

Design Process

(an iterative approach)

{based on Eric Zimmerman's 'Play as Research: The Iterative Design Process'}

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Hi, my name's Hanley, and I will be presenting, the design process through an iterative approach.
This approach is based upon *Eric Zimmerman's 'Play as Research: The Iterative Design Process'*.

Balance

- There exists a scale, of Designing “for needs”, and “for delight”. ~ Brendan Laurel

- Game Design:



- *“the process of interacting with a game is not a means to an outside end, but an end in and of itself ... (a) curious quality” ~ Eric Zimmerman*

First of all, why do case studies on games?

Well, Brendan Laurel states that *there exists a distinction between the notion of designing for needs and that of delight.*

As games tend to be created more-so for delight than for needs; they possess a curious quality in that *“the process of interacting with a game is not a means to an outside end, but an end in and of itself.”* It is this curious quality that drives Zimmerman’s studies.

Design Research

- *“When design research is integrated into the design process, new... questions emerge...”*
~ Eric Zimmerman



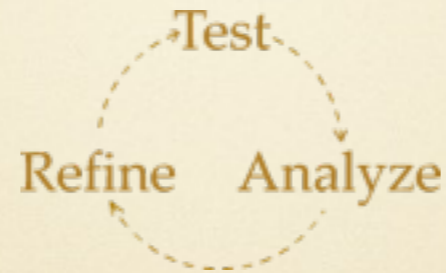
Eric Zimmerman states that;

“When design research is integrated into the design process, new and unexpected questions emerge directly from the act of design.”

This is a potentially cyclic model, since the questions can in turn lead to more design research.

The iterative process is one such example of a Design Research method.

Iterative Design Process



- test with Everyone:
yourself } office } dev-team } visitors } testers
- Advantages:
 - efficient resource utilisation
 - *“a more robust & successful final product”*

- This process consists of a continuous testing, analysing and refining of an idea or product.
- In game design, testing is ideally done with, gradually more and more people, expanding from *yourself to the office, development team, visitors, professional testers, ETC. especially keeping in mind; your target audience.*
- Usually, the, design process for a big-budget computer or console title consists of a **game designer who will think up a finished concept first, writing an exhaustive design document, only to have a final game that Never-resembles the carefully conceived original.**
- The iterative design process has a significant advantage over this usual process in that it utilises less development resources to try and conform with the original idea. In the end it produces *“a more robust & successful final product”*.

Bloons Tower Defence

Description (Game published on 2007-10-18)
We had a huge response to the first game, most people seemed to have lots of fun despite the game being fairly easy by most td standards. We've added 3 new maps, one for three difficulty settings. We've also added a new tower type, the boomerang tower, as well as some new 'on track' items and a couple of other surprises.

Instructions
Click on the items on the right to buy them and put them in the maze. Towers can only be placed off the paths, but road spikes and monkey glue can only be placed on the paths. As you accumulate money upgrade your existing towers or buy new ones.

TOP COMMENTS

	loner12 21 Apr. 23, 2010	this is probably the hardest game in the bloon tower defence series....	(7)
	ck98 50 Aug. 11, 2009	This game REALLY needs keyboard controls..	(1)

TOP COMMENTS

	Degenz 20 Apr. 22, 2010	Kred's really are ruining this site...	(4591)
	m42 14 Apr. 22, 2010	no more kreds >:D	(2394)
	infomage27 41 Apr. 22, 2010	also a nice to have: click on/click off speedup button, rather than having to hold the mouse down. annoying feature.	(2201)

Oct 26, 2009 5:04pm

Overshire
286 posts
Quote post
This Post

Just post your suggestions for the new Bloons Tower Defence and things you didn't like about the 4th one. For those of you who don't know that Bloons Tower Defence 4 was out the link is below. Maybe the suggestions could be like a Flamethower unit that you can upgrade for bigger flames
Link: <http://www.ninjabowl.com/Games/Tower-Defense/Bloons-Tower-Defense-4.html>

BLOONS TOWER DEFENSE 1
Money: 168
Lives: 67
Buy Stuff:
Cannon
Speed: medium
Range: 120
Bigger Bombs Can't attack 4.00
Extra Range Bombs Can't attack 200
Fast Forward (no auto)

This process is quite prominent and clear in independent games, even the various flash games that are floating around the web.

An example of such a game is Bloon's Tower Defence Series, though this is technically several different games, the game core, does not change over time, and is essentially the same game, continuously improved through the analysis of feedback.

This cycle is clear in the updates and versions of the game, in connection with various comments (with the most popular ones aided by a voting system), and forums for feedback.

Case Studies

Case Studies:

- Loop
- SissyFight 2000
- Lego Junkbot



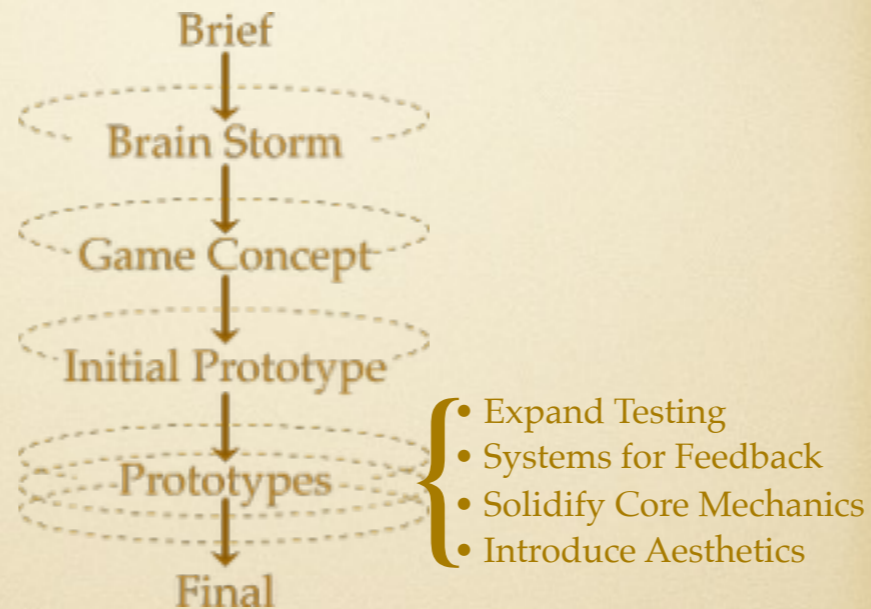
- *I'll just play out the case studies:
Lego Junkbot (client-core, audience), SissyFight (core), Loop (core, sliders) *

Overall Process

Case Studies:

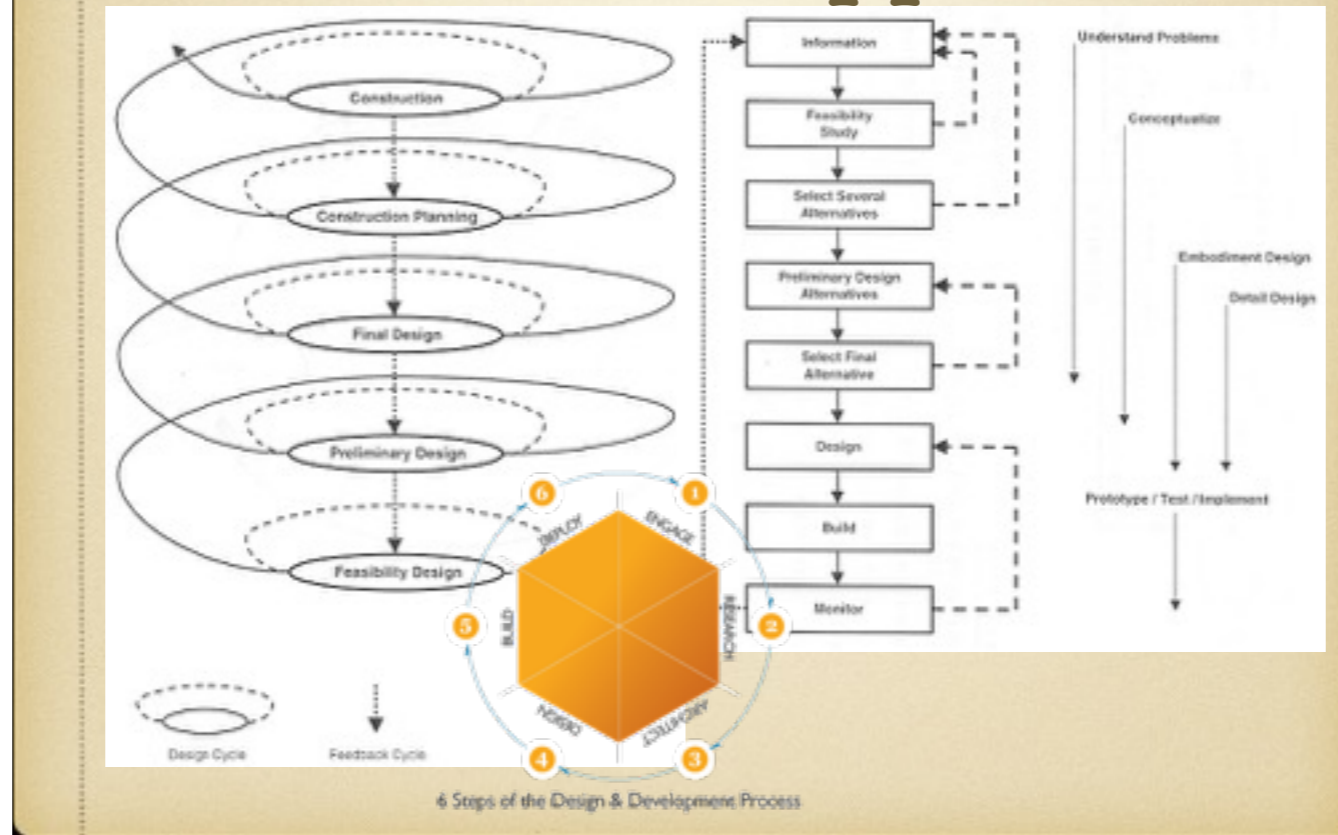
- Loop
- SissyFight 2000
- Lego Junkbot

Test; Analyze; Refine
Cycle



- Through the analysis of Eric Zimmerman's 3 case studies, an overall game design process can be deduced.
- The Test, Analyse and Refining Cycle is evident in all the stages of a project, from Brief to Final.
- The brief, is where a set of play values and parameters are established. These can be either self-created or requested for by a client.
- These parameters then lead to a brainstorm of possible game concepts. Often taking up a significant amount of time and can also consist of continued research into the brief, (for example, GameLabs (creator of SissyFight and Junkbot), bought a whole bunch of lego-bricks whilst brainstorming for Lego Junkbot).
- Once a single game concept is derived, or chosen from a select few, the process then moves along to the initial prototype where the Core Mechanics of the game are created. (In the game; Loop, this first prototype only consisted of the ability to draw lines, whilst in SissyFight, this was a sticky-note-like prototype which was then turned digitally into a simple text-only interface).
- Following this first prototype, many other prototypes are generated through the Iterative Design Process. As a project matures, so too does the amount of testers and systems for feedback (these could include; level editors, web-based forms, sliders where testers could vary parameters of gameplay for optimal settings, etc.). As the core mechanics of a game begin solidifying in code, aesthetics are introduced. These involve everyone, additional programmers to code scoreboards and visual effects, graphic artists to provide art and visual direction, as well as audio artists, providing music and sound direction.
- After various iterations of the project, through this process, what's remaining is a well tested, and refined product.

A Common Approach



Coming from Design Computing, I am aware that this design process, is not unheard of, and hardly new, being utilized in many other fields of design. (Here are just a few images i pulled from MIT and the web in relation to common Design Processes). There is little reason that this efficient and well-rounded process couldn't work for, and benefit games as well.

End

Thanks For Listening =)