

Where's The Fun?

How to Test Your Game Before You Build a Thing

Rob Davis Creative Director, Playniac

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As game designers we often struggle with the ways that we might model, simulate and refine games...



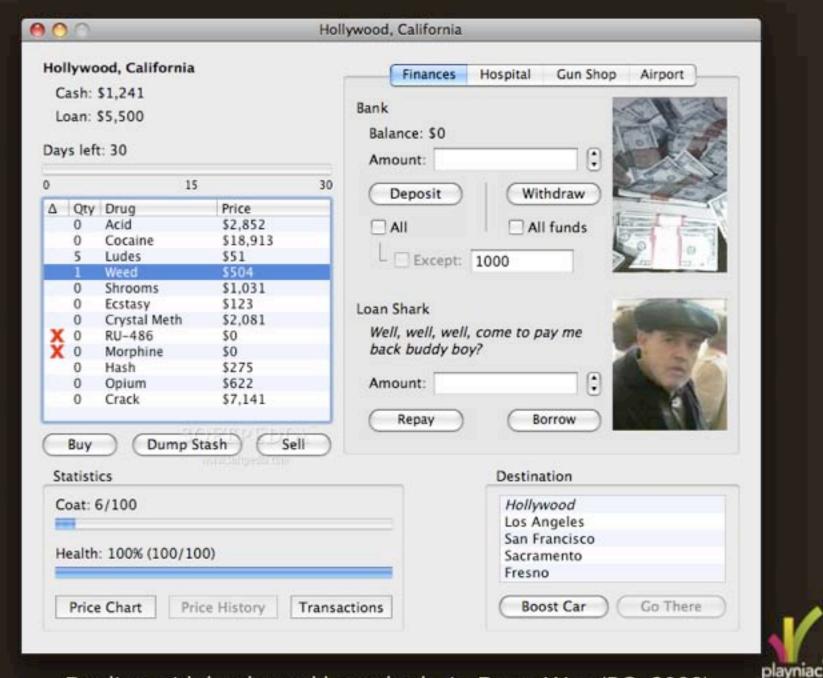
...and yet as humans with an innate sense of play those techniques are all around us.



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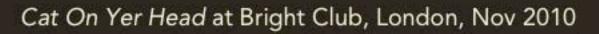


Paying off mortgage and using ATM in Animal Crossing: Lets Go To The City (Wii / 2008)



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Cat On Yer Head

A game about having a cat on your head







Rules for cat:

- IF someone taps your shoulder and says "cat" THEN the cat has jumped on your head
- WHILE the cat is on your head, REPEAT the word "cat"
- To make the cat jump onto someone else's head, tap their shoulder and say "cat"







Rules for mouse:

- IF someone taps your shoulder and says "mouse" THEN the mouse has jumped on your head
- WHILE the mouse is on your head, REPEAT the word "mouse"
- To make the mouse jump onto someone else's head, tap their shoulder and say "mouse"







Win condition I



 IF you have the mouse on your head AND someone taps you on the shoulder and says "cat" THEN stand up and shout "game over"



Win condition II



Cat win

 IF the cat catches the mouse before time up THEN the cat wins

Mouse win

 IF the mouse is not caught before time up THEN the mouse wins



Balancing



 To be fair the game must be equally difficult for the cat and the mouse



Extending

- Two mice
- Dog
- Mouse hole
- Cheese
- Super mouse, secret agents, minefield, etc.









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Flow: The player wishes to activate the attractor field (must be player's turn and this feature must be available for the current mission).

Action: Player clicks the Attractor field on/off button on their player character (or presses the 'A' key) to toggle the attractor field on.

Result: The attractor field energy level starts to decrease. The player character shows the attractor field graphic / animation and aliens are drawn towards it according to their mass and proximity (Figure 21).

Flow A: The player has finished using the attractor field (or it has run out of energy).

Action: Player clicks the Attractor field on/off button on their player character (or releases the 'A' key) to toggle the

attractor field off.

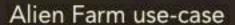
Result: The attractor field energy level stops decreasing.

The attractor field graphic / animation stops and the aliens are no longer drawn towards the player

character.

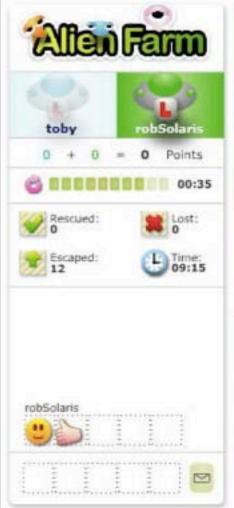


Eigure 11, Attractor field















Use-cases

- Becomes large document that is difficult to maintain... And no one wants to (re-)read!
- Useful for more procedural software; less useful for most games
- Does specify game functionality very precisely, but leaves little room to maneuver in implementation
- Doesn't give a sense of what the game is like to play or how the game GUI might work
- So we needed a better technique...



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Wireframe for mission select

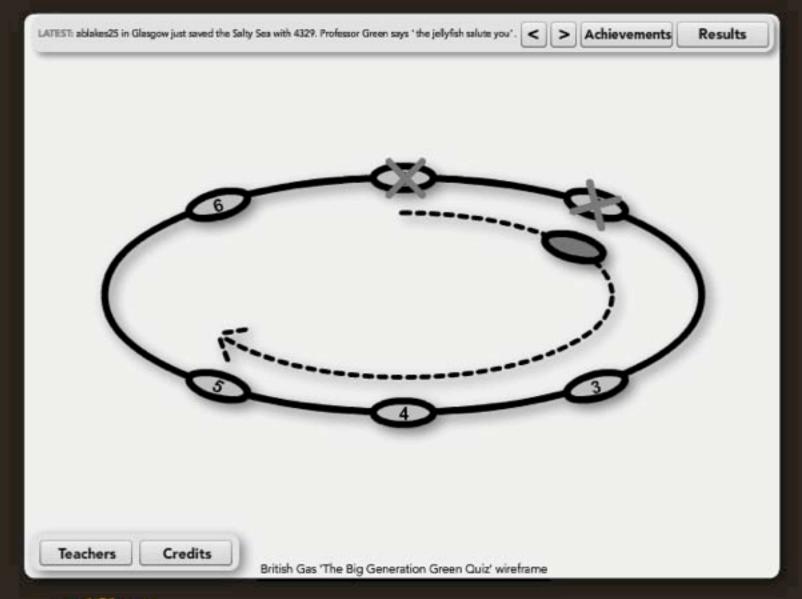




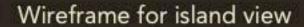




















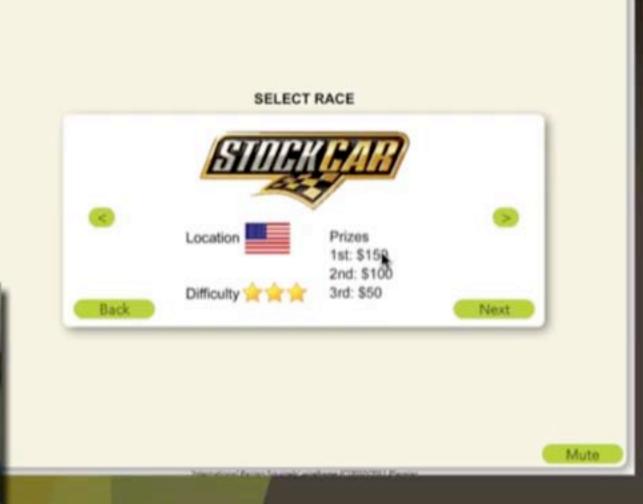


Static Wireframe

- Gives immediate visual sense of game screens and functionality
- Allows some GUI design to be done early and in an abstract manner
- Can be assimilated easily by technical and nontechnical readers
- Useful for design and dev teams
- Difficult to get a sense of screen flow and user interaction, so...



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Dynamic Wireframes

- All the benefits of a static wireframe
- Clear sense of screen flow and some sense of game dynamics
- Extremely easy to assimilate
- Extremely useful for design and dev teams
- Easy to maintain once set up
- Can be used for live testing with target audience



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The racing was exciting, the preparation and money management aspects added to the atmosphere and having to pay your bills at the end of the month added real jeopardy. There were several ways you could prepare for races, and they were varied enough that all the players adopted different strategies, and those approaches had distinct outcomes. There was enough riding on the races to make strategies that looked risky actually risky, but enough pressure from the requirements of rent, wages, and maintenance to make coasting along impossible.

Matt, paper tester





Overview

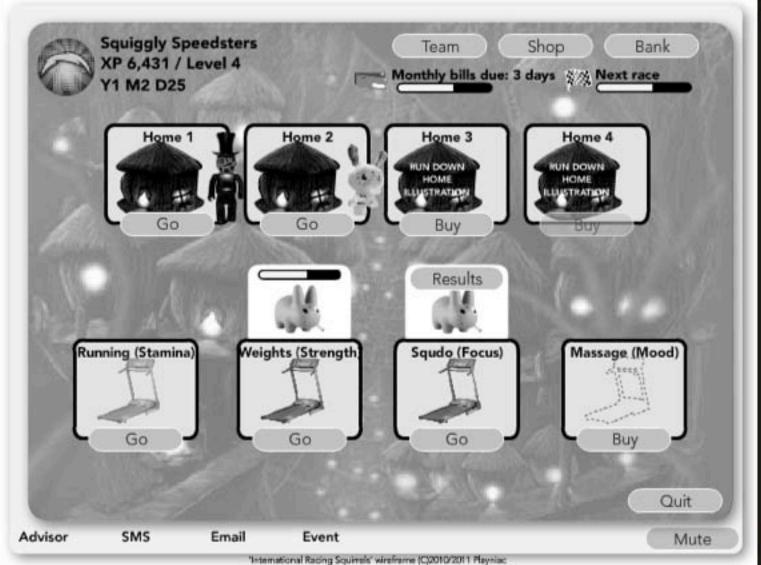
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Paper Test Toolkit

- Monopoly money (Ebay)
- D6, D10, percentile and blank dice + cup (witzigs.co.uk, www.thediceplace.com)
- Plastic counters (witzigs.co.uk)
- Blank cards (witzigs.co.uk)
- Post-it notes
- Pens and plain / coloured paper
- Anything else that seems relevant to your game!









XP:

Calendar	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	0	18	19	20
	21	22	23	24	25	26	27	28	29	30

Activity

Activity



D6 D6 D6



Price	400
Strength	+10
Mood	+5
Focus	+10
Stamina	+5
Wasse	200



Price	200
Strength	D10
Mood	D10
Focus	D10
Stamina.	D10+D6
XP	5xD10
Maintenance	100

SOUTRRELS

playniac





Finished home screen



SHOP

Energy Equipment Training Category 4

ory 4 Category 5

Liquid Zoom Running Shoes

An aerodynamic suit that will shave full microseconds off your squipe?s lap times!

1 +3 W +5

Lasts: 5 races

\$90

Sonic Boom Race Helmet

An aerodynamic suit that will shave full microseconds off your squirrel's lap times!

, M. + 3

☼ +5 Lasts: 3 races

\$105

oursquirers

Liquid Zoom Running Shoes

Level 8

+3

Required

Balderdash

There are forty-nine ingredients in this energy drink. Forty-eight of them are legal in at least ninetythree countries. Don't think about it too hard.

Buy

+ 50

\$4

Buy

Balderdash

There are forty-nine ingredients in this energy drink. Forty-eight of them are legal in at least ninetythree countries. Don't think about it too hard.

Buy

+ 50

\$4

Buy

Balderdash

Level 8

at) set nine think a

no hard

Required

OK

Mute

International Racing Squirels' wireframe (C)2010/2011 Playniac









The Snowman

Price	
	400
Strength	+5
Mood	+10
Focus	45
Stamina	+10
Wages	200

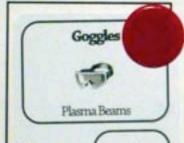
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Price	50
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Stamina	+5
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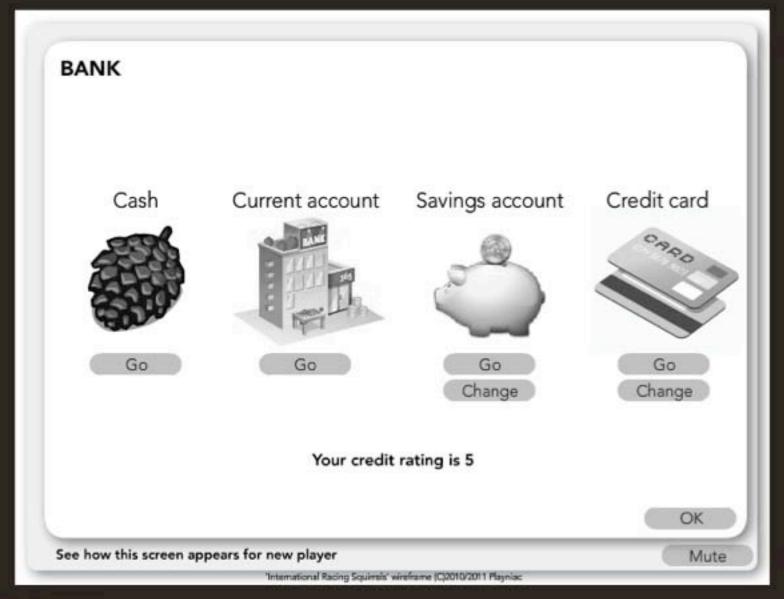
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Strength	+20
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Focus	
Stamina	+20
Duration	2

Item















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00 6%	0				
00 8%	100	4%			
	200	6%			
00 10%	300	8%			
	400	10%			









Finished bank





Squeaky Pete gets into a fight, trashing a night club. What do you do?

A

Pay 2,000 cones to fix the damage and bribe the press.

B

Do nothing and hope the story dies down.

Mute

"International Racing Squirels" wireframe (C)2010/2011 Playniac



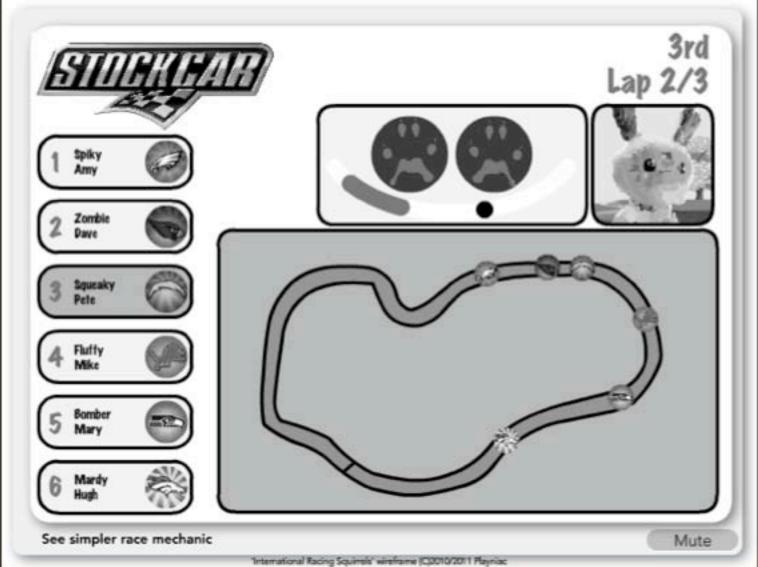


e'real story for a very decent price. [Squirrell's really happy with you, announce of the can you expect? [Sine)'s in love. Not*the sort of thing you want your team to be associated with. Tell [Squirrel] to end the relationship. Of I'm a bit, and [Squirrel]'s so angry ove. Leave ment around like a space hopper that's just wor the lottery. Shame Is the like a space hopper that's just wor the lottery. be that wasn't the best idea. The tabloids would have forgotten about the that wasn't the best idea turn up for training. Ah, young love. Leave them alone – it'll probably blow over. we carried You've helped catch some bad people. There's even a rome to you in a panic [5 he]'s been appro strength - I stamina -1++





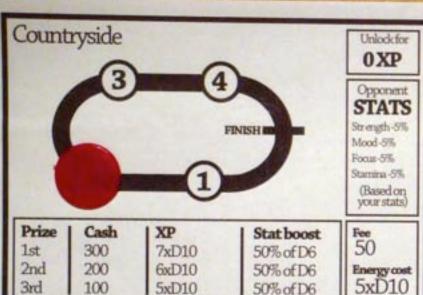


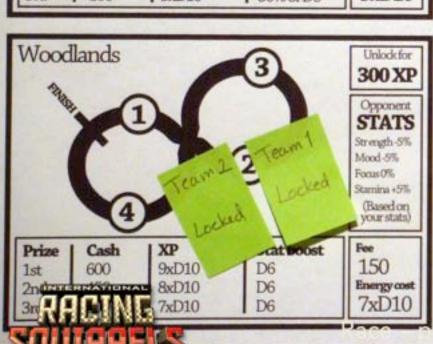














2nd

3rd

600

400

9xD10

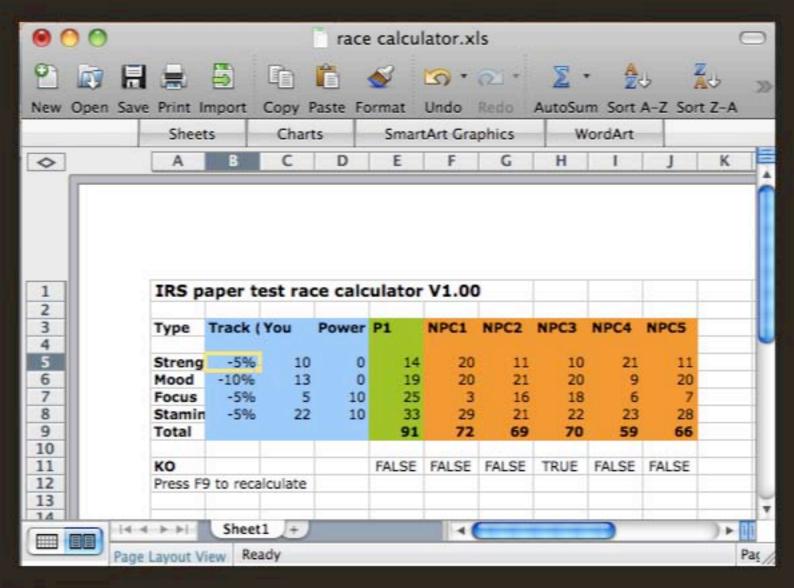
8xD10

D10

D10

Energy cost

8xI



















Aside: MDA model of game design

- Mechanics
- Dynamics
- Aesthetics
- Marc LeBlanc's game design workshop at GDC (www.8kindsoffun.com)
- Paper by Hunkicke, Zubek and LeBlank (www.cs.northwestern.edu/~hunicke/MDA.pdf)



Paper Testing

- Does not convey game mechanics
- Establish game dynamics early
- Conveys substantial part of game aesthetics
- Easy format to refine and tweak game play
- Refine game balance early
- Fun way to test game with no code



Overview

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INTERNATIONAL RACING SQUIRRELS CHARACTER DRAFT: #07 'INTRODUCING

"TARANTULA TALYA."

Early character sketch







INTERNATIONAL RACING SQUIRRELS CHARACTER DRAFT #02

TARANTULA TALYA (COLOUR BLOCK).

Early colourblocked artwork









playniac



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User Testing

- Be clear exactly what is being tested
- Test at several stages before and during build, from look and feel to alpha / beta
- Invaluable feedback direct from target audience
- Chance for dev team and design team to "see the game through new eyes"
- Very honest be ready for heart-warming compliments and gut-wrenching criticism
- A lot of conclusions can be drawn from the results – don't ignore them!



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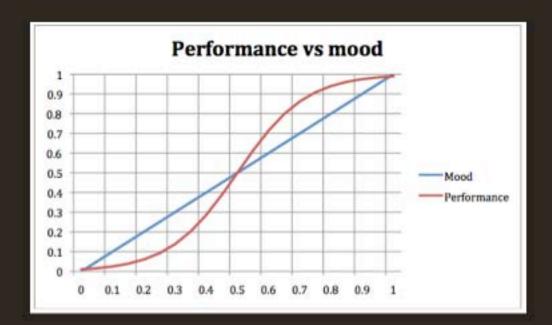


At mission control we can tweak and tune settings in the game...

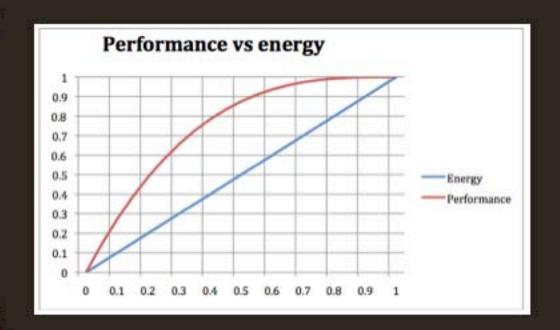








Equations for mood and energy







International Racing Squirrels

Main game cycle

Advance in game

Notes

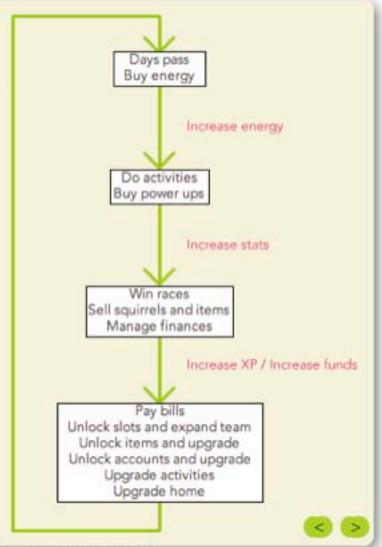
Energy increases each game day by an amount dependant on home level. Upgrading home costs more and gives more energy.

Energy only affects ability to participate in activities and races. It does not affect outcome.

Activities reduce energy and increase stats by random amounts. Upgraded activities use more energy with better results.

Races reduce energy and increase stats by random amounts. More advanced races use more energy with better results. They also earn more money and XP.

Good financial management and upgraded financial products enable funds to grow.



International Racing Squirels' systems diagrams (C)2010/2011 Playniac

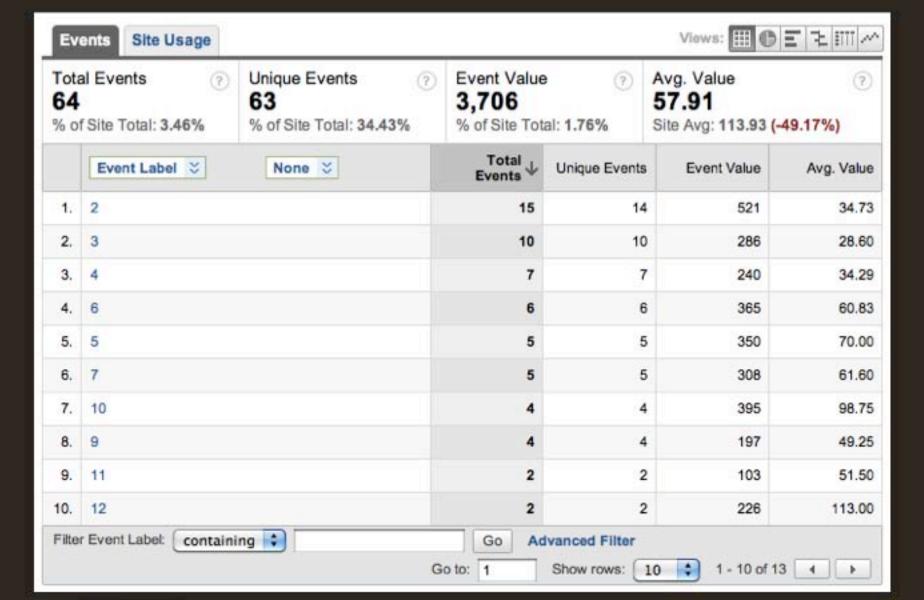
















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Balancing

- Start with a system-wide strategy and the right formulae
- Start with paper test findings
- Refine using the user test results
- Refine using testing company results
- Refine using using Google Analytics or any other data capture techniques
- Iterate until it's right



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Wrap up

- We have an arsenal of approaches available in our toolbox
- We can use them to understand, explore and play our games before and while we build them.
- Building games takes a long time the more we can understand early on and before we start, the better.
- Use the lessons these techniques show us about our games to make them better!





International Racing Squirrels launches Autumn 2011



Rob Davis

Creative Director

Playniac

Want to get involved in game design or game development? Come work for Playniac. Drop me a line.

Rob(at)playniac(dot)com @rbdavis

'Cat On Yer Head' will be live at GameCity, Nottingham, UK, 26-29 Oct 2011

www.playniac.com @playniac

www.facebook.com/RacingSquirrels @RacingSquirrels

