

Concept to Reality

Creating and Growing PopCap's Solitaire Blitz

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Takeaways

Using Solitaire Blitz as an example, learn...

- How to evaluate Playability and Viability
- Lessons about Staffing vs. Projections
- Lessons on Monetization and Social Features
- Specific Do's and Don'ts

What is Solitaire Blitz?

- Time-limited, boost-filled Blitz-style game
- Currently available on Facebook
 - Live in March 2012
 - 5+ million installs
 - ~450,000 DAU
 - ~20-person team

Origins

- Fall 2010...
- Hey, Blitz games are fun!
- But we're missing out on virtual good\$\$\$
- Try to blend the two...

Initial Concept

- What's more universal than Bejeweled?
 - Solitaire!
- Which variant is fast enough for Blitz?
 - Golf!
- Why is it 60 seconds?
 - Hold your breath!

Solitaire Blitz



Lochnus w/ replenished deck and 60-sec timer

Bonus cards for... extra stack, bonus time, joker, extra column, replenish deck

Streak multipliers

Sometimes columns converge back

Go on cards to buy more boosts

Boost: extra cards shuffled into deck,

Card backs change color to indicate new deck (blue/red)

Sometimes cards cross paths

Unbroken chains can go past time limit

Each full Nessie unlocks a Joker?

Unsatisfying end? Try SFX and countdown

Depth/time vs. run length... (vs. powerup cards)

Uneven depths... some stacks run out sooner →

Not enough opp. for developing skill... what skill?

As you level up... Dexterity, Card Count, Speed, Pattern Recog, Product.

Reserve/bank of cards you're saving for another game/time

Random/intermittent/floating extra card or free stack →

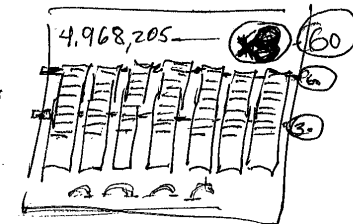
Colored backs/edges give some kind of 4 free cells/bubbles

Skill: setting yourself up for success

Fun: long chains, deeper than before, reveal fish tanks, random prizes

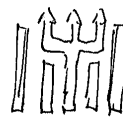


clear all stacks to this line to unlock its bonus time



purple
green
black
gold

Social: show card/time for your friends.



Pearl Diver Solitaire
(hold your breath)
(underwater)

occasional fish/sharks

Treasures / shipwrecks

Invert the board
(you're diving)

Bottom of each stack
may have prize

Tahitian/Hawaiian look
Social: trade/gift treasures

Safari Solitaire

Dodo Dinosaur
Chimacabra Giant Octo,
Yeti
Big Foot Gaffor
Lochnus 4 leaf clover

Paramo

Jokers

cards per stack

[list of] time bonus/depth

decks

Pearl Diver Meta Game



<u>Collections</u>	<u>Crafting</u>	<u>Exploring</u>	<u>Story</u>	<u>Strategy</u>	<u>Helping</u>
Sets of pearls	shell projects	Map of islands	Discover threats	where to visit	trading
Sets of shells	Pearl Mural	Dive in new spots	Damage to seas	what powerups + use in diff terrains/depths	wish list
Fish/sea creatures	Jewelry	Harvest new beds	Pollution + garbage	follow hints on ea. board to lead to giant pearl	Solve mystery
Coins across time/ thru ages	arrangement store + hut	Topography changes	Dumping		track down location of whale
Treasures ^{cup, plate, silver, bell} _{watch, statue, hood, ...}		Depth/profile varies	Destruction	pricing/selling	globally
Ship parts	Avatar	Diff. types of treasure	Crimes	boat upgrades	combine evidence to convict
Rocks	Customize accessories name + title	7 Seas	Long lost artifacts	size of boat affects capacity and/or # hands	donate real \$ to a cause
Bottles		Colors, creatures, cultures	Bits of letters/ personal mementos		
Floats	<u>Learning</u>	Ea. hand moves boat a little bit	Befriend Past civilization	<u>Character</u>	
Toys	Real seas/islands	(see something nearby while you're down there)		personal life	
Trash/Waste	Real creatures			diver's friends	
Trade in sets for \$	Real sunk treasure			Luau + other events	
Use \$ to upgrade	Real words in other langs			music part	
Or just go shopping	Literary references (The Pearl, Old Man And The Sea, etc.)			family	
	Real history - Hawaii, Philippines, Japan, Tahiti, etc.			boss/partners	
			<u>Business</u>	don't offer sunsets + beaches bo	
			pricing/selling layout of store vs. friends		

Prototype

- Debuted Nov 2010 at PopCamp
 - Company-wide game Jam
 - Held a couple times per year
 - Moderated by “Camp Counselors”
 - Opportunity to develop new game prototypes
 - “Graduating” from PopCamp means a chance for full production

PEARL DIVER

A SOLITAIRE BLITZ GAME

START!

YOU HAVE 60 SECONDS TO CLEAR ALL THE CARDS.

EACH CARD MUST BE ONE RANK HIGHER OR LOWER THAN THE ONE BEFORE.

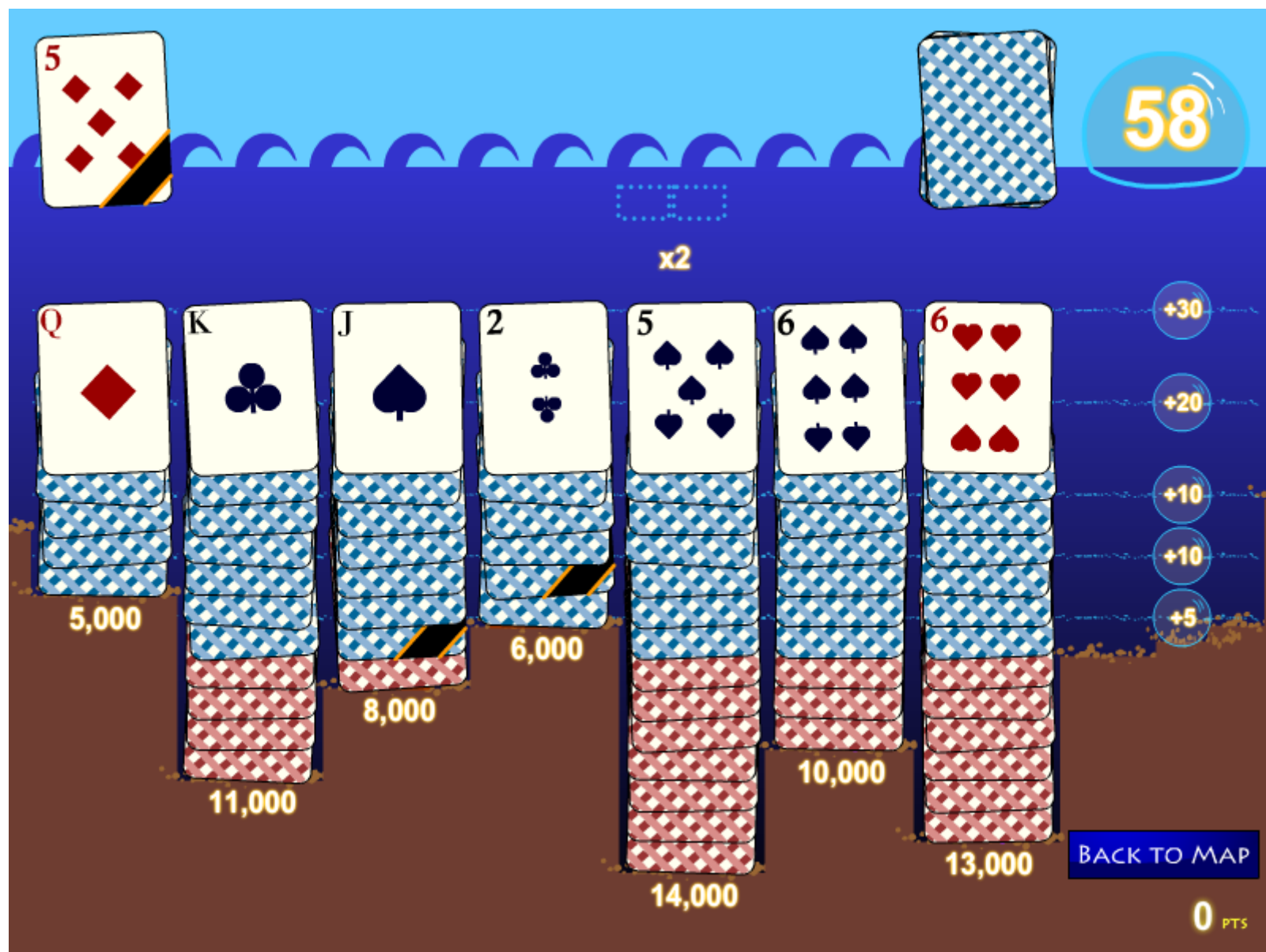
DRAW FROM THE DECK IF YOU GET STUCK.

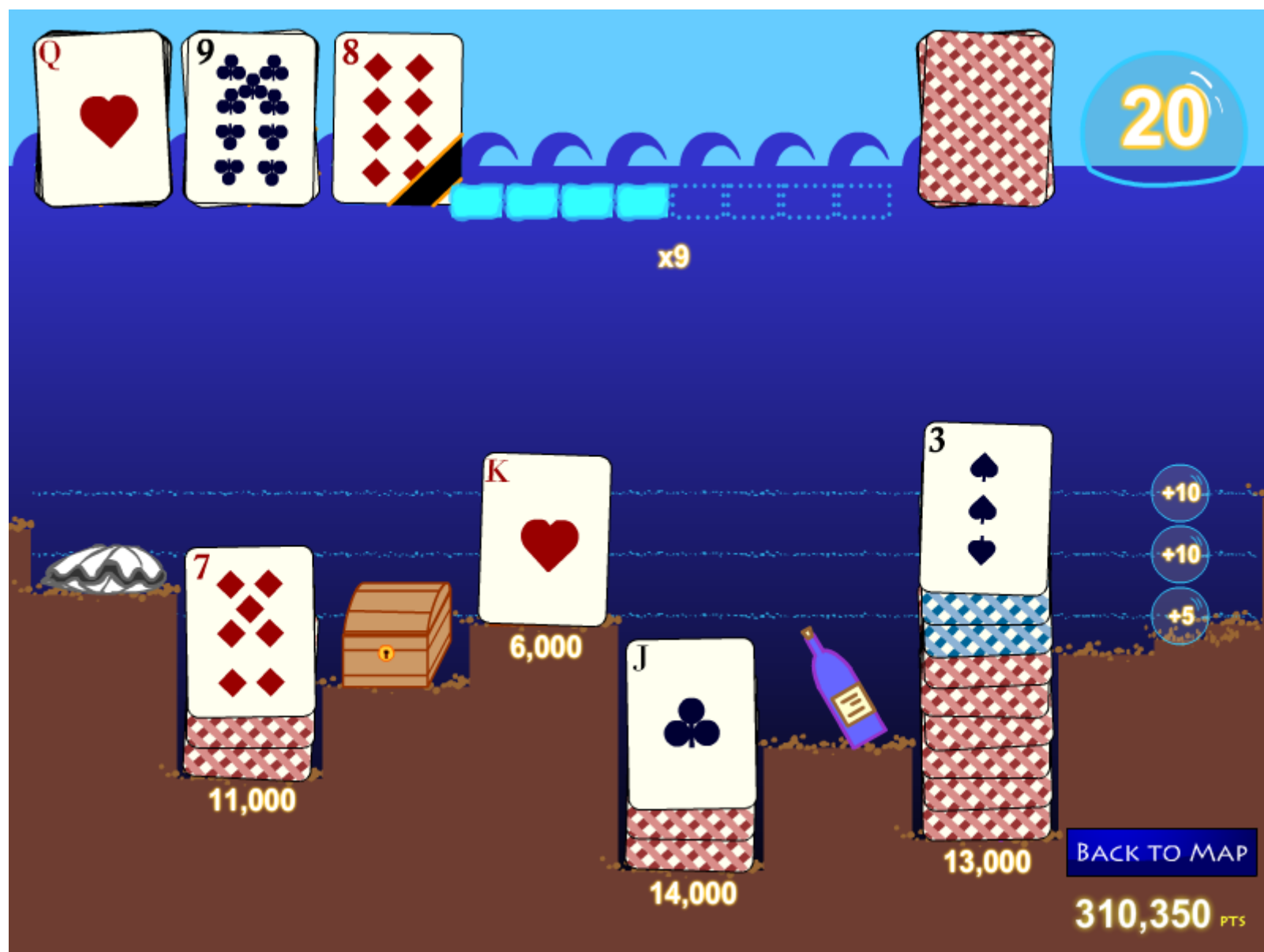
LONG UNBROKEN RUNS WILL SCORE THE MOST POINTS.



PICK UP YOUR TREASURE AT THE END!







Greenlight

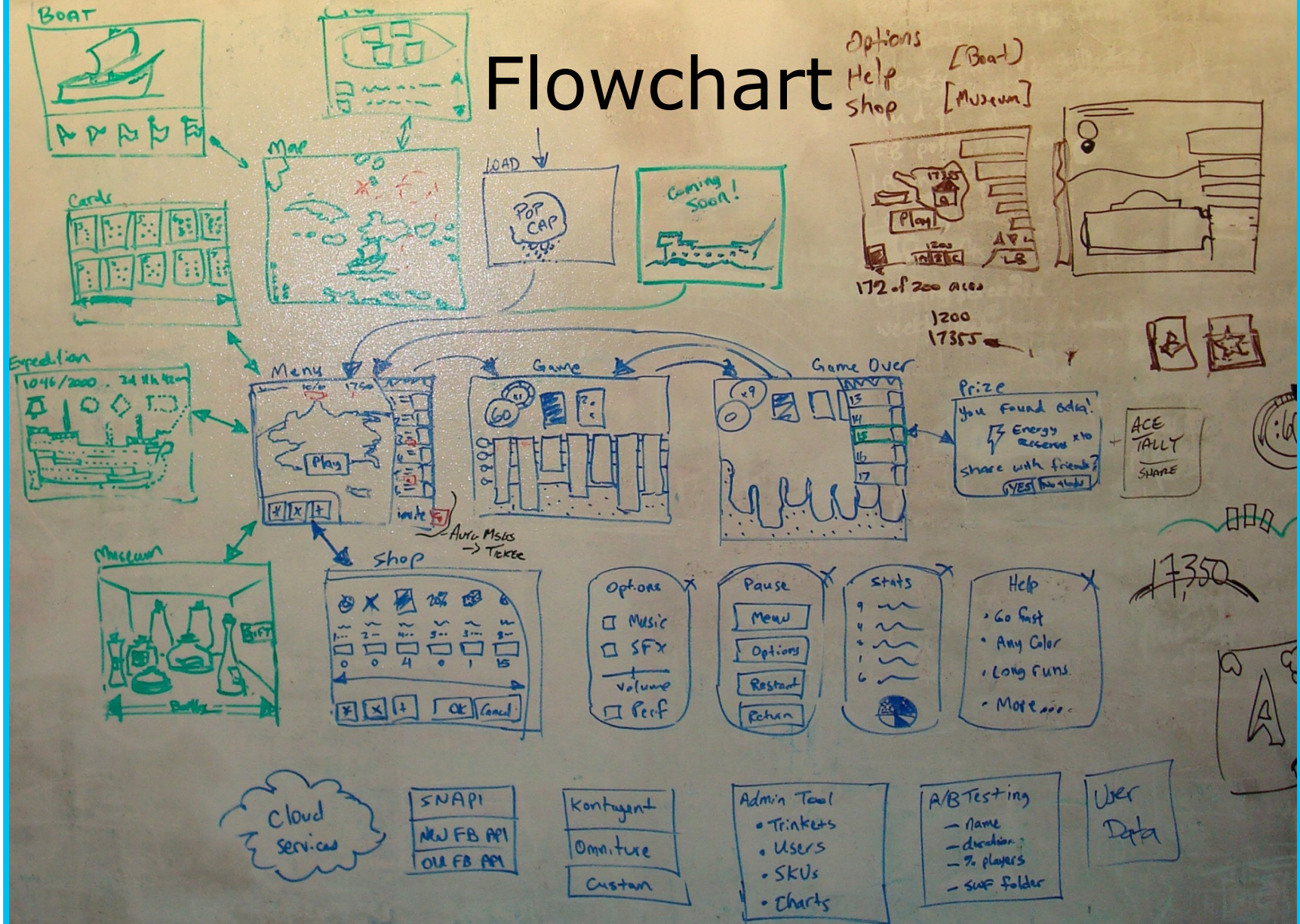
- Counselors liked it
- “This is actually pretty good”
- Additional time granted to explore further
- Pre-production kicked off Feb 2011







Flowchart



Instrumented Build

- They kept playing it!
- Same URL as prototype
- Thousands of mystery records in the DB
- Bug or... a good sign?

Full Production

→ This is going to be HUGE!!!

- Increase team size and work on:
 - Designing subsystems
 - Solving tech challenges
 - Refining the art style

SYSTEMS

- Monetization
- Retention
- Virality



Boosts



Boosts



Extra Time



Extra Cards



Depth Charges



Mine



Staargh Fish



Run Finder



Bonus Fish



Key Magnet



Spyglass



Starting Joker



Extra Jokers



Spare Joker



Tempest in a Teacup



Treasure Map

Decks



banana



barbecue



boatadventure



caradventure



cherries



crescentmoon



crocodile



dolphin

egyptianpyramid
s

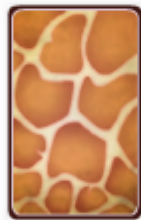
friendshipday



gerberadaisies



GinghamBlue



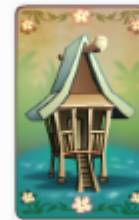
giraffeprint



honeycomb



hook



hut



icecreamcone



manta_ray



pagoda



papaya



Pizza



planeadventure



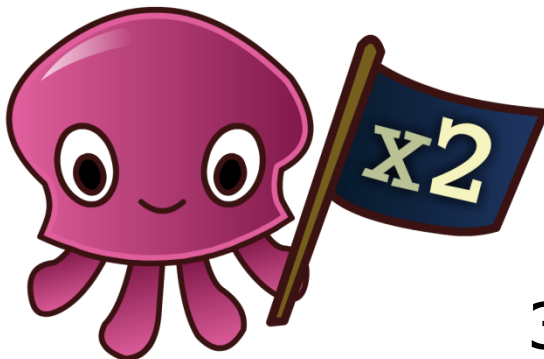
s'mores

Decks

Long runs
earn fish



0 to 8 fish
per game



300 – 500 fish
to level up

10 decks per month



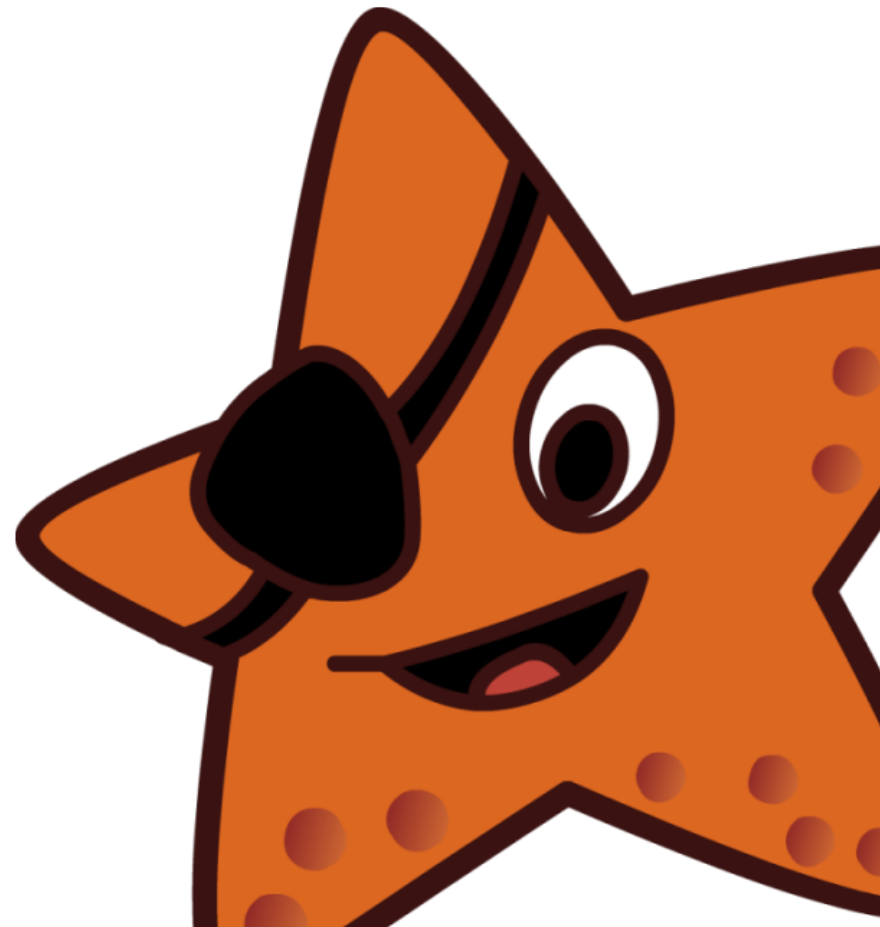
Random deck
@ level up

Shares

- High Score
- Level Up
- Win Streak
- Passed a Friend
- Found Rare Treasure



ECONOMY



Silver

- Sources:
 - Finding better treasure
 - Getting better score
 - Asking friends
- Sink: Boosts costs 1000 to 5000 silver



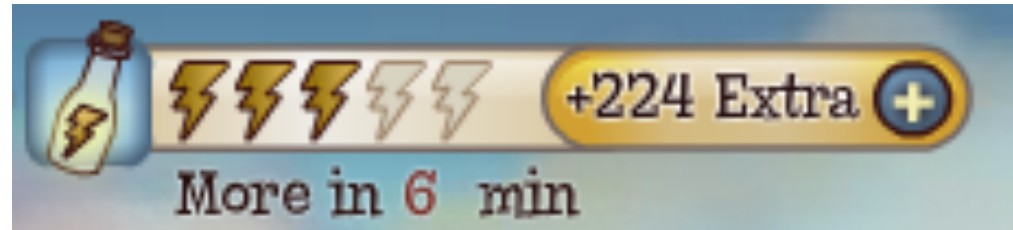
Qty	Rarity	Odds	Average	Payout
37	Rare	2-5%	3,730 silver	2,000 - 10,000 silver
44	Uncommon	3-10%	243 silver	150 - 500 silver
38	Common	85-95%	16 silver	5 - 40 silver

Silver Comparison

- What do you get for \$5
- How many minutes of play?

Title	\$5	Boosted Games	Average Minutes
Bejeweled Blitz	270,000 coins	54 games	54 min
Zuma Blitz	275,000 mojo	68 games	120 min
Diamond Dash	43 gold	30 hearts	30 min
Empires & Allies	40 credits	40 energy	15 min
Solitaire Blitz	200,000 silver	24 games	36 min

Energy



- Sources:
 - Start with 5
 - Regenerate 1 every 10 minutes
 - Bank any "Extra" energy gained by:
 - Purchase
 - Gift
 - Level up
 - Larry the Electric Eel
- Sink: Spend 1 every shuffle



Energy Comparison

Game	By	Start Amount	Smallest SKU	Cost per Game	Regen Rate	Social Gift	Level Up
Sims Social	EA	17 (X per action)	\$1.29 for 10 energy units	0.30 USD	5 min	✓	✓
Bubble Witch Saga	King.com	5	\$0.90 USD to refill 5 lives	0.18 USD	30 min*	✓	
Tetris Battle	Tetris Online Inc.	42 (5 per game)	\$1.00 to refill 42 energy units	0.12 USD	5 min		✓
Bubble Saga	King.com	5	\$0.90 USD to refill 5 lives	0.18 USD	30 min*		
Hoop de Loop Saga	King.com	5	\$1.00 to refill 5 lives	0.20 USD	30 min*	✓	
Zuma Blitz	PopCap	5	\$0.60 to refill 5 lives	0.12 USD	8 min		✓
Diamond Dash	Wooga	5	\$1.05 USD to refill 5 lives	0.21 USD	8 min	✓	
Solitaire Blitz	PopCap	5	\$2.40 to add 10 energy to bank	0.24 USD	10 min	✓	✓

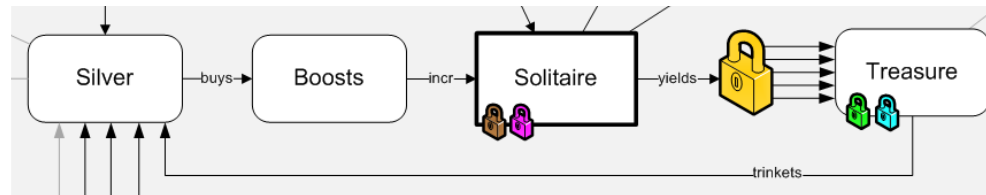
*life only deducted if player fails level

Upsells

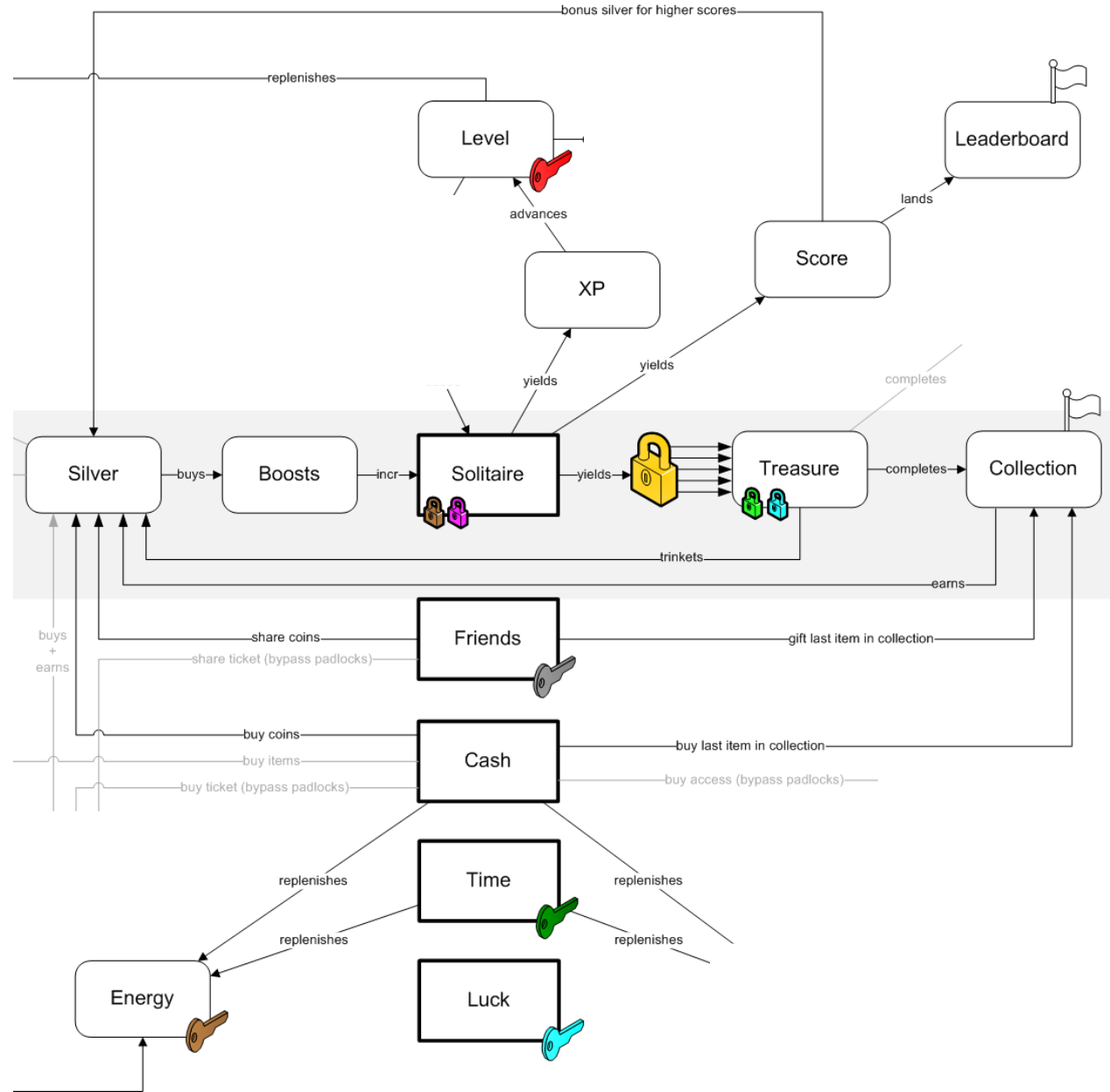
- Out of energy – offer!
- Out of silver – offer!
- Free gifts – send!
- Free energy – send!



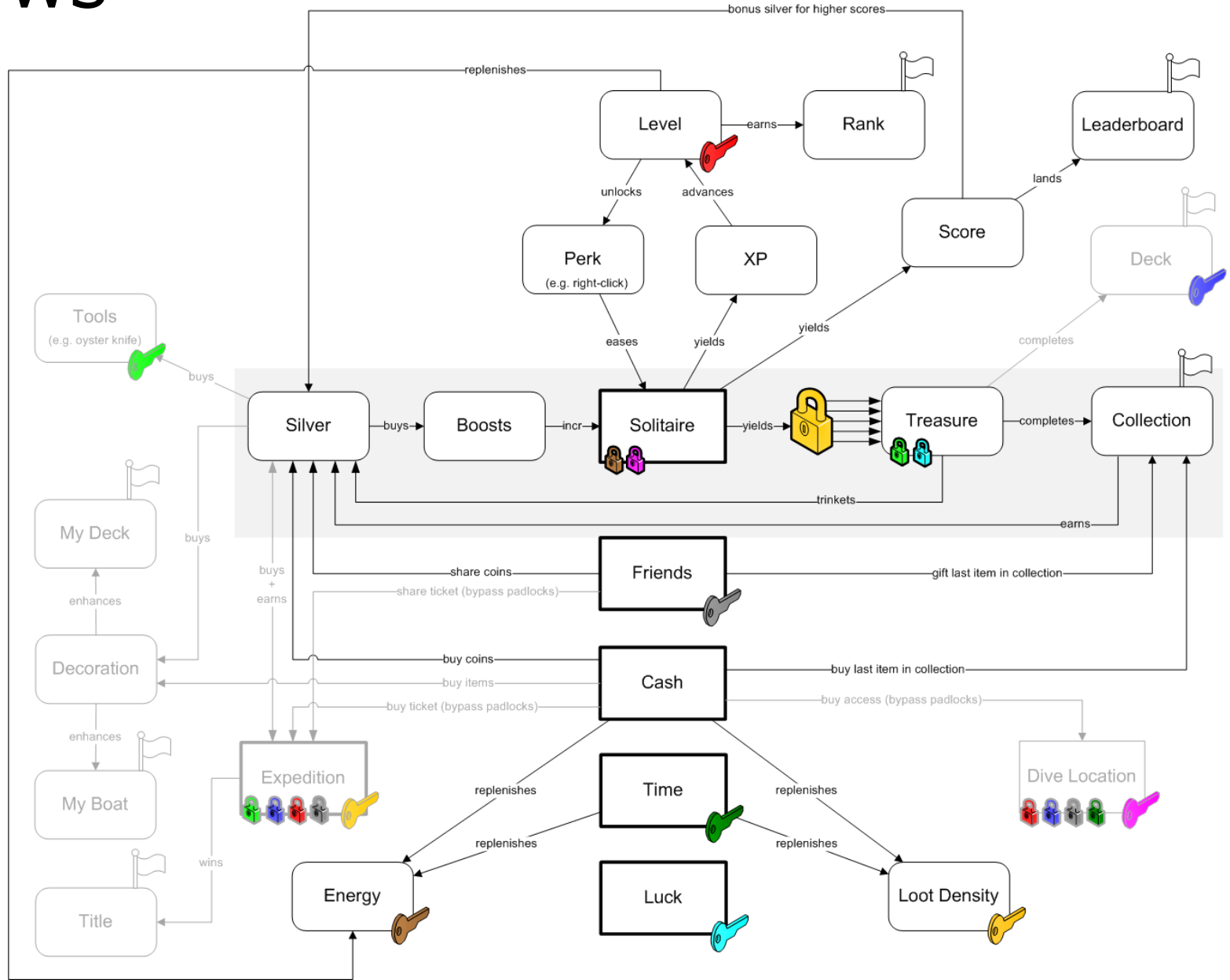
Flows



Flows

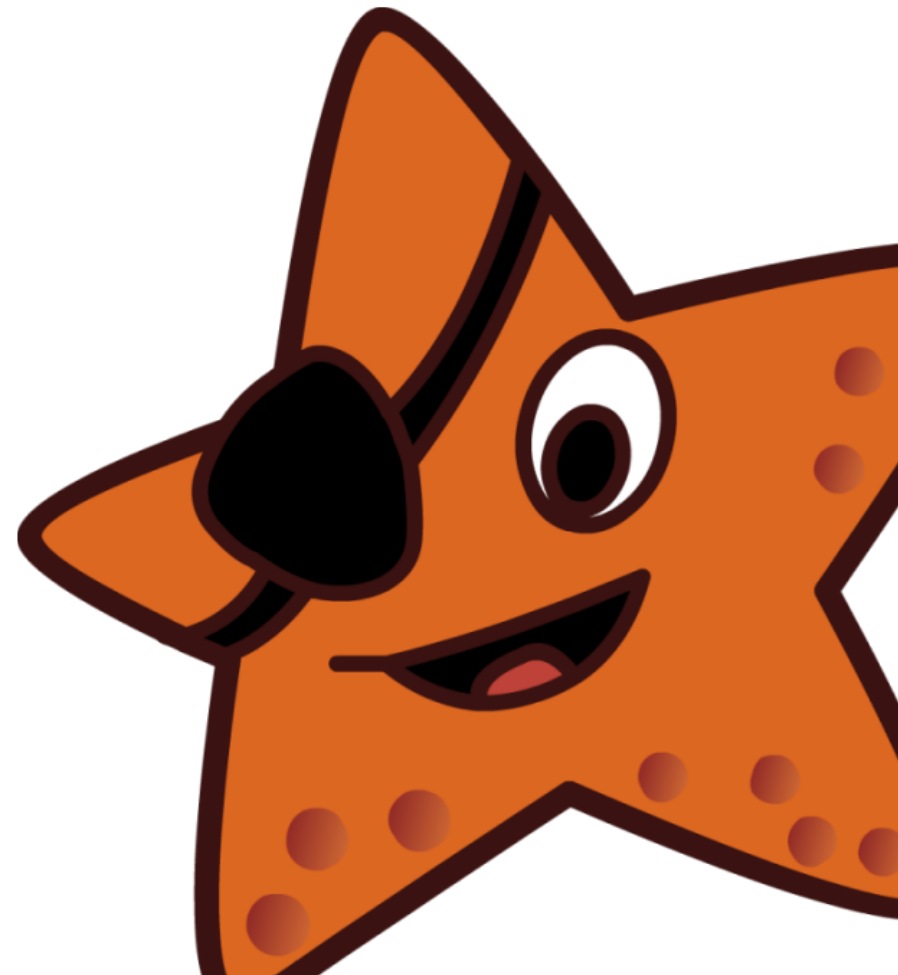


Flows



ART

- Setting
- Characters
- Style
- New UI











The interface for the Solitaire Blitz tournament features a nautical theme. At the top, a status bar shows a score of 157,400, a lightning bolt icon with 6/6, a plus sign, the number 50, another plus sign, a bell icon, and 45/50. The title "Solitaire BLITZ™" is prominently displayed in a stylized font. Below the title is a map of a tropical island with a compass rose in the center that has a "PLAY" banner. On the right side, a leaderboard lists the top six players, each with a profile picture, a rank number, a name, a score, and a lightning bolt icon. At the bottom right, there are buttons for "Tournament Ends In: 0 days, 21 hours" and "Decks of Cards" with a cat icon.

157,400 + 6/6 50 + 45/50

Solitaire BLITZ™

PLAY

Rank	Player	Score
1	Karin Madan	1,076,750
2	Larry Biely	1,009,900
3	Jason Mai	905,950
4	Andrew Federspiel	833,350
5	Ryan Ragona	785,100
6	Allen Murray	643,150

Tournament Ends In:
0 days, 21 hours

Decks of Cards



29,805 + 341/525 +224 Extra +

PLAY

Erin Middendorf 405,600 29

Bill Dennes 400,530 30

Jason Mai 397,730 31

Mohan Rajagopalan 387,030 32

Invite
+ Dextor Jeff Blazier

My-Linh Van 358,720 33

Tournament Ends In:
23:10:45

Deck

970,942 + 199/415 +239 Extra +

More in 8 min

970,942 +

Pick up to 3 Boosts

Keep your 20-game streak alive!

 1000 Extra Time	 (77 Free) Depth Charges	 (1 Free) Run Finder	 (75 Free) Bonus Fish	 4000 Key Magnet	 Shop for More Boosts
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Play Now!





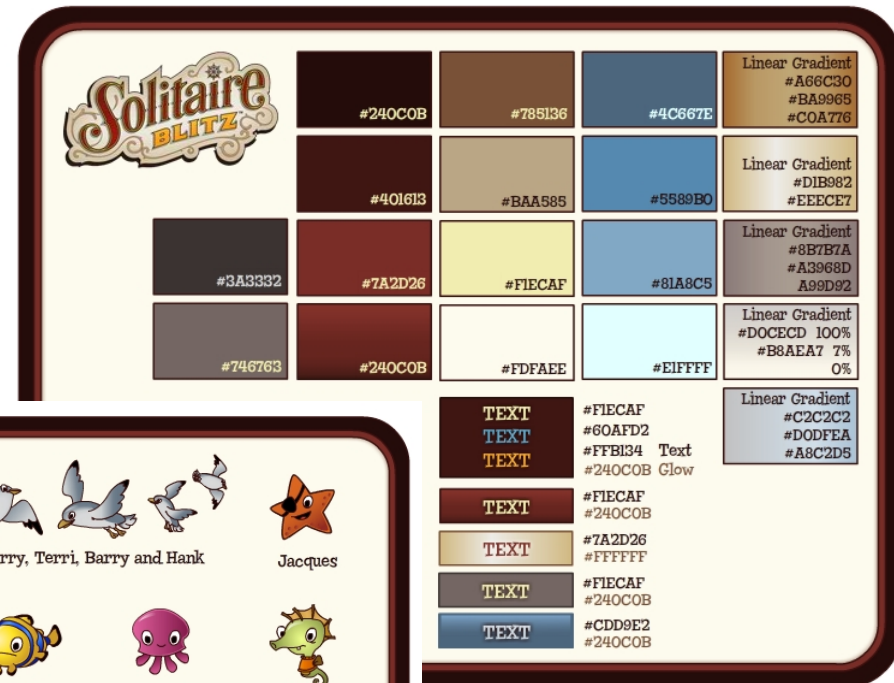


Mermaids



Style Guide

- Organic
- Elegant
- Charming





Worms



Worms



Worms



Treasures

- Shells
- Wrecks
- Treasure
- Natives
- Pirates
- Sea Life
- Vacation

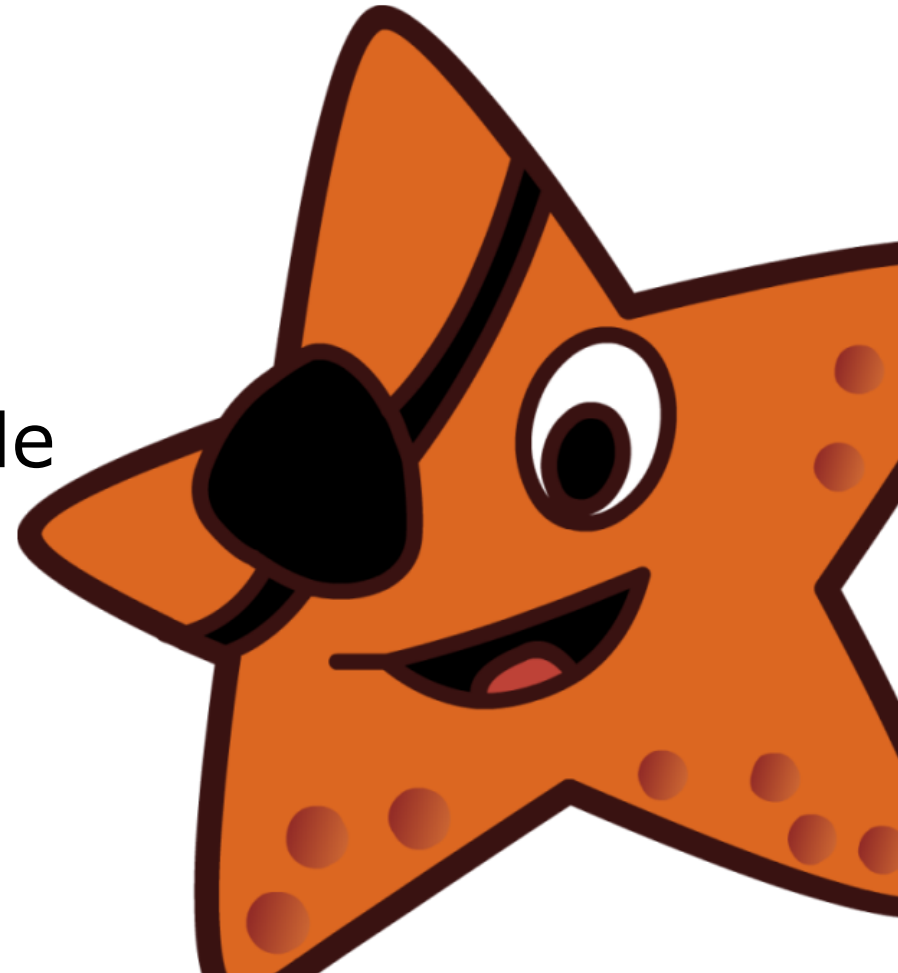






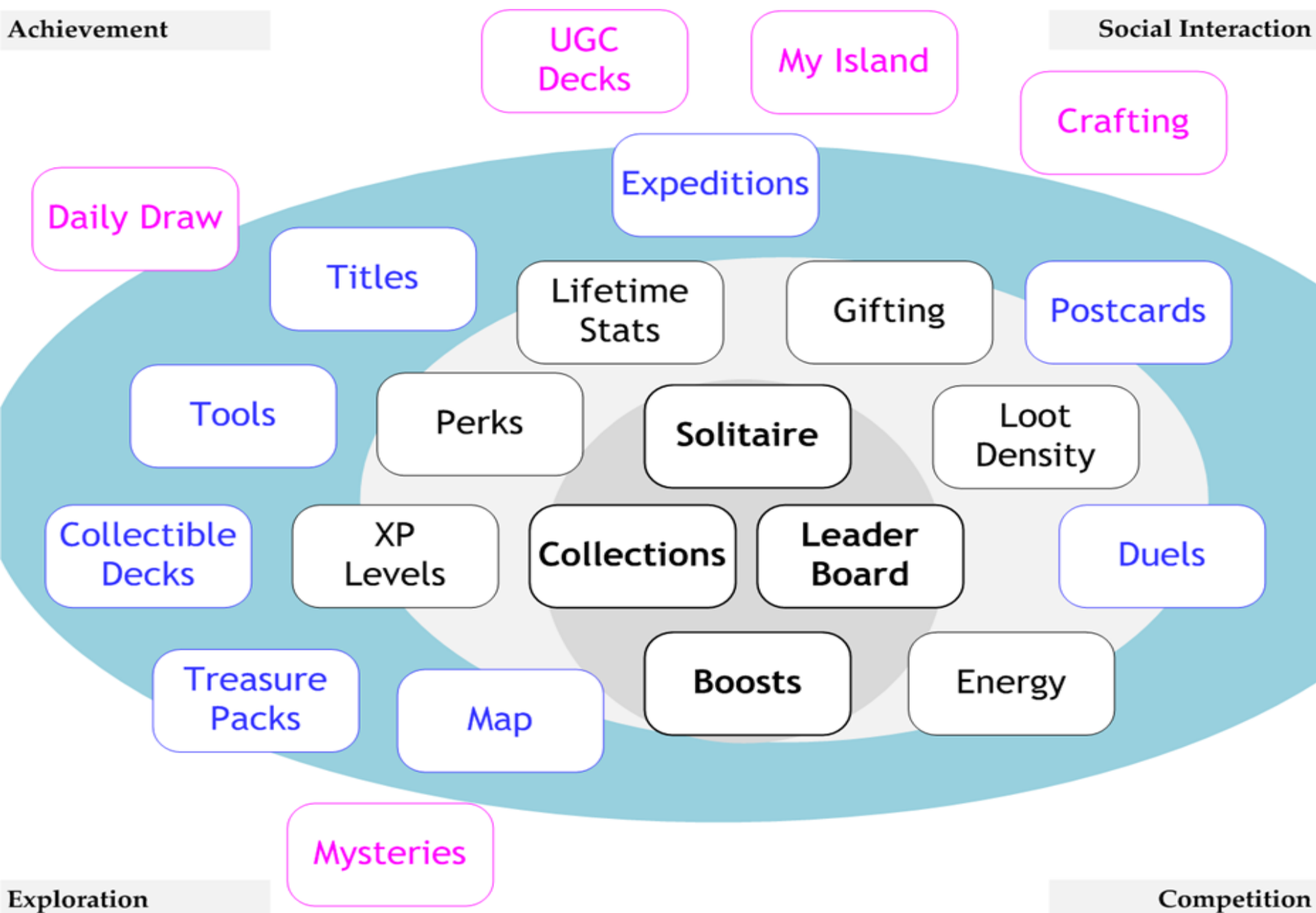
GROWING VISION

- Core game
- Collectibles
- Explore map
- Play with friends
- Customize and upgrade
- So much more!



Achievement

Social Interaction



The Reality

- We wanted to ship!
- But, it's cool because we've got:
 - A super strong core gameplay loop
 - More viral features than our sister apps
 - Great cross-promos lined up for launch
 - Plenty of time to add cool new features once we're all millionaires

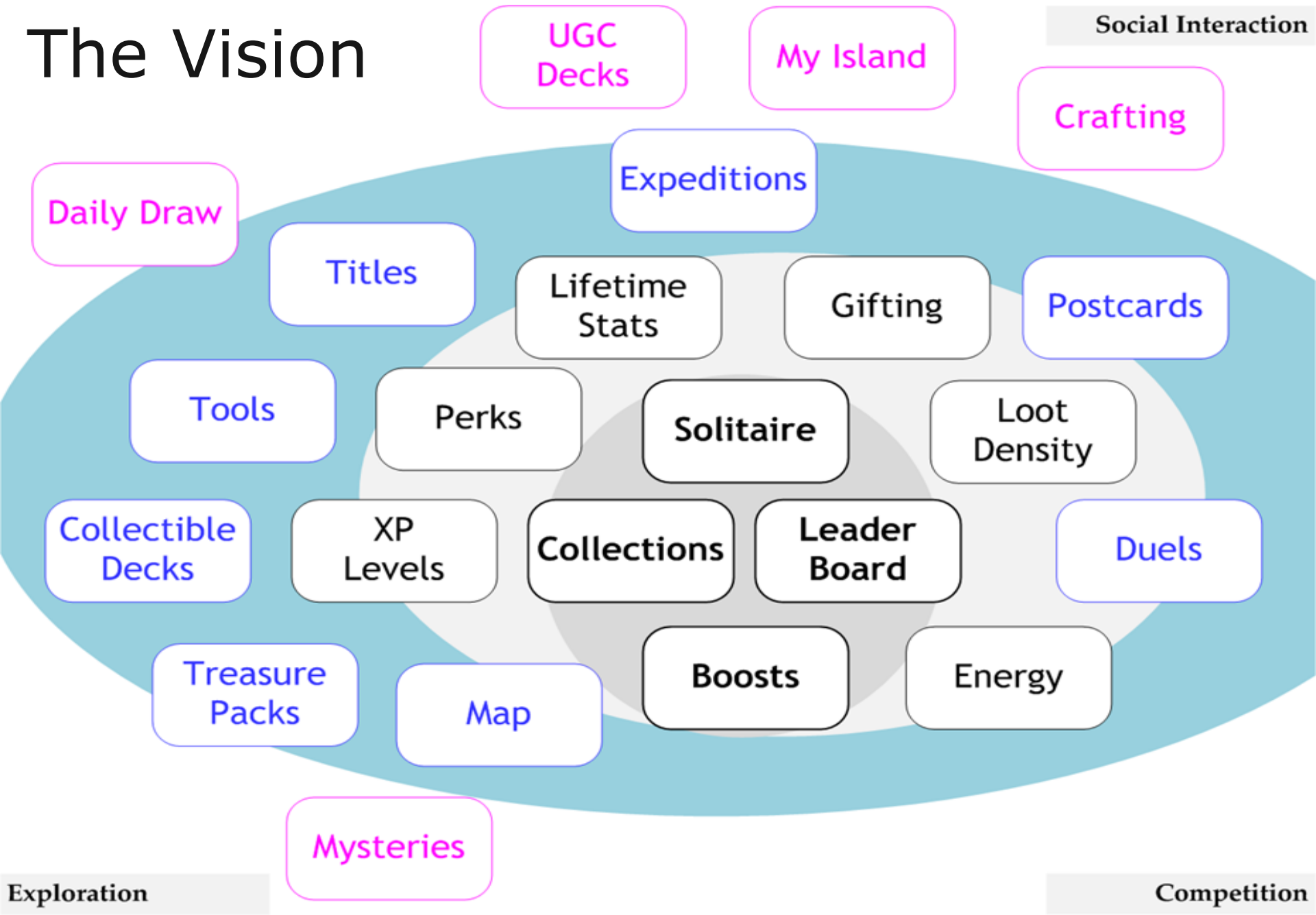
Enter the MVP

- MVP = Minimum Viable Product
- Intended for rapid market testing
- Has **required** feature set for success
- Additional features added via iteration

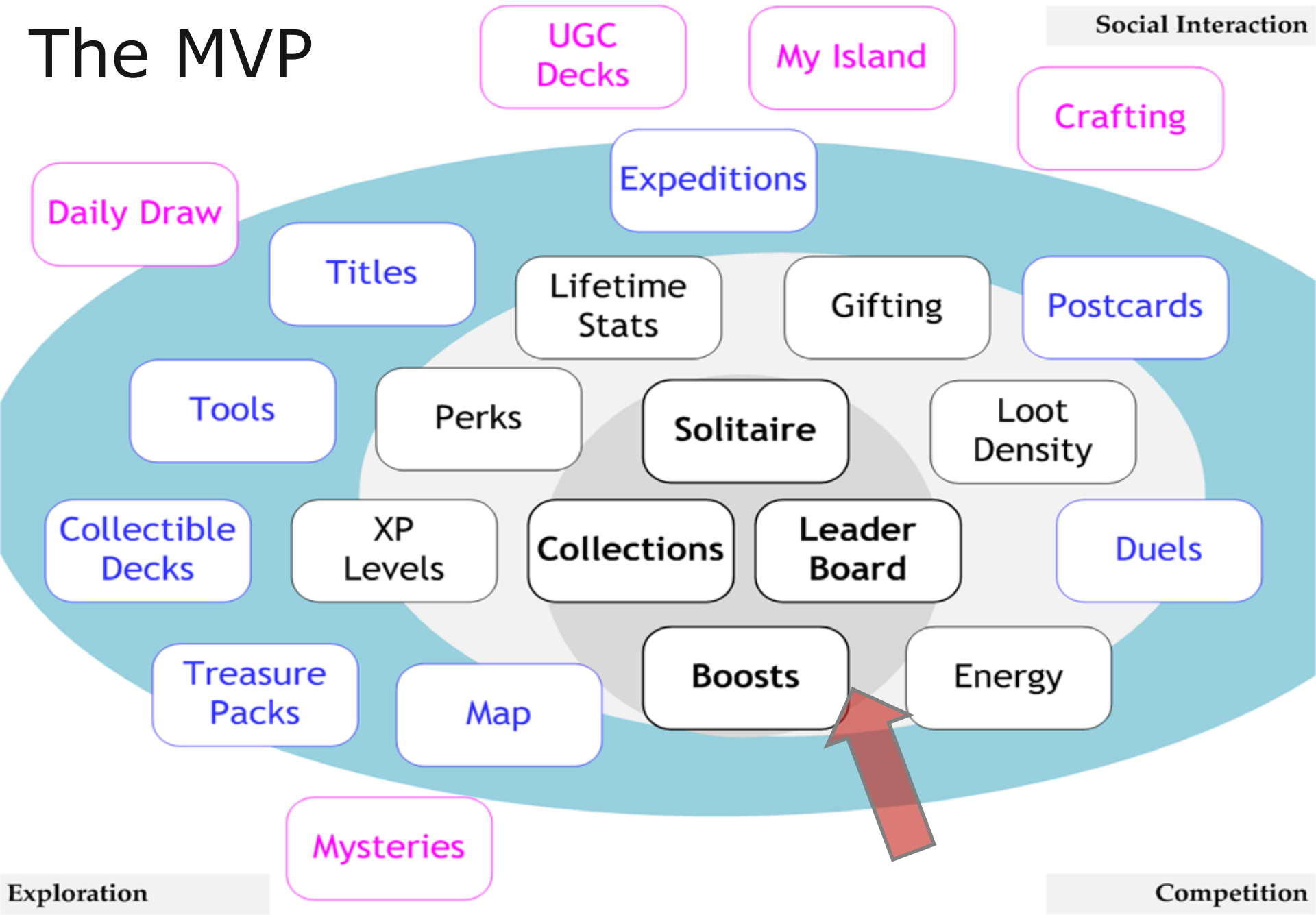
The Solitaire Blitz MVP

- Core Solitaire Gameplay
- Leaderboard
- Boosts
- Energy
- Facebook Feed Shares
- Decks for personalization
- Basic Level-Up System
- Message/Gift Centers

The Vision



The MVP



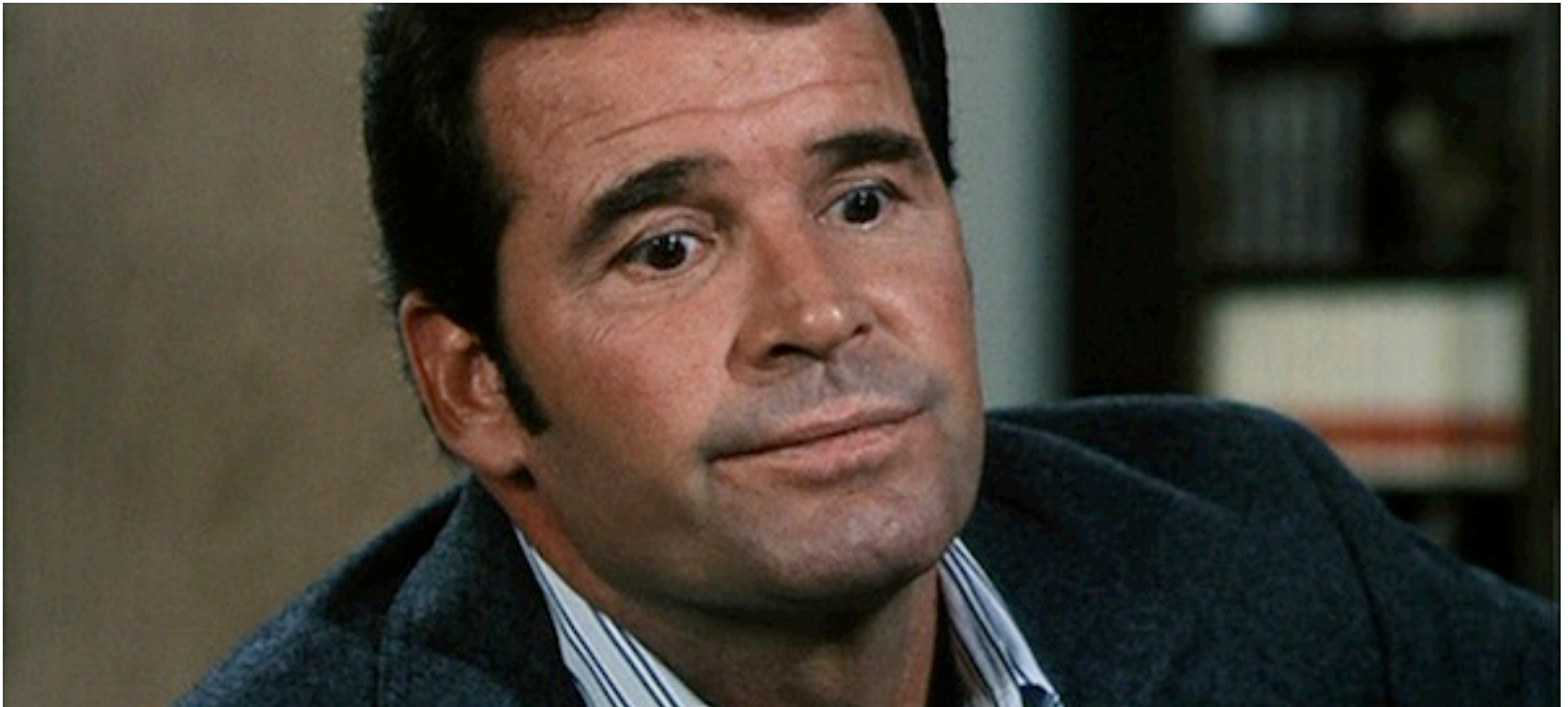
All Boxes: Checked

	Retention	Monetization	Virality
Core Gameplay	X		
Leaderboard	X		
Weekly Tournament	X		
Earn Decks	X		
Buy Silver		X	
Buy Energy		X	
Buy Decks		X	
Buy Boosts		X	
Send Free Gifts			X
FB: Feed Shares	X		X
FB: Achievements	X		X
FB: Scoring API	X		X

What were the expectations?



And how did it all turn out?

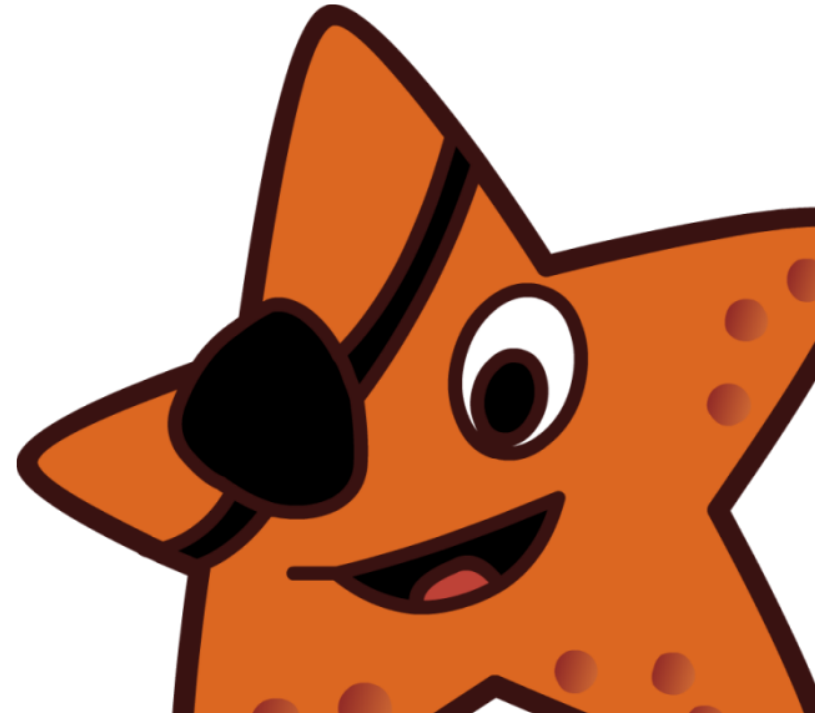


In the end, it went *pretty* well

- Sadly, “pretty well” wasn’t the goal
- Our release didn’t change the world, but:
 - Our game is alive and well
 - We have a dedicated team
 - We have a supportive company
 - We’ve learned a TON about the modern world
- And now, on with the reality!

Things that worked

- Polished, addictive core gameplay
- Flexible content systems
- Tools, not features, for business owners



Polished, addictive core gameplay

So...you know...just build an
amazing game.

Polished, addictive core gameplay

- Watch – Do people keep playing it?
- Listen – Do people talk about it?
- Feel – Do you find yourself wanting to play?

Flexible content systems

Freshness guaranteed.

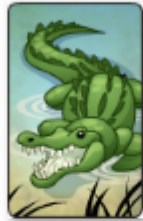
Flexible content systems – Boosts!



Flexible content systems – Decks!



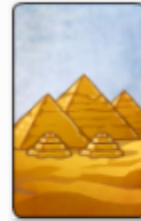
crescentmoon



crocodile



dolphin



egyptianpyramid
s



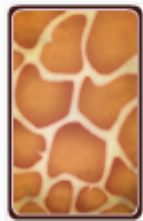
friendshipday



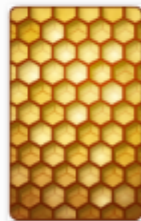
gerberadaisies



GinghamBlue



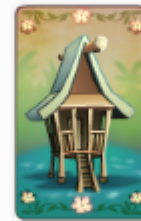
giraffeprint



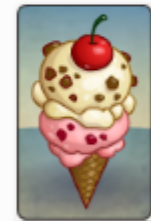
honeycomb



hook



hut



icecreamcone



manta_ray



pagoda



papaya



Pizza



planeadventure



s'mores

This image is a collection of 10 cartoon worms, each dressed in a different costume, hanging from a wooden frame with red ribbons. The worms are arranged in two rows of five. The top row features a worm in a pink hat, a worm in a green hat and vest, a worm in a tan explorer hat and vest, and a worm in a pink hat. The bottom row features a worm in a white chef's hat, a worm in a black pirate hat, a worm in a green hat, and a worm in a blue and orange striped shirt. Each worm is holding a small object, such as a scroll, a fishing rod, or a sword. The background is white, and the frame is made of brown wooden poles and red ribbons.

Tools > Features

Because those business guys have MBAs and you don't.

Tools > Features

- “Teach a man to fish.”
- More tools = Less randomization
- If you don’t build a flexible system now, you won’t fix it later

Marketing Tools

- Pop-up promo dialog on session start
- Incentivized cross promo
- Banner ad rotation system
- Sales, like “Happy Hour” discounts
- Gift URLs



Things that didn't work

- The "V" in "MVP"
- Chasing KPIs
- Forecasting via wishful thinking



The “V” in “MVP”

If you think all of your boxes are checked, you’re probably wrong.

The “V” in “MVP”

	Retention	Monetization	Virality
Core Gameplay	X		
Leaderboard	X		
Weekly Tournament	X		
Earn Decks	X		
Buy Silver		X	
Buy Energy		X	
Buy Decks		X	
Buy Boosts		X	
Send Free Gifts			X
FB: Feed Shares	X		X
FB: Achievements	X		X
FB: Scoring API	X		X

The “V” in “MVP”

Checkmarks do not equate to success



The “V” in “MVP”

- Sure, we had our boxes checked, but not in a materially relevant way
- The platform and marketplace is always evolving, and it evolved out from under us
- Those checked boxes would have served us well...two years ago

The “V” in “MVP”

If only...a multi-friend selector



The “V” in “MVP”

If only...new monetizer offers



The “V” in “MVP”

- DO pay attention to emerging trends
 - Reach out to experts for data
 - Review teardowns of competitors
- DON'T get left behind
- DON'T blow your biggest opportunity

Chasing KPIs

Being reactionary is a great way to never accomplish anything useful.

Chasing KPIs

OH, NO! DAU PROBLEMS!



Chasing KPIs

OH, NO! VIRALITY PROBLEMS!



Chasing KPIs

OH, NO! REVENUE PROBLEMS!

[Image omitted due to my desire to remain employed]

Chasing KPIs

So, what did we do?

Chasing KPIs

We chased KPIs!



Chasing KPIs

Progressive Invite Incentives...with no MFS



Chasing KPIs

Ad Network Integration...for marginal revenue gains

[Image omitted to protect the innocent]

Chasing KPIs

- DO stay focused on the real finish line
- DO build tools, not features
- DON'T chase quick fixes
 - It's easy
 - It's also stupid

Forecasting via wishful thinking

Setting goals that are aspirational instead of realistic is dumb.

Forecasting via wishful thinking

Projected DAU Growth

Projected



Actual



Forecasting via wishful thinking

Projected Revenue Growth

Projected



Actual



Forecasting via wishful thinking

- DO model feature impact
- DO forecast based on production schedule
- DON'T be overly aspirational

So, is it all doom and gloom?

- No!
- It's easy to set yourself up for success
- Don't get discouraged



Our advice to you?

- DO focus on core gameplay and polish
- DO build flexible content systems
- DO give your business owners tools

- DON'T overlook what it takes to be viable
- DON'T be overly reactionary to KPI issues
- DON'T forecast blindly

Questions?

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