

blitz

by Disney









blitz

by Disney



# TEMPO

Innovation Proposal







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## Interpreting the Problem

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What can we do to ensure that children are able to learn new information, develop their talents, be creative, and have sufficient amount of time for play? How can we help children develop into adults who have a balance of social, emotional and intellectual skills?

**How can we teach children some of the soft skills like appreciating and respecting the natural world.**

Can we develop new products and services that can assist children (as well as their parents and teachers) in managing their development with an adventure and a touch of the Disney magic?





## Our Solution

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Disney Blitz is a game that combines elements of popular games like Bop-It and Simon into an agility game that is fun for the whole family. Parents have expressed that they feel their children need to be more active, and that technology has led them into a sedentary lifestyle.

**Dash will help solve that problem by getting kids off the couch and urging them to run or swim across the pool to reach the beacons as they light up in random sequence.**



## Product Inspiration

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Every product in the market has a form that was inspired from somewhere. For Disney Blitz, these inspirational product provide the foundation for the look and feel.

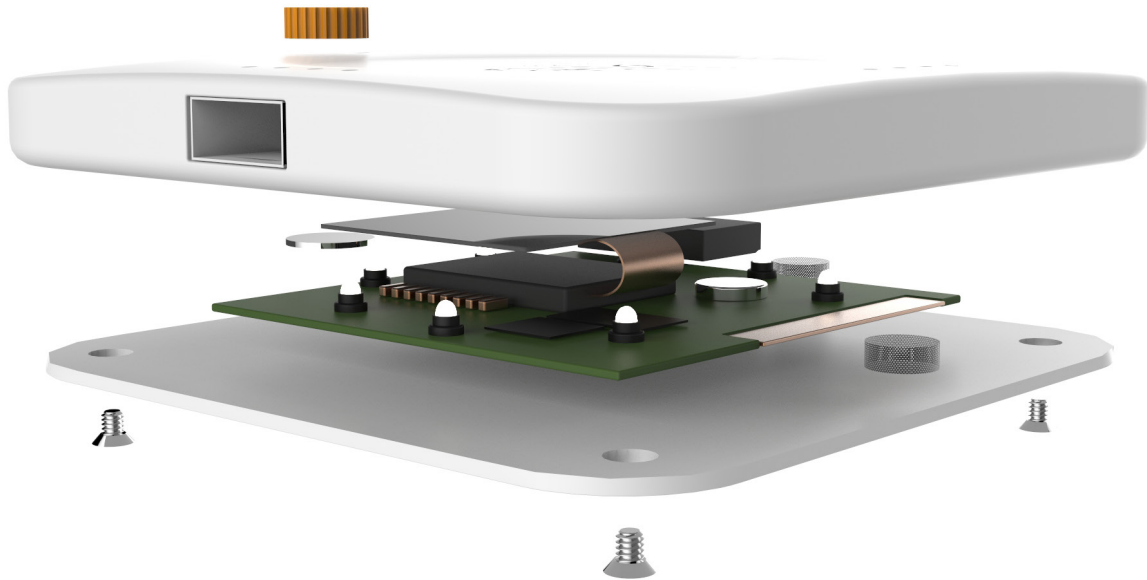
**Having a solid form can mean the difference between the successful and the failures.**



## Product Render

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Once the form is figured out, we can then bring it into reality by rendering out what the final product should look like. These renders showcase our Disney Blitz from the front, and exploded view of all the materials inside the product itself.





## Be Active

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Being active is one of the most important aspects in a child's life. During the growth cycle, it is important to utilize different parts of the body so that growth can occur equally throughout.

**It is shown that only 1 out of 4 kids are truly active in the age range between 5-10 years old.**

This is a big issue that is solvable with Disney Blitz.





## How it Works

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Disney Blitz is a modern exercising product that allows for open-ended interpretation gameplay.

**With this feature, kids will be able to reimagine and play their favorite games using advance technology that simplifies set-up process and allows for player to Disney character integration.**

Flip the page to see some sample games that a kid might be able to play.

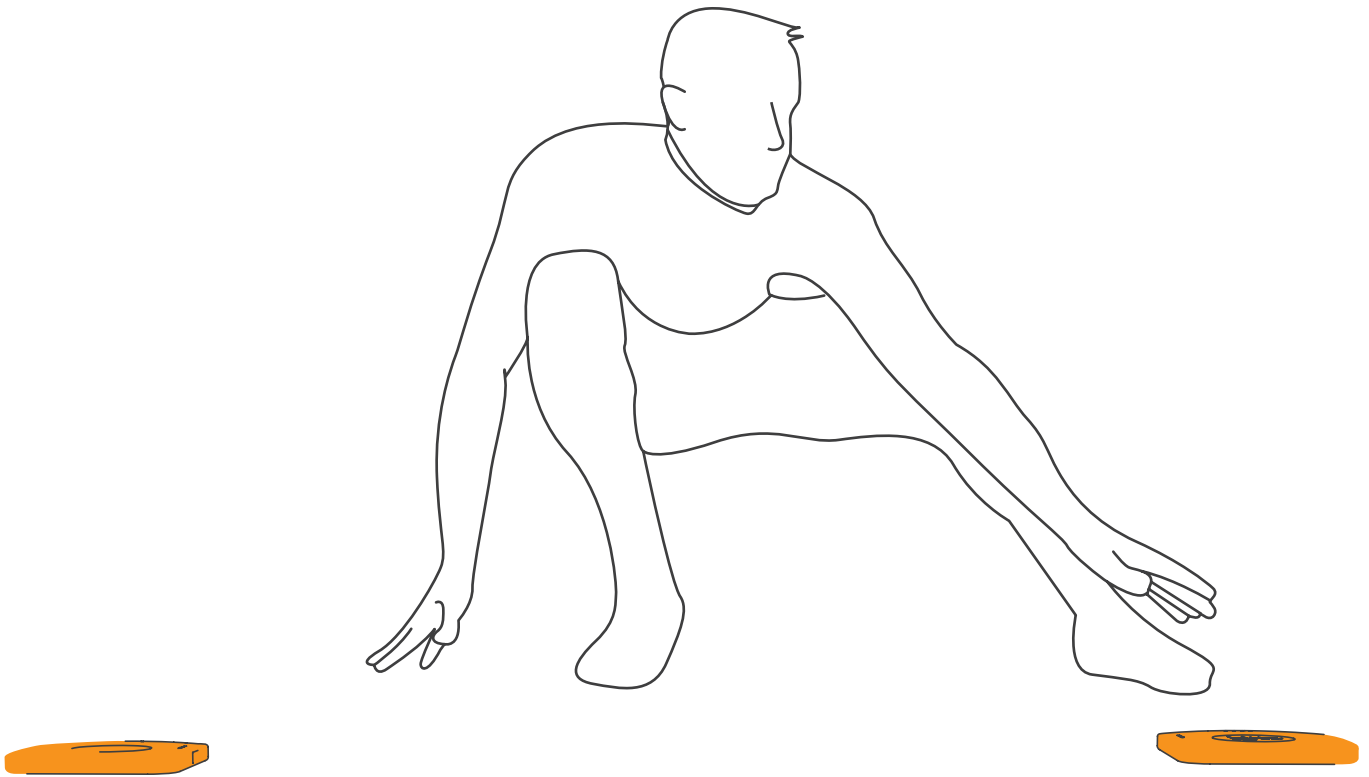
# Spiderman Agility Press

Outdoor Game

## 1 Player

1. Download "Spiderman Agility Press"
2. Place Blitz sensors several yards apart
3. Challenge yourself on obtaining the quickest time







## Can Others Join?

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Disney Blitz is tailored to be extremely flexible and open-ended. Additional players can join at any time with a press of a button on the phone app.

**Disney Blitz will never leave any kids behind!**

# The Incredible Dash

Outdoor Game

## 1+ Player(s)

1. Download "The Incredible Dash"
2. Set up the sensors all around the yard
3. Push start to start the game
4. Sensors light up in random order
5. Dash to press the sensors, before timer runs out

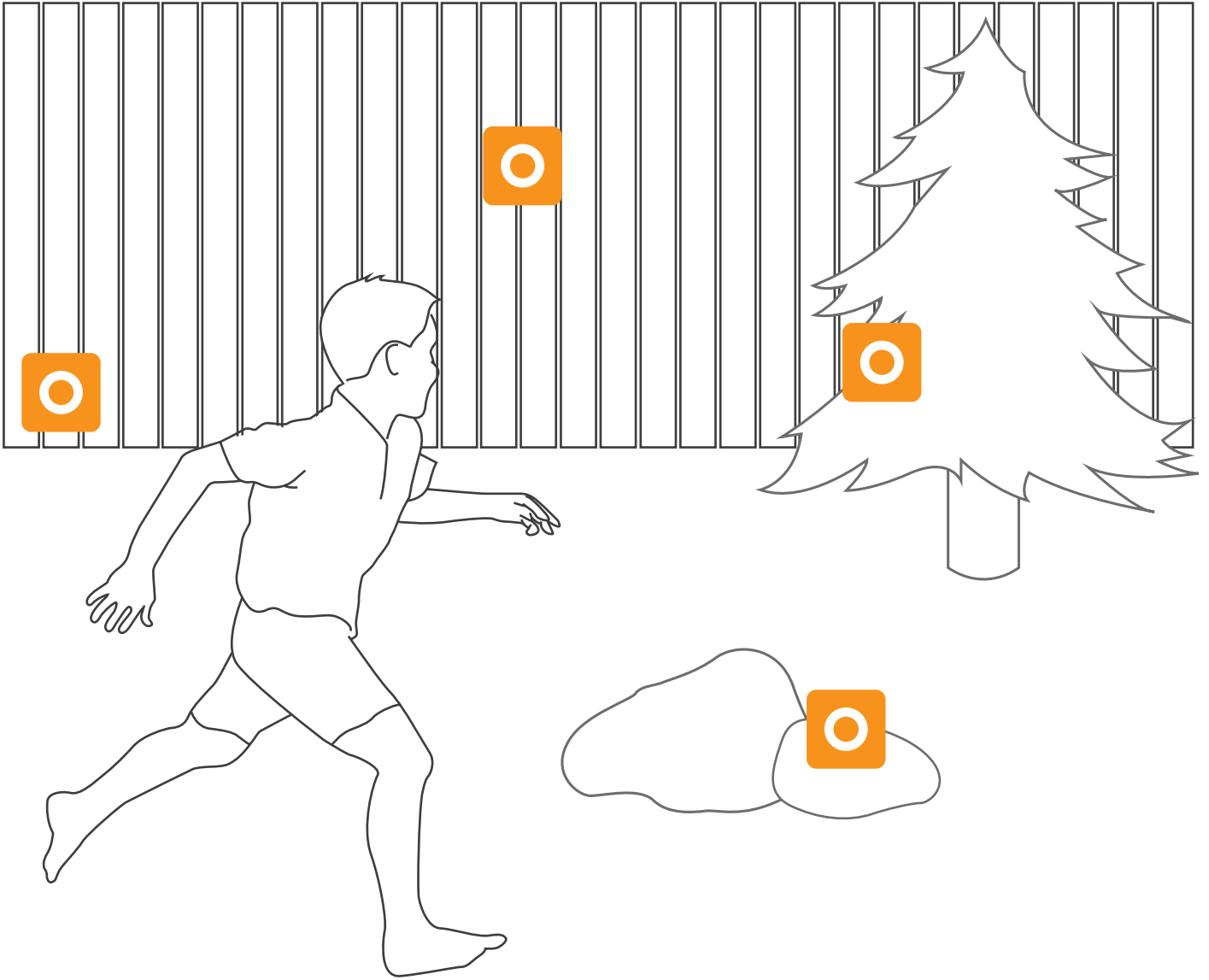


1

2

3

4







## What about Friends?

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What about friends? Of course Disney Blitz supports your friends playing with you.

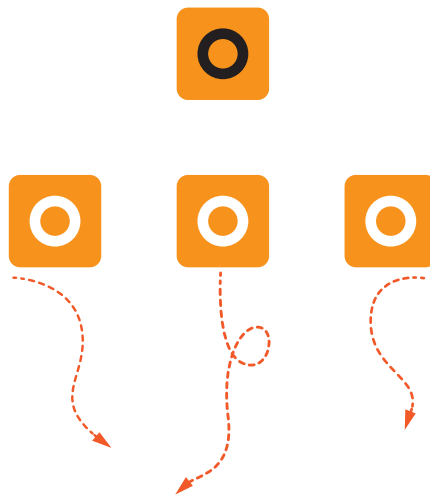
**In fact, it is recommended that the user plays with friends since that will further their social interaction skills.**

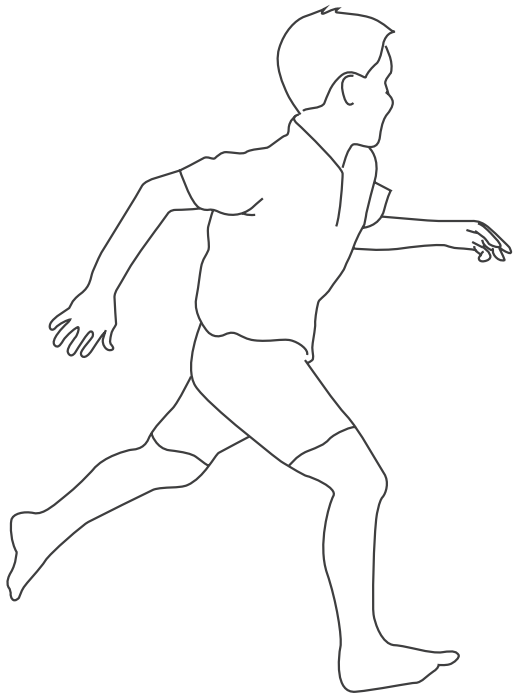
# Saving Neverland

Outdoor Game

## 3+ Players

1. Download "Saving Neverland"
2. Players add wearable attachments
3. Place Blitz sensors onto attachments
4. Captain Hook is "it"
5. Players evade Captain Hook as long as they can to "save" Neverland
6. Captain Hook has 90 seconds to capture the Lost Boys and Wendy's before he is "eaten" by the alligators





Function 1 + 2

# SMARTER

Determine the Appropriate  
Time Allowance to Get From  
One Target to the Next

Activate One Tar  
Time, in Rando

Track the  
Targets  
has S

Target at a  
m Sequence

Number of  
that the Participant  
Successfully Hit

End Session

Perform Consistently

Determine  
Distance Between Each  
Pair of Targets

Set a Pace According to  
User-Specified Skill

Communicate to Neccessary  
Targets When Another  
Target's Button Pressed

Trigger Lights  
When Appropriate

Display Countdown as  
Time Expires

Play Tune When Target  
is Activated

Generate Random Sequence  
of Target Activations

Play Tune

Display Score

Flash Lights

Endure Hard, Repeated  
Target Hits

Provide Spring Response  
with Each Hit

Determine Position  
of All Targets

Provide Adjustable Volume







## Product Solutions Inspired by Nature Platypus Push-Rods

---

For a digital outdoor gaming platform to be reliable and entertaining to the users, the ability for the system to respond to touch is extremely important.

**Outside activities typically involve tactile response, thus highlighting the importance on touch sensors.**

The bill of a platypus is dotted with electro-receptors that are slightly raised structures that communicate with the animal's central nervous system.

The touch sensor in its prototyping stage consists of a simple square tactile pressure sensor. For more versatile digital function and useful final form, the product would attach and detach from clothing with if the toy could attach to a vest or shirt that copied the striated patterns with conductive thread/yarn, game play allowing a larger area to be used in "tag games." This is important to translate tag seamlessly to digital form.





## Product Solutions Inspired by Nature Simple/Nested Components

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Our product is based on revamping backyard play. In doing so we are creating a game that in theory could take many different forms of game accessories. It is necessary for youth to be willing to use a gaming platform long term that challenge and variation be integrated into the game play.

One of Life Principals No. 8 of Biomimicry includes integration development and growth based on a foundation of modular and nested components.

**With these basic components as building blocks, complex structures are formed by simply connecting multiple units.**

Three features of the product include 1) Lights, 2) Sounds, and 3) Tactile Response. By varying the colors of the lights, and the sounds that are heard, game play can be designed from very simple (single player rhythm games) to the complex (multiplayer tag).



## Smarphone App

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To reduce the cost of the product, a lot of the controlling features were taken out.

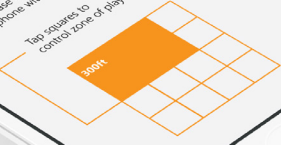
**Instead an app was produced that is free for download with any smartphone.**

This decision allows the price to Disney Blitz to be cut while at the same time brings full functionality control to the palm of your hand.



# MULTI-TAG

Please touch phone with death mode  
Tap squares to control zone of play



# MULTI-TAG

Please touch phone with death mode  
Tap squares to control zone of play



# ACTIVE

- Hill King
- Beat the Clock
- Multi-Tag
- Capture the Flag
- Course Run

# FEELING

- Active
- Creative

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## Multi-Tag Demo

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This storyboarding shows a walkthrough of the Disney Blitz app from menu to the game Multi-Tag.

Touch and drag to control the size of the playing field. Simple touch lessens learning curve.

Checklist will help the user set up the game experience to their liking.

List of available games to play. Newer games will be added over time.

Clutter-free menu allows the user to hone in on what they really want to achieve with Disney Blitz.

Simply tap the start or stop button to control the timer. Once stopped, timer will be saved.

The app also provides an internal timer to help track time for certain games.

Logo screen needs to synch with a device first before moving on to the next screen







## Be Creative

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This project deals with the design and development of educational tools for children that will help them develop skills like creativity and imagination that they will need to be successful individuals as they grow up.

**Such tools will ideally consist of a physical-digital hybrid system.**

This will involve functional hardware and software incorporated into a physical object with shape, form, color, and texture



## Where to Begin?

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The control unit will be placed in the center of the other beacons and will allow children to set difficulty levels and will control the timing by sensing the distance between each beacon. We will use a wireless technology such as Bluetooth or another emerging near field communication system in order to transmit signals between the beacons and the central unit.

**Sensor signal bounces back and forth at all times allowing real time feedback.**

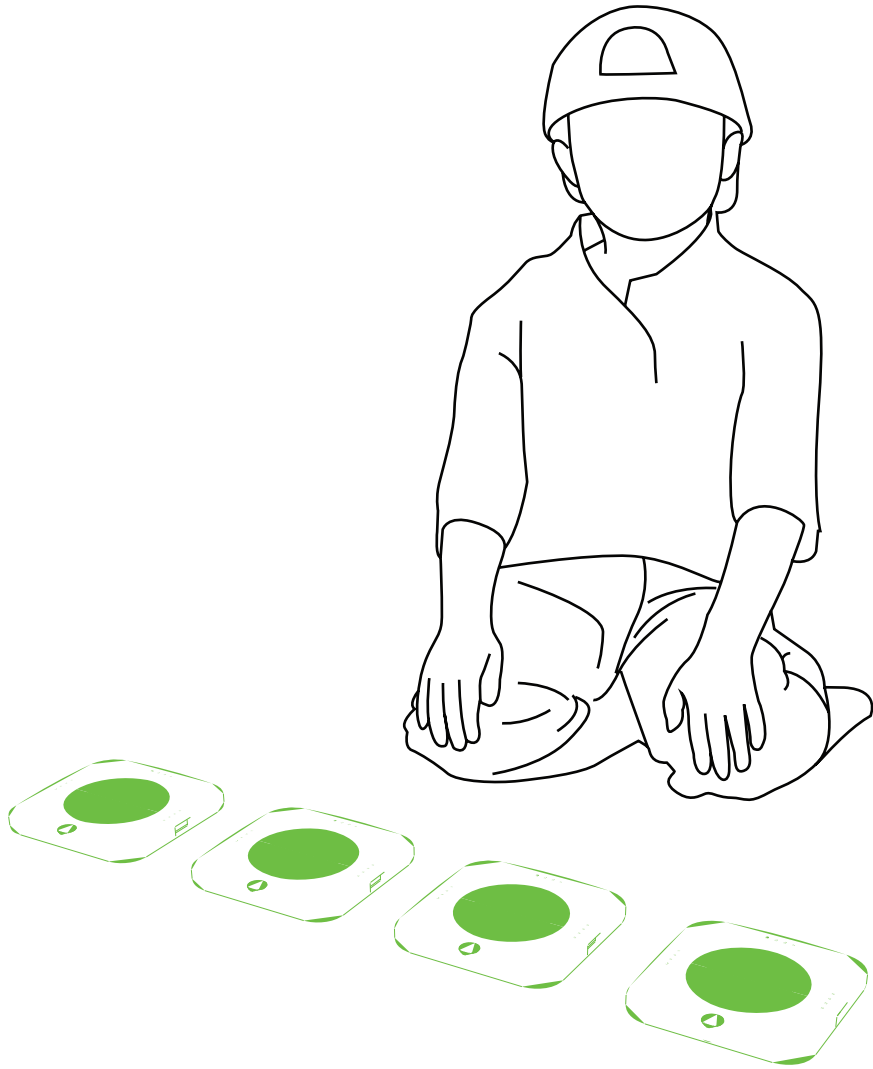
# Sebastian's Music Clam

Outdoor Game

## 1 Player

1. Download "Sebastian's Music Clam"
2. Line up Blitz sensors
3. Start game on app
4. Follow the light up and sound sequence of Blitz sensors
5. Repeat the pattern back and level up in difficulty









## Environmental Flexibility

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Both the disk shaped beacons and the central unit are intended to be waterproof for outdoor or underwater use.

**Different units will be able to withstand different environmental effects.**

The units will be sold in variety packs that will allow for maximum flexibility for the user.

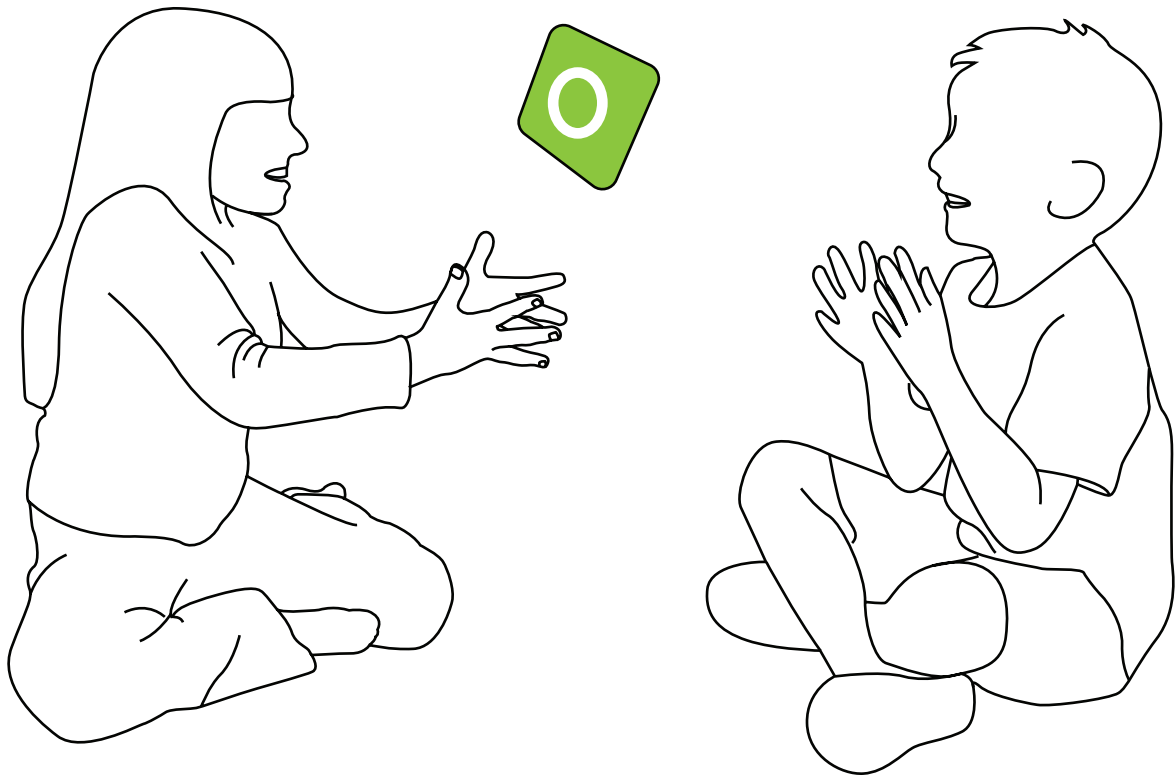
# Hot Potato Head

Indoor/Outdoor

## 2+ Players

1. Download "Hot Potato Head"
2. Start timer on the app
3. Toss the "Hot Potato Head" to the other player
4. Don't be the last one to hold it when timer runs out









## Creative Solution Inspired by Nature Galapagos Finches

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As a toy designed for the activity of youth in a modern era, customization and universality is really important so that the product will be viable in the toy/sports market long term. Understanding that users have very different tastes and live in very different conditions we want our game to mold to the environment of its user.

### **Every geographic area has its characteristic environments.**

A successful device that mimics how Galapagos Finch further highlights the importance of considering how this product could be adapted to the local conditions.

Ideally this casing would be made for different weather conditions, arid air, cold fronts, even rain. Traditional backyard play is not always limited by the environments, thus by having multiple accessory “skins” the device might allow more play time. If the skins were able to have different colors/images, this would also improve user personalization.

# Planning Tree Diagram + Form Table

# Describing a Great Physical CS

Understand  
the Problem

S

# Engineering Requirements









## Creative Phone App

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The creative side of Disney Blitz will be included within the Disney Blitz smart-phone app.

**A flick of a finger is all it will take to switch between being physically active and mentally active.**



12:34 AM  
Carrier  
LET'S PLAY RHYTHM  
**CATCHER**

How many nodes are in play?  
Choose difficulty level then pick a song to begin

ADVANCE

Under the Sea  
Circle of Life  
Colors of the Wind

12:34 AM  
Carrier  
LET'S PLAY RHYTHM  
**CATCHER**

How many nodes are in play?  
Choose difficulty level then pick a song to begin

BEGINNER

Under the Sea  
Circle of Life  
Colors of the Wind

12:34 AM  
Carrier  
WANT TO BE  
**CREATOR**

Re-Arrange  
Sound Travel  
Rhythm Cal  
Light Up  
Patternify

12:34 AM  
Carrier  
HOW ARE YOU  
**FEELING**

Active  
Creative

12:34 AM  
Carrier  
**blitz**  
by Disney

## Rhythm Catcher

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Allows the user to select a song of their choice so that they may use Disney Blitz as a sound pad to recreate the rhythm.

This game will allow the player to select any song from their playlist.

Checklist will help the user set up the game experience to their liking.

List of available games to play. Newer games will be added over time.

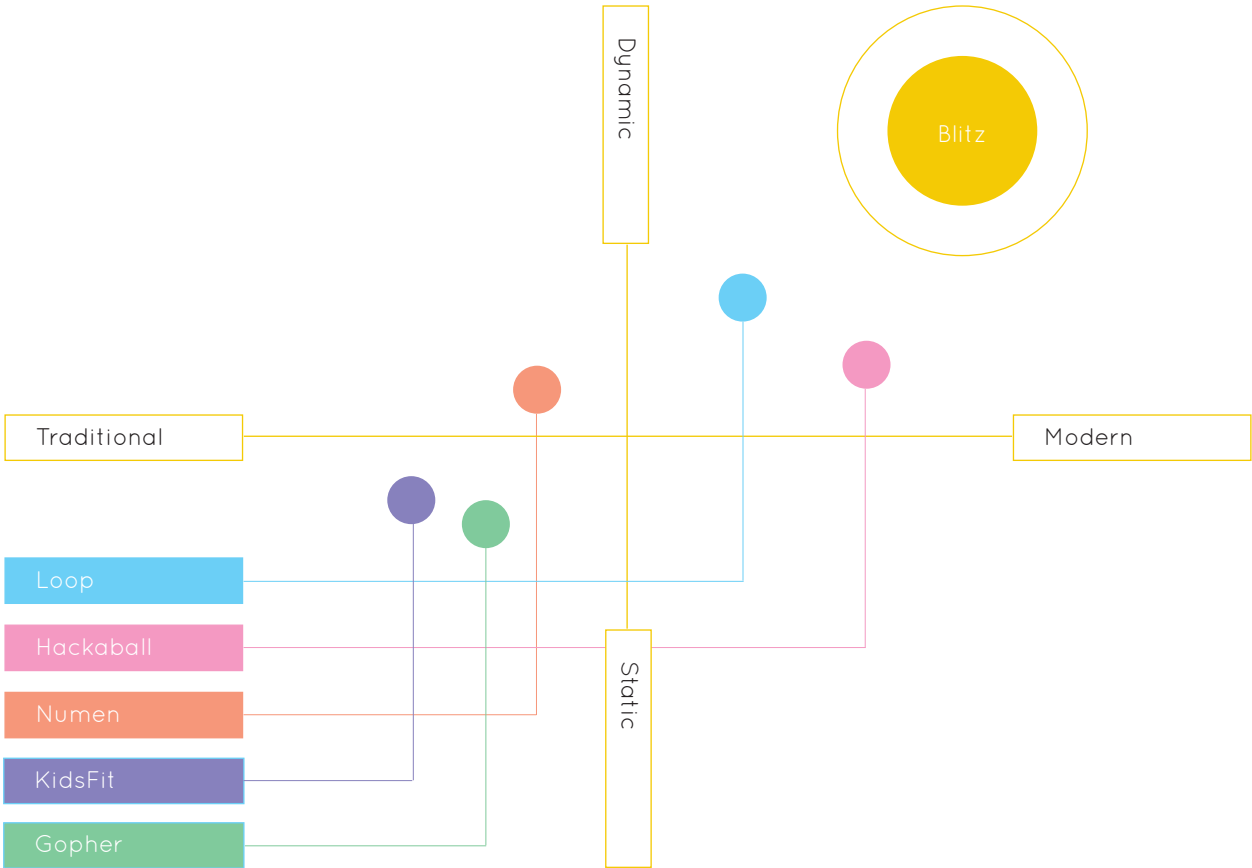
Clutter-free menu allows the user to hone in on what they really want to achieve with Disney Blitz.



## Brand Benchmarking

Before we can develop the product, we must look at what the current competition has to offer.

**We discovered that there are no product line currently in existence that seamlessly merge both creativity and health + wellness into a single modern user interface.**





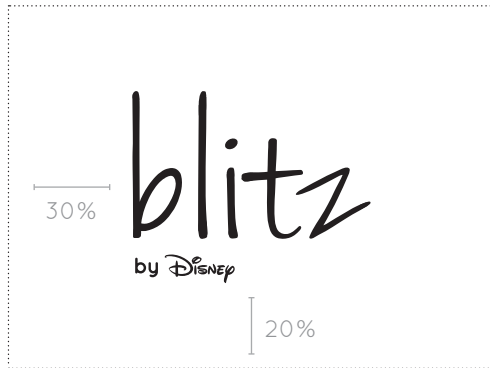


## Brand Identity

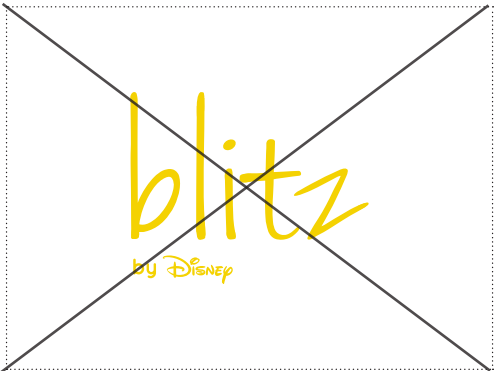
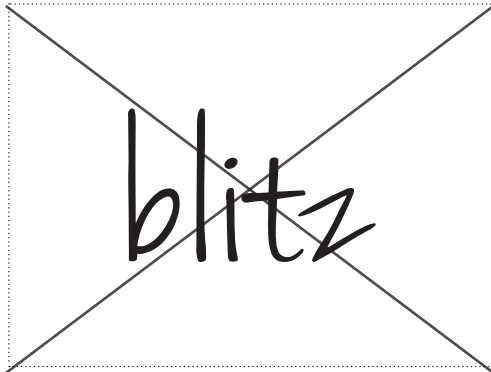
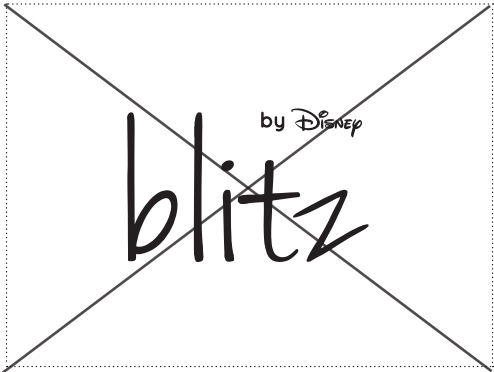
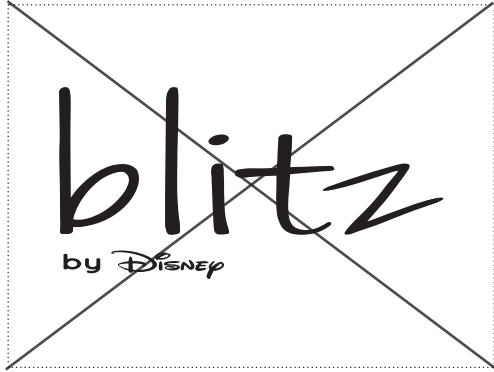
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These are branding guidelines that should be followed at all time in order to create a cohesive brand identity, and consistency across all brands.

## Branding Standards



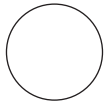
Unacceptable Uses



## Primary Colors



Yellow  
C 0 M 10 Y 100 K 5



White  
C 0 M 0 Y 0 K 0



Black  
C 0 M 0 Y 0 K 100

## Secondary Colors



Orange  
C 0 M 50 Y 100 K 0



Lime  
C 50 M 0 Y 100 K 0

## Typography

Quicksand Regular 10pt  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
0123456789  
Tracking 0

**Quicksand Bold 10pt**  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**0123456789**  
**Tracking 0**

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**Quicksand Bold 14pt**  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**0123456789**  
**Tracking 0**



## Abstract Video

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To raise brand awareness, an abstract video was created to go along with Disney Blitz.

**This video will showcase Disney Blitz in various environments, and will also highlight key open-ended gameplay of Blitz.**

How the video progresses is through moving scenes, color popping important object that relates to the product itself.

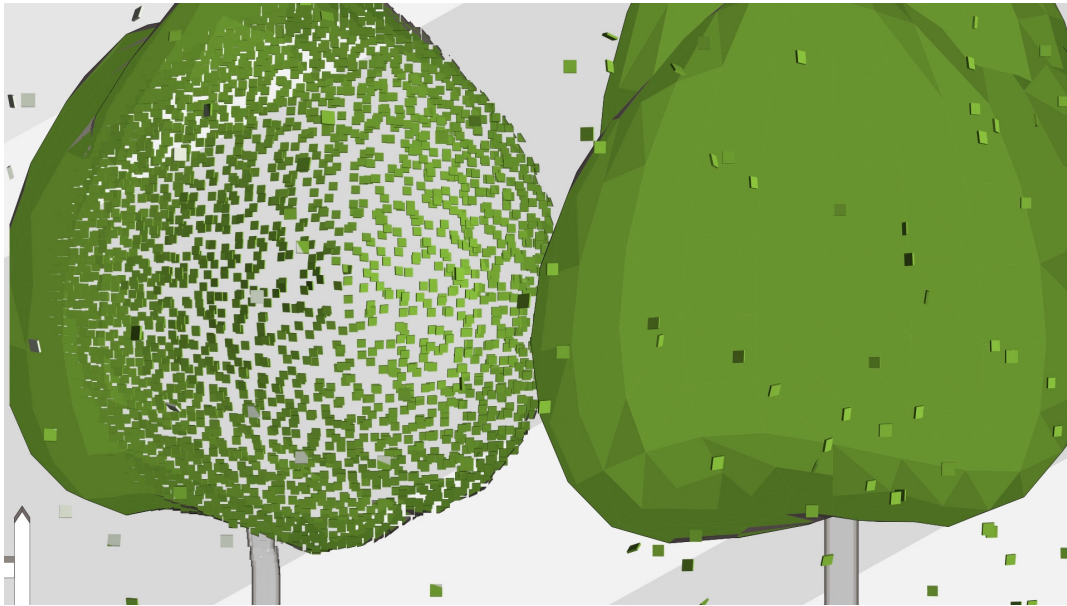
**keeping a kid actively entertained  
is a tough job to do**











**interactive.**



**adaptable.**









## Design Solutions Inspired by Nature

### Organic Ink

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For printing purposes of the product, instead of using synthetic ink, we are going to be utilizing all natural inks. Ink that are made from natural materials provided to us by nature.

**Not only will these ink add to the sustainability of our product, but it will also assist in breaking down when thrown away.**

Bloodroot ink is one such example for this where deep bright orange can be made. Artemisia is another which can be used to make green.

### Paper Wasps

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Instead of printing on bleached paper that was made from wood fibers, why not utilize paper that mimics the properties of wasps nest. These properties consists of strong physical integrity that is also waterproof. When looking at package design for our product, we needed a material that is durable and wasps nest secretion is it.





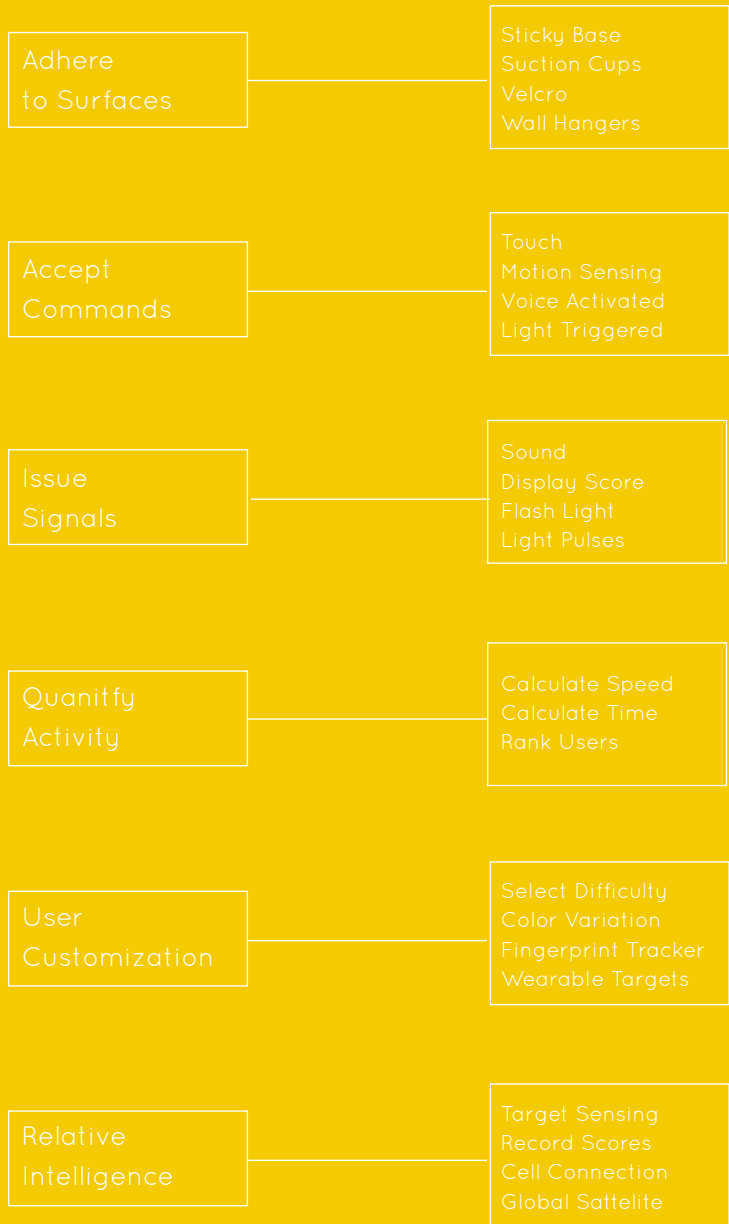
## The Nitty-Gritty

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Behind every concept, there needs to be a solid base for which the concept can stand upon.

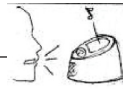
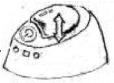
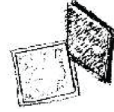
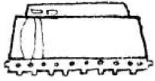
**This base needs to be informative filled to the brim with facts and production status.**

Without the nitty-gritty, a concept would just be a figment of the imagination existing only in the mind of the dreamer.





## Morphological Chart



### Specification Table

D	Lead child through a series of button presses with specified duration between presses	Design
<b>Geometry</b>		
D	Radius: 4" – 8"	Design
W	Height: < 3"	Design
D	Each button weighs 2lbs or less	Design
W	Packaging Geometry: 1' x 1' x 2'	Design
<b>Energy</b>		
D	Each button runs on 2 AA batteries	Design
W	Each battery runs on a rechargeable battery	Design
<b>Safety</b>		
D	Suitable for children ages 6+	
D	Operating Range: 15°F – 130°F	
<b>Maintenance</b>		
D	Force that button can withstand without breaking: 100lbs force	Design
D	Light Lifespan: 50,000 hours	Design
<b>Operation</b>		
D	Tone Volume: 60–70 dB	Engineer
D	LED Light Power: 4.8W	Engineer
W	Allows for cue intervals of 1s to 60s in 1s intervals	Engineer
W	Range of wireless communication between buttons: 20m	Engineer
D	Support mechanism must hold 3lb button	Design
D	Operational Range: 15°F – 130°F	Design
D	Automatic shut off after X number of seconds	Engineer
<b>Quality Control</b>		
D	Buttons function for 10,000 presses each	Design
D	Time between transmitted signal and button response: <1s	Design

Weight	Requirement	Responsible Party
<b>Cost</b>		
W	Cost of production for final product: Less than \$15 for all manufacturing costs and materials, batteries not included	Design
D	Cost of prototype: \$500 or less	Design
<b>Materials</b>		
D	Shatter-proof to 200lbs of force	Design
D	Maintains structural integrity through heat cycles of 15°F – 130°F	Design
W	Coefficient of friction for button base: 0.8	Design
<b>Ergonomics</b>		
D	Font size on device display: 36pt	Design
W	Optional button elevation: >3ft	Design
W	Size for setting controls: 0.5" radius	Design
D	Force that button can withstand without breaking: 100lbs force	Design
<b>Assembly</b>		
	Time required for initial use: 5 minutes	Design
	Time required for recurrent use: 1 minute	Design
	Battery charging time required: 8 hours	Engineer
<b>Signals</b>		
D	Time between transmitted signal and button response: <1s	Design
W	Range of wireless communication between buttons: 20m	Engineer
<b>Forces</b>		
D	Shatter-proof to 200lbs of force	Design
<b>Transport</b>		
W	Packaging Geometry: 1' x 1' x 2'	Design
W	Force required to dislodge stacked buttons: 5lbs	Design
<b>Recycling</b>		
W	Total percentage of recycled content: 50%	Design
W	Total percentage of recyclable content: 10%	Design



**Arduino Uno**

7.6 x 1.9 x 6.4 cm  
41g

A microcontroller board based on the ATmega328. It has 14 digital pins

**Board Headers**

1.16 x 1.0 x 0.58 in  
2g

Breaks out all 20 pins of the Xbee to a 0.1" standard spacing dual row header

**AA Batteries**

49.2 – 50.5 mm  
14.5 – 23.0g

Source of power for the individual units

**Xbee Chip**

1.087 x 0.96 x 0.16 in  
4.5g

Embedded solutions providing wireless endpoint connectivity to devices

**Force Resistor**

1.75 x 1.5"  
5g

The FSR will vary its resistance depending on how much pressure is applied

**Half Breadboard**

5.5 x 8.5 x 0.97 cm  
41g

Half size breadboard with a standard double-strip in the middle and two power rails

**Battery Holder**

5.5 x 8.5 x 0.97 cm  
109g

Container for standard AA Batteries

**LED 5mm**

75 x 3mm

Light emitting diodes

## Bill of Materials

Item	Size	Weight
Xbee Chip	1.087 x 0.96 x 0.16 in	0.01 lb
Break-out Board	1.16 x 1.0 x 0.58 in	0.004 lb
2mm Xbee Sockets	1.16 x 1.0 x 0.58 in	0.004 lb
0.1" Header Pins	1.16 x 1.0 x 0.58 in	0.004 lb
Arduino (Uno)	7.6 x 1.9 x 6.4 cm	0.09 lb
Half Breadboard (Classic)	5.5 x 8.5 x 0.97 cm	0.079375 lb
Assorted Wires	0.5 - 2 in	0.059375 lb
Assorted Resistors/Capacitors		0.0001 lb
AA Batteries	49.2 - 50.5 mm	0.051 lb
Battery Holder	2.5 x 2.79 x 0.79 in	0.24 lb
LED (Mixed) 5mm	75 x 3 mm	0.0001 lb
Force Sensistive Resistor Square	1.75 x 1.5 in	0.011 lb
Piezo Buzzer	12.0 D x 8.5 H mm	0.003 lb

<b>Material</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total</b>
Mixed	1	\$22.95	\$22.95
Mixed	1	\$2.95	\$2.95
Mixed	2	\$1.00	\$2.00
Mixed	2	\$1.50	\$3.00
Mixed	1	\$29.95	\$29.95
Mixed	1	\$9.95	\$9.95
Plastic/Metal	1	\$6.95	\$6.95
Nichrome/Ceramic	4	\$0.25	\$1.00
Alkaline	4	\$0.50	\$2.00
Polypropylene	1	\$2.95	\$2.95
Mixed	2	\$9.95	\$19.90
Mixed	1	\$7.95	\$7.95
PPO (Black)	1	\$1.95	\$1.95
		<b>Shipping</b>	\$10.00
		<b>Tax</b>	\$11.35
		<b>Total</b>	\$134.85

## Okala Ecological Impact

	Component	Description
<b>Form</b>	Housing	Polypropylene (PP)
	Packaging	Carboard, Primary
<b>Internals</b>	Integrated Circuitry	Board with Mixed Components
	Microcontroller, Arduino	
	Battery, Alkaline x 4	
<b>Transport</b>	Truck, 40 ton	Truck, Half Full
	Van, 3.5 ton	Delivery Van, Half Full
<b>Disposal</b>	Circuitry	
	Component Recycling	



<b>Amount</b>	<b>Okala Factor</b>	<b>Impact</b>
0.0617 lb	9.2 per lb	0.57
0.011 lb	8.9 per lb	0.10
0.166945 lb	9600 per lb	1602.67
0.09 lb	9600 per lb	864.00
0.204 lb	1.5 per bat	0.31
0.533645 lb	1.6 per ton-mi	0.85
0.533645 lb	2.4 per ton-mi	1.28
0.256945 lb	200 per lb	51.39
0.204 lb	0 per lb	0.00

**Total Impact / Lifetime** 2521.1671

**Lifetime Hours** 2160

**Impact per Hour** 1.1672

	<b>Component</b>	<b>Description</b>
<b>Form</b>	Housing	PVC, Rigid, Plastic
	Packaging	Carbon Fiber
<b>Internals</b>	Integrated Circuitry	Board with Mixed Components
	Power	
<b>Transport</b>	Truck, 40 ton	Truck, Half Full
	Tanker Ship	
	Van, 3.5 ton	Delivery Van, Half Full
<b>Disposal</b>	Circuitry	
	PVC	
	Component Recycling	

<b>Amount</b>	<b>Okala Factor</b>	<b>Impact</b>
1.5 lb	15 per lb	22.50
0.5 lb	9 per lb	4.50
1.75 lb	9600 per lb	7200.00
1.74 lb	120 KW per Hr	209.14
3.5 lb	1.6 per ton-mi	5.60
3.5 lb	0.13 per lb	0.46
3.5 lb	2.4 per ton-mi	8.40
0.75 lb	200 per lb	150.00
1.5 lb	5.3 per lb	7.95
0.5 lb	0 per lb	0.00
	<b>Total Impact / Lifetime</b>	7608.54
	<b>Lifetime Hours</b>	2880
	<b>Impact per Hour</b>	2.6419



## Engineering Inspired by Nature

### Starfish Limb Loss

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What is great about Blitz its ability to cross-communicate. This is mainly due to its wireless transmission/receiving component. A key engineering function is Blitz's ability to locate all other sensors serial numbers, understand which ones want to join into the game play, key them all into one game, allow more players to join, and allow players to leave without breaking the connections in the game play.

Starfish appear to have a bony and defined shape, but each limb is relatively independent of the other.

**The idea is that even if a predator manages to detach one of its limbs, as long as the central body disc of the starfish is intact, this limb has the ability to regenerate a whole starfish.**

When you have more than one Blitz in one area, one is the Coordinator, whose programming talks to the other Blitz units. Signals will automatically reconnect if severed.



## Customer Segments

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The primary customers of Blitz are parents of young children ages 5-10 years old. Children at this age are at a highly active stage in their development and need toys and games that allow them to use their energy without running around the house.

**The parents of these children are primarily in their 30s, possibly both employed, and are looking for fun ways to get their children active.**

According to the US Census (census.gov), in 2010 there were over 35,000,000 families in the US with 1 or more children under 18. According to census data, approximately 32% of families with at least 1 child make \$50,000 or more. This means there are approximately 3,840,000 families in the US alone with children in our target age group.







## Value Proposition

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Blitz facilitates activity, competition, and full family fun through its various game modes and customizable layout. Unlike other family games that are played sitting down, the Blitz requires motion which keeps kids healthy and off of the couch. Additionally, the multiplayer functionality and the ability to download/purchase new games makes the game more versatile and modernized.

**The customizability and difficulty options allow for a different game experience every time, and a long play value.**

Blitz comes with 5 preinstalled games. Combined, these features and benefits create a fun exciting experience that benefits children and parents alike.





## Channels

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Since both children and parents can enjoy Blitz, there are two main marketing channels. The first is through Disney's existing channels such as Disney TV channels, movies, websites, apps, and stores.

**These channels depict the product as an exciting new game for kids to play and compete with friends.**

The second is through TV channels, websites, and other media frequented by parents. These channels depict the product as a new way to get kids active, and also provide full family fun. The product is sold in retail stores, online, and at Disney parks. The product includes a 90 day limited warranty to cover manufacturers defects and software glitches.







## Customer Relationships

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For Blitz, there are different relationships to be formed with the children and the parents.

**The parents need to trust Disney to create safe and durable products for their children.**

We connect with these parents by periodically emailing about the new games available for Blitz, and by offering them customer support for the product. The children are looking to Disney for regular game updates as well. We advertise these games through the regular marketing channels, and periodically release extra accessories the children or parents can buy. The update process is automated, but accessories need to be purchased online, the Disney Store, or 3rd party retailers. The costs of the automated updates are offset by additional revenue from more accessories and games.





## Revenue Streams

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The main revenue streams of the product are the initial purchase, the purchase of new games, and the purchase of additional accessories. Similar games such as Bop-It or Simon sell for \$20 - \$30 and only include one handheld electronic device. Since our product requires at least 3 devices and wireless technology, we believe an appropriate price is closer to \$40.

**We offer discounts for Blitz if customers have ticket stubs from Disney Parks or certain Disney Movies.**

Disney offers the main product at a variety of retail outlets, and offers product accessories through the Disney Store and online. New games can be downloaded online, or unlocked with Disney Infinity characters.





## Key Resources

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The production requires many raw materials such as plastic, screens, batteries, wireless transmitters, metals, and other electronic components.

### **The production will be outsourced to Mattel or Hasbro.**

Most of the engineering, design, marketing, and management teams are already in place at Disney as well, so Blitz just needs to be added to the existing product mix. The product requires an initial investment to develop the software algorithms for the game, and also to engineer the devices, but we believe this can be funded through existing research and development accounts.



## Key Activities

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Key activities for the Incredible

Blitz include manufacturing and marketing the product, developing new games & accessories, and connecting new characters to the product. The manufacturing process involves not only engineering & testing the physical product, but also developing software & algorithms for the games.

**Additionally, is important to regularly evaluate the needs and wants of customers to adapt the product to the consumers' demands.**







## Key Partnerships

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There are several possible partnerships that are very helpful for the success of Blitz. For the actual physical product, companies like Qualcomm, Intel, Broadcom, and Motorola reduce the need for research & development into the wireless communication between the devices.

**Since the devices are designed to be individually powered, battery companies like Duracell or Energizer are also helpful.**

However, some emerging wireless technologies reduce the need for individual power sources. The other components of the product are outsourced or built by Disney's usual suppliers.





## Key Competitors

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The key competitors of Blitz in terms of companies are Hasbro and Milton-Bradley with reaction-style games like Bop-It and Simon. Other competitors are manufacturers of outdoor toys such as bikes, pogo sticks, skateboards, rollerblades, and sports equipment. We differentiate ourselves from these competitors in the versatility that Blitz offers in terms of number of games, and also the updating electronic features.

**These products do have an advantage on Blitz however in terms of price.**

These price disadvantages are offset by the fact that most other products are older and have had few advancements recently. Disney's size and variety of distribution channels should make Blitz a competitive product.







## Cost Structure

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The costs of offering this product mainly lie in the R&D and procurement of electronic components. Customers of the product may be price sensitive because they are young parents, but the various benefits offered should justify the pricing. The fixed costs associated with the product are research and development and management costs.

**Variable costs include actual product costs, packaging costs, and warranty costs.**

Other costs include marketing research and expenditures, transportation costs, and returned products.





## Sustainability Strategy

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The sustainability strategy has 3 main components: environmental sustainability, profit sustainability, and play-value sustainability. While sustainability is not one of Disney's main goals, it is becoming increasingly important for businesses to have not only a sustainable business model, but to employ sustainable practices.

**While it was once an order winner, sustainability has become an order qualifier in many industries.**

The main components are plastic, which is renewable in certain forms, silicon, and metals, which are both recyclable but not renewable. The profits are sustainable because of ongoing game releases and accessory sales. Play value is sustainable also because of the downloadable games and available accessories, as well as the multiplayer capability and integration with Disney Infinity.



**Key Partnerships**

Suppliers/Manufacturers  
Retailers

**Customer Segments**

Parents in 30s  
Household incomes above 50k  
Want kids to be more social  
Want kids to play outside  
Male children 5-10 years old  
Want customizable challenges

**Revenue Streams**

Product purchases  
Accessory purchase  
Game unlocks  
\$40-\$60  
Game download subscription

**Key Activities**

Marketing Product  
Developing New Accessories  
Connecting characters to product  
Creating different games

**Value Propositions**

Outdoor play  
Multiplayer  
Game diversification  
Can link with Disney Infinity

**Customer Relationships**

Product updates  
Game ideas  
Movies/Stories  
Download able games

**Cost Structure**

Manufacturing  
Research and Development  
Packaging cost  
Warranty cost  
Advertising/Marketing



## Startup Budget

Item	Cost
Utility Patent	\$280.00
Utility Search	\$600.00
Utility Examination	\$720.00
Utility Issue	\$960.00
Design Patent	\$180.00
Design Search	\$120.00
Design Examination	\$460.00
Design Issue	\$560.00
Trademark	\$325.00
Product Development	\$120,000.00
Accessory Development	\$100,000.00
Product Testing	\$30,000.00
Market Research	\$50,000.00

## Sources

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<http://www.titoma.com.tw/How%20Much%20Will%20It%20Cost%20to%20Have%2>

[http://makezine.com/craft/calculating\\_the\\_true\\_cost\\_of\\_c/](http://makezine.com/craft/calculating_the_true_cost_of_c/)

<http://www.jeffandersonconsulting.com/marketing-research.php/focus-group/fo>













## Social Equity

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Blitz will be manufactured under fair labor practices which are implemented by Disney's key manufacturing partners such as Mattel, Hasbro, etc.

**Hasbro manufacturing plants allow organized labor, and have been certified for quality, safety, and environmental management.**

They also have employee reward programs in place. Mattel has implemented "Global Manufacturing Principles" to show their commitment to responsible, and ethical manufacturing.



These same manufacturing partners also plant safety rules in place. Safety is key concern at Hasbro and is just one of the dimensions on which they are certified by 3rd party auditors.

**Mattel's "Global Manufacturing Principles make the safety of their employees and products a key concern.**

Their Corporate Social Responsibility report lists health and safety guidelines as a key component, and they also have toy safety certification programs in place.





These manufacturers also have strict stances against child and slave labor.

**Mattel has a zero tolerance policy for employment of underage workers and forced labor of any kind.**

Mattel also communicates these policies to all of their vendors. Hasbro has bi-annual audits to protect against these unethical labor practices as well as safety and health issues.



## Design for the Environment

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Disney Blitz, like many other products, will be manufactured in China to take advantage of localized resources and manufacturing capabilities. China is the number one country in the world for Silicon production, which minimizes the effects of transportation on the environment.

### **China is also the 4th country in the world for Copper production.**

The only other component is polypropylene which China is also a large manufacturer of. Since all of these resources are locally available, the transportation time throughout the supply chain is reduced.

Blitz will be a very durable, long-lifecycle product. Hard outer plastics combined with interior insulation and padding allow for considerable wear and tear on the product without rendering it unusable. Because it is designed for outdoor use by children, it has to be built to last. Additionally, the versatility of the system and additional game downloads lead to an even longer play value.



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The product will also be very recyclable due to the use of sustainable components.

**The metals and chips inside can be recycled for use in refurbished products or completely new products.**

The outside will be molded out of Polypropylene thermoplastic which can be melted down and re-purposed for use in other products.







## Business Inspired by Nature Siberian Huskies

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Siberian Huskies shed their outer layers of hair during the summer, and grow thicker coats in the winter to adapt to the climate. Our team will adopt this strategy by offering different accessories in the summer and winter, and by using lean manufacturing in times when sales are lower.

## Chameleon

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**Chameleons use their own bodies to adapt to the colors and patterns of their environment.**

To use this emulate this strategy, we will look at Disney's existing product mix, color scheme, design language, and other aesthetic elements to see how we can incorporate them into our product. This will help our product to become more associated with the Disney brand, and customers will be able to identify the game as a Disney product.





**Tuan Tran**  
Graphic Designer



**Brittany Pierone**  
Industrial Designer

## Behind the Scenes

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The Tempo Group is a design innovation team made up of dreamers and producers. What we dream we will produce and what we produce is great product.

**Our products are always well designed with an eye set for the little details that turns a good product into a great product.**

Our innovative ideas and attention to the finer things allows Tempo to be what it is today.

Tempo is derived from the word Tempo. This word portrays rhythm and pace. Our work represents one that is well thought out, never rushed into production until every little details is thought out.



**Jessica Schiltz**  
Biomedical Engineer



**Kevin Thomas**  
Biomedical Engineer



**Devon Poindexter**  
Business



## Meet the Sponsor

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Disney Consumer Products (DCP) is the business segment of The Walt Disney Company and its affiliates that delivers innovative and engaging product experiences across thousands of categories from toys and apparel to books and fine art. Under the leadership of President Bob Chapek, DCP is focused on franchise growth and product quality and innovation.

This focus enables DCP to deliver compelling merchandise at retailers around the world enriching consumers' experience with the Disney brand and its characters: licensing, Publishing and Disney Store.



## Assets + Resources

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Today, as the world's largest licensor, DCP inspires the imaginations of people around the world by bringing the magic of Disney into consumers' homes with products they can enjoy year-round. The business is aligned around five strategic brand priorities: Disney Media, Classics & Entertainment, Disney & Pixar Animation Studios, Disney Princess & Disney Fairies, Lucasfilm and Marvel.

Disney Publishing Worldwide (DPW) is the world's largest publisher of children's books and magazines with over 700 million products sold each year.







## The Future is Now...

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We live in a time where technology is flourishing. Advancements are being made by the days instead of years.

**No longer can we keep technology separate from our daily routines.**

After 8 months of grueling research and development, our concept of Disney Blitz come into fruition; a product that simplifies active gaming for young kids. In the past, technology was kept separate from their daily routines forcing kids to choose between staying indoors and going outside.

**Disney Blitz aimed to solve this by providing a blend of technology with traditional gaming.**

This is only the first step however.

As we advance into the future, technology will be more and more ingrained into our life providing plenty of opportunities to redefine routines and lifestyles. Disney Blitz is only the first step, there are plenty more to come. Will you join us?