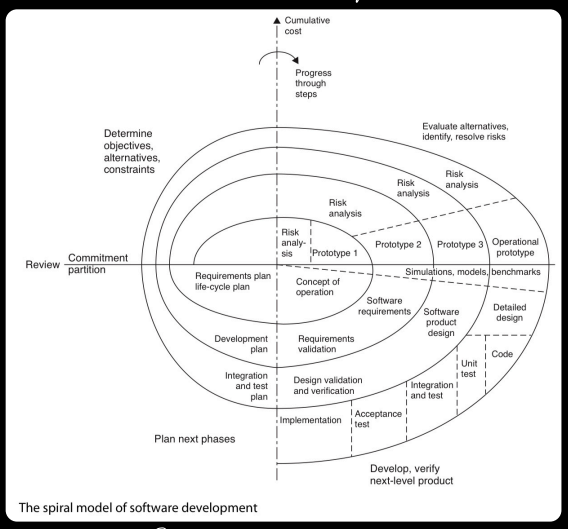
⑧ Playtesting — Does the playtester enjoy the game enough?

Lens #13: The Lens of the Eight Filters

To use this lens, you must consider the many constraints your design must satisfy. You can only call your design finished when it can pass through all eight filters without requiring a change.

1. Come up with a basic design.
2. Figure out the greatest risks in your design.
3. Build prototypes that mitigate those risks.
4. Test the prototypes.
5. Come up with a more detailed design based on what you have learned.
6. Return to step 2.

找出风险
评估并改进风险



The spiral model of software development

Barry Boehm

Lens #14: The Lens of Risk Mitigation

To use this lens, stop thinking positively, and start seriously considering the things that could go horribly wrong with your game.

Ask yourself these questions:

- What could keep this game from being great?
- How can we stop that from happening?

Risk management is hard. It means you have to face up to the problems you would most like to avoid, and solve them immediately. But if you discipline yourself to do it, you'll loop more times, and more usefully, and get a better game as a result. It is tempting to ignore potential problems and just work on the parts of your game you feel most confident about. You must resist this temptation and focus on the parts of your game that are in danger.

Rapid Productive Prototyping eight tips

① Answer a question 不要过度构建原型 多问问题

- 我们的技术能支持多少个角色在一个场景中运动？
- 我们的核心游戏性有趣吗？它能保持长时间的乐趣吗？
- 角色和设定在美学上是否统一呢？
- 这个游戏的一个关卡需要有多大？

要抵御过度构建原型的诱惑，并将精力集中于回答关键问题上来。

② Forget quality rapid prototyping 快速而简陋

③ Don't get attached 学会放弃自己的孩子。

④ Prioritize your prototype 优先直面大/根本的问题

⑤ 高效并行原型 码美编与测试

⑥ Doesn't have to be digital 纸模型

⑦ "Fast loop" Game engine

Python	快速迭代之系层
C++	不需动更之底层

⑧ Build the toy first

Toy 是否具有直观吸引力

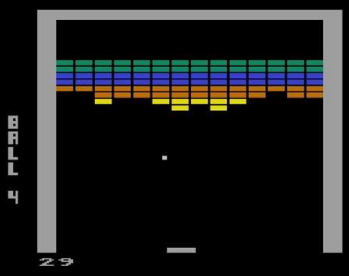
Lens #15: The Lens of the Toy

To use this lens, stop thinking about whether your game is fun to play, and start thinking about whether it is fun to play *with*.

Ask yourself these questions:

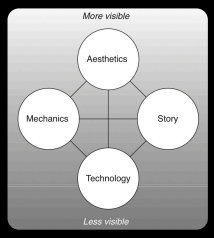
- If my game had no goal, would it be fun at all? If not, how can I change that?
- When people see my game, do they want to start interacting with it, even before they know what to do? If not, how can I change that?

There are two ways to use the Lens of the Toy. One way is to use it on an existing game, to figure out how to add more toy-like qualities to it — that is, how to make it more approachable, and more fun to manipulate. But the second way, the braver way, is to use it to invent and create new toys before you even have any idea what games will be played with them. This is risky if you are on a schedule — but if you are not, it can be a great "divining rod" to help you find wonderful games you might not have discovered otherwise.



paddle movement
ball speed increase
point value of tiles
ball destroy tiles
ball bounce on wall

color of tiles
sounds - retro
blocky style
overcoming challenge



on the box
<very separate>

mouse
computer
console
arcade machine

Mechanics

Space — discrete or contineous

functional space

structure

boundaries
progression
hierarchy subspaces ?
affordance <perceived> what could player do ?

time — discrete or contineous

use of time

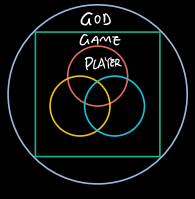
pressure
boundary <sports . time-out>
races
duration

noun
objects
MONOPLY

adj
attributes
HOUSE
OWNER
INFO

adj
states

Secret <information>



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