

Game Design Document

Rat Race

In a factory that kills and replaces its cloned workers by the second, one "Lab Rat" can't stay dead. Seeking his freedom, he will platform his way through these hellish factories.



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1. External Goal

The external goal of Rat Race will be to appeal towards its target audience – thus becoming a hidden-gem game in a smaller market. This means that Rat Race will become a niche in a strong market. By becoming this niche, Rat Race hopes to foster a speedrunning community due to its streamer-friendly design.

I aim to get critical acclaim for the games 'Fair' difficulty, Gathering positive reviews and a 'Very Positive' rating on steam. (would it ever get released).

All these points connect to create a replayable, well-known product.

2. Internal Goals

The internal goals of Rat Race will be to enforce a 'difficult, but fair' difficulty level, making it a game that has rage-educing moments, but does not feel unfair. This will be further enhanced with a solid movement system, not having floaty or poor controls. Every small movement the player makes will be visible and have instant feedback.

The game will be high stakes but also forgiving in a way. By keeping the levels short, the player can quickly try again and not feel a slog of 'having' to replay a difficult long level. This also increases the replay-ability of the game and the feeling of 'playing just one more'.

Another goal of the final game; sadly, not present within the grey box, is an environmentally told story. Adding cutscenes and long stories to a speedrunning platformer game does not feel right. This disrupts the pacing of the game and feels like a stop sign on a highway.

The final goal of the game is to reward players who perform well but also motivate them to retry a level just once more again. This is done by adding a medal system within the game, giving a medal to players who perform well and motivating them to go for the best medal possible.

3. Target Audience

To pinpoint the target audience for Rat Race, I made use of a primary and secondary audience.

Primary Audience:

Age: Around 17-30 years

Interests: Fast-paced action and precision platformers; difficult challenges and speedrunning; hidden lore and environmental storytelling

Player Type:

Competitors/Achievers: Enjoys mastering difficult mechanics, perfecting routes and competing with others.

Adrenaline Junkies: Thrives on high-stakes, one hit kill gameplay where precision is mandatory and failure is instant.

Lore-Seekers: Looks for hidden details within a game's storytelling and environments, piecing together a story.

Examples of similar game fans:

Mirror's Edge, Super Meat Boy, Celeste.

Secondary Audience:

Environmental Horror Fans: The hidden story behind this platform game will bring over horror fans that already like games like Five Nights at Freddy's.

Fans of indie games: Players who are drawn to new, smaller projects made by a single person, with unique mechanics.

3.1 Desired experience for target audience

The desired experience for the target audience would be to induce a state of flow. Players should feel a great sense of rhythm and focus where their actions become an instinct. The game aims to make the player feel like a master of their movement. Increasing their skill and the game's difficulty. The player should be motivated to 'just try one more time' when a level fails, or they have a feeling that they can improve their finishing time. The players will feel a sense of adrenaline as they quickly blast through levels. The most important part for the desired experience would be a social competitiveness; players should feel a drive to compare themselves to others. Beating a friend's time by a few tenths and climbing a leaderboard.

4. Game Objective

4.1 Movement and Gameplay:

Due to the nature of this game being a gameplay driven speedrunning platformer, things are kept very simple.

The player can select a level and start playing, a short countdown from 3, 2, 1 -Go! Begins and the player can instantly start moving.

The player can: Dash, jump, wall-jump, pick up items and stomp enemies.

Colliding with a death tile (fungus), restarts the current level instantly.

All these tools are used to reach the end of the level as quickly as possible.

What is Rat Race?

4.2 Elevator Pitch:

A speedrunning platformer needing perfect precision. Set in a chilling dystopia, blending the controls and art style of games like 'Super Meat Boy' and a story like 'Bioshock' and 'The binding of Isaac'.

You are a 'Lab Rat'- a disposable human experiment trapped in the bowels of a corporate-owned world. Lab Rats are weak, disposable and have never seen the outside world. These lab Rats working inside corporate owned factories their whole life's, due to a genetic failure during your cloning process, you have gained more knowledge than you should have.

You have found your one and only goal: escape.

The core gameplay loop is a relentless speedrun. You will be parkouring through decaying factories and failed labs; the poor condition of these factories causes them to be filled with life-threatening fungus. Touching these will guarantee your death. One wrong move and the level start over all again. The levels range between 10 and 30 seconds, motivating you to try 'just once more' and try to beat your best time.

As you race for freedom that you cannot even imagine, you will uncover this world's horrifying secret: you are the slave labour creating cheap products for a brainwashed population that worships consumerism, all while a decadent high society profit from these horrors. This is a game about *speed*, *survival*, and *escaping* a system that sees you as less than human.

4.2 Structure

Rat Race will follow a strictly level-based structure. Being able to unlock the next level by completing the previous level. For the current grey box, the player can play the levels in any order, but pressing 'next level' after a level is finished automatically moves the player to the next level.



Shown above is a screenshot from the current level select. The level select showcases a few important aspects of the game: A brief description of the level, Level number, completion times and medals earned.

4.3 Story Type and structure

Rat Race will be using a 'prison break' story structure. This will consist of three acts in a game world divided in different worlds.

Act 1: The Setup.

Our player wakes up in a cloning machine (level 1) and sees the horrible factory around them. They are marked for death.

Plot Point: The player picks up a data chip and sees the first clone trying to kill them. This makes the player realize that they need to escape.

Act 2: Confrontation.

The player will go from level through level with increasing difficulty, slowly seeing their progress with the difficulty ramping up.

It becomes clear to the player that if their character stays too long, they turn into one of these feral clones.

Act 3: Resolution.

The player escapes this horrible technological world for their own freedom. A satisfying end... or maybe not?

The final game will be using environmental storytelling. Showcasing small parts of the story in its environment for players to find if they would like to do so. In its base, this is just a competitive speedrunning platformer but will have a story in its background; Comparable to games like Five Nights at Freddy's, where most of the storytelling is done in the background with small elements.

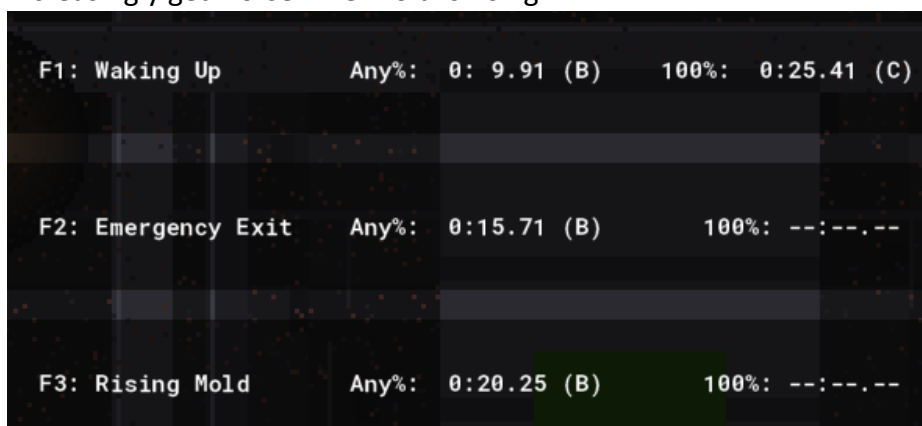
A story has been written for this game and is readable at chapter 4.6.

A small detail that already starts telling a story is the names of each level:

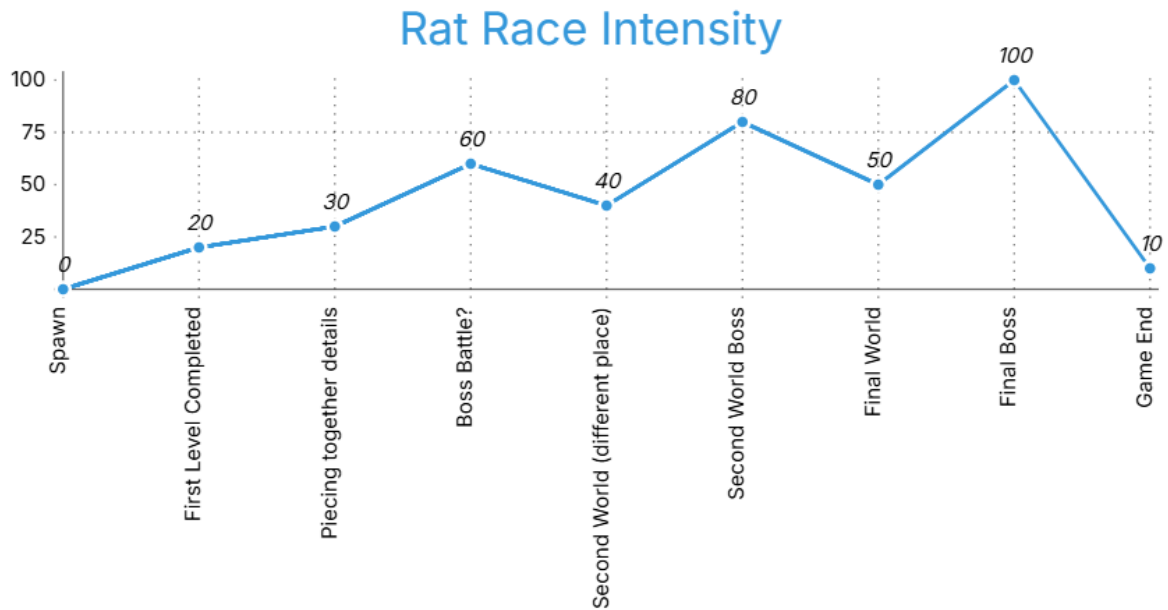
The first level being called 'Waking Up' tells the player that someone (presumably the player character) has woken up from something or somewhere.

Level 2: emergency exit tells the player that our character wants to escape.

Level 3: Rising Mold tells the player that the bad conditions within these factories increasingly get worse. The Mold is rising.



F1: Waking Up	Any%: 0: 9.91 (B)	100%: 0:25.41 (C)
F2: Emergency Exit	Any%: 0:15.71 (B)	100%: --:--.--
F3: Rising Mold	Any%: 0:20.25 (B)	100%: --:--.--

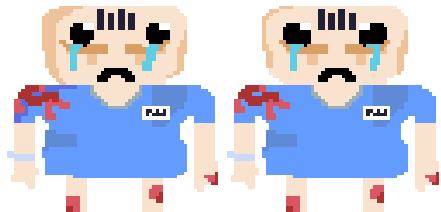


Intensity chart for the games story and game intensity

4.4 Sprites and Storytelling

Sprite work:

Main character (The escapist)



This is the model for our main character: A lab-rat. There are a few details within his model that already give subtle storytelling to the player.

Barcode on his head: He is a clone and is seen as a product.

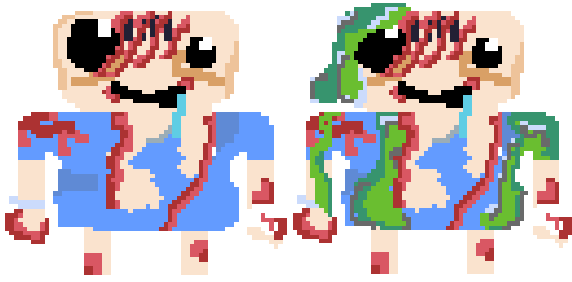
Scars/Blood: The working conditions are terrible.

Clothes: Medical/Hospital Gown, no normal clothes a 'human' would wear.

Medical Band: an armband to show which clone he is.

Name Badge: Who are you? Does this have name or a number?

Enemies (the cannibalistic clones)



(Left, Version 1. Right, Version 2.)

Reason for change:

The enemy did not pass the 'squint test'. Squinting to differentiate the different characters (player and enemy.)

This is the model for the enemies moving around the levels. These are meant to look just like the player character as they are clones. These clones have become rabid and will eat/murder anything in sight due to their hunger and mental derangement.

They are badly scarred and their facial expression is manic.

The reason for these big scars is to differentiate them even more from the player character and to keep the contrasting colours going. Red = Danger

The Mold differentiates the enemies from the players even more; this is also subtle storytelling.

The Mold on the enemy also tells the player that Mold = danger.

Subtle storytelling:

Blood around mouth: The clones eat something meaty and bloody.

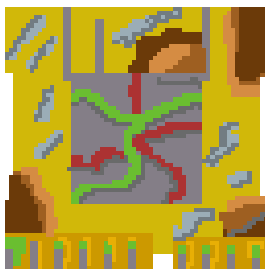
Scars on head: These are clearly scratch marks from something or someone.

Same look as player: They are clones.

Drooling: Hungry and Stupid.

Mold: The Mold is dangerous. What does it do?

(Information) Chips:



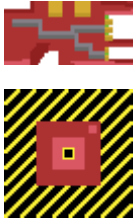
Rusted over chips that work as the optional pickups in this game to gain a 100% completion run/score. In an earlier greybox of this game, these were originally coins. These have been changed to information chips to further showcase the player that they are in a factory/industrial area.

Subtle details:

Scratch marks: are these already used? How long are they here?

Rusted: Clearly old chips, what is their purpose?

Lock and key:



These futuristic looking locks and keys are supposed to show the player that this is a technological world. Instead of using regular keys/locks the game world uses electronic keys.

Subtle Details:

Unknown usage: Who used these keys?

Clean look: They look cleaner than other found items

Digital: They are digital locks/keys so this must be futuristic.

Clone Machine (Player Spawn)



The player spawns in a broken cloning machine, telling the player in a subtle manner that they are escaping from something.

It may not be directly clear towards the player that this is a cloning machine

Less Interesting Sprites:



Finish Flag



Mold

These sprites are kept simple to ensure easy understanding of their use towards the player.

Aesthetic: The game will make use of a High-Contrast Industrial pixel-art style. To support the gameplay, the visuals prioritize readability above all else. The world uses a desaturated grim palette for the background, ensuring that interactive elements pop out with high saturation colours. This allows players to subconsciously follow the path in milliseconds.

Colour System:

Neutral/Platforms: Light Grey blocks/sprites that are lighter than the background which indicate platforms and walls.

Danger: Neon/Bright colours like green or red that contrast with the background and are easy to see for the player.

Narrative: Background details remain in the shadows to build an atmosphere without cluttering or distraction.

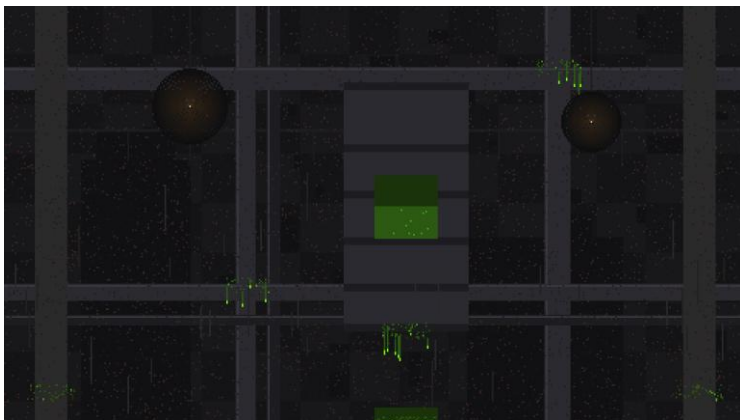
Greybox to Final: The current prototype makes use of geometric shapes to test physics and contrast without finished sprites/ These shapes correspond directly to assets in the final version.

Level Background:

This background has been generated with Google Gemini AI Pro.

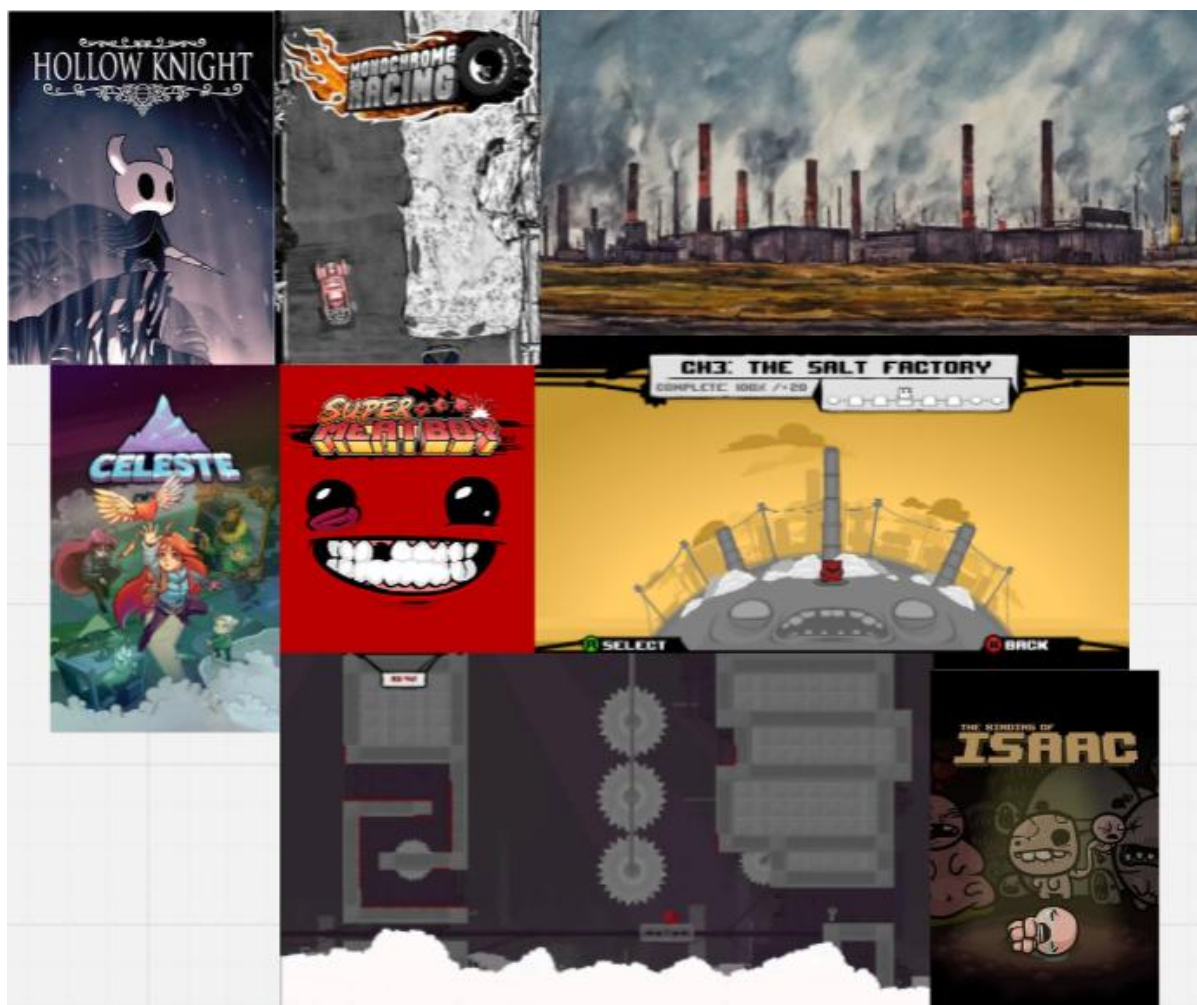
This mainly due to time constraints and wanting more inspiration.

“please generate a background for a pixel art dystopian speedrunning game without any platforming elements in front. ONLY a background. Make it look like this. In a run-down factory with green Mold MAKE SURE that the background can seamlessly scroll horizontally.”



Note: Only the background and Music have been made with the help of AI. All other sprites have been handmade.

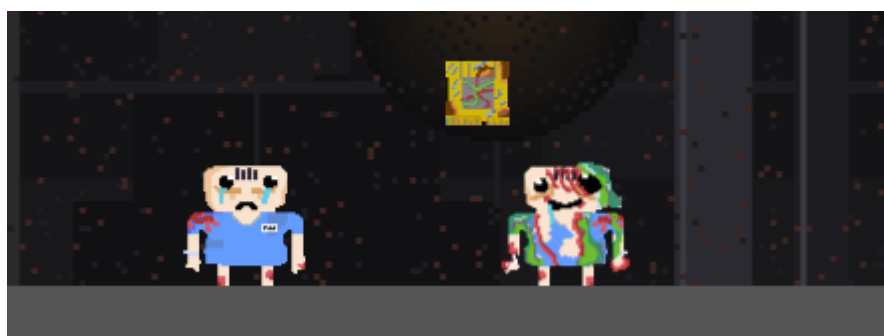
4.5 Theme and Moodboard



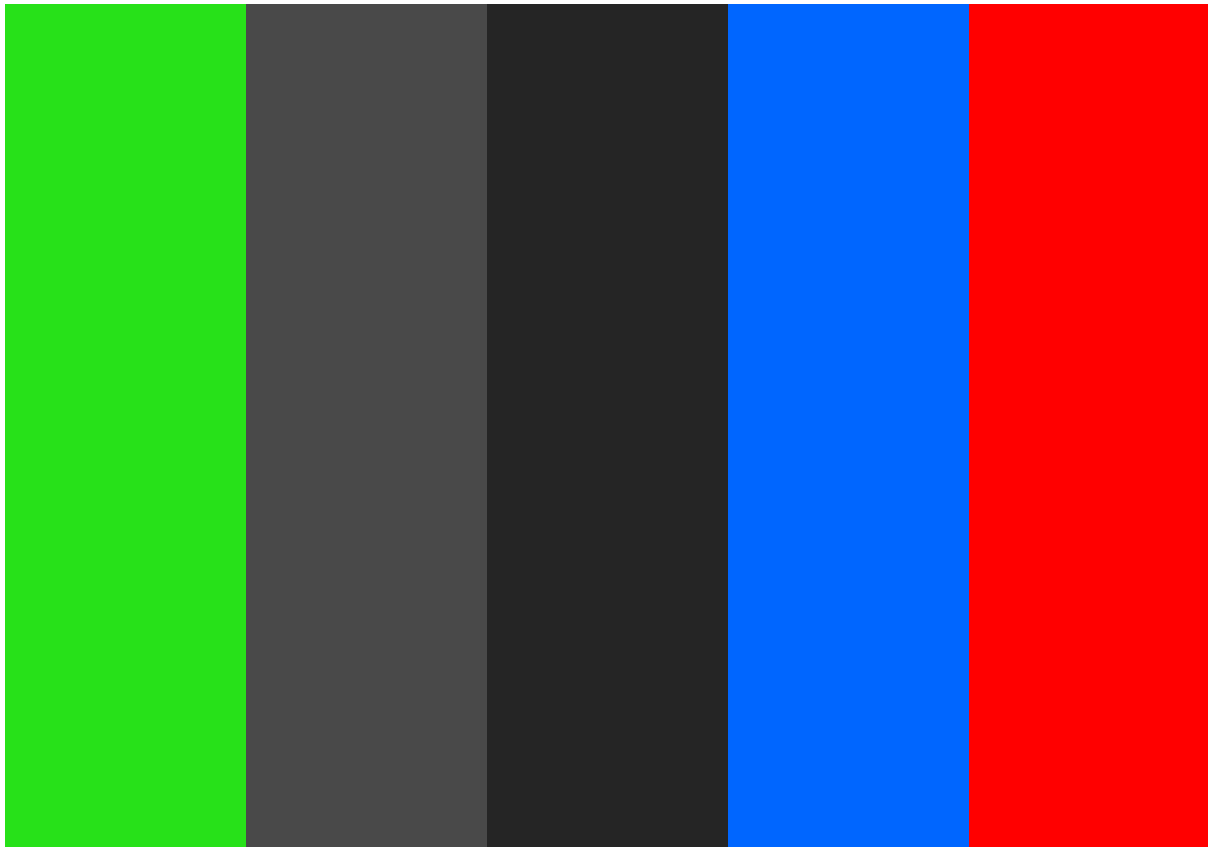
This is the overall gameplay and style inspiration for Rat Race.

Celeste – Super Meat Boy – Hollow Knight for their gameplay mechanics

Monochrome Racing - Super Meat Boy – The Binding of Isaac for their art style



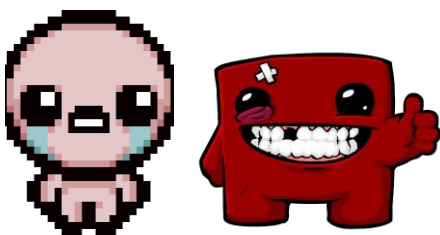
In-game screenshot showing the player character and an enemy.



colors

COOLORS

Colour palette of Rat Race



Isaac and Meat boy, references for our player character and enemy designs.

4.6 Story and World Building

As mentioned before, the story and world building will mainly take place as environmental story building. This is a placeholder story to be told within small details.

A world taken over by corporate greed

Base of the world:

Genre: Sci-fi, Dystopian Speedrunning platformer

Primary Theme: Futuristic Science Experiments

Geography: abandoned science labs and factories, wanting to escape, not knowing how the outside world looks.

Three different cultures:

Civilians: Most current world human-like, they are not aware of the horrors behind their current world luxury. They celebrate holidays just like the current world, speak English, work, go to school, and have their own faiths. They usually live for a 9-5 job.

High society: The richest families on earth who own almost every company, factory or anything needed for a normal life. They are arrogant, see the normal civilians as money milking cows. They speak English but in a more formal manner. They don't celebrate holidays but advertise them still to gain more customers for their already heavy monopoly.

Lab-rats: Lab born human experiments working as factory workers and get experimented on by the high society as a way of getting new products on the market for the regular civilians. These "lab-rats" don't know about the world outside of their factory or lab. Due to their lack of a normal diet and vitamins they are usually extremely weak and die very early. They celebrate no holidays, cannot speak (not learned, or body too weak to talk.) and only know how to do their job.

Flora and Fauna:

The high society don't clean their factories well. Due to the bad hygiene of the lab rats and the poor cleaning of the factories, fungus and Mold starts growing on certain parts of the factories that are highly dangerous to humans. The fungus and Mold kill a human when in contact within 10 seconds. (This is an insta-kill in-game.)

The fungus and Mold feed on the poor conditions and hygiene but doesn't grow well on parts where many people walk. This causing the fungus and Mold to be a hazard in lesser populated areas of the lab.

The high society tried to fight this fungus and Mold by creating more lab rats, but this only making the hygiene even worse.

History:

In 20XX during the elections of a newer World, an extreme party finally won the vote. Promising a more equal world for all with safer streets and less poverty.

Leader X, the leader of the party became president of the United States.

Several protests broke out by extremes, and due to the destructions, that the people made, Leader X lost a lot of money having to fix his broken land.

After a year of protests, constant fixing of government property, having to pay out of the funds of the World, the losses became too much.

Leader X broke down, and he had no other solution than to give up on his hard work.

He sold off all Earthly belongings to the Mega Corp, causing rich CEOs to own the whole country.

Something unexpected:

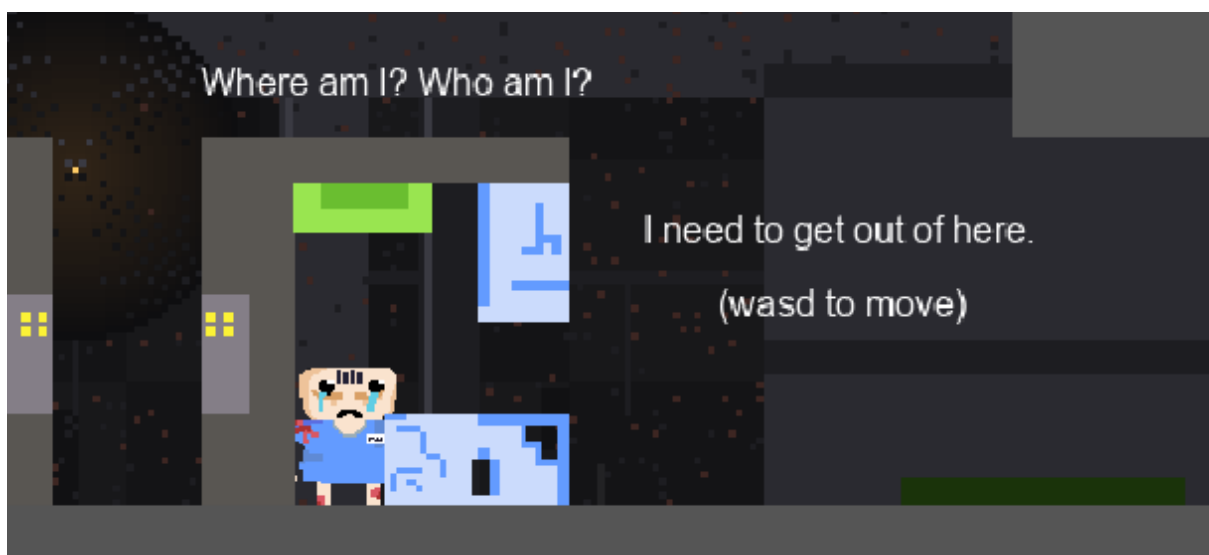
The civilians have no knowledge of the world before the CEOs took over America. This changed their beliefs and their holidays.

Instead of praying to a god, they pray to their companies to release a new product. The civilians are brainwashed into a society where social status is shown by what they have purchased and how expensive it was. People with designer clothing, new technology, expensive items, are seen and treated as gods by their fellow humans.

The lab rats have their own hierarchy as well. Due to their poor circumstances, they usually eat the oldest, weakest lab rat.

4.7 Story Elements in-game

As already shown in the sprites, the game has small details showcasing the world and story of the game. Another way of communicating this story is by having text on screen that is optional to read. The best example would be the first level; being a tutorial and informing the player of the characters thoughts.



The player spawns in a broken cloning machine with some dialogue. This is important, since the three second countdown the player will be able to read this without losing speedrunning time.

"Where am I? Who am I?" This tells the player that our character has no idea who he is and why he is in the place where he is.

“I need to get out of here.” This gives the player a reason to go.

First enemy encounter:



Our character says: “he seems dangerous... but he looks like me!”

Some keen-eyed players will already connect the dots that this is a clone. Giving the thoughts of our main character dialogue will connect the player even more with the character and its story.

T-shaped platform:



Players who are stuck on this part will be able to easily read the text, helping those players. This dialogue is still made as if the main character is thinking/saying this but does help players in need.

Key encounter:



4.8 Music

The biggest inspirations for the music choice of Rat Race are:

Super Meat Boy, Madness: Project Nexus, Postal Redux, Enter the Gungeon.

With the help of suno.ai I was able to add placeholder music to the game. The prompt used for the in-game music is:

“ At 180bpm, this drum and bass track unleashes rapid-fire kicks, razor syncopated snares, and crushing industrial sub-bass, Piercing chiptune leads cut through dense, metallic FX—sirens, clanging machinery, and stacked synths—building an oppressive, cinematic horror soundscape”

And the main menu music:

“ For the calm menu music version, tempo drops to 80bpm, Sparse, pulsing sub-bass rumbles gently beneath crisp, lightly filtered electronic percussion, Glassy pads and distant, reverberant chiptune motifs drift above subtle metallic textures, creating an uneasy but soothing ambient electronic palette”

I have also created a Spotify playlist to showcase the overall music for this game.

<https://open.spotify.com/playlist/5ijEfPuRc7chdP0wBfGoC0?si=486cb3deb15a46d3>

It will be a mix of drum and bass, synth and metallic FX like sirens and machines.

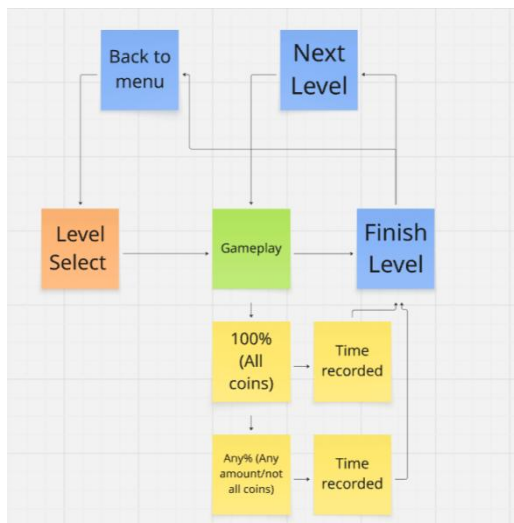
Sound Effects:

Sound effects were initially planned to be added but due to time constraints are not within the Demo.

Sound effects I would have added:

- Jumping and Landing sound effects, a splashy meaty when jumping and landing.
- Enemies groaning + death sounds, Enemies hungrily groaning as they walk slowly towards the player.
- Running sounds when the player moves, muffled sounds of a person running barefoot.
- Level complete sound effects, an eerily happy sound effect, a music clip of about 2/3 seconds.
- A sliding sound when the player stops moving, like hitting the brakes.

5. Level Objective



A flowchart showing the basic flow of the level progression > simplicity is what makes this game shine.

5.1 Gameplay Actions:

Controls:

WASD: Move character

Space: Jump

Shift: Dash

Esc: Pause

Mouse: Select Options

The player has some very basic actions that translate very well into a speedrunning platformer. As mentioned, before they are: Dash, Jump, Wall-jump, Stomping Enemies.

I will be going through these abilities a bit more in detail:

Movement

The overall movement within the game has had a lot of fine-tuning to feel as responsive as possible. Using our experience with many 2D platformers, I focussed mainly on the feedback the game gives upon certain actions. A player must FEEL what the character does, not just see it.

An important part to this feedback is **acceleration**. The player character does not immediately start at its max speed but quickly gains speed within a short time. This makes the game feel more fluid and not abrupt. Not having acceleration will make the game feel too abrupt, breaking the game's flow.

Another important factor to make movement as fluid as possible was a **coyote timer**.

A coyote timer gives players the opportunity to still jump even though they missed a platform by milliseconds, a coyote timer usually only lasts for about 0.2 seconds > that is also the margin that is used within Rat Race.

The final unique aspect to the movement is sliding, when the player decides to let go of a directional button, the character will slide a very short distance until it completely halts. This is also a very difficult mechanic to get the hang on – if the player slides too much, the game will feel slippery. If the player doesn't slide (enough), the game will feel too abrupt and rigid, breaking the players sense of momentum and flow.

Dash

The player can dash in the direction that they are moving with a slight cooldown of 1 second. This punishes players who make a mistake and makes timing the dashes a key factor to getting a quick finishing time.

The player can dash whenever they want, this meaning that they can also dash mid-air. This is also needed for some jumps in the game and again, perfecting their run times.

The way this dash is programmed is giving the player a small speed boost in a certain direction, this making a dash a deliberate decision the player makes but does not directly punish the player too harshly if done wrong.

Jump

Jumping is a very basic mechanic present within (almost) every platformer game. Still, this needed some finetuning to perfect within a competitive platformer. Jumps need to feel realistic, not too floaty and should under NO circumstance feel buggy.

The players' jump height is 2.5 blocks, (the player being 1 block high.) This makes the player able to reach higher jumps with some effort.

Another factor within the jumping mechanic is an exponential jump height. The player can hold the jump button to jump higher. This is also used in many modern platform games and if this is not properly (or completely is not) implemented, the game will feel very abrupt and stale.

Wall-Jumping

Wall-Jumping is common but not always used mechanic in platforming games. In speedrunning platformers, they are almost always used. A smooth wall jump is very difficult to replicate, since they can quickly cause bugs and feel unrealistic. Rat Race uses a very different system for it's wall jumps, not having to use separate objects, but looking at the X axis of the floor tiles, if the characters X Axis touches the X Axis of a floor, it hangs on.

After this, a small jumping cooldown is introduced, making the player unable to 'spam' its way up a wall. The character slides down the wall slowly and automatically detaches after 2 seconds of sliding. This makes wall jumping more difficult since the player needs to quickly move from wall to wall, not hanging on forever. This also adds extra flow in the movement and more decision-making from the player's side. It was a challenge working on the wall jumping mechanic since it can quickly feel too sticky or bug out. The result feels responsive.

Enemy Stomping

The player can jump on an enemy to eliminate them, just like in Super Mario Bros. This also adds another layer of strategy since these enemies can be used as platforms. I implemented a small jump once landing on an enemy, instantly giving the player feedback on their actions. This makes it possible to quickly skip past a platform or reach a wall usually more difficult to reach, breaking momentum.

5.2 Emotional Feedback

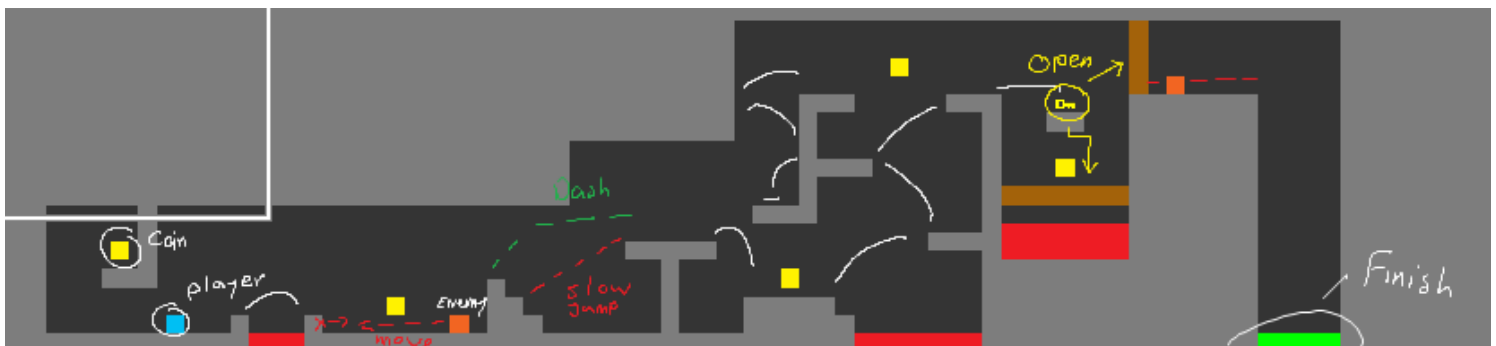
All these movement mechanics add on to one important part of replay-ability – Emotional feedback. The feedback in this game is quick and responsive.

The most important part for this feedback is the fact that there is no game over screen. Upon death the character instantly respawns, giving the player the chance to instantly restart the level. This takes away a part of the frustration of having to redo a whole level again.

5.3 Rewards

Rat Race is a punishing but also a rewarding game. Finding the best route within the level, being the fastest, getting a gold medal, all these factors give the players a rewarding feeling upon completion. This gameplay loop is really addictive to the right target audience. During testing in class, our game got played instantly for a longer while. While other people tried others' games for once, maybe twice, our game was being played for over 15 minutes by the same people. The short level structure, the instant rewards and instant punishments give a lot of dopamine to the players playing the game, making them almost addicted.

6. Annotated Map



Easily readable greybox map showing the pathways the player will/can take.

IMPORTANT:

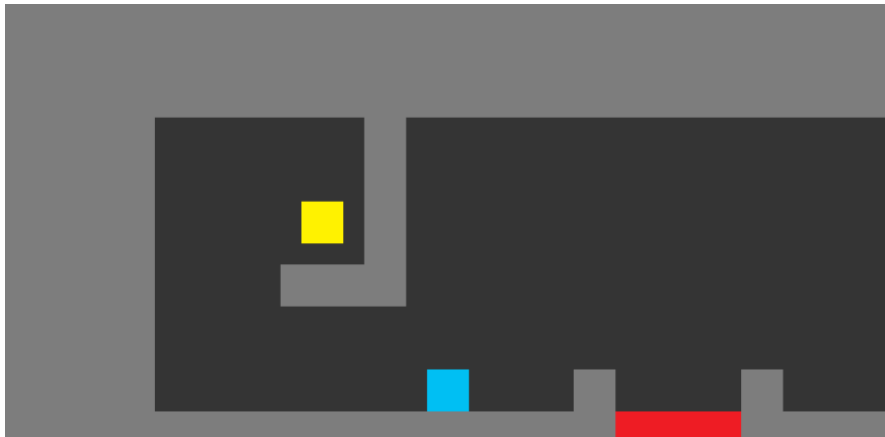
Coin is named 'Chip' in the game world, but for easy understanding they are referenced as coins in the greybox.

Level 1: The 'Tutorial-less Tutorial'

Tutorials can be a slog to play through, especially when this game focusses so hard on being fast paced and smooth. That is why I went with a starting level that explains all needed mechanics by just letting the player play.

I have made several notes to showcase choices the player makes upon starting the first level, this is a level that can be completed in many ways – slower routes for less skilled players, faster routes for more skilled players.

Let's start at the beginning: ***The spawn.***



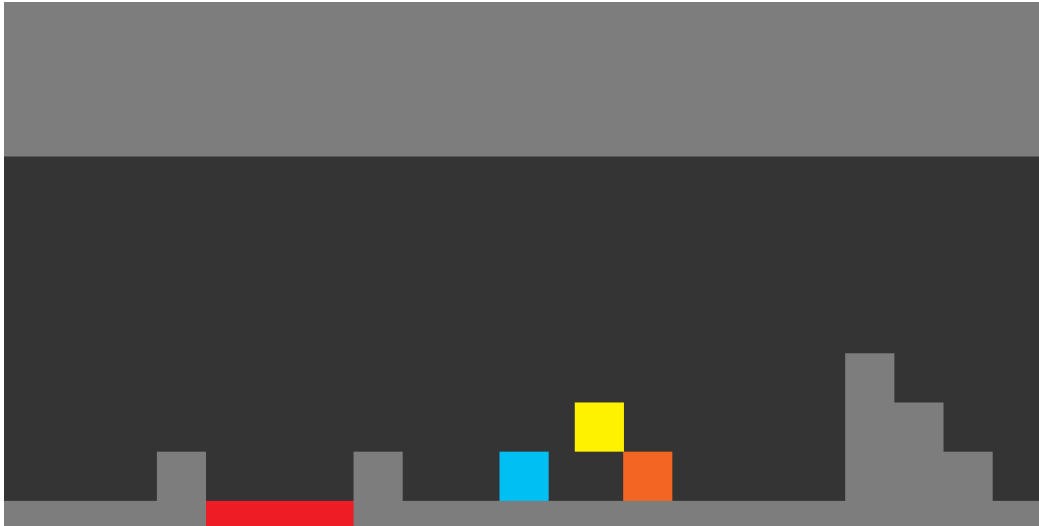
(spawn area)

When the player is spawned, they instantly see two important pieces of the game design, a death pit and a coin.

Most players will move towards the right instantly; by adding death tiles and a higher tile, you force the player to jump. This already gives them a feeling of how the platforming feels from the first seconds of playing.

Some other players may also see the coin on the left side and will wonder if they can reach it. The coin is too high to collect with a normal jump but can be collected by wall jumping. This explains another core mechanic to the player by just playing.

After completing this first jump, the player will be seeing this:



(after spawn; first enemy)

The player will notice three things.

A coin/pickup, floating above the player,

A creature/enemy moving towards the player

A high wall/platform the player must overcome.

All these elements were deliberate and explain features to the player without a tutorial.

The coin:



The Coin is placed one tile higher as the player, forcing the player to jump to reach the coin.

This adds a small layer of challenge, also looking at the enemy moving the players' way.

The enemy:

The player will see a character moving their way slowly, players with experience within platforming games will try to jump on top of the enemy, killing it instantly. This explains to the player that enemies are killable.

Lesser experienced players will most likely touch the enemy, dying and restarting the level instantly. This teaches these players that these enemies should not be touched.

Upon gaining more experience, these players will find out that they can jump on top of the enemy to eliminate it. This showcased by combining all these mechanics.

The wall/obstacle:



The *jump height* of our *player character* is **2.5 blocks** max; but this *obstacle* is **3 blocks** high. Forcing our player to try and make this jump.

An inexperienced player will try to make this jump anyway and will collide with the wall in the process. This is intentional and shows a key feature: *wall jumping*.

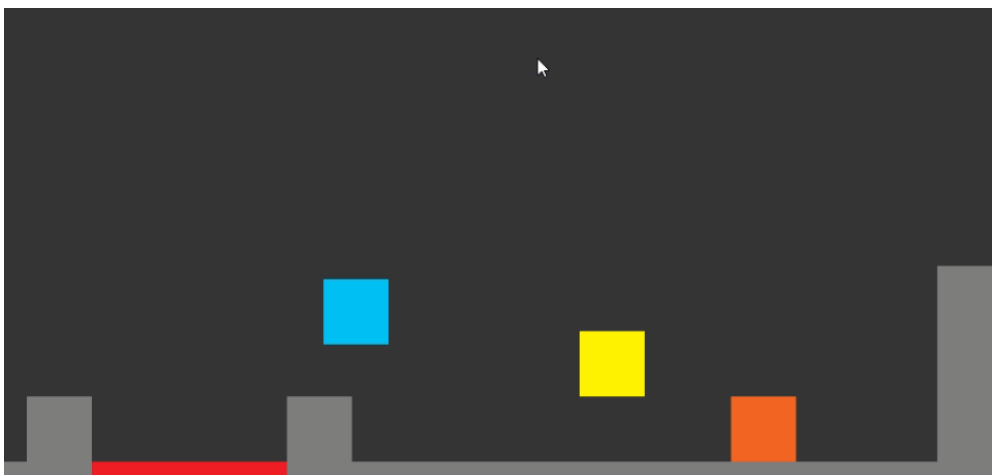


The player will hatch onto this wall and in response will try to jump again.

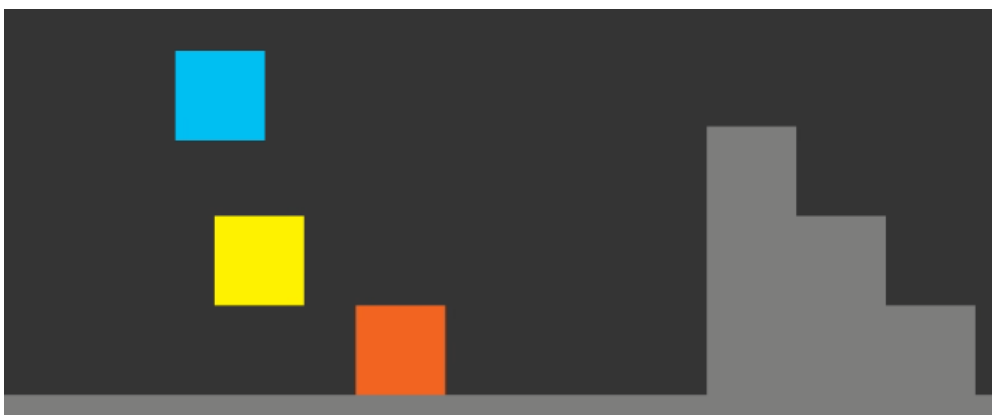


This makes it possible for the player to move over the obstacle.

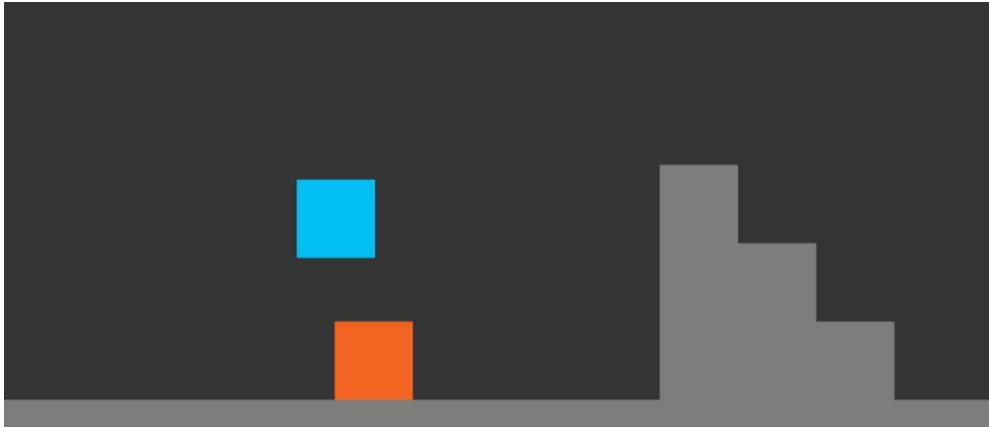
All three mechanics combined:



(the player makes a large jump from the obstacle)



(the player lands on the coin)



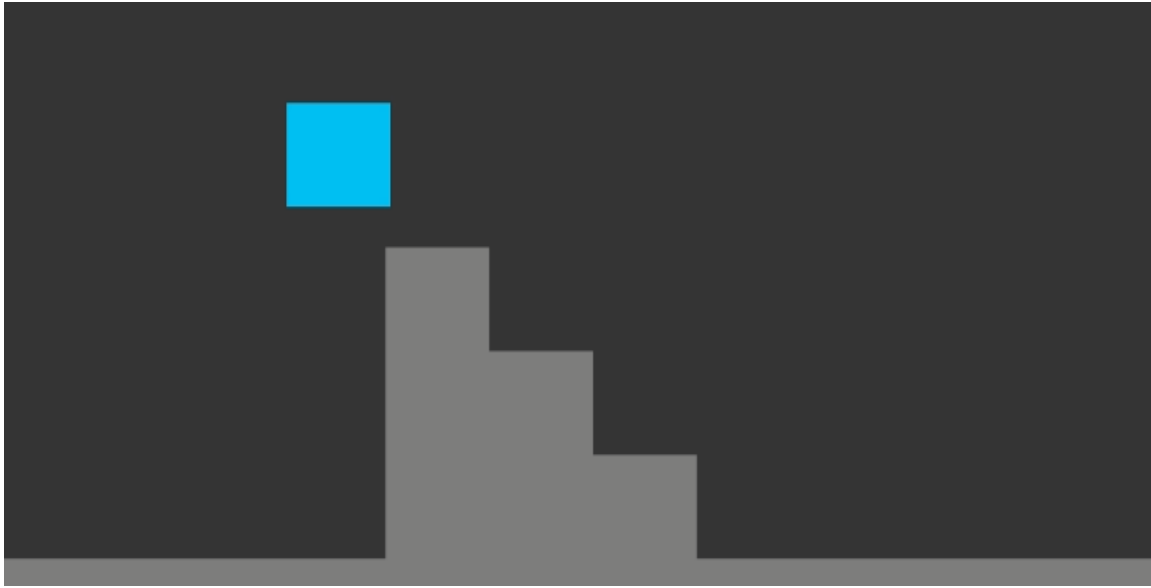
(when landing on the coin, the enemy is directly under the player)



(the player kills the enemy and is launched forward)



(The player lands on the side of the wall, entering a wall jumping state.)



(The player can jump again when in the wall jumping state, going up.)



(Jumping over the wall, the player has overcome this obstacle.)

After completing this part, the player is set with another, more difficult challenge.

A T-shaped platform.



The reason I went with a T-shaped platform is to increase the difficulty and to block players from wall jumping up this platform. By designing the platform this way, I force the player into using a solution to this problem that I envisioned.

There are two solutions to this problem, taken from the annotated map:

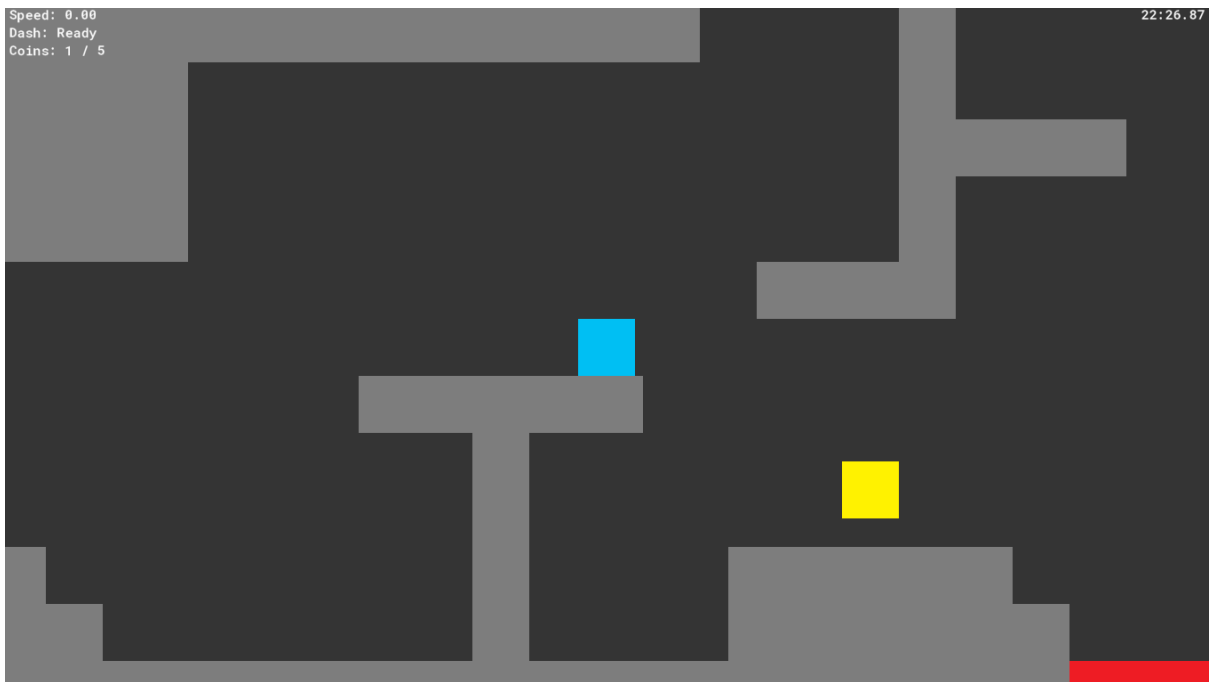


More experienced players will use the dash mid-air, jumping from the top of the stair-platform to the top of the T with ease.

Lesser experienced players will use the second stair of this platform to jump over the less conventional way.

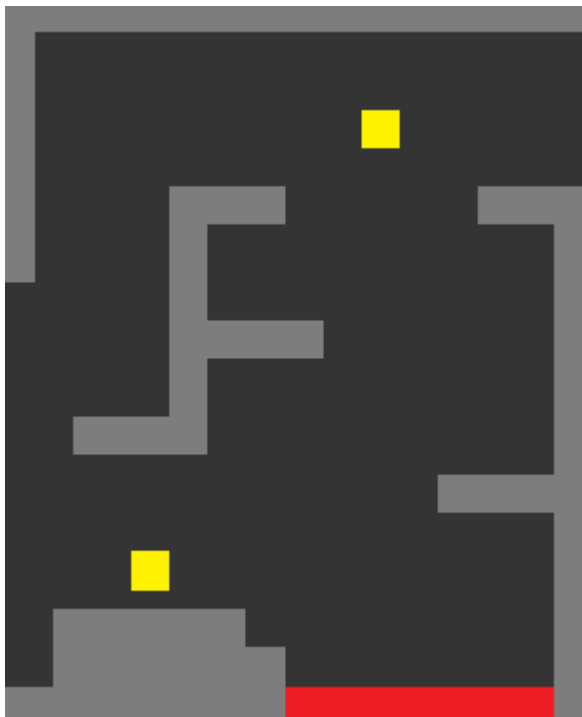
A dash is a feature not needed in this level and because some players may not know this feature yet, they will replay this level later with their found knowledge to try and beat their slower time.

After completing the T-shaped platform jump, the player is met with a choice of path. Again, showing a feature within this game: Choices. The player has multiple ways of reaching the end goal, one being faster but missing pick-ups, the other being slower and having a coin.



This is deliberately made a difficult choice for the player: the jump going up is easier, there is no danger visible and is closer to the player.

The jump going down (drop) has a coin, but also a visible death tile. This shows the player that this path has a reward but also comes with danger.



(both pathways zoomed out)

Both paths force the player to wall jump between walls (wall jumping!)

Higher path:

Looking at the two paths together, the first higher path is a way quicker, easier route but is missing a coin.



(The easy path.)

During the platforming, the player will notice a coin for when after they complete this section; showcasing that they are going the right way.

This coin also shows the player that they should jump over the gap, which is the difficult path and will result in a massive slowdown or even an instant-death if they fall down this hole.

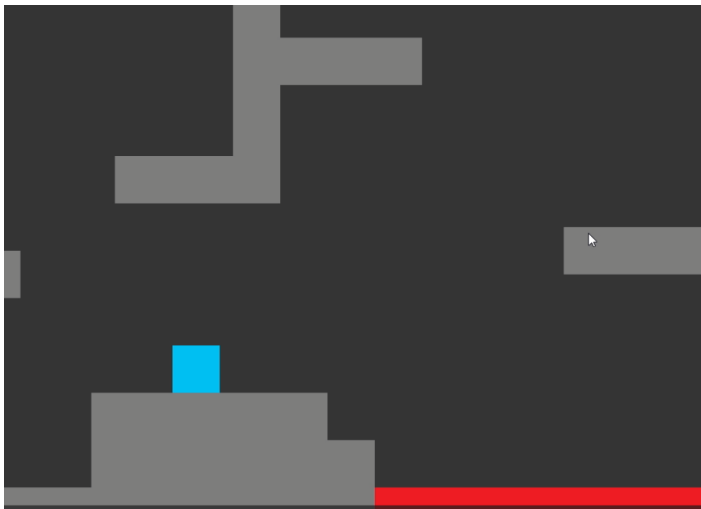


(Player clearing the gap.)

The player is also able to see a brown tile further to their right, showcasing another feature and indicating that they are progressing.

Lower path:

The lower path being more difficult due to the death tile under the player and the smaller margin on where they must jump.



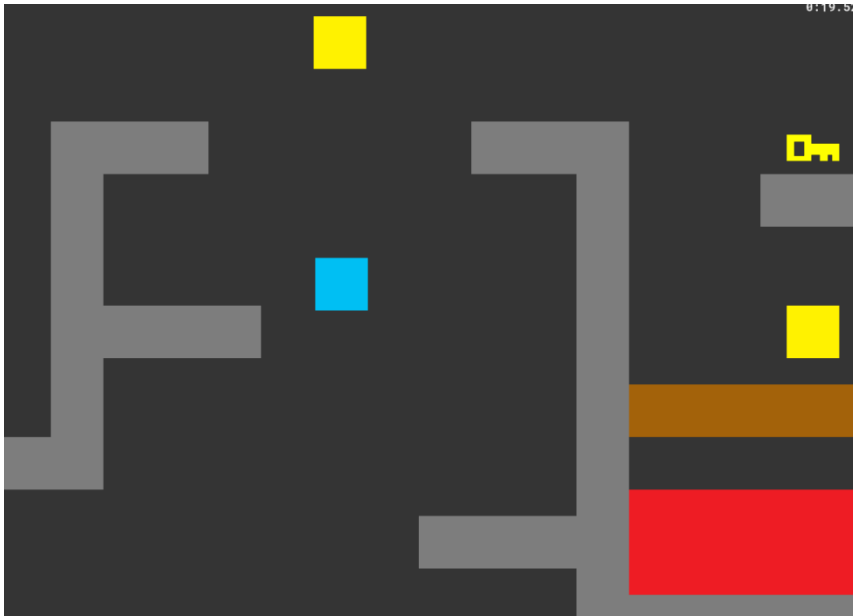
(The player picked up the coin.)

It is visible that the player still has a choice now; go back to the easier route with the coin or keep going with the difficult route.



(The player made the first jump.)

The player can see a coin to their right, higher up and a wall blocking them. This indicated that they are going the right way and should continue.



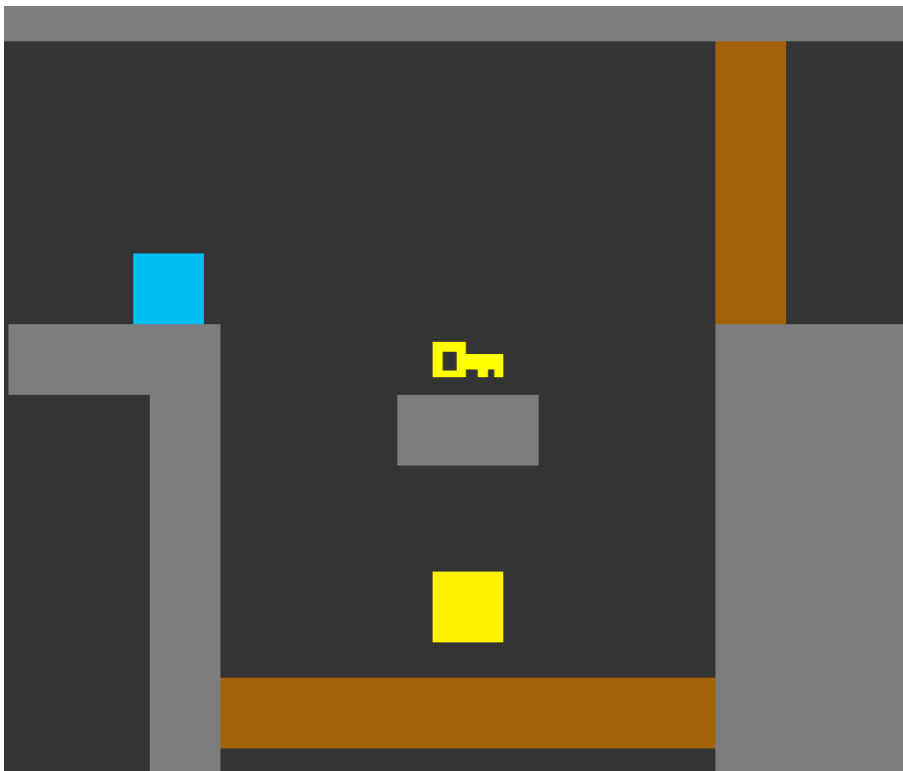
(the player reaching the second jump)

The player will see the coin on their right, and the coin at the end of this platforming piece.

This motivates the player to keep going and indicates that they are going the right way.

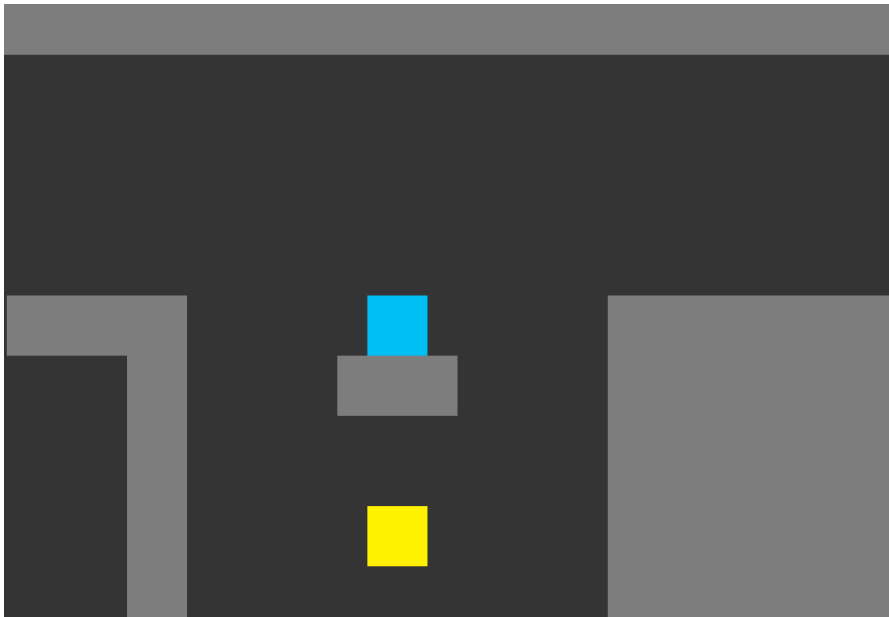
For the next part of this level (and almost final) the player is met with a key and brown floor/wall tiles.

The player will also see a coin under the coin, with the brown tiles as a floor.



(The player has reached the key section.)

This gives the player another choice: do you pick up the key or the coin? Or both? But in what order?



(player picks up key)

The player will see that the brown tiles have now disappeared. If they were going for all the coins, a nasty surprise is waiting for them.

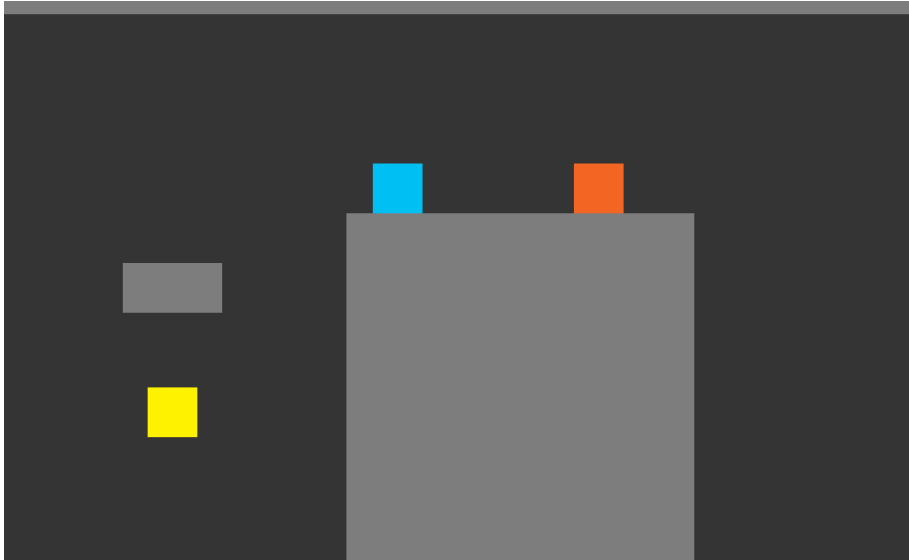


(player tries to get the coin and... dies!)

This is a surprise mechanic for the players who took the easier path. Players who took the difficult path already saw the death-tiles under the brown key tiles. Players who took the easy path did not see this.

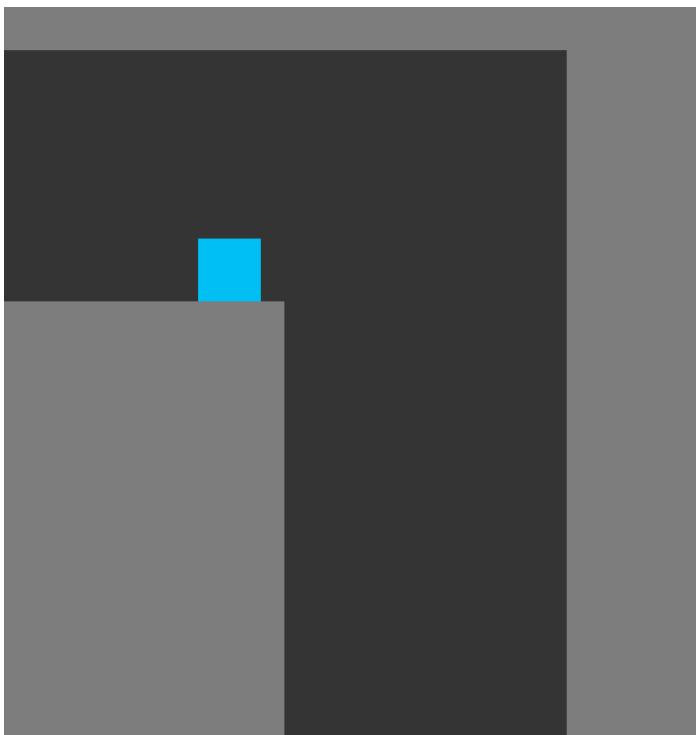
It is now clear that the key gets rid of brown tiles, which opens our final path.

The final:



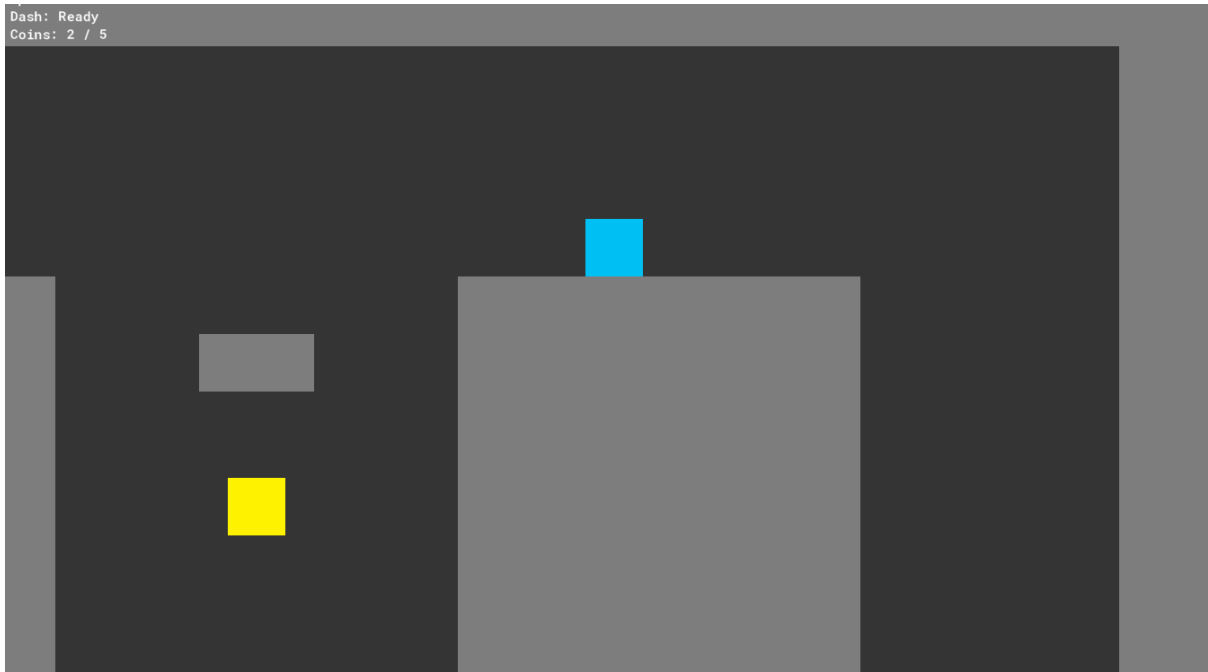
(Player went past the key tile)

The player will be met with a final obstacle, an enemy.



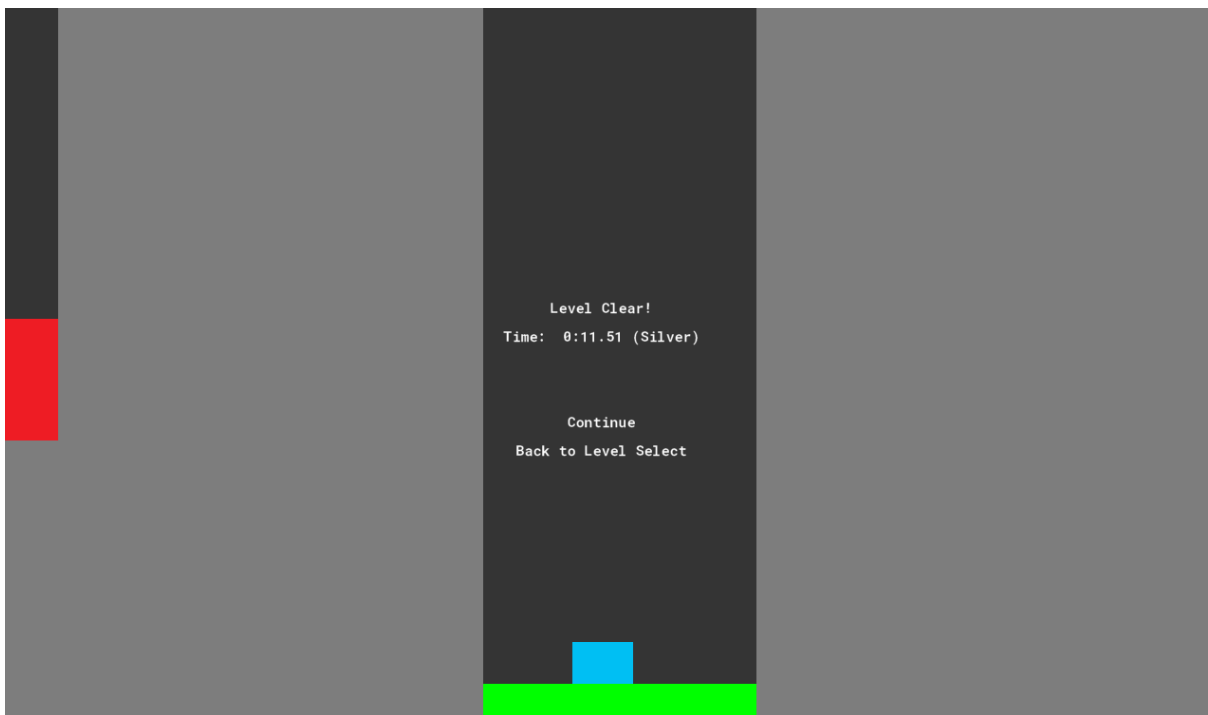
(player beat enemy)

Going past (or eliminating) the enemy will give the player a final choice. Do they jump into this bottomless looking pit, or do they look for another solution?



(player deciding what to do)

The player sees that there is no other solution and try to jump in the pit.

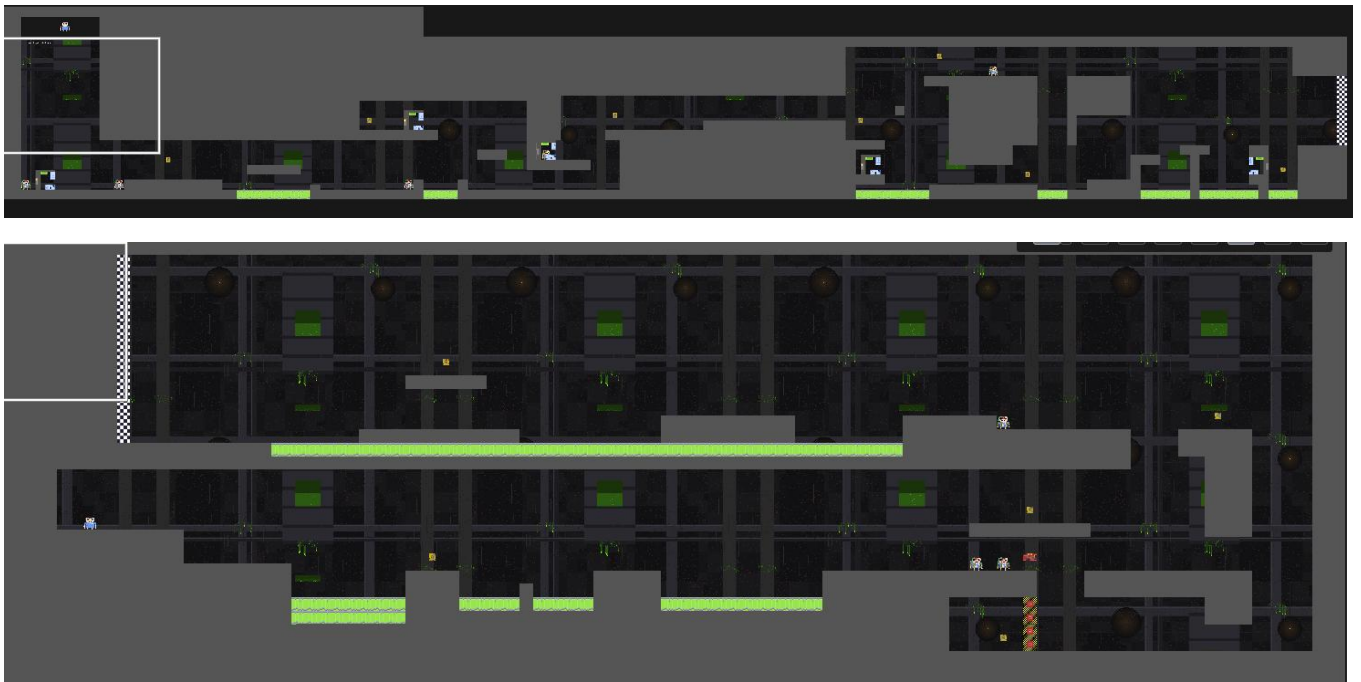


(the player finishes the level)

After the player jumped in the pit, they are met with green tiles and... A level clear screen!

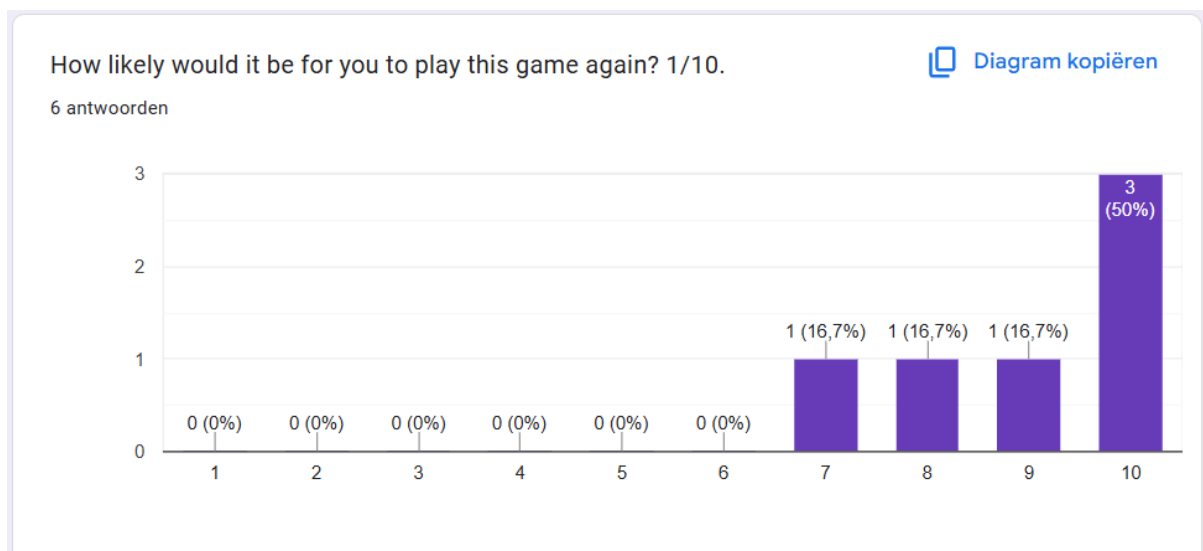
These were the design choices for the first tutorial level, making the player learn gradually from their own actions and mistakes.

Level 2 and Level 3 Maps:



7. Evaluation and Research

I have conducted game testing research to ensure that the game is engaging and keeps the player playing for longer than they intended. I made the use of a questionnaire after the play testing to ask questions towards the players who tested. These are the results:

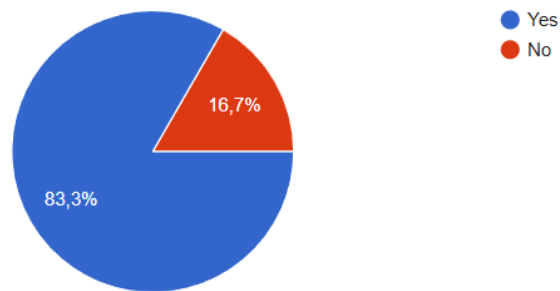


It seems like most testers really would play this game again.

Did you like the medal system? Gold/Silver/Bronze

[Diagram kopiëren](#)

6 antwoorden

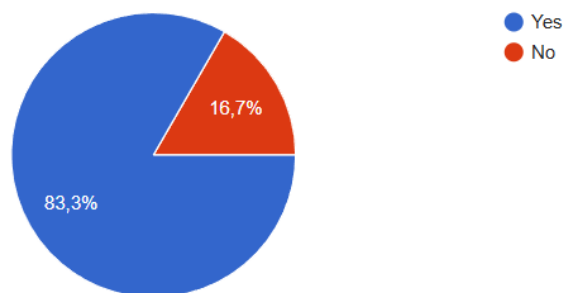


Only one of the testers disliked the medal system. Overall people are positive.

Should the time needed for the medals be visible?

[Diagram kopiëren](#)

6 antwoorden

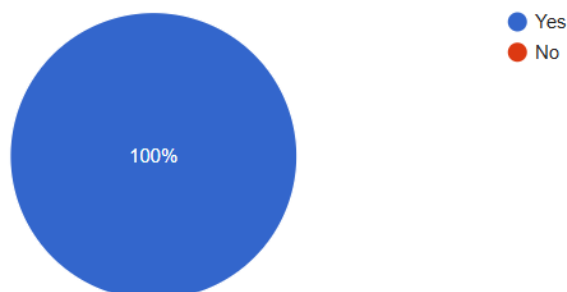


People would have found it better if the time needed for medals would be visible (due to time constraints, this is currently not in the build.)

Did you understand the general movement mechanics quickly?

[Diagram kopiëren](#)

6 antwoorden



ALL players understood the movement mechanics.

Would you add any movement mechanics? (if so, what?)

6 antwoorden

Double jump or dash upwards/downwards

No movement mechanic but I would add music to it that fits the dark vibes youre going for and makes the speenrunning a bit stressful (like geometry dash does)

Cloning yourself

It feels great like this but maybe some kind of upwards dash

Nope

i'm used to double jump with the W key so getting used to the dash was something but it was easy to adapt

Some other questions regarding possible features.

What did you like about the movement mechanics? (if this is the case.)

5 antwoorden

Its feel good, very responsive,

The dash was nice

Apart from walljump it felt fluid


It feels really nice and fast

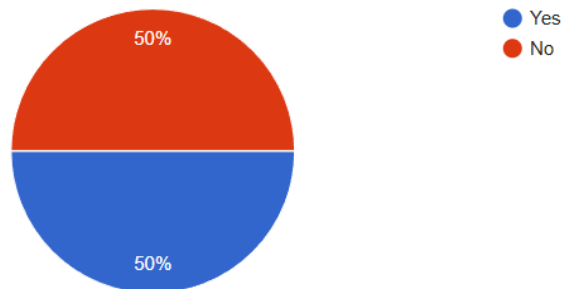
Wall jump feels very natural, dash is smooth

Testers are yet again very positive about the movement.

Would this game need a tutorial?

6 antwoorden

 [Diagram kopiëren](#)



There is a 50/50 split on the question if this game needs a tutorial. It would be helpful for players who don't know much about other platforming games.

What did you think of the length and flow of the levels?

6 antwoorden

The length is fine, its perfect.

I like the lenght of the levels

A bit short

Perfect

Right amount of enemies and obstacles for the sizes of the levels

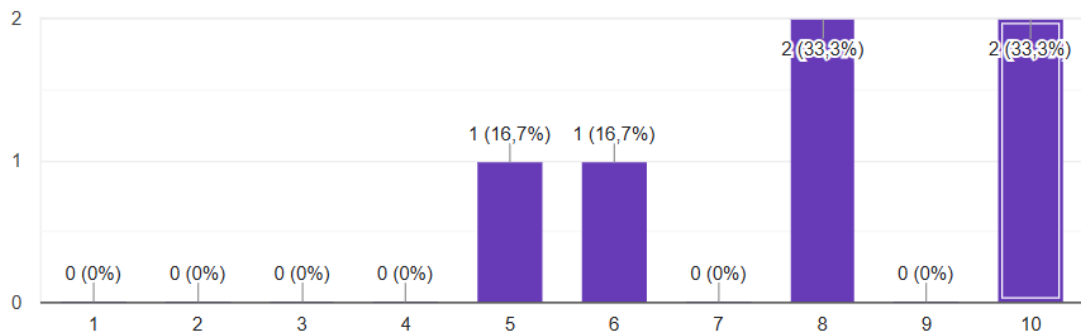
i really liked it and how it varies in difficulty is really nice for those that are competitive

People were very positive about the bite-size level design. The levels are short.

The plan is to make this a dark dystopian theme game. (Think Super Meat Boy, Binding of Isaac.) How much would this fit the gameplay? 1/10.

[Diagram kopiëren](#)

6 antwoorden



There is a mix of feedback on the art style, mostly still being positive.

Evaluation:

This game used to be a very simple game without any real usage of sprites; only primary colours showcasing the usage of objects and their effect on the player.

This deemed to be a poor decision, causing the grade to be heavily under expectation. This made us return to the drawing board and connect the written-out story with the gameplay. The result is a game that evokes a story but doesn't press it onto the player if they don't feel the interest towards a story game. This was also apparent during testing, where one player gives feedback that they want more story and others preferred the no-story approach.

This still deemed very challenging and I should have focussed more on connecting the story and game to begin with. Focussing too much on having gameplay over an actual story.

This is something I will be considering for my next game project.