

Game Design Document (GDD)

Solseris: Puzzle Fighter (Unity Version PC)

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1: Project Overview

Executive Summary

Solseris is a fast paced, challenging puzzle game that requires fast reflexes and excellent pattern recognition.

Core Gameplay

Spin gems to get matches build your special meter and junk wave. Combine your special abilities with junk waves and overwhelm your opponent!

High Concept: A fast puzzle game in which you match sets of gems to defeat your opponent.

Genre: Puzzle

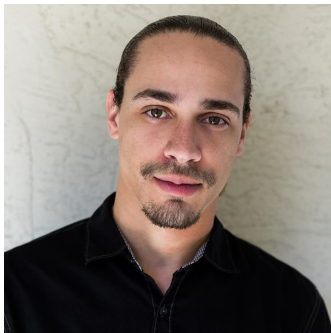
Target Audience: Competitive Gamers

Executive Summary



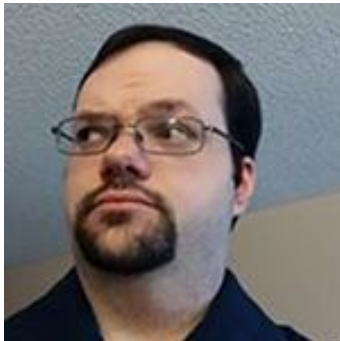
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2: Game Overview

2.1 Gameplay

Players play through levels of varying difficulty to get the fastest completion time. You can compare your score with other users online. There are multiple modes to participate in.

2.2 Story

Sol is on a quest to release Seris from the clutches of Ina in order to save her world from destruction. Ina has stolen Seris with the help of his crew of mercenaries and loyal fighters. Ina has used Seris's energy to not only save their world, but also to empower himself and members of his team. Sol must gain access to 8 gates in order to make it to Seris and release it so it may return to where it belongs.

2.3 Characters

Sol (Protagonist-Overcharge)



- The main character of the game is a female with bronze skin and yellow eyes.
- Core Values - [Clarity](#), [Truth](#), [Balance](#)
- She fights to destroy the Eight Gates which hold the soul of the world (Seris) captive. Born and raised a Soldier, she rose quickly through the ranks of the special forces. She believes in doing what is right by the moral standards set forth in her culture which values balance in all actions. She was chosen for this mission due to her incredible ability to heal ailments and adapt to any situation.
- Ability: Gain a shield, refill vortex and destroy gems in an x shape on your board.

Quotes:

Enter : "Are you ready?"

Special 2: "You can't break me!", "No more tricks!"
8+ Match/Low Block Bonus($\frac{1}{8}$ times): "Yeah!",
"Easy."

Super lvl 1 ready: "I'm on a roll!", "Going strong."

Defeat: "How could I lose focus..."

Victory: "I'm too good!"

Ina (Antagonist-Ultimate Spite)



- The antagonist that protects the eighth Gate, this character is a male android with blue and tan color scheme..
- Core Values - **Deceit, Duty, Ruthlessness**
- Ina has captured the soul of the world in order to harness its energy to save his people. Ina's plan to forsake another world in order to save Ina's own has caused a split among the people of Ina's world. Ina is among the resistance on Ina's planet which calls for the forceful acquisition of the resources needed to prevent the death of the planet. Gathering other strong rebels he has successfully stolen Seris from Sol's system. Ina's hidden motive is to use Seris's power to give himself far reaching power and control over the physical universe.
- Ability: spawns infectious gems that explode, doing damage and spreading the infection

Quotes:

Enter : "Foolish."

Special 2: "Suffer.," "Feel no more..."

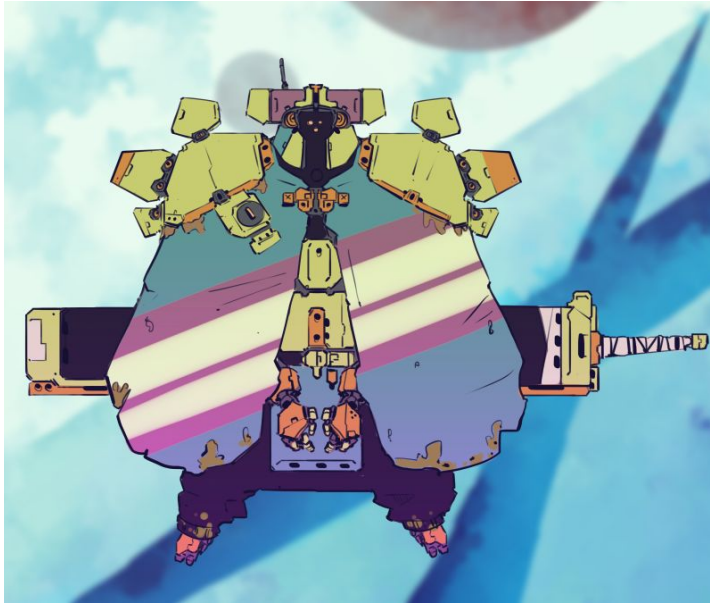
8+ Match/Low Block Bonus($\frac{1}{8}$ times): "Soon...",
"More Power"

Super lvl 1: "We will survive.", "We act swiftly."

Defeat: "I was blind..."

Victory: "No one can stand in my way."

Dragonsworn (AoE Damage)



- A knight loyal to Ina that protects the third Gate. This character has no discernable sex as it is in full armor. The armor is colored red and black.
- Core Values - [Honor](#), [Duty](#), [Strength](#)
- He has sworn his life to protecting the third Gate to ensure the survival of his world. Dragonsworn lead the strike force that was responsible for extracting Seris. A former member of the king's personal guard, he is a strong fighter that has defected to the Ina and the rebel cause. He is a strong believer in action over inaction, prompting his defection.
- Ability: gems on the outer rings of the board deal damage over a specified period of time.

Quotes:

Enter : "I stand strong!"

Special 2: "Burn!", "Submit!"

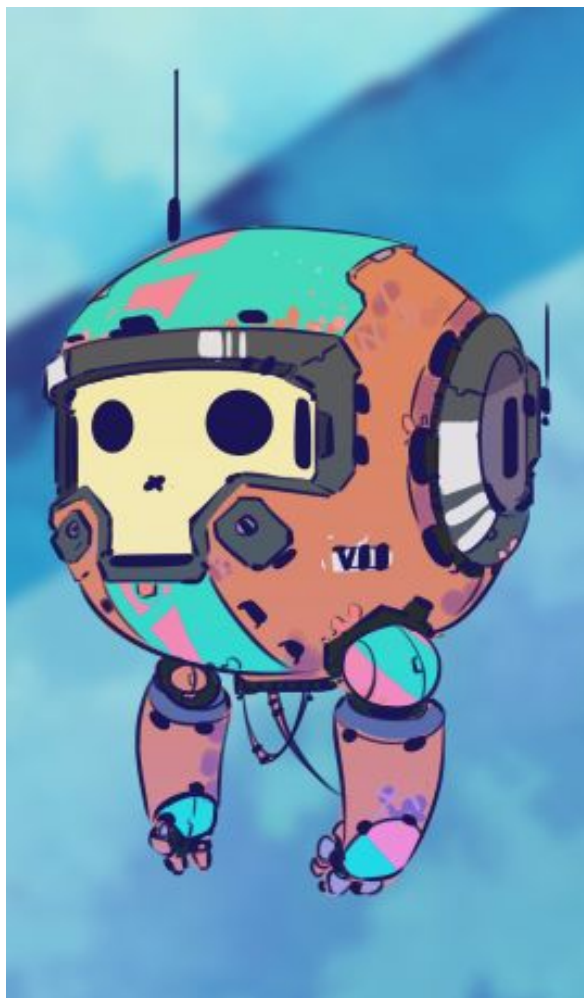
8+ Match/Low Block Bonus($\frac{1}{8}$ times): "Yes!", "Yeah!"

Super lvl 1: "Witness my skill!", "I *will* win."

Defeat: "My honor..."

Victory: "I will not lose my resolve."

Beeboop, the Tutorial Sentinel (Mimic)



- A helper to Sol seen in training, it is grey with rainbow highlights.
- Core Values - [Humor](#), [Knowledge](#)
- Beeboop is genderless and teaches Sol how to effectively combat her enemies. Although Beeboop is similar to other training bots, this one has been given the ability to analyze and mimic enemy powers. Given this ability, Beeboop has the potential to become the most powerful fighter in the universe!
- Ability: Mimics the opponent's ability.

Quotes:

Enter : "You think you're good?"

Special 2: "I'll show you how it's done.", "Observe, your true power."

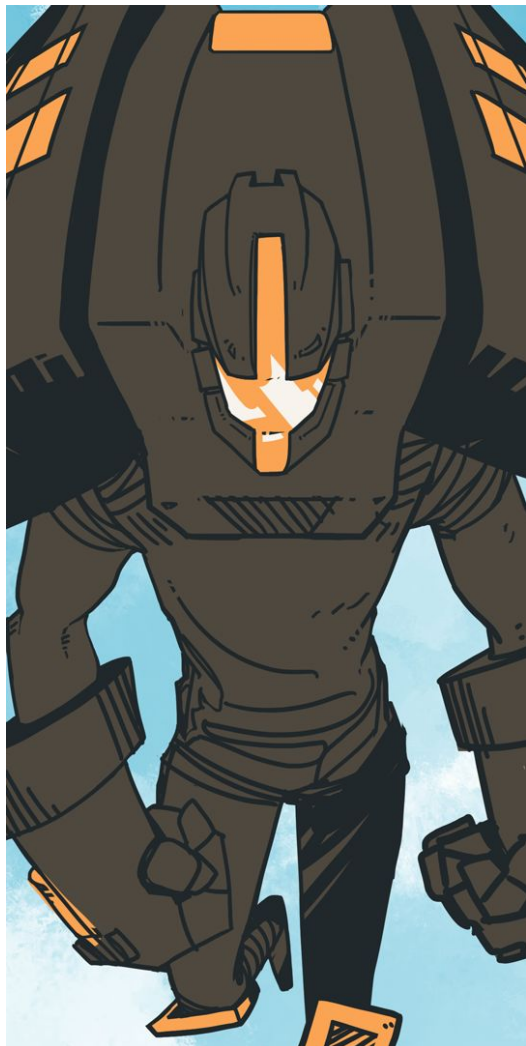
8+ Harmony/Low Block Bonus($\frac{1}{4}$ times):
"Calculated.", "Perfection.", "Easy."

Super lvl 1: "Margin of error is point one percent", "Prepare for hostilities."

Defeat: "Please schedule a repair..."

Victory: "Higher quality than the original."

Tupolev (Bomb)



- A mercenary hired by Ina to protect the first Gate, this character is grey and black with orange highlights.
- Core Values - [Chaos](#), [Conflict](#)
- Tupolev is pilot who enjoys blowing things up. He is in control of the air and space forces for Ina. Originally enlisted by the Royal Army, Tupolev defected to Ina in order to quench his desire for destruction. While his motives seem outwardly simple, he believes there is a great depth in philosophy of Chaos as the sustaining force of the Universe.
- Ability: Fires rockets that destroy opponent's gems to inflict damage to health.

Quotes:

Enter : "(Maniacal Laugh)"

Special 2: "DESTRUCTION!", "(Maniacal Laugh 2)"

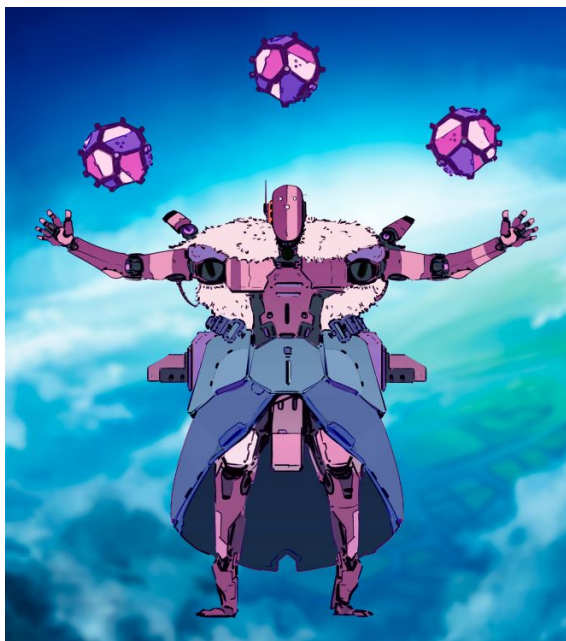
8+ Match/Low Block Bonus($\frac{1}{8}$ times): "Ha!", "Ha!(2)"

Super lvl 1: "Your destruction will be swift", "Armed and loaded"

Defeat: "This truly *is* chaos..."

Victory: "Chaos rules all"

The Grey (Life Drain)



- A powerful fighter who guards the seventh gate, this character is monochrome grey(black).
- Core Values - **Strength, Bravery, Perseverance**
- The Grey is a Humanoid who has his own plans to save both worlds using Seris. Ina used The Grey to power the machine responsible for extracting Seris from its homeland. The Grey is a native to Sol's planet who is sympathetic to Ina's world. He had proposed a plan to share the energy between the two worlds until a more permanent solution could be reached, but this was rejected by the leaders of Sol's planet. Having some influence over the gate's energy controlling properties, he was able to trick Ina into building in conduit system to transfer energy between the two worlds. After learning Sol has destroyed the previous gates, he decides he must stop her from destroying the rest if there is any hope left of completing his goal.
- Ability: Enchants gems to drain HP until they are matched in a group of 6 or more, destroyed by a Supernova, or until the time on the ability runs out.

Quotes:

Enter : "I won't back down"

Special 2: "This is True Power!", "Whatever it takes!"

8+ Match/Low Block Bonus($\frac{1}{8}$ times): "Keep it goin'!", "Ha!"

Super lvl 1: "Now I'll show you!", "Time to make peace."

Defeat: "No one is safe"

Victory: "The Gates are safe"

2.4 Environment

The game is played on a futuristic grid with pulsating lights. This grid represents the Gate associated with each fighter. Powers will originate from the grid to the opponents grid during attacks. In the background there are beautiful space or sky themed paintings. These backgrounds will represent the location the duel is taking place in.

- Sol's Home Planet: Planet Ipsen
 - Sprawling blue sky with white clouds
- Beeboops Training Zone: Planet Ipsen
 - Spherical white and blue grid
- Tupolev's Wrecking Ground: Sector 66
 - Hellish red space background
- Dragonsworn's Sanctum: Planet Chrono outer orbit
 - Pure white sphere with one ring
- The Grey's Gate of Equilibrium: The Master gate
 - Space debris in a monochromatic space
- Ina's Home Planet: Final Gate
 - Small grey planet juxtaposed to huge glowing blue Sphere



3: Gameplay Details

3.1 Screen Elements

- Health Bar
 - Tells player what their current health is
 - Has an after image as it drains
 - See Solseris version 1 gameplay for example
- Gems
 - The pieces the player moves to make Harmonies
 - There are 4 basic gems
 - Blue
 - Red
 - Orange
 - Green
 - There are 4 Singularity gems
 - Blue Singularity
 - Red Singularity
 - Orange Singularity
 - Green Singularity
 - There are Power-up Gems
 - Supernova Gem (All block)
- Grid
 - The space the gems are sitting on. The spin nodes and selector also reside here
- Spin Nodes
 - These are visual cues for the player to aim the cursor on. Or, if they are using touch, to press to spin gems
 - On versions that do not feature mouse and keyboard controls, these will not be present
- Selector
 - Shows the player the gems they are about to spin. use the mouse or controller to move
 - Will contain visual queues for the following

- Low Health Animation
 - States that show what color you are on for your color chain
 - A quick animation for when the Super becomes ready
 - A quick animation that plays when the vortex becomes ready
- Vortex Meter/Trigger
 - Button that starts the Vortex action.
 - Has a charging bar
 - Has an animation and sound queue that signifies that it is ready
- Special Meter
 - This meter shows the player how much longer until they can use their special ability
 - Charges through completing matches
- Level/Time/Difficulty indicator
 - Shows the player the level they are on
 - Shows Time left
 - Shows the current difficulty
- Singularity Wave Indicator
 - Shows the player how many singularities they need to build before the wave sends
 - Indicates when the wave is ready to spawn by animation and ready sound
 - After that, an animation travels from the symbols and to the enemy board at which time the singularities spawn
- Menu/pause button
 - This button pauses the game and opens the menu

3.2 Core Mechanics

- Spinning Gems
 - The player can spin 2x2 sets of gems clockwise or counterclockwise
- Matching Gems
 - Arranging gems in sets of 2x2 of the same color or larger will grant you a Match. If you manage to get an additional color of gems in 2x2 set or larger, they will count towards the same match.
 - Matching gems builds your singularity wave and special meter.
 - 2 matches = Builds one singularity for your wave
 - Super Gains (non vortex matches)
 - 4 match = 5 special
 - 6 match = 7 special
 - 8 match = 10 special
 - 10 match = 15 special
 - 12 match = 20 special
 - 14 match = 25 special
 - 16 match = 50 special
- Spawning Gems
 - Gems only spawn off of other gems that are on the board
 - These are the conditions in which gems spawn:
 - After Achieving a Harmony
 - After Achieving a Genesis
 - After Suffering a Discord
 - After scoring 2 consecutive matches of 4 or less
 - Gems do not spawn if you get a match greater than 4
 - Harmony, Genesis and Discord are exceptions to this rule.
- Singularities
 - Color Singularity
 - Spawned through singularity waves
 - Spawned when the wave reaches that characters max wave value. Default is 3 singularities
 - Can spawn in any open square on the grid
 - Destroyed by including the Singularity in a match that matches the color of the Singularity.
 - Color Singularities deal 50 base damage when they explode. (See [Color Chain Bonus Damage](#) for details.)
- Specials
 - In order to activate a Special ability, the player must complete matches.

- The meter has 2 levels of completion with a total value of 200.
 - level 1 is ready at 100
 - level 2 is ready at 200
- Each match completes some amount of the special meter(See [Super Gain](#)). Additionally, players receive special meter equal to 20% of the damage taken.
- Board Clear bonuses
 - Harmony
 - A Harmony is an objective the player achieves for dropping the number of gems on the board to less than 20
 - The player sends 2 singularities to their opponent when achieving this objective.
 - This objective also spawns waves of gems until there are at least 20 gems on the board
 - Genesis
 - A Genesis is an objective the player achieves for clearing ALL non-singularity gems from the board.
 - The player receives Health, Special, and sends singularities for achieving this objective.
 - Gives 30 special
 - Sends 4 singularities
 - Restores 50 health
 - This objective fills the Vortex meter immediately.
 - This objective also spawns waves of gems in a special pattern until the board is full. To do this, spawn base gems, then run the spawn function repeatedly. Or, simply force spawn a predetermined set of gems
 - Discord
 - A Discord is an objective the player achieves for being the cause of an effect that drops the opponents gems on board to below 20.
 - It will spawn blocks on the opponent's board until there is at least 20 gems on board
 - Spawns 2 singularities on the receiving player's board.
- The Vortex
 - The Vortex pulls all the gems on screen inwards towards the center in a counterclockwise spiral
 - After pulling the gems in as far as they can go, the game checks for matches. If a match is achieved, the Vortex will automatically trigger again.
 - Matches made during a vortex do not add super meter.
 - Matches made during a vortex always continue a Color Chain no matter what the previous match was.

- If a match is made during the vortex, the next match the player makes will always count towards that players color chain. Essentially, it makes the next match wild.
- The Vortex ability is recharged every 6 seconds and the cooldown starts immediately after the ability is used.
- Color Chains
 - The player gains +1 color chain every time the player makes a match that includes gems of the same color as gems in the previous match. This chain has a max value of 50.
 - If you get a match with 2 colors in it, the next match will continue your chain as long as it contains at least one of the colors
 - Vortex matches count as wild matches. They will never break your color chain and any match made after Vortex match counts towards your color chain.
 - Breaking your color chain reduces the chain to 25% of its current value
 - Color Chains increase the damage on singularities you send to your opponent.
 - Color Chain bonus damage:
 - 4 - 8 = +25 total bonus
 - 8 - 16 = +40 total bonus
 - 16 - 20 = +45 total bonus
 - 20+ = +50 total bonus

3.3 Abilities(Names are subject to change)

1. **Sol: Infuse** - Sol instantly destroys the (x shaped 8, big x shaped 20) using her cursors position as the center and fills your Vortex Meter. (the blocks destroyed do not count as matched, however, any singularities destroyed do go towards your "Singularities Destroyed" stat)
2. **Dragonsword: Imposing Presence** - After a 2 second delay, Dragonsword deals 1 damage per second for each gem outside of the inside (6x6, 4x4) zone for (3,4) seconds
3. **Beeboop: Copy Zone** - Beeboop copies your opponent's ability and uses it against them. Copies at the the level of special used by Beeboop.
4. **Ina: Ultimate Spite** - Ina infects 3 random enemy gems. These gems explode after (7, 5) seconds, dealing (4,6) damage and infecting all surrounding gems. infected gems can still be matched with their original color, similar to colored singularities.
5. **Tupolev: Rocket Barrage** - Tupolev fires (2,4) rockets at your opponent's grid that explodes and clears a (3x3) zone after 4 seconds (there is a warning zone that appears immediately and lasts for 4 seconds) dealing (10, 12) damage for each gem it destroys. This ability targets the grid section that the top left corner of your cursor is pointing to for the center of one of the blasts. The rest of the blasts will target a random area. Blasts will not overlap and gems will not spawn inside the blast zones. If the top left of the cursor is pointing to an invalid area, the blast will pick a random zone.
6. **Grey: Gem Drain** - Grey drains your opponents gems in a (3x3, 5x5) area for (5, 8) seconds. During this time, gems do 2 damage per second and require at least 6 gems to create a match. The gems in the area are drained when the area is chosen. This ability targets the grid section that the top left corner of your cursor is pointing to as the center for its effect. It is an effect that is applied to gems once upon use. If the top left of the cursor is pointing to an invalid area, the effect will pick a random zone. it is not an area that stays on the board.

3.4 Power-ups

- Multiplayer Power up spawn once every 15 seconds. The power up that spawns is the same on each board
 - Supernova Gem
 - Can harmonize with any gem. Destroys all gems of the colors included within the match
 - Blast Gem
 - Destroys gems in a 3x3 area when matched
 - (To be expanded upon)

3.5 Multiplayer

Description

Compete in a head-to-head competition against your friends in an all out puzzle frenzy!! Quickly match gems to defeat your opponent in a competition of reflexes, speed, and wit!

Multiplayer Game Modes

Default - The default rules are the rules used in matchmaking and cannot be adjusted. The default rules are as follows:

Time Limit - 99 seconds
Set Count - Best of 3 rounds
Difficulty - Hard

Custom - Battle with player chosen win conditions! Have any combination of rules

Rules

(can be set for a custom game)

Time Limit - Survive with more health or defeat your opponent(99 seconds, No Limit)

Difficulty - Normal, Hard (determines the number of gem colors and singularity damage)

Gameplay

Get matches to gain health, fill your special meter, and build singularity waves to send to your opponent.

If your health drops to 0 or below you lose the game.

Use your special ability to disrupt your opponent or make more devastating combos!

3.6 Time attack

Description

Select a character and play timed matches at varying difficulty. The goal is to defeat as many foes in single round matches as possible before losing all your health or the timer runs out.

Time Attack Game Modes

Normal - 3 Colors of gems (Red, Blue, Yellow). Normal base damages on hazards.

Hard - 4 Colors of gems (Red, Blue, Yellow, Green). Higher base damage on hazards.

Rules

- Time Limit Choice - 2, 3 or 5 min
- Games are 1 round
- Difficulty Choice - Normal, Hard

Gameplay

Get matches to gain health, fill your special meter, and build singularity waves to send to your opponent.

If your health drops to 0 or below you lose the game.

Use your special ability to disrupt your opponent or make more devastating combos!

- **Unique Mechanics**
 - You gain 100 health between matches
 - After winning 4 matches, the difficulty increases(if possible)

4: Aesthetics

4.1 Color Scheme

The game should stick to a cool colors for background elements as well as less active foreground elements. We will use warm colors for the more active on screen elements and some accents.

- Main Colors: Blue, Orange, White, Blue-Grey, Red, Space

4.2 Sound Effects

The number that goes after each item is the variations on the same sound needed. I will most likely transfer this information into a spreadsheet.

- Menu Sounds
 - menu forward
 - menu back
 - option change
 - option select 3
 - screen transition forward
 - screen transition back
 - pause menu sound
 - Opponent found
 - Connection lost
 - Searching for connection
- In game UI sounds
 - timer countdown 5
 - gem spin 4
 - selector move 4
 - supernova use 2
 - power use
 - Vortex use
 - vortex charged
 - super charged
 - health low warning
 - singularity wave warning
 - 4 match 2
 - 6 match 2
 - 8+ match 1
- Game Object sounds
 - Singularity spawn sound
 - Singularity 1 second to explosion sound
 - Singularity destruction sound
 - Singularity explosion sound
 - Block Spawn sound 2
 - All gem spawn
 - All Gem activation
- Bonus sounds
 - 4 Vortex match 1
 - 6 Vortex match 1

- 8 Vortex match 1
 - 12 Vortex match 1
 - 16 Vortex match 1
 - Vortex match sound
 - Harmony sound 2
 - Genesis Sound
 - Achievement Unlocked sound
- Post game sounds
 - statistic sounds(numbers counting up)
 - unlock sound - achievement
- Character sound(each one of these sounds is per character)
 - Taking damage grunt
 - Entry sound
 - Death sound

4.3 Music

- Gameplay Music
 - Time attack
 - 2min - End of an Era
 - 3min - Kaleidescape
 - 5min - Solseris Theme
 - VS
 - 70% chance - End of an Era
 - 15% chance - General Relativity
 - 15% chance - Solseris Theme
- Menu Music
 - Main Menu - Helium Sky
 - High Scores - Oath of Winter

4.4 In-Game pop-ups

- Current Color Chain bonus gained on match
 - Neon blue text with black outline
- Health gained on match
 - Neon green text with black outline
- Super gained on match
 - Neon yellow text with black outline
- Health lost
 - Neon red text with black outline
- Harmony pop up
 - A graphic with the words Harmony on it.
 - Creates an animation with the game board. perhaps a pulse throughout the grid lines
- Discord pop up
 - A graphic with the word Discord on it.
 - Creates an animation with the game board. perhaps a pulse throughout the grid lines
- Genesis pop up
 - A graphic with the word Genesis on it.
 - Creates an animation with the game board. perhaps a pulse throughout the grid lines. Also creates an animation involving the background.

5: Game Controls

5.1 Game Controls

Default Controls

Keyboard

(w/ or w/o mouse)

Arrow Keys - Move Selector 1 space
s+Arrow Keys - Move Selector 4 spaces

Left Click/d - Spin Counterclockwise
Right Click/f - Spin Clockwise

The following controls also have clickable on screen controls

T - Power
Spacebar - The Vortex

Escape - pause
F5 - restart

Controller

Button 1 - Spin Counterclockwise
Button 2 - Spin Clockwise

DPad/Left Stick - Move Selector 1 space
Right Stick - Move Selector 4 spaces

Button 4 - Power
Button 3 - The Vortex

Button 9 - pause
Button 10 - restart(this button must be set to active in the settings)

5.2 Settings

Music Volume
Sound Effect Volume
Gamma Slider
Key Binding