



GAME Design Document

GD2 FIRST CONTACT PROJECT

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I- BASIC INFORMATION

A- DATA SHEET

Genre : Platformer 2D

Platform : PC

Number of players : 1

Target : Amateurs of platformers








B- 3C

Camera : 2D scrolling

Character : The player controls a blob-like creature named Spouic who can walk, jump, dash and collect bebiz.

Controls : Keyboard, Controller

Action Mapping Button

Action	Controller Input	Keyboard / Mouse input
Movement		AD / QD / Arrows
Power activation	 	Shift / X
Jump / Double Jump	 	Spacebar / C
Cling (on wall)	 (Hold) or  (Hold)	Left Ctrl / V

C- Concept

In "Almighty Goosmic", the player embodies a **creature named Spouic** that has to make good use of **elemental tiles** granting them **special abilities** by a simple **touch**, helping them make it through challenging **puzzle-like levels**.

D- Narration

When Spouic, a **lost creature**, is granted powers by the **embodiment of cosmos** to save the universe from collapsing, they're suddenly able to interact with **cosmic breaches**, allowing them to **control their environment** so that they fulfill their sacred duty.

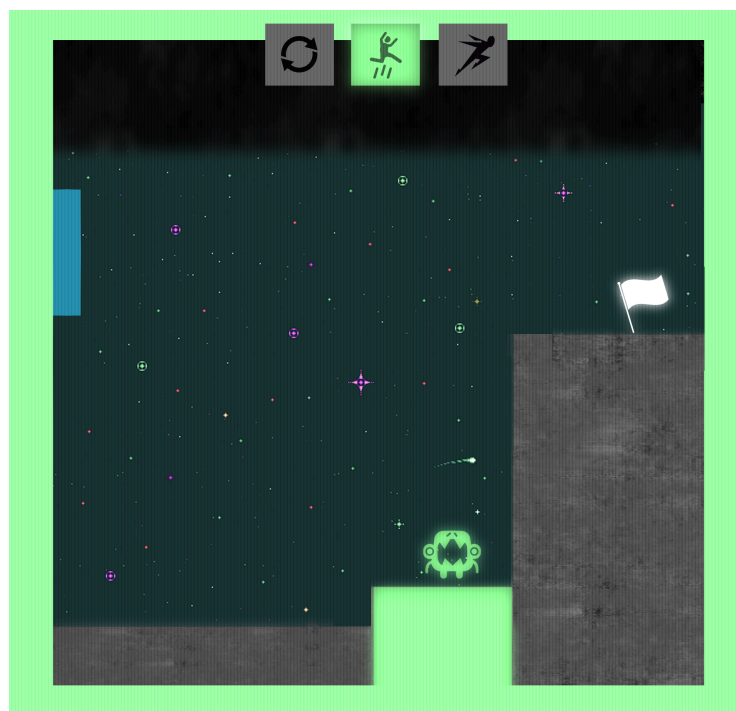
E- Win/Lose conditions

- **Win** : Find a way to reach the end of every level
- **Lose** : Make contact with a harmful tile (void)

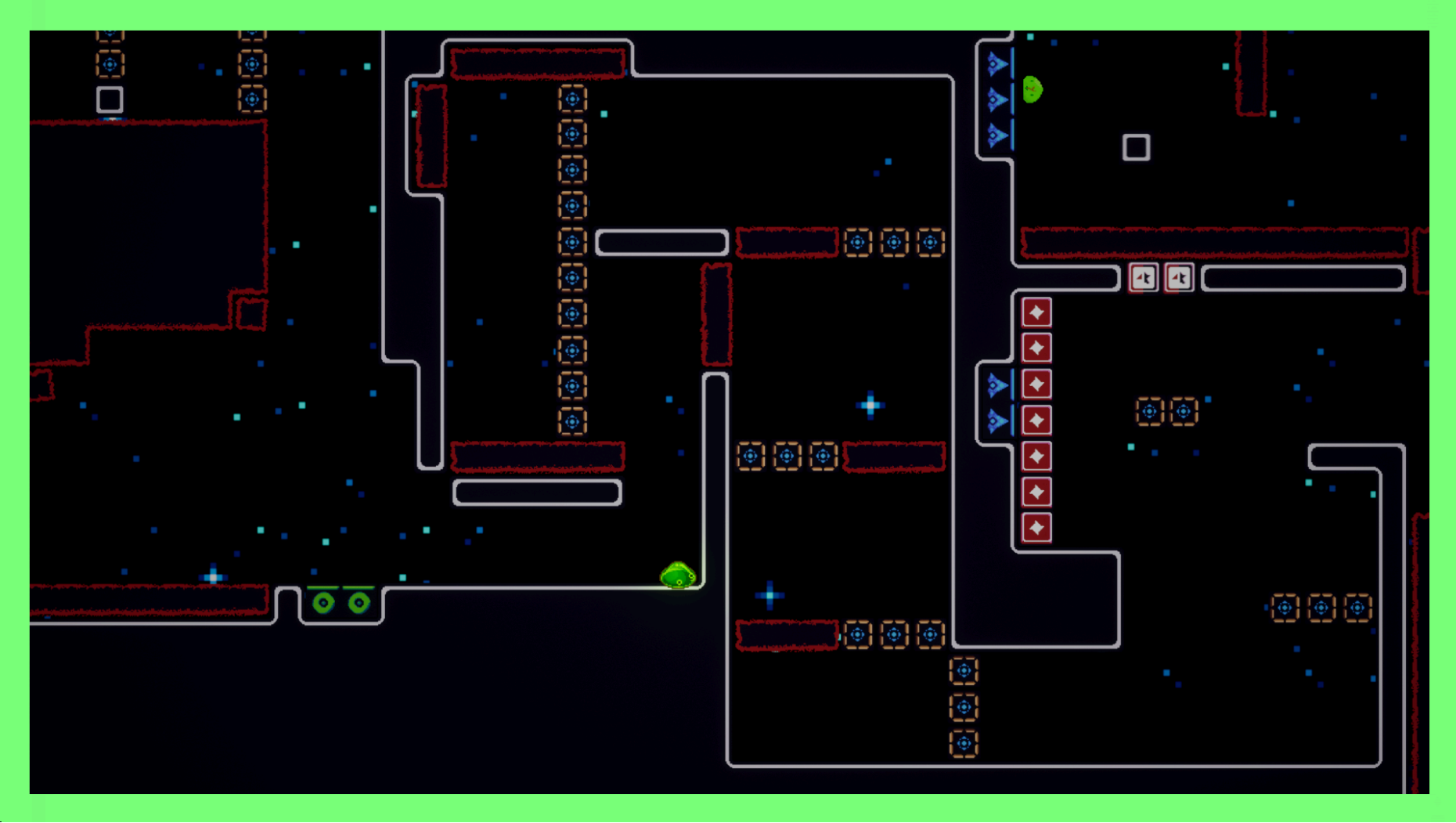
F- USP

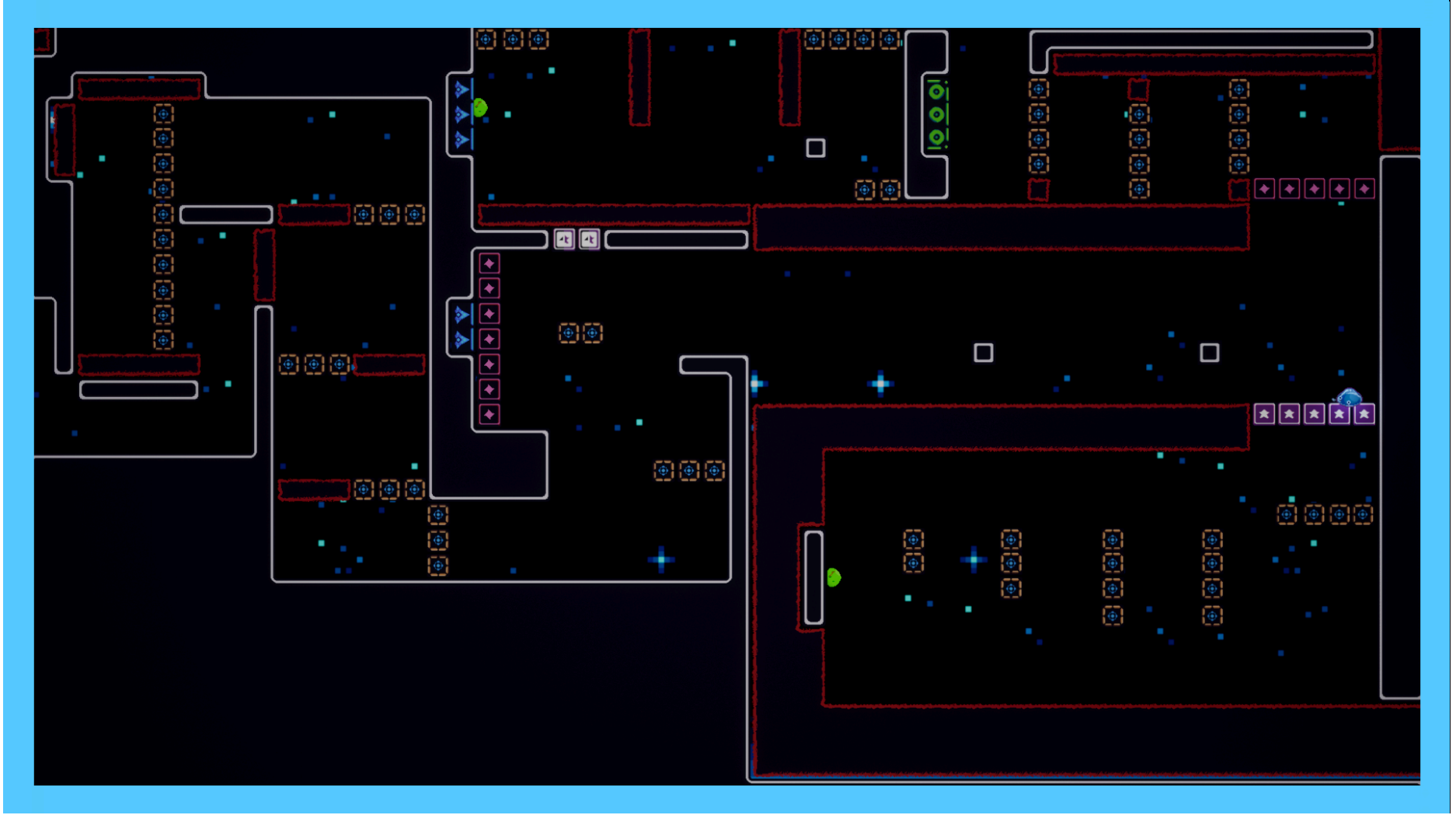
→ "Almighty Goosmic" is a game where the player can obtain abilities by touching surfaces to overcome puzzle-like platform sections.

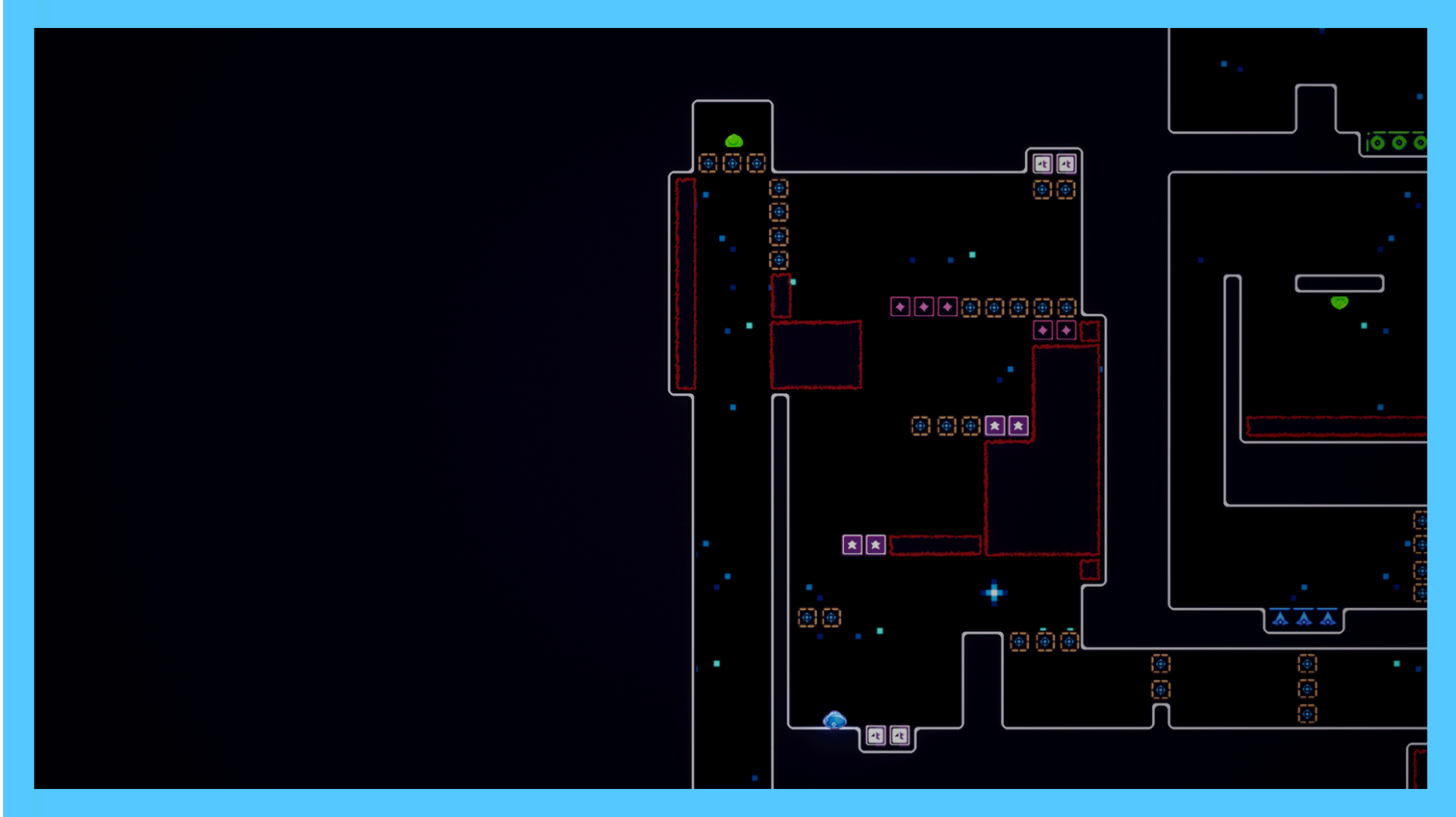
G- Fake Screenshot



H- Screenshots







II- Vertical Slice—Scope

Minimum Scope

Demo playtime : -5 min

Number of **levels** : 1 (Sandbox level)

Number of **mechanics** : 3 (Dash / Jump / Crumbling Tile)

Context experience difficulty : Early

Objective Scope

Demo playtime : -10 min

Number of **levels** : Min. 1 complete level

Number of **mechanics** : 5 (Grab / Dash / Jump / Crumbling Tile / Switch Tile)

Context experience difficulty : Early-Mid game

III – MECHANICS & SYSTEMS

A- Mechanics

→ Sticky body

- The player can stick to a surface. To do so, they have to maintain the Left CTRL button/ left trigger in the direction.
- Sticking to a wall resets an ability (Jump or Dash)

→ Four-sided Dash (Tiles mechanic)

Unlocked when touching a **Dash Tile**.

- Allows the player to move quickly in a short amount of time.
 - Possibility to dash in 4 directions (up / down / left / right), giving the player a strong impulse in the direction.
 - Can be used on the ground and in the air (can only be used once while in the air.)
 - Requires the player to land, to cling, or touch a Dash tile to be able to dash again.
- Can destroy crumble tiles
Resets if the player destroys a crumble tile.

→ Double Jump (Tiles mechanic)

Unlocked when touching a **Jump Tile**.

- The player has the ability to double jump in the air.
 - Requires the player to land, to cling to a surface or touch a Jump tile to be able to double jump again.

→ Bounce Jump (Tiles mechanic)

Unlocked when touching a **Bounce Tile**.

- The player has the ability to bounce on the ground & prevent damage from below.
 - Requires the player to land, to cling to a surface or touch a Bounce tile to be able to bounce again.

Player Values (Unreal Values)

Capsule size :

Capsule Half Height : 53,341091

Capsule Radius : 53,341091

Character movement :

Gravity Scale : 3.0

Ground Friction : 8.0

Mass : 600

Jump Z Velocity : 900

Air Control : 0.8

Air Control Boost Multiplier : 2

Air Control Boost Velocity : 25

Falling Lateral Friction : 6.65575

Jump :

Power 1st Jump : 1400

Power 2nd Jump : 1600

Power X Grab Jump : 1200

Power Z Grab Jump : 1600

Dash :

Dash Power : 1800

Temps Dash : 0.2s

B- Systems

→ Power Shifting

By fusing with a Power Tile's element, the player has the permanent ability to change its power depending on the type of the tiles touched.

→ Power Tiles

Each tile is a chunk of a random place in the cosmos, each with their own color and aesthetic. The player gets a specific power by stepping on a power tile.

★ Dash tile

World : *Cloud County*

Visual identity : BLUE + YELLOW HUE

Power : Four-sided Dash

★ Jump Tile

World : *Mushroomland*

Visual identity : GREEN + RED HUE

Power : Double Jump

★ Bounce Tile

World : *Duckland*

Visual identity : YELLOW + BLUE HUE

Power : Bounce Jump

★ Smoke Tile

World : *Industry*

Visual identity : BLACK + GREY

Effect : Suppress the actual player's skill.

→ Environmental Tiles

Some tiles have other specific effects on the player or other tiles

★ **Neutral tiles**

World : *BlandVille*

Visual identity : GREY HUE

Effect : Resets the player's power

Variation : Moving tile

★ **Void tiles**

World : *Deep Space*

Visual identity : BLACK or PURPLE HUE

Effect : Kills the player

★ **Crumbling Tile**

World : *Tunnelsborough*

Visual identity : GREY HUE + CRACK

Effect : Disappears after 0.8 seconds after the player touches them; reappears after 4 seconds. The player is able to dash through them. Hide tiles beneath them as long as they stand (only if the room beneath is fully closed by walls).

★ **Switch Tile**

World : *Crystal Kingdom*

Visual identity : RED / PURPLE

Effect : Interchanges Stellar Tiles state. The player keeps their ability.

★ **Stellar Tile**

World : *Crystal Kingdom*

Visual identity : PINK/PURPLE + WHITE HUE

Effect : Is active when Stellar-bis tiles are inactive.

★ **Stellar-bis Tile**

World : *Crystal Kingdom*

Visual identity : PINK/RED + WHITE HUE

Effect : Is active when Stellar tiles are inactive.

★ **Rotation Tile**

World : *Clock World*

Visual identity : BROWN

Effect : Rotate the whole level to 90° / 180° (depending on the level)

★ **Antigravity Tile**

World : *Civet Zone*

Visual identity : PINK/RED + WHITE HUE

Effect : Invert the player until it touches another antigravity tile.

★ **Phantom Tile**

World : ???

Visual identity : Grey

Effect : Player can pass through if it doesn't have any power

→ **Bebiz**

Bebiz are a type of collectible, the player must gather as many as they can to unlock extra-levels.

→ **Checkpoints**

In normal mode, when the character dies, it reappears on the last checkpoint activated.

In the "No death mode", unlockable once a level is finished in normal mode, the level doesn't have a checkpoint.

Gameplay Situation : Stellar Tiles 2

In this situation, the player has to make good use of the switch tiles, jump ability, dash ability and stellar tiles to reach their goal.

To do so, they must stay aware of their effect : if one stellar tile is activated, the other one disappears until the player touches a stellar tile again, making room for puzzle-like situations.

This situation also features void, crumbling and dash tiles to create interesting combinations and avoid using a single tile mechanic.

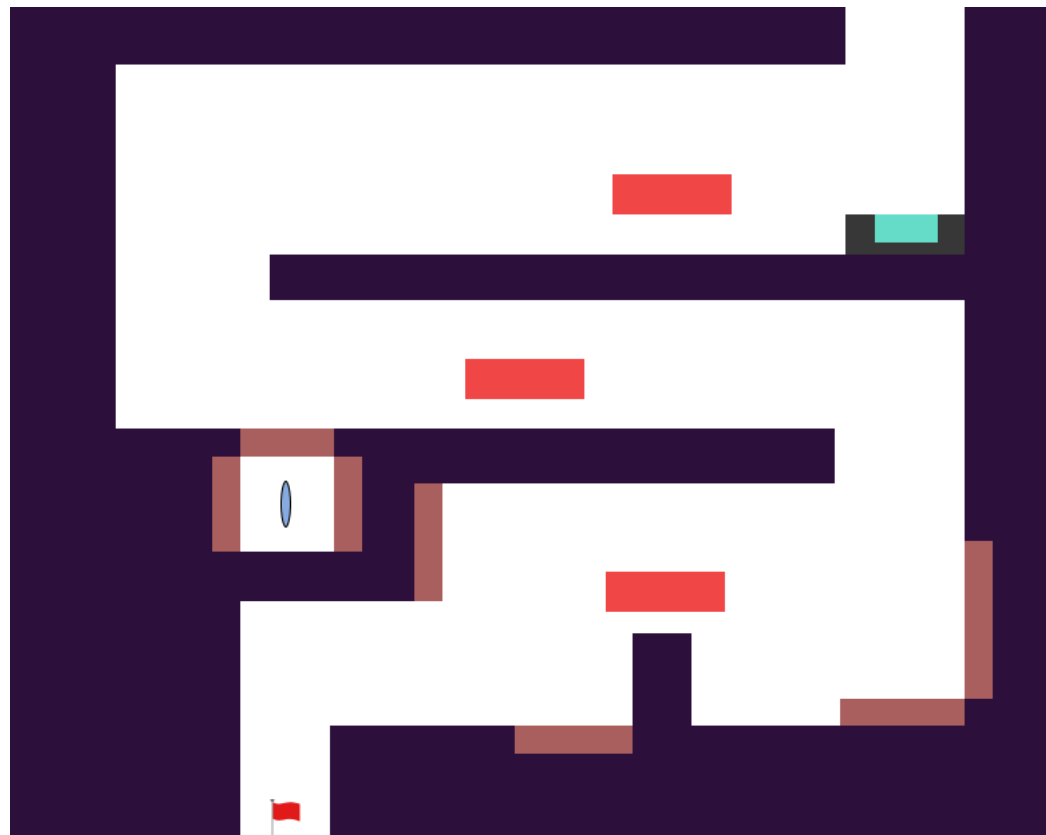


Gameplay Situation : Moving Tiles

In this situation, the player has to make good use of moving tiles and crumbling tiles to reach their goal.

They must anticipate the moving tile's movement at multiple occasions, using the occasional crumbling tiles to gain access to new areas (or collectibles) and avoid falling into void tiles.

The given dash power is also a useful tool when encountering these crumbling tiles - and combining them with the moving tile's power reset effect grants access to fun gameplay scenarios like in this situation.

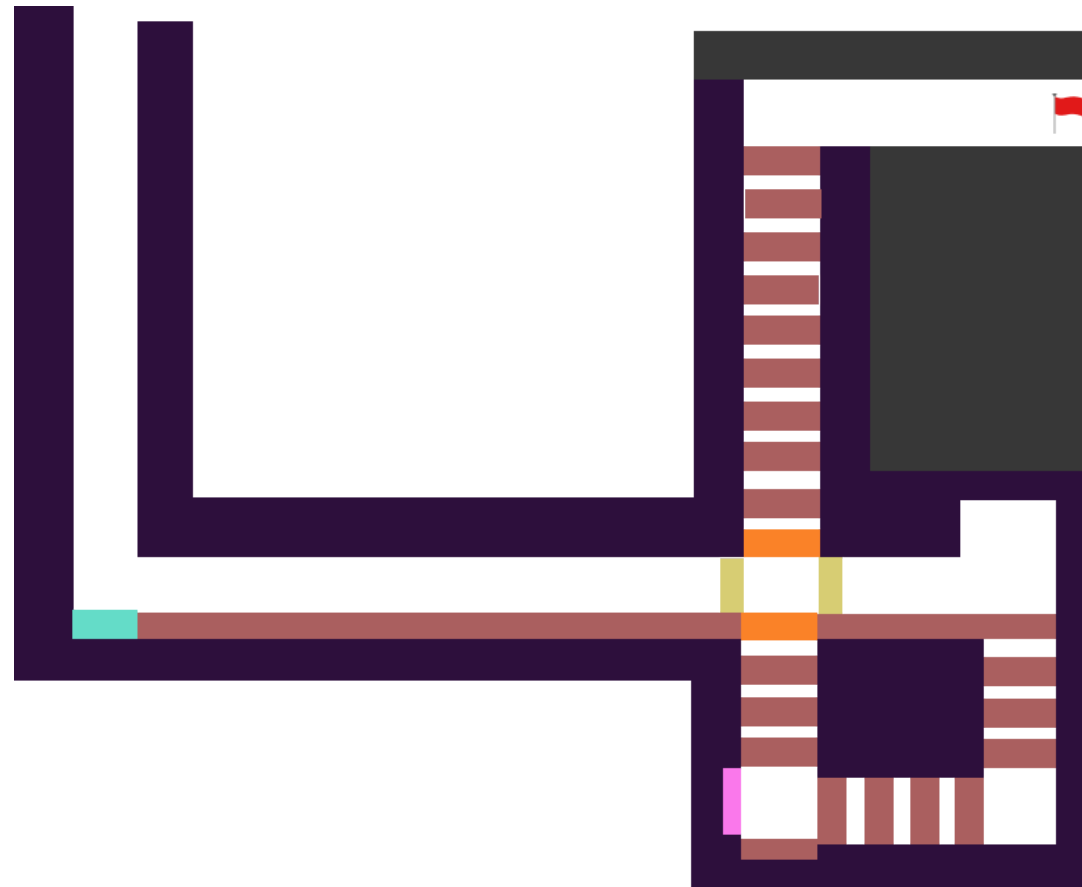


Gameplay Situation : Crumbling Tiles

In this situation, the player has to make good use of their dash ability and crumbling tiles to reach their goal.

This fast-paced and fun example allows us to see the full use of the crumbling tile's power reset effect as the player is urged to dash through them as fast as possible to avoid falling into void tiles.

With the addition of a switch tile in between the crumbling tiles, the player is also prompted to always be aware of their surroundings, no matter the level structure.

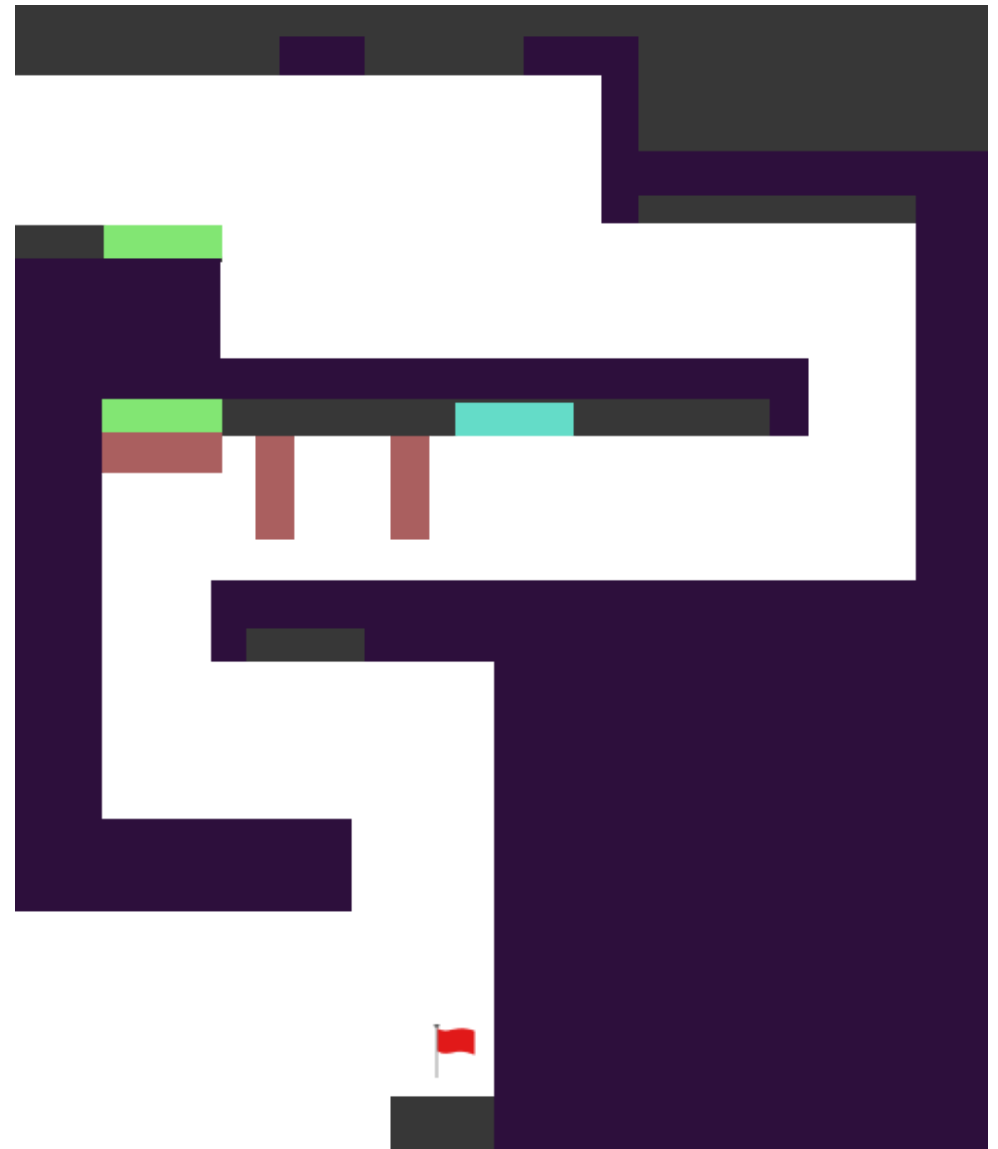


Gameplay Situation : Jump tiles + Dash tiles

In this situation, the player has to make good use of their dash ability, their grab ability and their jump ability to reach their goal.

This level puts in context three previously seen abilities to their fullest, urging the player to test their own abilities to avoid falling to their death.

To achieve this, neutral tiles and crumbling tiles allowing the player to reuse their powers also appear within the situation.



B- Details

Composition

Each level is composed of micro challenge compounds on single-screen situations. A checkpoint is placed every 2-3 challenges.

Extra-Challenges

As additional challenges, 8 Bebiz are present to reward the player from overcoming harder challenges.

The challenges require backtracking from the player, but are always optional to not break the player's game pacing.

Level suggests a critical path, but some challenges can be done with other skills than the one intended (by avoiding a tile).

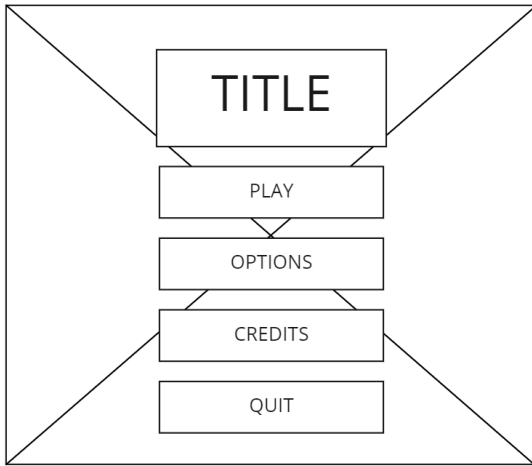
Game Modes

The whole game is power-play friendly, when the player finishes the game, it unlocks a "No Death-mode" in which levels are empty of checkpoints.

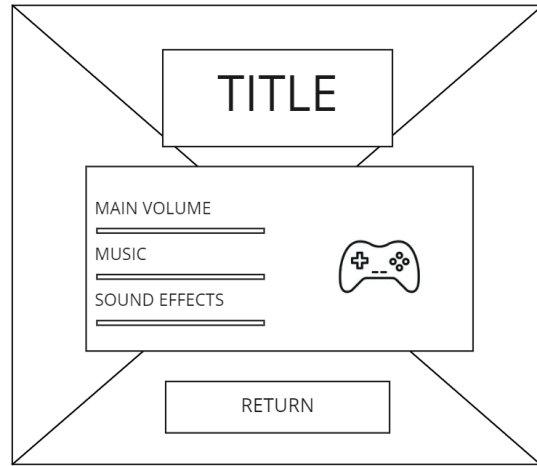
Additionally, the game proposes a hidden timer for each level / the entire game, displayed at the end of it, for a speed run perspective.

V- UX/UI

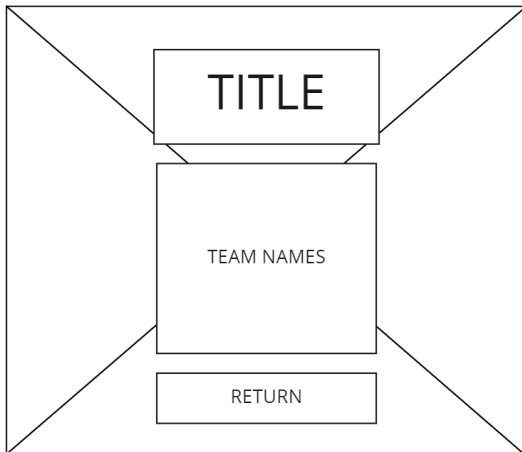
A- UI Wireframes



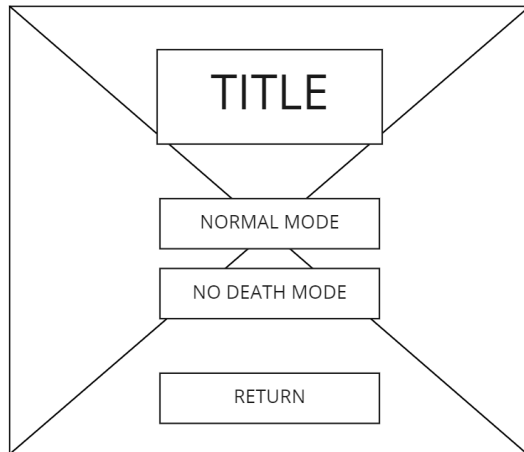
MAIN MENU



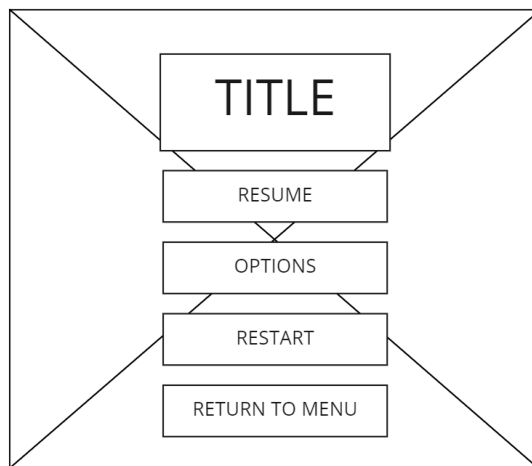
OPTIONS MENU



CREDITS MENU



GAME MODES MENU



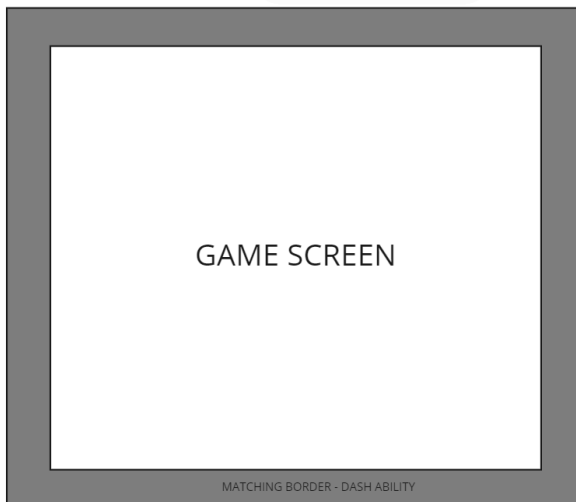
INGAME MENU



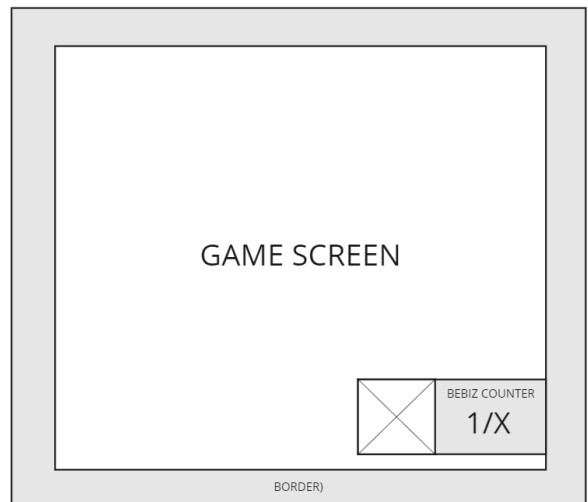
GAME SCREEN - NO POWER



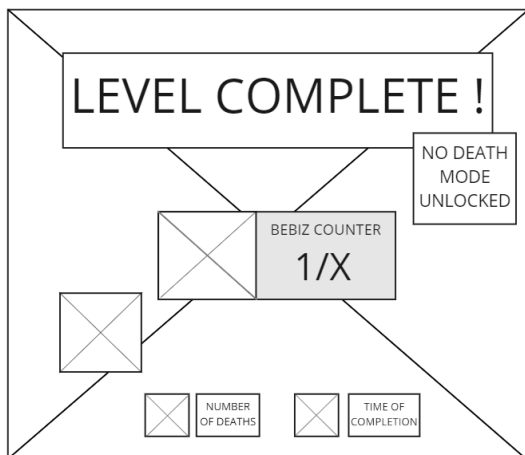
GAME SCREEN - JUMP POWER



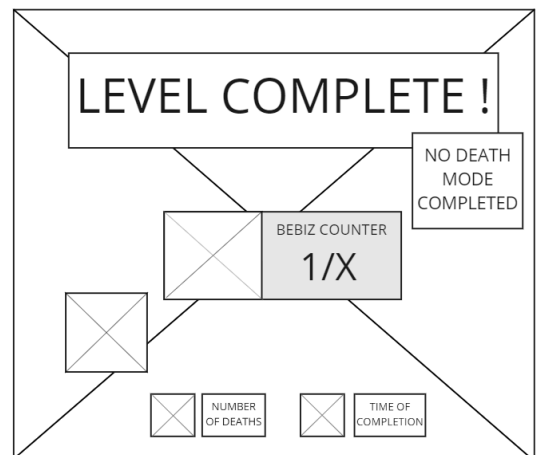
GAME SCREEN - DASH POWER



GAME SCREEN - BEBIZ COLLECTED



ENDING SCREEN - NO DEATH MODE UNLOCKED



ENDING SCREEN - NO DEATH MODE COMPLETED

B- Onboarding

Discovery : When the player launches the game, they are first given **context** about the story in an **introductive cinematic** so they can understand the situation they're in and the characters that will be relevant to them. Once given control over **Spouic**, they're free to advance within a first tutorial level designed to familiarize themselves with the game's **main mechanics** (controls, power tiles, danger zones...), all in a **relatively safe area** to facilitate their **learning** and **immersion**.

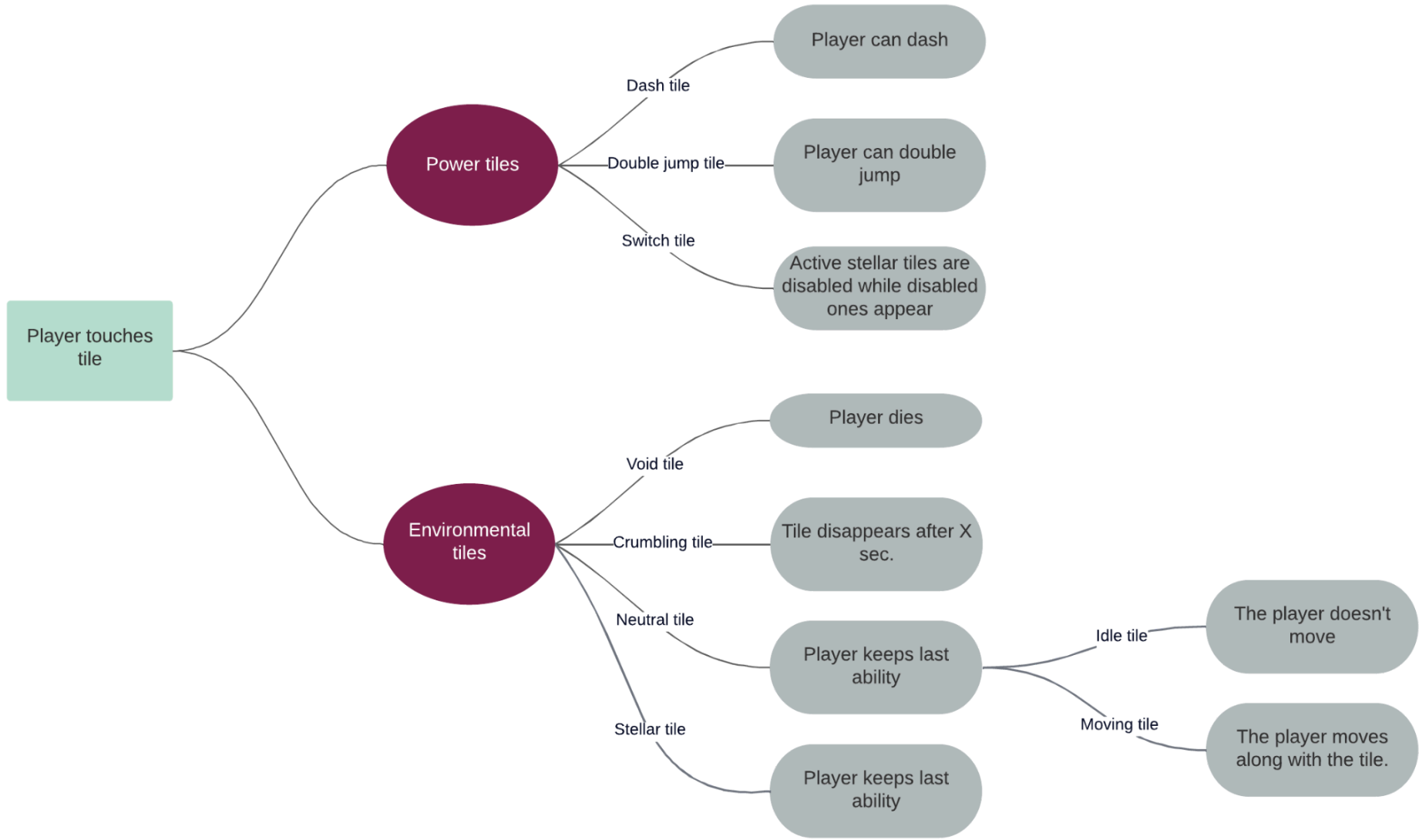
Learning : The game's controls are **communicated early on** in the first level so that the player can incorporate them quickly and make good use of their **various declinations** offered through the power tiles. Since there are not many of them, the player is able to naturally get used to them and quickly go with the level's flow.

Moreover, each mechanic is presented within **a specific narrative context** so that the player can integrate them organically. For example, whenever Spouic first faces a wall that is too high for its usual jump, the Embodiment of Cosmos will appear and grant it the power to use a **Jump Tile** that will appear nearby. The same goes with the **Dash Tile, Crumbling Tile, Stellar Tiles...**

Furthermore, each mechanic is taught to the player in **separate instances**, so they don't get confused while testing them out, while they'll be urged to combine them later in the levels once they've grown **confident enough** in their skills.

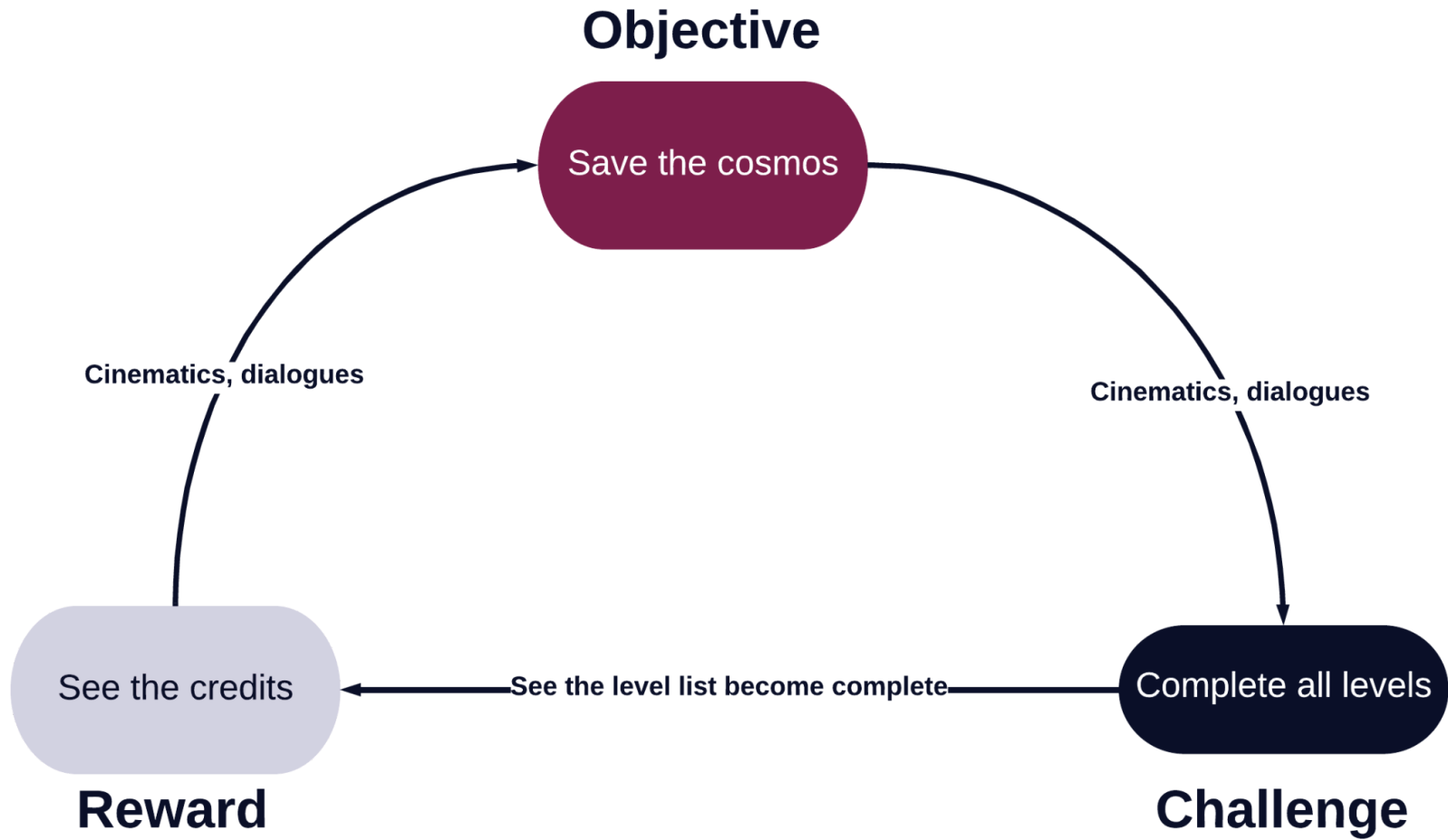
Immersion : All in all, Almighty Goosmic's gameplay is **pretty immersive** as the player's actions often have a **direct, visual** impact on the screen (the border's color changes when picking up abilities from power tiles, Spouic's body interacts with its surroundings either by changing color or being squished...).

Moreover, the visuals of the game have a **narrative significance** doubled by a **mechanical cohesion** (chunks of cosmic worlds peeking through the power tiles), making the game **visually** and **physically juicy** and easy to get into. When the game begins for example, the introductive cinematic immediately sets up the game's mood and aesthetic, thus beckoning the player to immerse themselves within the narration and gameplay in a natural, instinctive way.

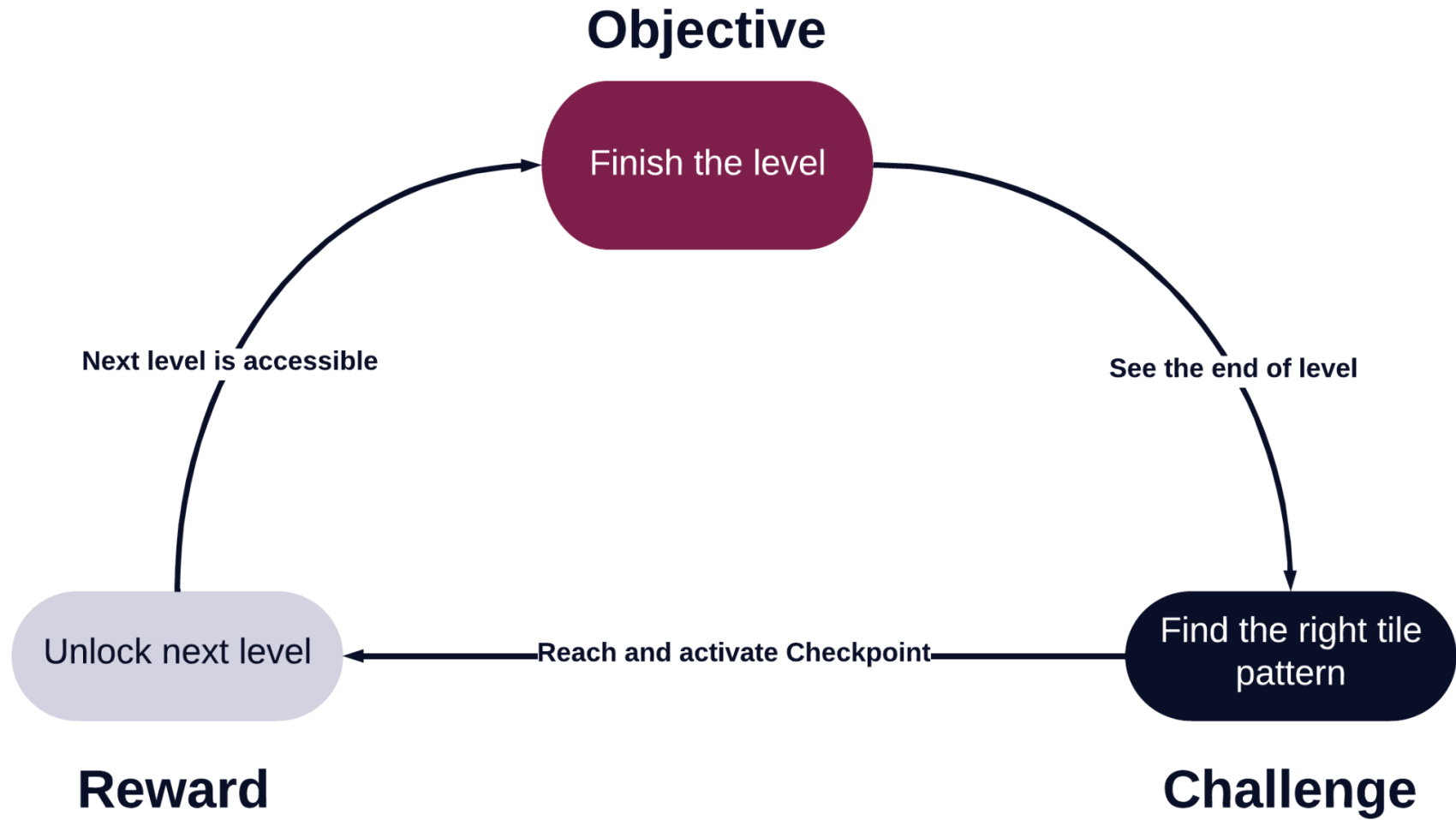


VI- GAME LOOPS

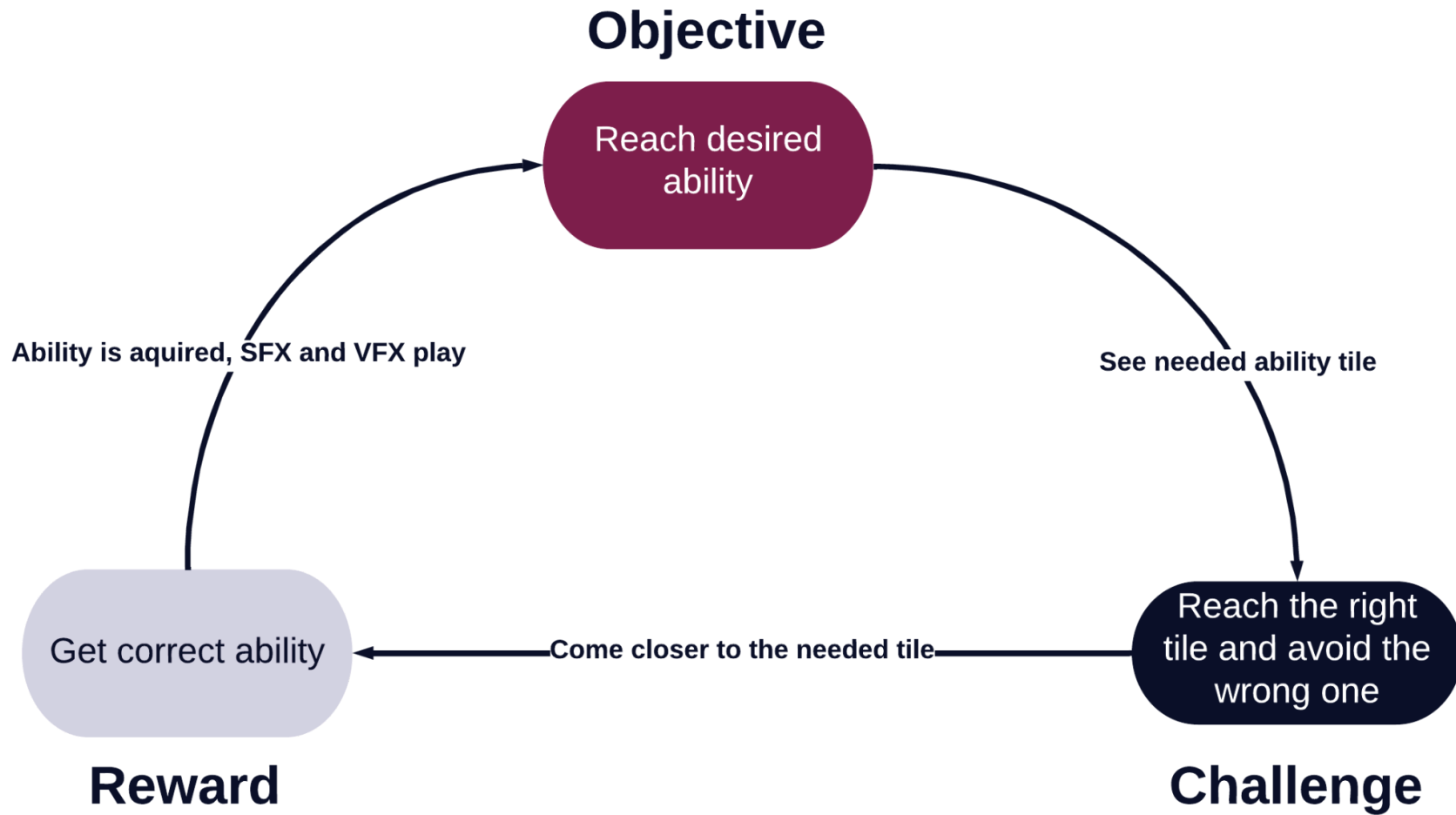
Macro



Middle



Micro



VII- REFERENCES

A- Gameplay References



Celeste - Dash Mechanic



The Legend of Zelda : Link's Awakening - Switch mechanic



Megaman - Level Design

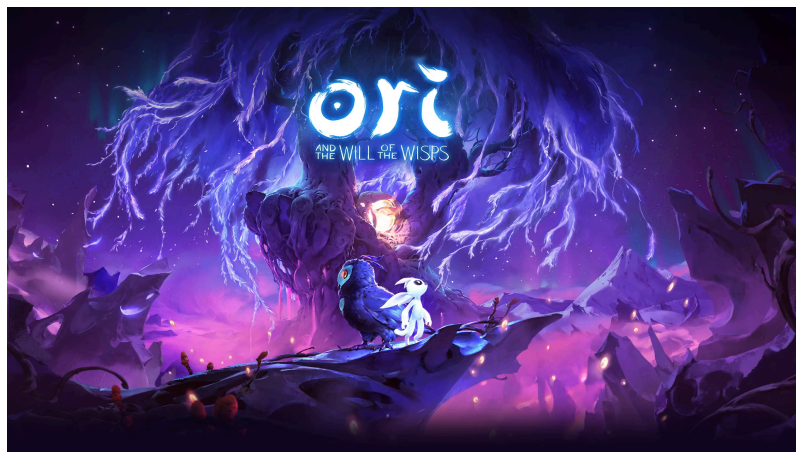


WWWWW

B- Artistic References



Toodee Topdee



Ori



Wakfu