Leaky's Escape

(name pending)

DESIGN DOC

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Table of content

Introduction		UI / UX	
Project description	4		In-game UI/UX
Narrative context	5		Menu flow
Pillars	6		Customization menu
Game design		Art Direc	tion
Game loops	8-10		Style
Controls	11		Mockups
Camera	12		
Mechanics	13-19	Tools	
Collisions	20		Priorities Monetization strategies
Level Progression			Market Analysis
Level progression	22-26		
Upgrade progression & Monetization			
Rewards	28-30		
Permanent Upgrades	31-39		
Cosmetic items	40		
Microtransactions	41		

45

50 51 52-53

Project Description

Type of project

Vertical endless runner on Android and iOS F2P + microtransactions + optional ads

Pillars

Reflexes Upgrading Reward

Similar games

Super Mole Escape Burrito Bison: Launcha Libre Pac-Man 256

Target audience

12 to 18 year old

Likes to play a short arcade game on their smartphone while going to school, or at home waiting for food.

Wants to be constantly rewarded every time they play. Likes to customize the appearance.

Secondary target audience

18 to 30 year old

Likes to play a smartphone game in small bursts while on the throne or in the bus going to work or school.

Wants to progress and see the ending and get better scores.

Narrative Context

When

Modern days

Where

Area 51

Who

Alien blob with elastic tongue Name: Leaky



Story trigger/intro

Alien named Leaky crashes their ship in a desert, which digs a hole right into Area 51.

The player controls Leaky and must escape through the hole and get back to the surface, where his friends will pick him up.

Pillars

All decisions should satisfy a pillar and categorize on the chart, otherwise it deviates from the purpose of the game.

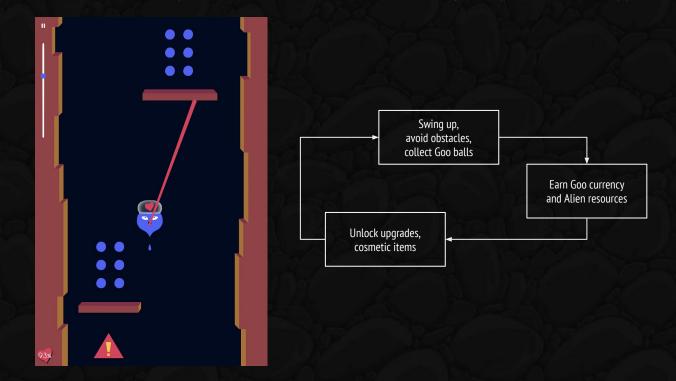
Application Pillars	Aesthetics	Mechanics	Story	Tech
Reflexes	-Style that ensures readability	-Must think fast and react to what's on screen -Dangers are quick and keep players on their toes		-Being a smartphone game, matches should be quick to start and quick to put away
Upgrading	-The more you upgrade, the further you get, the more you see of different backgrounds	-Doing good in a match gets you more resources, which lets you choose which upgrades to pick	-When you finally reach the surface, the alien gets in the ship and is super muscular!	-Share a screenshot of your customized character on social media through a button in the game
Rewards	-Customize your look -Health is also the currency, making goo valuable at first sight	-Health is also currency, giving double the value to goo -Every 3 hours you can re-open the game to get free rewards	3	



Gameplay Loop (Overview)

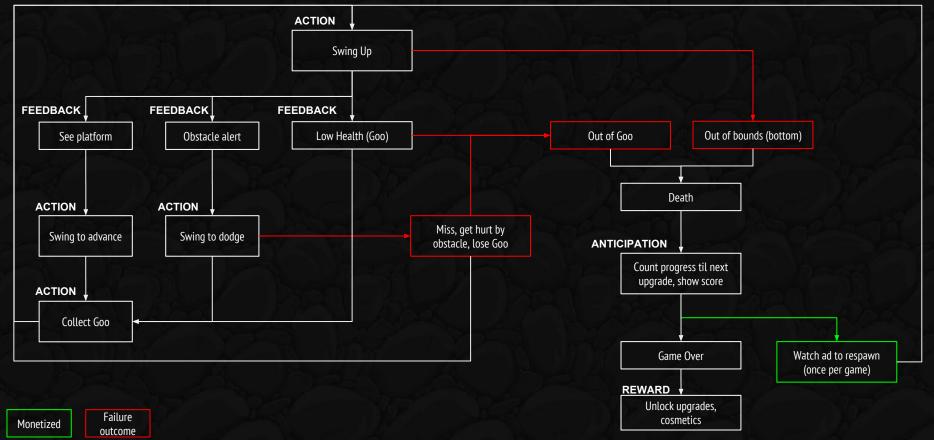
In this game, the player swings Leaky up the screen to progress. Doing so, they must avoid obstacles and collect Goo balls. Once the game is over, the player earns Goo currency and Chests containing Alien Technology.

Those resources are then used to upgrade and customize the character, allowing for higher scores and bigger rewards.



Core Gameplay Loop

This is the loop the player will go through while playing a match. Keep moving up, react to feedback to avoid dying by falling at the bottom or running out of health (Goo). After dying, the player can see how close they are to the next upgrade and decide to watch an ad to keep going.

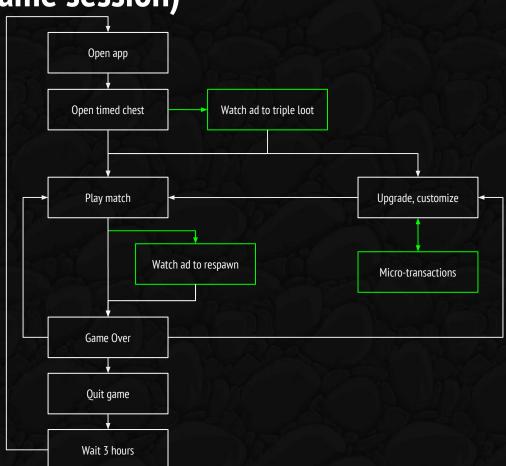


High-level Game Loop (game session)

We want the player to keep coming back to the game. Ideally, this is the loop they are naturally going to be adopting.

The game has incentives to keep opening the game, even if it means just opening a timed chest then closing the game. It keeps the game on their mind and builds anticipation for their next unlock.

The player can spend money or watch ads to take bigger steps in the upgrade progression.



Controls

(A) Drag input method Swipe & hold to aim (slow-down) Release to shoot tongue

(B) Direct input method

Tap to shoot directly in that direction

Camera

Camera smoothly follows the character upwards, and never follows Leaky down. However, if the player shoots down and successfully sticks to a platform near the bottom of the screen, Leaky will bounce down before slingshotting back up. The camera will then also follow Leaky to make sure he does not go off-screen while swinging.

Leaky should never be in the top 50% of the screen, and should never be in the bottom 25% if swinging.

When Leaky gets hit by an obstacle, the camera shakes.

Parameters

Safe Zone Top float

Maximum % from the top the character can be, ie: 50% would mean Leaky cannot be in the top half of the screen.

Safe Zone Bottom float

Maximum % from the bottom the character can be while slingshotting, ie: 25% would mean Leaky cannot be in the bottom ¼ of the screen.

Catch Up Speed float

The speed at which the camera will follow if Leaky enters the camera's safe zone.

Shake Duration float

How long the camera shake should last when Leaky is hit.

Shake Intensity float

How far away from the normal position the camera should shake when Leaky is hit.

Shake Speed float

How often the camera goes to a new shake position when Leaky is hit.

Mechanics Overview

Swing / Player Movement

The player can shoot Leaky's tongue in any direction. The tongue will go in a straight line. If the tongue hits a platform, the tongue sticks to it and starts a swing: Leaky will gets pulled towards it, and he will detach the tongue from the platform once he passes it. Once detached, the player can swing again. In the event that the tongue misses all platforms, it will quickly come back to Leaky's mouth once it reaches max length (about

Fall out

When Leaky is falling, the player must be careful not to let him get out of the camera space at the bottom.

½ the screen length), allowing the player to shoot again.

If Leaky falls completely out of the screen, it results in a Game Over.

Health / Goo

Leaky loses his Goo during gameplay so it constantly needs to be refilled. If it reaches 0, Leaky dies, which results in a Game Over. Collect Goo balls floating in the stage to refill small chunks of his health.

Obstacles

Obstacles such as missiles and rocks can come from the bottom or the top of the screen. There is always a warning before they appear on the screen.

If Leaky gets hit by an obstacle, he loses a chunk of his health, loses most of his momentum, and the tongue releases if it was stuck to a platform.

Upgrading

Goo balls collected while playing can be used to upgrade Leaky's stats. This allows for faster progress at the start and allows the player to continuously reach higher up.

Detailed Mechanics - Player Movement

Movement States

Falling -

When the player is doing nothing, and the only thing affecting Leaky's position is the velocity (including the gravity).

Aiming -

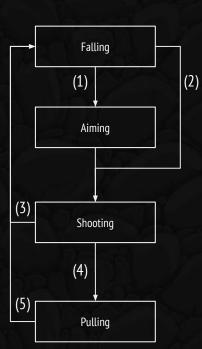
- (1) If using *Drag input method*, Leaky's momentum slows down (slomo percentage) to allow for the player to aim properly. An arrow appears, pointing in the opposite direction of the player's finger.
- (2) If using *Direct input method*, this state is skipped and goes directly in shooting.

Shooting -

Entered once an aiming input is received. This is when the tongue stretches out from Leaky's mouth in a linear animation (tongue out speed). Momentum goes back to normal if it was slowed down. The player cannot aim again during this state. If the tongue exceeds the maximum length, it reels back in quickly (tongue cancel speed), going back to Falling state (3). If the tongue detects a collision, we go into Pulling state (4).

Pulling -

The tongue sticks to the collision point, while Leaky's body gets propelled exponentially towards it (elasticity). Once Leaky exceeds the point vertically, the tongue automatically releases and disappears, going back in Falling state (5). If the player shot downwards, Leaky will bounce down then wait until it exceeds the point vertically again to release. The player can also cancel pulling at any time during this state and aim/shoot again.



Detailed Mechanics - HP

Overview

Leaky loses his Goo during gameplay so it constantly needs to be refilled. The Goo is his health points (HP). If it reaches 0, Leaky dies, resulting in a Game Over. Collect Goo balls floating in the stage to refill small chunks of his HP.

Visual Representation

HP is represented in 3 ways. First, HP is numerically shown on an icon in the corner. Second, a heart on Leaky's head gets smaller as HP gets closer to 0. Third, Leaky's body color becomes grey the closer the HP is to 0.

Near-death Attenuation

Health points fall at 50% the usual rate when the player is close to dying, ie: when health is under 10%. This allows the player to make satisfying last second comebacks.



Detailed Mechanics - HP (cont)

Health States

Inactive-

At the start of the game, HP stays intact until the player gets in control of Leaky (1).

Leaking-

As the game starts, the player is slowly losing X HP each 0.5 second. When this is happening, particle effects of blue drops are falling from Leaky's tail.

Regen-

When the player picks up Goo balls, regen HP is stored. This stored HP is gradually transferred to the player HP (2).

Leaking is halted for as long as the HP is going up (X amount each 0.1 sec). This means the player can be at 100% and still pick up Goo balls, postponing Leaking for a few seconds.

While regen is happening, the heart in Leaky's head is pulsating and the HP icon in the UI has a white outline indicating there is still regen HP to be transferred.

Once the stored regen HP is empty, we go back to Leaking state (3).

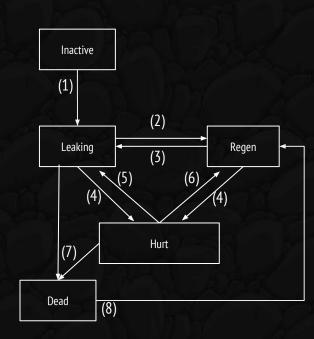
Hurt-

If Leaky gets hit by an obstacle (4), the player instantly loses X HP. Any stored regen HP is lost. The camera starts shaking.

If Leaky survives the hit, the model blinks in opacity for X seconds, can't get hit by obstacles and isn't leaking. Once the invincibility timer is over, we either go to Regen state if a Goo ball was captured while Hurt (4), or Leaking state otherwise (5).

Dead-

If Leaky's HP gets to 0, the game is over(7). If the player watches an ad, Leaky regains all his HP (8).



Detailed Mechanics - Goo balls

Overview

Goo balls are the main way to regain health points. The player must constantly try to collect as many as possible while playing to avoid dying. They appear above platforms in groups of 2 to 6, more often in bigger groups earlier in the game.



Money

Goo balls are also used to buy upgrades and cosmetic items from the main menu. At the end of a match, all Goo balls collected go into the player's "Goo bank", with a multiplier based on which Zone they were collected in. More details in the "Upgrade Progression" section of this document.

Parameters

Health Value float

How much HP is granted to the player when collected. During a match all Goo balls are worth the same, but the value can be permanently upgraded in the shop, allowing for further progression.

Detailed Mechanics - Obstacles

Overview

Obstacles come in different shapes and forms but they are all things that the player should avoid touching. If Leaky gets hit by an obstacle, the player loses health, his velocity gets halved, and gets put back into Falling state if he was Pulling.

Warning

All obstacles are telegraphed with a warning sign, accompanied with a graphic cue and sound effect unique to each type of obstacle.

Obstacle States

Warning -

Once an obstacle is spawned it isn't yet visible. A warning is first shown at the edge of the screen for X time. Once this time is over, the obstacle becomes active (1).

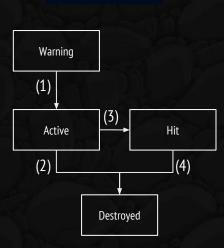
Active -

Obstacle is sent or shot in the screen and can hurt Leaky. If it exits the frame or its time runs out, it is destroyed (2).

Hit -

If it successfully hits Leaky (3), the collision is then disabled. Certain obstacles will have a visual effect like breaking in half, and shouldn't be destroyed until this effect is over (4).





Detailed Mechanics - Obstacles (cont)

Types

Missile-

A slow missile comes flying from the bottom of the screen at X speed. Variable size.

Rock-

A fast rock comes falling from the top of the screen at X speed. Variable size.

Laser-

A quick ray that fills all screen vertically appears for X time. Variable width.

Common Parameters

Spawn Position float

From where the obstacle will begin. Each obstacle will use this differently, as some spawn from the top, others from the bottom, or the side.

Damage float

How much HP will be taken from Leaky if it hits.

Warning Time float

How long (in seconds) the warning sign will appear before the obstacle spawns.

Collisions

Collision layers

TongueCollide -

Includes the tongue tip and any platform it can touch. Only used to swing the player up.

PlayerCollide -

Includes the player body, walls, powerups, obstacles. Used to lock the player inside the window, and used to detect overlap on powerups and obstacles.

Level Progression

Level generator: Overview

The level generator creates platforms and obstacles ahead of the player, depending on the current Zone settings. After a set distance, the player is greeted with a transition and enters a new Zone, which becomes harder and longer as they progress.

States

Deactivated-

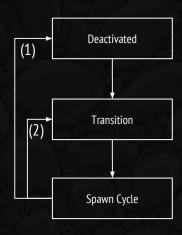
When the game isn't running, ie: before a game begins, when paused (1), or at the end of the last Zone in story mode.

Transition-

Zone title and graphic appears on the screen while Leaky is flying up. Previous platforms are deleted and the next 10 platforms are spawned. Color palette changes to the next one. After X seconds, the transition is removed.

Spawn Cycle-

Every time a platform is out of sight at the bottom of the screen, it gets deleted and a new one is spawned above the screen, unless it exceeds the Zone units, at which point it waits for the player to slingshot past that limit to trigger the transition (2).



Level generator: Zone details

Zones

After a set distance, the player enters a new "Zone". Zones become harder and longer as they progress. Each Zone has different platform settings, obstacle frequency, color palette, and more. Zones have these different parameters:

Parameters

Zone Order int

The number of apparition of this Zone.

Zone Name string

Name that shows up during the transition.

Zone Length float

Distance in game units that the player needs to progress before reaching the next Zone.

MinMax Platform Width vector2

Minimum and maximum width each platform can appear in this Zone.

Platform Distance float

Vertical distance between platforms in this Zone.

MinMax Goo Balls vector2

The minimum and maximum number of grouped Goo balls above each platform.

Obstacles Allowed ObstacleType[]

List of obstacles that can appear in this Zone.

MinMax Time Between Obstacles vector2

Possible minimum and maximum time in seconds between the apparition of obstacles.

Foreground color color

Affects the platform and border colors

Background color color

Affects the background color

Level generator: Zone details (cont)

Zones

This is a table to keep track of the progression between Zones' parameters:

Zone Order	Zone Name	Zone Length	MinMax Platform Width	Platform Distance	MinMax Goo Balls	Obstacle s Allowed	MinMax Time Between Obstacles	Backgroun d Color	Foreground Color
0	Area 51	50	2.5; 3	6	6; 6	Missile	20; 25	191b1d	84999b
1	Deepest depths	100	2; 2.5	6.5	4; 6	Missile, Rock	10; 15	010b1e	8f4347
2	Grass turfs	200	1.8; 2.3	7	3; 6	Missile, Rock, Laser	8; 12	230201	255f2c
4	etc	400	14/2		3; 4	<u></u>	I 🔏	<u> </u>	<u> </u>

Level generator: Transition details

Transition

After a set distance, the player enters a new "Zone". Before entering gameplay, the player is greeted with a small transition screen.

- -The camera zooms in, showing a closer look of the character
- -Leaky keeps going up at a fast speed no matter how fast the velocity was before leaving the previous Zone
- -Leaky gets centered on the screen, towards the top so we can see him
- -Graphical animation showing "Level up!" and the name of the next Zone
- -Shows the current distance from the start
- -Grant the player a bit of HP

Parameters

Zoomed in FOV int

FOV to reach during the transition.

Transition Duration string

How long the transition animation lasts.

HP Gain float

How much HP to grant the player during the transition.



Level generator: Map chunks (tbd)

tbd

Possibility of spawning pre-determined platform locations for more crafted challenges in later Zones.

Upgrade Progression

Rewards

Game Over Rewards Overview

When the player dies, they get 2 types of rewards:

- Goo currency (\$
- Chests of Alien Technology (CATs).



Goo currency

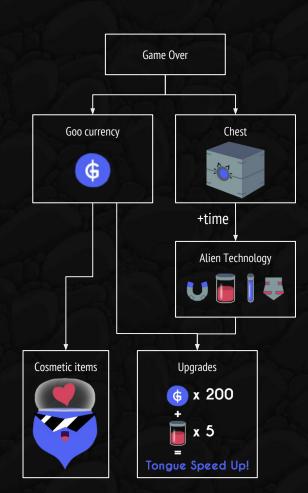
The Goo balls collected during the game turn into currency. Goo balls collected in Zone 1 are worth 1 Goo currency, Goo balls collected in Zone 2 are worth 2 Goo currency, and so on. Goo currency is used to unlock cosmetic items, and to upgrade stats when combined with Alien Technology.

Chests

The player also gets a Chest depending on which Zone they died in. The further away the player dies, the more content the chest has.

Chests contain different Alien Technology, which are needed to upgrade Leaky's abilities.





Rewards: Goo currency



Goo currency

The Goo balls collected during the game turn into currency.

¹Goo balls become more scarce as Zones progress, but Zones are also longer, resulting in similar numbers collected each Zone.

²Goo balls collected in Zone 0 and 1 are worth 1 Goo currency, Goo balls collected in Zone 2 are worth 2 Goo currency, and so on.

³The total amount of Goo currency the player gets at Game Over becomes exponential the further they die.

Area where the player died	Average Goo collected in this Zone ¹	Currency value in this zone ²	Average total Goo currency at death ³
Zone 0 (Area 51)	50	1	50
Zone 1	100	1	150
Zone 2	100	2	350
Zone 3	100	3	650
Zone 4	100	4	1050

Cosmetic tier	Cosmetic price at this tier
Zone 1	500 to 1500
Zone 2	1500 to 3000
Zone 3	3000 to 6000
Zone 4	6000 to 10000

Upgrade level	Goo price to upgrade to next level ⁵
0	300
1	600
2	2000
3	

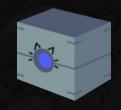
Usage

Goo currency is used to unlock cosmetic items, and to upgrade stats when combined with Alien Technology.

⁴Unlocking a cosmetic item costs about the amount you would make in 10 matches of that Zone, assuming the player doesn't die early.

⁵Upgrading stats costs the equivalent of the Goo earned in 2 matches in the latest zone to upgrade one stat. Upgrading stats is mostly dependent on Alien Technology (see next page). The reason it also costs Goo is to give players who don't care about cosmetic items an incentive to earn Goo.

Rewards: Chest details



Chests of Alien Technology

The player gets a Chest depending on which Zone they died in. The further away the player dies, the more content the chest has. Dying in the first zone (Area 51) does not grant a chest.

Chests contain different Alien technology. Those are materials needed to upgrade Leaky's abilities. Chests can also hold cosmetic items as a bonus.

Rewards possible >		Cosmetics available	Chance of getting a cosmetic item
Zone 1	1 of random type	Tier 1	20%
Zone 2	2 of random type	Tier 1 or 2	25%
Zone 3	3 of random type	Tier 1, 2 or 3	30%
Zone 4	4 of random type OR 1 of each	Tier 1, 2, 3 or 4	35%

Upgrade level	Alien Tech required to upgrade to this level	Ideal Zone to upgrade to this level ¹	Minimum <i>Chests</i> to get ALL 12 stats to this level ²	Minimum <i>days</i> to get ALL 12 stats to this level ²
Level 0	0			
Level 1	2	Zone 2	12	3
Level 2	8	Zone 3	32	8
Level 3	20	Zone 4	60	15

Unlocking a chest

When the player wins a chest, it gets put on the Main Menu screen. Chests take 3 hours to open and can only be opened one at a time. There can be 4 Chests at most on the Main screen. This incentivizes the player to stop playing after 4 matches, not to tire themselves out of the game, and to bring them back in short sessions instead. This also means the "Alien technology" resource is completely tied to time.

¹We are assuming that the player can constantly reach this zone.

²Assuming the player opens 4 chests per day and gets perfectly equal amounts of Alien Tech. Watching Ads isn't taken into account.

Permanent Upgrades

To upgrade a specific stat, the player needs to spend Goo and Alien resources. Upgrades are split into different groups, each needing a different Alien resource.

Specific upgrades are detailed in the following pages.

The cost for Alien Technology increases more than the Chest rewards do, meaning they will be more and more distanced.

					Goo cost to	Alien resource
				Value for each	upgrade to next	cost to upgrade
	Upgrade Group	Parameter	Description	upgrade level	level	to next level
			Diameter of the circle collision that collects	0	300	2
		O Alle 1'		1	600	8
		Goo Attraction		1.5	2000	20
		Range	Goo	2	-	-
				1	300	2
			Multiplier applied to	1.1	600	8
	N. I. a. a. a. 4	0 1 1 1	Goo earned after	1.2	2000	20
	Magnet	Goo Jackpot	Game Over	1.3		-
			How fast the tongue comes out after		300	2
				1.33	600	8
	Т			1.66	2000	20
			aiming	2	-	-
			Gives Leaky a bigger	1	300	2
				1.5	600	8
	Tonguo			2	2000	20
	Tongue			2.5		-
				0	300	2
				25	600	8
	Max Health	Max Health		50	2000	20
		Max Health health reserve	Tieaiti Teserve	100		•
				1	300	2
				0.9	600	8
	Health	Goo Drain Speed		0.8	2000	20
				0.7	- 200	-
				1	300	2
		Damage	Reduces the damage	0.9	600	8

Upgrade: Goo Magnet

Overview

When unlocked, Leaky has an invisible circle collision around him that pulls Goo balls closer to him. By default, this ability has no effect, as Goo balls need to touch Leaky directly to count.

Parameters

Magnet size float

Diameter of the circle collision. This is the parameter that can upgraded.

Magnet strength float

How fast the Goo balls get pulled towards Leaky.

Upgrade: Goo Jackpot

Overview

Multiplier applied to the match's Goo balls captured at the Game Over screen. By default, the value is 1, meaning it has no effect on the total Goo.

Parameters

Goo Multiplier float

Number to be multiplied to Goo balls. This is the parameter that can upgraded.

Upgrade: Tongue Speed

Overview

Upgraded to give the tongue projectile a faster travel speed. This allows for quicker response time to obstacles, making it easier to progress.

Parameters

Tongue Speed Multiplier float

Number to be multiplied to the base Tongue Out Speed and Tongue Cancel Speed. This is the parameter that can upgraded.

Upgrade: Swing Speed

Overview

Upgraded to make swings more effective going up. It gives an extra boost to help Leaky reach further up, making earlier progress faster. It also makes further Zones possible, as platforms will get too far apart if this isn't upgraded.

Parameters

Swing Speed Multiplier float

Number to be multiplied to the base Swing Speed. This is the parameter that can upgraded.

Upgrade: Max Health

Overview

Bumps the maximum health above the usual 100hp. The player always starts with full health. This helps the player survive more obstacle hits and survive longer in general.

Parameters

Additional Health float

Number to be added to the base Health. This is the parameter that can upgraded.

Upgrade: Goo Drain Speed

Overview

Reduces how fast Leaky loses Goo over time. This also affects the particle droplets visual effect. This helps the player depend a bit less on collecting Goo balls and helps them survive longer.

Parameters

Goo Drain Multiplier float

Number to be multiplied to the base time between each health drop. This is the parameter that can upgraded.

Upgrade: Damage Resistance

Overview

Reduces the damage received when hitting an obstacle.

This helps the player when they are overwhelmed with obstacles, and helps them survive longer.

Parameters

Damage Multiplier float

Number to be multiplied to the base obstacle damage. This is the parameter that can upgraded.

Upgrade: Knockback resistance

Overview

Diminishes how hard Leaky's velocity gets cut when getting hit by an obstacle.

This helps the player to keep momentum even if they get hit, giving them a bit more time to react and not fall at the bottom of the screen.

Parameters

Knockback Multiplier float

Number to be multiplied to the base knockback from obstacles. This is the parameter that can upgraded.

Cosmetic items

Overview

The are dozens of cosmetic items available to be worn by Leaky. They can be bought using Goo currency. (For more info view Goo currency) There is also a chance of unlocking them in a Chest, but can always be bought with Goo currency.

A slew of new items are added to the shop every time the player reaches a new Zone.

Cosmetic items don't affect stats and have no collision.

Cosmetic items are split into different categories to avoid overlapping. One of each category can be worn at the same time.

Categories (

- -Face items (glasses, masks, mustaches, etc)
- -Back items (wings, jetpack, guitar, etc)
- -Hat items (anything on the bulb part, as long as it doesn't hide the heart)
- -Heart replacement (changes Leaky's heart to another model, like a brain, battery, food, etc)
- -Body texture (changes Leaky's texture to different colors and patterns)

Bragging

There should be a feature from the shop and at the Game Over screen where the player can share a snapshot of their customized character + high score to social media. This can add to the player's personal goals within the game, with the benefit of exposing the game to potential new players.







Microtransactions

Overview

Players can spend real money on Goo currency and direct Chest unlocks.

This allows players to skip grinding to get the cosmetic items they want, or skip having to wait for Chests to open to get Alien Tech quickly, allowing for quicker stat upgrades.

Real money	Goo received	Grind skipped	% discount compared to base price	Cosmetic items you can buy with this
		~13 games in Zone 1	-	3 to 5 from Tier 1
0.99\$	2500	or ~3 games in Zone 4		OR 1 from Tier 2
		~60 games in Zone 1	20%	6 to 18 from Tier 1
		or		OR 3 to 6 from Tier 2
		~10 games in Zone 4		OR 1 to 3 from Tier 3
2.99\$	9 000			OR 1 cheap from Tier 4
		~200 games in Zone 1	33%	20 to 60 from Tier 1
		or		OR 10 to 20 from Tier 2
		~30 games in Zone 4		OR 5 to 10 from Tier 3
8.99\$	30 000			OR 3 to 5 from Tier 4

Real money	Direct Chest unlocks	Grind skipped	% discount compared to base price
0.99\$	4	12h wait	
2.99\$	15	45h wait	25%
8.99\$	50	150h wait	38%

Ads

After seeing what is inside a Chest, players have the option the watch an Ad to triple the amount of Alien Technology that was in the Chest. This allows a non-paying player to still return monetary value, and doesn't annoy players who don't want to watch Ads at all or most of the time.



In-game UI/UX

- 1: pause button
- 2: shows how close you are to the next zone
- 3: current health %
- 4: walls take roughly 10% of the screen space on each side, and serve as background for UI elements
- 5: warning indicator for obstacles
- 6: Leaky should fit 7 times horizontally in the playable space

The player can switch to left-handed mode In the options menu to move the elements 1, 2, 3 to the right instead.



Customization menu

tbd

Style



Saturated, flat colors.
Simple 3D shapes.
Strong contrast between gameplay elements and the background.

Mock ups







Tools / Other

Priorities list

This page groups all features that need to be made and ranks them by priority.

Task group	Task	Priority	Description
Control	Leaky tongue throw	***	Leaky should throw his tongue where the player clicks
Control	Leaky swing	***	Leaky should pull himself towards the contact point
Control	Drag input method	**	A different way to aim, drag down to shoot up, instead of just clicking where the tongue should go
Character	Leaky health drain	***	Leaky should slowly lose health
Character	Leaky health regen	***	Leaky should slowly regenerate health after picking up Goo balls
Character	Hurt state	***	If Leaky gets hit by an obstacle, instantly lose HP, and stay invincible to obstacles for a few seconds
Character	Death by health	***	Leaky should die and stop reacting to inputs once reaching 0hp
Character	Death off-screen	***	The game should end if Leaky falls off-screen
Character	Near-death attenuation	**	Health points should fall slower the usual rate when the player is very close to dying
Character	Visual feedback on Leaky of HP dropping	**	The heart in Leaky's head should shrink depending on his health; Leaky should drip goo
Camera	Smooth camera follow up	***	The camera should follow Leaky upward smoothly
Camera	Camera follow bottom rebound	***	The camera should follow Leaky slightly downward if the player is successfully slingshotting down
Camera	Camera shake	**	When Leaky gets hit by an obstacle, the camera should shake
Level	Generate platforms	***	Generate platforms above the screen at a set distance, random width and X position
Level	Generate Goo balls	***	Generate Goo balls above certain platforms that serve as health
Level	Spawn basic obstacles	***	Spawn rockets shooting from bottom and rocks falling from the top
Level	Zone progression	**	After a certain distance, change the parameters of the generated platforms, goo and obstacles
Level	Advanced obstacles	**	Harder obstacles for later zones
Level	Visually different Zones	*	Change color palette, background, and wall models for each Zone
UI	Health %	***	Show the current health % on screen
UI	Obstacle warnings	***	Warning sign showing obstacles' location before they appear
UI	Progression bar	**	Show how close the player is to the next Zone
UI	Results screen	**	After dying, show score & how much Goo currency you earned
UI	Transition screen	**	Between Zones, show a UI transition adding health, showing Zone name and current score
Menu	Main loop: menu, play, die, repeat	***	Full win&lose loop where the player can die and replay pressing a button
Menu	Pause	**	Pause the game by pressing on the button in top-left
Menu	Lefty mode	*	Switch around the UI to show information on the right
Menu	Cosmetic item shop		Menu to allow exchanging Goo currency for cosmetic items
Menu	Closet / customization menu		Menu to allow changing the appearance of Leaky with the items owned
Menu	Upgrade menu	*	Menu to upgrade Leaky's stats

Monetization strategies

Force constant progression. http://www.gamasutra.com/blogs/RobertGreen/20151112/258246/Progression_is_the_new_victory.php
Always show how close you are to a goal

Skinner box techniques. https://levelskip.com/misc/Skinners-Box-and-Video-Games.

Keep moving the goalpost Reward every time a goal is reached Rewards that slow down the more you do it

Optional video ads, significant rewards when watched.

Video ads for a "continue". Video ads to triple loot.

Market Analysis: Game Type

Mobile market

Types of games that do well on mobile:

- -Clickers/Idle games
- -Endless action games
- -Match 3
- -Attack/defend with social aspect

Conclusion: Brain Leak is an endless jumper game and will have aspects of idle games, which in theory should bring fans of both.

Market Analysis: Similar Games

Burrito Bison

Seemingly infinite runner with an actual end, then becomes endless after end-game. Can be played as an idle game for a while, then when you go back to playing, you're noticeably more powerful. During gameplay you always know how close you are to the next goal. Optional ads, rewards with triple loot.

Pac-Man 256

Random chunks of maps to make an infinite level, with more and more enemies the longer you survive. Always reminds you that you're close to the next unlock.

Ads to avoid game over once per match.

Super Mole Escape

Random chunks of maps to make an infinite level.

Single button for a powerup.

During gameplay you always know how close you are to the next goal.

Multiple characters to unlock. Expensive.