



Prototyping in LittleBigPlanet

A final report

This document covers the entirety of my game design project, in which I explore the possibility of using the game LittleBigPlanet to build game prototypes.

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Table of Contents

Table of Contents.....	2
Introduction	3
Project documents.....	4
Reference List.....	6
Change management.....	8
Schedule & Planning.....	8
Goals.....	9
Achieved Goals	9
Post Mortem.....	10
Background	10
Phase one: research.....	11
Phase two: learning the tools	12
Phase three: prototyping.....	13
Conclusion	15

Introduction

This game design project is testing *LittleBigPlanet's*¹ viability as a software prototyping platform. By using the game's built-in *Create* mode I wanted to explore the possibilities of this and create basic prototypes for different mechanics and game elements inside of LittleBigPlanet.

Why prototyping?

Our early courses brought up prototyping as one of the crucial feature in any modern game design process; this is why I wanted to test out a new method of prototyping. One which will not scare away those who cannot code or don't feel at home in front of a computer and keyboard. I chose to focus on the software based prototyping since I think the industry is in need of a more easy to use tool.

Prototyping has evolved along with games themselves. There are a lot of new methods for prototyping and defining an idea through prototypes is one of the best ways to get your vision through to other people.

The end goal is to highlight the importance of prototyping and how a good prototype can change the outcome of a whole game production.

Why LittleBigPlanet?

My fascination about LittleBigPlanet started early in its development and when it finally was released I was amazed by all the community content that was created. The game has proven to be a great platform for the casual audience who wants to create something for others to enjoy.

So I thought of using this already established platform to test out my thesis and the fact that you can do more than build fun and interesting levels inside the game. Using LittleBigPlanet as a developing platform for other games and their mechanics just seemed natural.

I want to raise the relevance of both prototyping and LittleBigPlanet and use them together in the same way that people have done on the PC side. The mod community has come up with games inside of already existing games for years. My thesis is sort of a replica of this phenomenon but for console.

Universities and schools that focus on game design and other sections of the production are constantly growing and a lot of hobbyists are creating their own games on their spare time. With this new outlook, we need a new method for easy and useable prototyping. Why not use an easy and user friendly platform to build it on?

This is why I chose LittleBigPlanet as my project platform. The game got casual appeal, which will serve well when attracting aspiring designers as well as anyone interesting in expanding their game ideas from their own living room.

¹ <http://littlebigplanet.com> by Media Molecule 2008

Project documents

Here are all the attached documents used or created during the course of this project.

Document	Content
(Project proposal) isak_anklew_lbp_proposal.pdf	The original proposal for the project in which I explain my choice in topic and sources to look further into.
(Project plan) isak_anklew_lbp_projectplan.pdf	A document that describes my project in detail in form of schedules, goals and use of the topic.
(Project schedule) isak_anklew_lbp_schedule.pdf	A more detailed look at my schedule on a week to week basis. Planned time and actual time spent is also shown.
(Project blog posts) isak_anklew_lbp_blogposts.pdf	All of my blog posts, from beginning to end.
(Milestone 3 presentation) isak_anklew_lbp_milestonepresentation.pdf	This presentation was for the third milestone in which we were to present our project to our teacher and classmates.
(Milestone 3 report) isak_anklew_lbp_milestonereport.pdf	A short progress report for the third milestone in which I summarize what I've been doing up to the point of milestone 3.
(End result presentation) isak_anklew_lbp_endresult.pdf	The end result presentation in which I describe my findings and conclusions for the whole project 18/3.
(Post mortem presentation) isak_anklew_lbp_postmortem.pdf	A short post mortem for the presentation day 18/3.
(Blueprints) isak_anklew_lbp_blueprint1,2.jpg	Two blueprint sketches from my prototyping process.
(Personal letter) isak_anklew_lbp_letter.pdf	The personal letter I sent to Media Molecule for getting in contact with them.
(Project folder) isak_anklew_projekt_folder.rar	Pictures and a short text for the project folder that will be created for the presenting day on the 25 th of March.

Prototyping levels which are uploaded on YouTube.

Prototyping in LBP session 01

<http://www.youtube.com/watch?v=A7yNipXJRA4>

Prototyping in LBP session 02

<http://www.youtube.com/watch?v=k9kB0vbCWyo>

Prototyping in LBP session 03

<http://www.youtube.com/watch?v=lj-eMw2g17A>

Prototyping in LBP session 04

http://www.youtube.com/watch?v=SP1imPz_fg0

Prototyping in LBP session 05

<http://www.youtube.com/watch?v=cO6nE5pdSMQ>

Prototyping in LBP session 06

<http://www.youtube.com/watch?v=M6M2gQm-gtQ>

Prototyping in LBP session 07

<http://www.youtube.com/watch?v=oYazisY6-NI>

Tutorial playthroughs.

LittleBigPlanet Tutorial Playthrough 01

http://www.youtube.com/watch?v=Z_zf-wiM5X8

LittleBigPlanet Tutorial Playthrough 02

<http://www.youtube.com/watch?v=uPIsYFjrVzc>

LittleBigPlanet Tutorial Playthrough 03

http://www.youtube.com/watch?v=ZVa_Kl4Fr7Y

LittleBigPlanet Tutorial Playthrough 04

<http://www.youtube.com/watch?v=98te-u2rBW0>

LittleBigPlanet Tutorial Playthrough 05

http://www.youtube.com/watch?v=x8SZS_IDsrM

Reference List

Here follows a list of different reference material I used for the research phase of the project.

Literature:

- | | | |
|------|-------------------------------------|---|
| 2004 | Game Design Workshop | Tracy Fullerton; Christopher Swain; Steven Hoffman |
| 2008 | Game Production Handbook 2/E | Heather Maxwell Chandler |
| 2008 | Game Space Final Report | Jussi Kuittinen, Frans Mäyrä, Janne Paavilainen, Annakaisa Kultima, Johannes Niemelä, Hannamari Saarenpää |
| 2008 | /P/ Prototyping (slides) | Janne Paavilainen |

Web sources:

Added 2009-01-20

http://www.gamasutra.com/features/20051026/gabler_01.shtml

By Kyle Gabler, Kyle Gray, Matt Kucic and Shalin Shodhan

Gamasutra

October 26, 2005

http://www.gamasutra.com/features/20060329/waugh_01.shtml

By Eric-Jon Waugh

Gamasutra

March 29, 2006

<http://lostgarden.com/2005/08/common-game-prototyping-pitfalls.html>

By Daniel Cook

Lostgarden

August 21, 2005

<http://en.wikipedia.org/wiki/Prototype>

Wikipedia

<http://csweb.cs.bgsu.edu/maner/domains/Proto.htm#0>

By Walter Maner

Revised March 15, 1997

<http://www.prototypezone.com/prototype/prototyping-history-and-prototype-development-information>

By ?

Added 2009-02-05

<http://www.gamesindustry.biz/articles/prototyping-the-sims-3>

By Rob Fahey

07/04/2008

<http://www.igda.org/leadership/?p=111>

Posted by BenHoyt

November 13th, 2008

http://www.gamasutra.com/features/20050913/sigman_01.shtml

By Tyler Sigman

Gamasutra

September 13, 2005

<http://lostgarden.com/2005/10/space-crack-gift-prototype.html>

By Daniel Cook

Lostgarden

October 02, 2005

Change management

Schedule & Planning

Since the start of this project I've tried to keep special attention on my schedule and planning. These two are essential for any project and since I'm sort of a control freak I constantly need to know I'm on schedule.

Schedule of planned hours.

Week	4	5	6	7	8	9	10	11	12
Topic	First week	Research	Research	Learning the tools	Prototyping	Prototyping	Prototyping	Documentation	Presentation
Hours	2	10	15	20	20	20	20	20	8

Total: **135 hours**

Executed schedule as of 13/3.

Week	4	5	6	7	8	9	10	11	12
Topic	First week	Research	Research	Learning the tools	Prototyping	Prototyping	Prototyping	Documentation	Presentation
Hours	10	9	15	18	19	20	15	16	10

Total: **132 hours**

I used the comment function in Excel to pin out the time I actually spent on this project. Take a look at my project schedule (isak_anklew_lbp_schedule.pdf) for more details.

Week	7									
Date	09-feb	10-feb	11-feb	12-feb	13-feb					
Day	Monday	Tuesday	Wednesday	Thursday	Friday					
Subject	Learning software	Learning software	Learning software	Skype chat	Learning software					
Scheduled time (h)	4	4	4	4	4				Total time:	
Time spent (h)	2	3	Author: started recording 14.30-16.15	5	Author: started 16.00-21.00				18	
Week	8									
Date	16-feb	17-feb	18-feb	19-feb	20-feb					
Day	Monday	Tuesday	Wednesday	Thursday	Friday					
Subject	Prototyping	Milestone 3	Prototyping	Skype chat	Prototyping					
Scheduled time (h)	4	4	4	4	4				Total time:	
Time spent (h)	2,5	Author: Started working 15.00-16.00 posting a blogpost 17.30-19.00 LBP prototyping	2	Author: Went to school 13.00-14.00 Blueprint and blogposting 14.00-15.00	3				19	
Week	9									
Date	23-feb	24-feb	25-feb	26-feb	27-feb					
Day	Monday	Tuesday	Wednesday	Thursday	Friday					
Subject	Prototyping	Prototyping	Prototyping	Skype chat	Prototyping					
Scheduled time (h)	4	4	4	4	4				Total time:	
Time spent (h)	4,5	Author: Started prototyping 10.00-14.30	2	4,75	Author: 11.00-12.45 started prototyping, blogging 15.00-17.00 - prototyped				19,75	
Week	10									
Date	02-mar	03-mar	04-mar	05-mar						
Day	Monday	Tuesday	Wednesday	Thursday	Friday					
Subject	Prototyping	Prototyping	Prototyping	Skype chat	Prototyping					
Scheduled time (h)	4	4	4	4	4				Total time:	
Time spent (h)	3,75	1,5	1,5	4	4				14,75	

Goals

These were the goals stated in my project plan (isak_anklew_lbp_projectplan.pdf).

- A pre-research on the subject
- Blog post at least every third day concerning the progress of the project
- Three weeks of prototyping process
- Documentation of the prototyping through both videos and writing
- A presentation on the project
- Final report

These were my more quality objectives for the overall project.

- Providing a clean new look at prototypes from an aspiring game design student's perspective.
- Explore a new way to software prototype inside of LBP.

Achieved Goals

I would like to think that I have achieved each of the original goals I set up for myself.

- ✓ A pre-research on the subject
 - I did a research that's explained further in the post-mortem.
- ✓ Blog post at least every third day concerning the progress of the project
 - A complete document of all my blog posts (isak_anklew_lbp_blogposts.pdf)
- ✓ Three weeks of prototyping process
 - I spent week 8, 9 and 10 to prototyping.
- ✓ Documentation of the prototyping through both videos and writing
 - I've been doing both of these with YouTube videos and blog posts.
- ✓ A presentation on the project
 - We will have two presentations dates 18.3 and 25.3 (the latter in front of the whole school and some game companies).
- ✓ Final report
 - That's what you are currently reading
- ✓ Providing a clean new look at prototypes from an aspiring game design student's perspective.
 - I have, at least for myself.
- ✓ Explore a new way to software prototype inside of LBP.
 - It's been a new experience and I think it works.

Post Mortem

Background

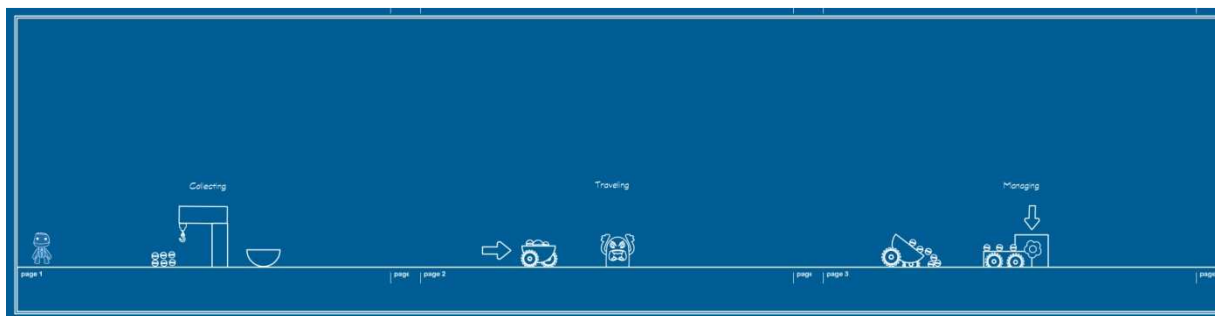
This project idea actually started to take shape way before our first project information meeting in January. I started working on a project proposal the winter of 2008. I even sent out the proposal to Media Molecule, the game developer of LittleBigPlanet.

Unfortunately I never received any answer from them; I used their public email address since that's was the only one I got hold off. So I decided to put the proposal on hold and start working on something else. The time went on and the project came closer and closer.

In the first week of the project I had yet to decide what to work on. Our teacher had narrowed our choices down to three different topics. We had to choose between doing a design project, research project or a design analysis project. I was interested in all of them, but I felt I should take use of the foundation I'd built up before Christmas.

I left behind my thoughts of doing an analysis project about BioShock and thought I should save my game ideas for later so I went with my original idea. Prototyping in LittleBigPlanet was set in motion. I've always wanted to expand on the lessons we learned about prototyping in the early courses of game design and take them to a new level.

By implementing what I'd learnt and experiment with these experiences on a new and interesting platform I hoped to improve my own ability as a game designer as well as LittleBigPlanet's prototyping capacity.



A blueprint sketch.

I briefly got hold of a Media Molecule employee who thought my work sounded interesting but I have yet to establish a solid connection since we started talking on Facebook. I've tried to contact him further to get the developers input on my project which would have been a great asset.

Unfortunately they seemed to have quite a lot to do at the studio so I was forced to skip his input.

I've decided to break this post mortem down into the three topics; research, learning the tools and prototyping. These three are the meat of the project and stretched over a six week period. I will discuss them in detail; what went wrong/right, what I learnt and what I would have done differently.

I'll then reflect on the project as a whole and conclude the post mortem.

Phase one: research

I decided to take the time to research the subject (prototyping) before actually starting to build anything. We got some lectures on the subject and even had a workshop that was very interesting and provided a good foundation. I went back and read through some of the PowerPoint slides (*/P/ Prototyping by Janne Paavilainen*) and also dug deeper into some literature (*Game Design Workshop, Game Production Handbook 2/E and the Game Space Final Report*) for some background information.

What went wrong:

In the beginning of the first week I asked myself some irrelevant question that I had to find answers too. Since I didn't find any clear answers to some of them I had to draw some conclusions of my own. This is never a good thing to do when doing a research. What I needed was cold hard facts.

Didn't have time to read through all of the literature I had available. I had a hard time letting go of the computer and try to sit down and read a chapter or two in the books.

I didn't use playtesting enough during the research's second week. A second opinion is a valuable source for criticism and it could give you ideas on how to improve your prototype. It was very unfortunate that I didn't see the importance of this before the research phase was over.

Fell for the cheap trick of creating a nice looking prototype instead of a working one in the second week's method research.

What went right:

I found very interesting web articles as well as some interviews from the literature that points out the fact that prototyping is a crucial process of any modern game production. This is was music to my ears since I'm trying to refine one method to make this crucial part of the pre-production easier for anyone who dreams of creating a game.

After reading an interesting article in *Game Design Workshop* I decide to do my first software prototype inside of the *Warcraft III* world editor. It turned out to be a good exercise to what was about to come in the prototyping phase. I learned to be patience and not to give up as soon as something didn't work as intended.

Even though the *Warcraft* prototype wasn't playable I still see the time I spent with the editor as valuable. This also convinced me that a prototype doesn't have to be complete to be meaningful and that even if you fail with the task at hand you can still learn things from that failure.

I finally came up with my own definition of what a prototype is, after two interesting weeks of research.

It's like when a TV chef already prepared a cake just so the audience can see it and gets a sense of how it would taste. - Isak Anklew 06 February 2009

What I learnt:

- A research needs cold hard facts
- A working prototype > an easy on the eye prototype
- Even a nonworking prototype can contain valuable data
- Defining something by yourself makes you understand it better

What I would have done differently:

- Asked questions that would provide more relevant answers for the research
- Take time to study several different sources both literature and web
- Take use of others for playtesting

Phase two: learning the tools

When I started planning this project and decide how many weeks I would spend on each phase I realized I hadn't make room for any learning curves. Since learning how to use the tools was an important step I decide to take a whole week out of the schedule for that topic.

What went wrong:

I decided to record every sitting with the game, big mistake. There was no need for documenting the actual tutorial sittings. The only relevant video was the first one, in which I introduced the project to the viewer.

Uploading the videos also seemed to take up a lot of time. The whole video recording got a little out of hand and I had to put in a lot of hours just editing. It was all a bit messy and I think I learned more about video editing than the actual tools.

The videos themselves were too long and too badly directed.



One of my prototype levels.

What went right:

I picked up some new and important tools for the game to be able to function the way I wanted. The tutorials were short, informative and interactive. I learned all of the most necessary tools that I would be using later on in my prototyping as well as some project managing skills.

Even if there wasn't a huge following of the videos, it had at least showed the readers of the blog what the game was capable of.

What I learnt:

- Don't spend time recording stuff you won't use
- Take more time actually learning how to use the tools given to you
- Never let the videos get out of hand!
- I learned a lot more about editing than I'd ever imagined I would

What I would have done differently:

- Skipped the tutorial videos
- Written a short manuscript for the introduction video
- Spent more hours just sitting and mess around in the game

Phase three: prototyping

This phase was all about creating viable content that could prove the relevance of my thesis. Therefore I decided to spend three weeks on it, testing out different ideas and methods along the way.

I started out with creating smaller not so complex prototypes of different puzzle mechanics. My inspirations came from all over the place; sometimes I'd use littlebigworkshop's blueprint room for fast and dirty sketches or just use one of my old ideas of a mechanic or game element.

The first two weeks seemed to go as planned but the last week I lost focus and could probably have done a better job if I had put some more effort into it.

What went wrong:

Spent way too much time editing all the material which I recorded for each sitting with the game. I thought I had learnt from my previous mistake in the learning phase, but I found myself spending more time in front of the computer.

Didn't test out as much methods of prototyping as I wanted to. Should have used some pen and paper models to create a more streamlined way of taking a low-fidelity prototype and transition it to a higher level.

The message of the project wasn't as clear to many as it was to me. I received a lot of comments wondering what I was doing and I tried to explain but the same comments kept on coming.

Again I didn't realize I needed a third perspective on the whole project for it to be something else than just my own two cents. I noticed this at the end of the first week and started to think of a solution.

I had a small third perspective from the comments of my videos from YouTube and littlebigworkshop, but these were about 99% irrelevant comments. What I needed was someone who could play my prototypes and then leave a comment afterwards.



An explosive prototype.

What went right:

Whenever I sat down with the game I came up with something new to test out. It was always a blast to experiment with something and then implement it in the prototype. Just sitting down with the game makes you start to think in a mechanic way and how things work together.

Taking an idea from your head and make it come to life inside the game gives you a great feeling of accomplishment.

I took use of littlebigworkshop and its nifty blueprint room to quickly sketch down something from my head. I also started to draw up things on paper and using old ideas that I had forgotten about from my early days at school.

I started experiment with larger prototypes and was not afraid to spend hours on a thing that I would later throw away when I came up with a better mechanic for it. Invaluable skills that I'm thankful for getting the opportunity to test out.

Finally found a way to playtest my prototypes with others. It was as simple as sharing them with the already existing LBP community that already spend hours playing others levels. The problem I was faced with instead was to inform the player that my prototype levels weren't actual levels but just work in progress.

This point was hard to make with a limited level description so I had to add some additional text inside the level to further inform the players.

I got some people playing the levels and a few even liked them as they were without actual goals. Even if the levels weren't suppose to be played at this stage, it was a good sign that something in my mechanics had an element of fun.

What I learnt:

- Sketch up the idea before even start to build for a more streamlined process
- Take time to explore different methods
- Make your project message as clear as possible
- Take use of others so the project isn't just a ramble in your own thoughts
- Don't be afraid to spend time on something that you will later throw away

What I would have done differently:

- Again, spent a little more time prototyping than editing
- Emidietly launch the prototypes to the LBP community for feedback
- Planned each day a little more detailed

Conclusion

This project have been a very interesting one from the get go. Working independently has its up and downsides of course, but overall it's been a great experience. A big project like this really makes you give it your best and I've enjoyed much of the process.

That being said, it has been a lot to do and things went the wrong way sometime. I ended up with this project that I really don't know if I've made a breakthrough in or not. One thing is for certain though; you can build prototypes inside LittleBigPlanet.

The easy to use tools and the responsive community that are willing to test out your creations are two great features you won't find in other level editors. Are you going to succeed with building a prototype that is fun to play from the start? Probably not, but it doesn't have to be fun to be a good representation of what you want to build.

Just the fact that you easily can build a raw creation of something and then fine tune it until it does what it intends to is great in itself.

So should everyone who is interested in prototyping go out and buy themselves a PlayStation 3 and LittleBigPlanet for all their prototyping needs?

No of course not, that would be a very expensive level editor. But if you're in possession of a system and you have an interest in game developing it could be a great springboard. The fact that a mass market of people will be able to play with your creation and comment on it gives you a built-in focus test.

But LittleBigPlanet isn't flawless, it has its limitations. Not all genres suits the create mode and if you want to build a big prototype you might want to look for something else. What it is good at is the smaller things, similar to the Mythbusters way of doing a smaller prototype of their myths before going full scale.

This is where the people interesting in using LittleBigPlanet should aim their ambitions when using it as a platform for prototypes.

How would I manage these risks on a next project?

I would use a day to day schedule actually. Pin point out exactly what is to be done each day and how much is to be spent on each topic. This would be of great aid whenever in doubt of what is to be done each day.

Secondary tasks such as editing and uploading should never take more time than the main goal of the project. The main topic always goes first, it's nice to have a good looking presentation but if there isn't any content people lose interest.

Lessons well learned and noted for the next project.

This will conclude this Post Mortem, thank you for reading and hope this have given you an insight to my project.

