HAVEN

HUB FOR ALTERNATIVE VISIONS IN ENVIRONMENTAL NURTURING

DAAN VAN GENECHTEN & PHILIP CORSIUS
A CONCEPT FOR THE STORYLAND DESIGN CHALLENGE 2024

ABOUT US

DAAN VAN GENECHTEN - Concept Artist

This year, Daan made the transition to a full-time career as a concept artist, after spending six years pursuing his passion alongside his work in education. Since then, he has had the opportunity to work on several larger projects for clients such as Europa-Park, Doloris, and Diergaarde Blijdorp, focusing on themed entertainment. This shift has allowed Daan to fully embrace his creativity and further develop his love for drawing.
He hopes to continue contributing to the magic of theme parks, zoos, and related experiences for the rest of his life.
HAVEN has allowed Daan to step outside of his comfortzone design-wise as well as build a world from the ground up!

PHILIP CORSIUS - Storyteller

For almost ten years now, Philip has been a lecturer on storytelling. After writing his Master's thesis on transmedia storytelling, he taught this topic for three years. Later, re-joining his alma mater as a faculty member, Philip lectured on various matters, ranging from film history to media research.
Putting theory into practice while also turning practice into theory, Philip co-authored two textbooks, one on media and one on storytelling, and one academic article, on dark rides. As a freelancer under the company name of Story Supplies, Philip has given talks, contributed to the script for a short film, and has written and edited scripts for podcasts.
This project, HAVEN, is his first go at co-creating a storyworld for themed entertainment.

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THE CHALLENGE

We would like to thank Storyland Studios for hosting the second edition of their Design Challenge. It is in response to this challenge that we created the concept presented in this document.

The core of the assignment can be summarised as follows:

"Your task is to create a new Location-Based Entertainment (LBE) concept that can be utilized by operators and developers across various global destinations. (...) Your concept should be designed for a space no larger than 50,000 sq ft (4645.15 square meters)."

The most important criteria are "depth and richness of storytelling", "emotional resonance", "design-innovation", "executability", "creative use of materials" and "ecological and sustainability compatibility".

A synopsis of our creation for this challenge can be found to the right. Many more details will be revealed in the rest of this document.

ATTRACTION SYNOPSIS

For a new Location-Based Entertainment (LBE) concept, we present the fictional storyworld of HAVEN.

HAVEN is an organisation and location all in one: the Hub for Alternative Visions in Environmental Nurturing. Its mission is unique. In the 1970s, a group of pioneers dedicated to finding ways to live in a more sustainable manner, cut themselves off from the distractions of the rest of the world. They went to work and live at HAVEN. Now, fifty years after the original group started, the current people of HAVEN are ready to welcome the outside world in.

Guests may choose to immerse themselves into the storyworld to the extent that comes naturally to them. It's possible to ignore any hints towards the backstory, and have a good time with an awe-inspiring tour through the labs, a surprising twist on the classic lasertag game, and the arcade hall featuring brand-new games. Should they so desire, though, guests will find an abundance of ways to discover more about HAVEN. Performers on stage tell tales and sing songs. Plaques on scale models reveal the history of each of the buildings. The souvenir shop offers books and comics containing the adventures of HAVEN's brightest and boldest inhabitants.

Guests can take up the role of recruits to join HAVEN. Their personal progress will be stored on their Discus, our interactive token. At many points throughout HAVEN, tapping the Discus will unlock personalised reactions from characters on what guests have experienced.

We have designed HAVEN so that guests have a new place they'll want to spend time in. There is room for fun and for reflection. For thrills and calm. For sharing a meal and finding cool collectibles. We really do intend for HAVEN to be a haven for those who are looking for one.

MODULARITY

In coming up with the concept of HAVEN as a storyworld for Location-Based Entertainment, several factors were important in our design process.

The first of these is the idea of modularity. There is no predetermined order in which guests should experience each of the attractions and other elements in HAVEN. Every attraction stands on its own, telling a short story from start to finish. When taken together, the attraction mix offers the guests several opportunities to dive deeper into the storyworld, with each element revealing something new.

Modularity also plays an important part in turning HAVEN into a real LBE, accommodating for the actual location's space and other aspects. Please see page 12 for more information.

PERSONAL STORYTELLING

Another factor is the goal of personal storytelling. While we don't want to - and won't - force guests to participate (see the Discus chapter), we strive to personalise each guest's experience through interactive elements within HAVEN. A visit to HAVEN will be perfectly enjoyable without these elements, but they do enhance the experience.

Part of the options for guests to personalise their story in HAVEN, is to join one of two teams: Tech or Nature. In various forms of friendly competition, points can be earned for their teams by doing well in the Surge attraction, or in the Arcade.

On an individual level, each choice that is registered by the interactive token, the Discus, can result in different interactions and can unlock specific content throughout HAVEN.

ACCESSIBILITY

It is paramount that everyone feels welcome in HAVEN. In theory, a differently-abled guest's experience should not differ from that of an abled guest. In practice, we admit there will be differences - but we've strived to minimise them and, where possible, to turn the difference into a feature.

Around the hub, scale models of each of the buildings in HAVEN are presented on pedestals. These come with little plaques telling guests more about them, but they're really meant for visually impaired guests to get a feel for the place. In a similar vein, lifts are available to take guests up or down, and audio description is offered.

Please find details on how we factored accessibility into our designs for individual attractions on the pages dedicated to accessibility per attraction.

FUN!

The themes of science and nature are not always presented in the most fun way. That's why we think it's not overdoing it to make it explicit here, that fun is a hugely important factor in our design process.

When thinking about the phenomena from science and nature we've incorporated into HAVEN, we always wondered: what would be a fun way for guests to physically experience this? That line of thinking 100% informed what should happen in the dark ride (see the Particle M chapter).

Guests being able to join Team Tech or Team Nature is another way to stimulate them to have fun. It feels wonderful to score points for the team. Healthy competition against the other team ultimately is a positive shared experience, too.
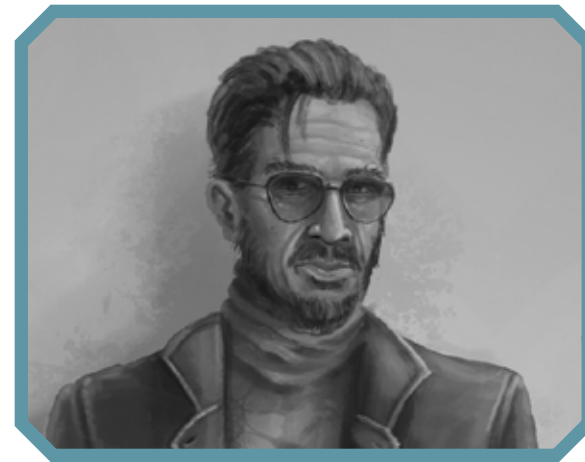
WELCOME TO HAVEN

"Recruits! Thank you for visiting our Hub for Alternative Visions in Environmental Nurturing - or HAVEN, for short. Here at HAVEN, we are working on sustainable solutions for tomorrow's problems. Are you here to join us? We can certainly use people with skills and knowledge like yours!

If it takes a village to raise a child, what does it take to advance a whole society? Well, it takes a whole society, we figured. So that's what we created. You might consider HAVEN a prototype, a test version of what we can accomplish if we all work together.

The HAVEN project started on paper in the 1960s and turned into a reality in the 1970s. The idea was to create a society on a small scale, equivalent to a village, that would focus its communal efforts on the betterment of humanity in an environment-friendly way. Progress should nurture nature as much as it should humanity, because humanity is part of nature.

Taking inspiration from the Romans, HAVEN is set up to be run by three people. This way, different points of view are guaranteed to be part of the conversation surrounding any important decision that needs to be taken. The triumvirate is made up according to the core principles of HAVEN, so we have one tech lead, one nature lead and a mayor. Together, they look after the technological side of the project, the natural element, and all the people involved in it.
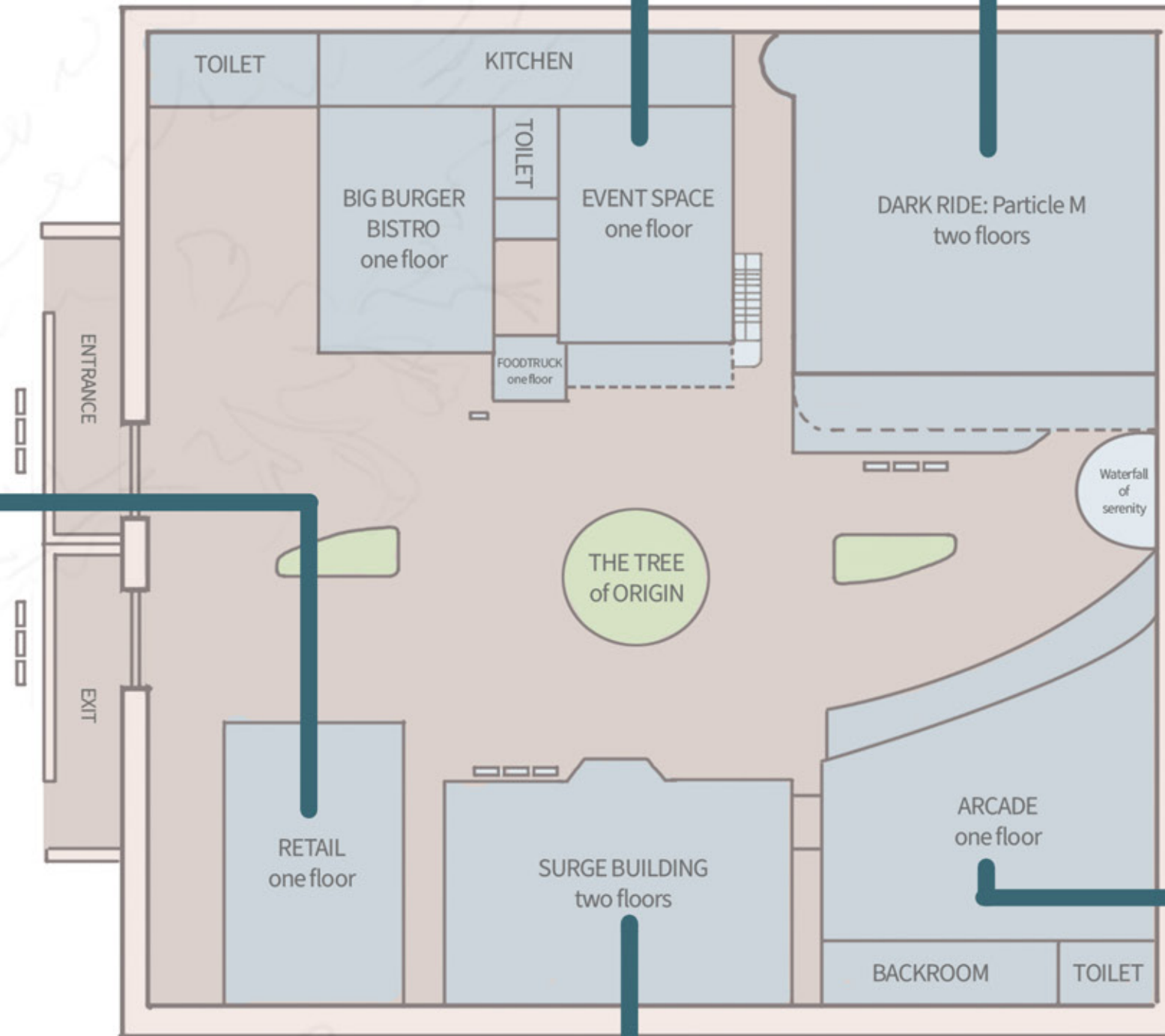
HAVEN's technology probably looks and feels a little unusual to 21st century people. That's the result of a deliberate decision made early on in the project. When the HAVEN project started in the 1970s, we locked ourselves away from the rest of the world. Our community evolved parallel to the rest of the world from that point onwards.

By the time in the 1970s when we splintered off, so to speak, we were well aware of then-current technology. We even had a decent idea of what was to come, because promising developments were already underway. Some major influences on your everyday life, we missed out on, such as social media. But then again, it's not like we really needed it in our relatively small community. We've made progress in other areas here. My wish for you is that, in coming here, you are inspired to build upon those strengths.

There's a lot to be done here at HAVEN. You can help us control rogue energy, visit our labs, enjoy our meals made with local produce, and test your skills in the arcade. Welcome! We're happy you're here."

— Yûharu Noda, fifth mayor of HAVEN, on the occasion of HAVEN opening up to the public after 50 years.

TOILET   KITCHEN

TOILET

ENTRANCE

EXIT

BIG BURGER BISTRO
one floor

EVENT SPACE
one floor

DARK RIDE: Particle M
two floors

FOODTRUCK
one floor

THE TREE
of ORIGIN

Waterfall
of serenity

RETAIL
one floor

SURGE BUILDING
two floors
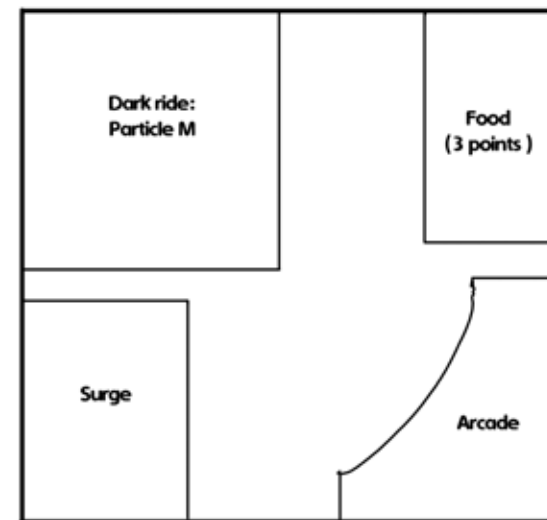
ARCADE
one floor

BACKROOM   TOILET

MODULARITY

While the full range of attractions presented in these pages offer the complete HAVEN experience, it's entirely possible to pick and choose elements to fit different locations. Instead of offering two restaurants and a food truck, just go for one or two of them. Retail area too big to fit? A smaller version is always an option. Which blend of attractions best matches the location? The offerings can be tailored to the limitations and opportunities available. Each individual attraction has been designed to be based on scalable concepts. A smaller location means the dark ride could take place on one level instead of two.
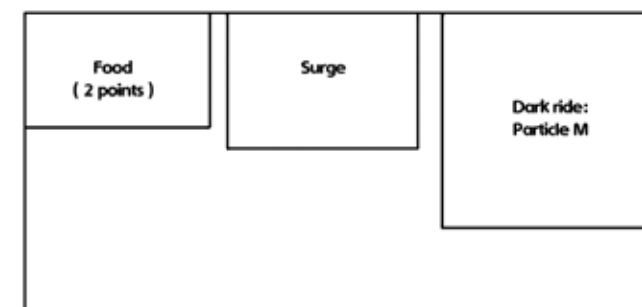
THE DIFFERENT PIECES OF HAVEN:

- Particle M (dark ride)   625m2*
- Surge   350m2*
- Arcade   520m2 (variable)*
- Retail big   250m2*
- Retail small   125m2*
- Food big (3 foodpoints)   605m2*
- Food small (2 foodpoints)   300m2*
- Food truck only   20m2*
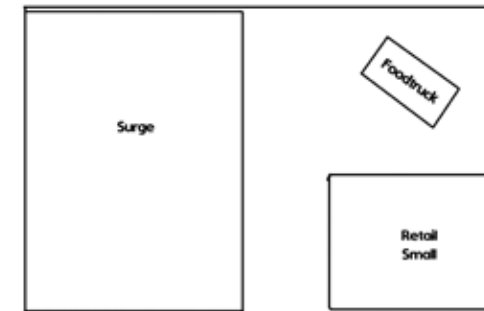- Hub   Variable size (adapts to version of HAVEN)*

EXAMPLE ONE:

Example one: Dark ride, Surge, Food Big and Arcade
size: 2500 m2

EXAMPLE TWO:


Example two: Dark ride, Surge, Food Small
size: 2000 m2

EXAMPLE THREE:

Example three: Surge. Retail, Food truck
size: 805 m2

* all sizes are subject to change

THIS VERSION OF HAVEN

In this document, we present the most lavish form of HAVEN we can imagine within the parameters of the challenge. It's a fully-fledged themed land, with a roof over it, that's painted to look like the sky. This version of HAVEN uses 4100m2 of floor space. It offers all of the elements we love about theme parks (well, okay, there's no rollercoaster), in a smaller, indoor environment. The lay-out has been designed to make it easy to oversee the entire area, striking a balance between there being a lot to do, and still offering enough space for relaxing seating areas in the middle.

GROUND FLOOR
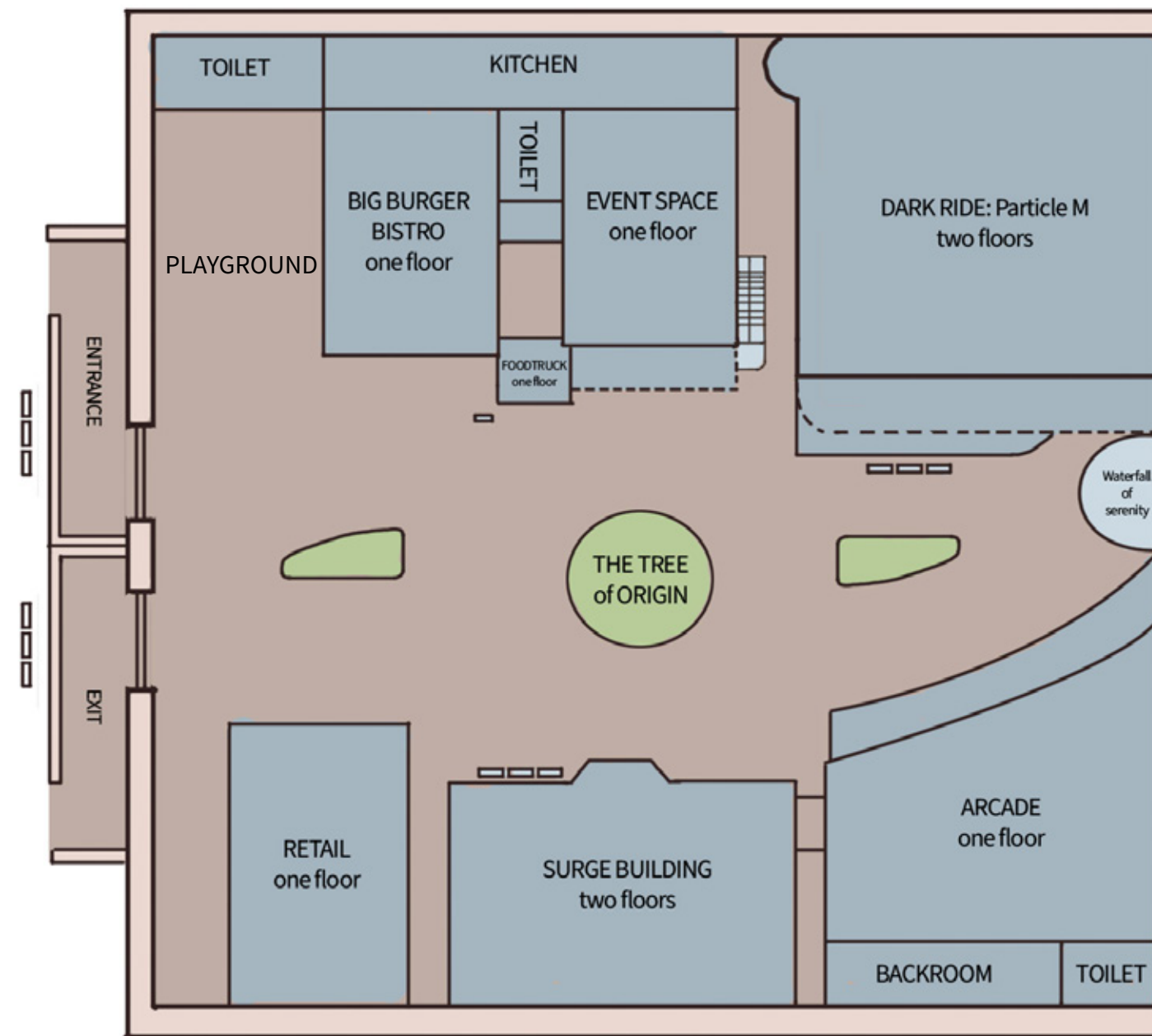
FIRST FLOOR
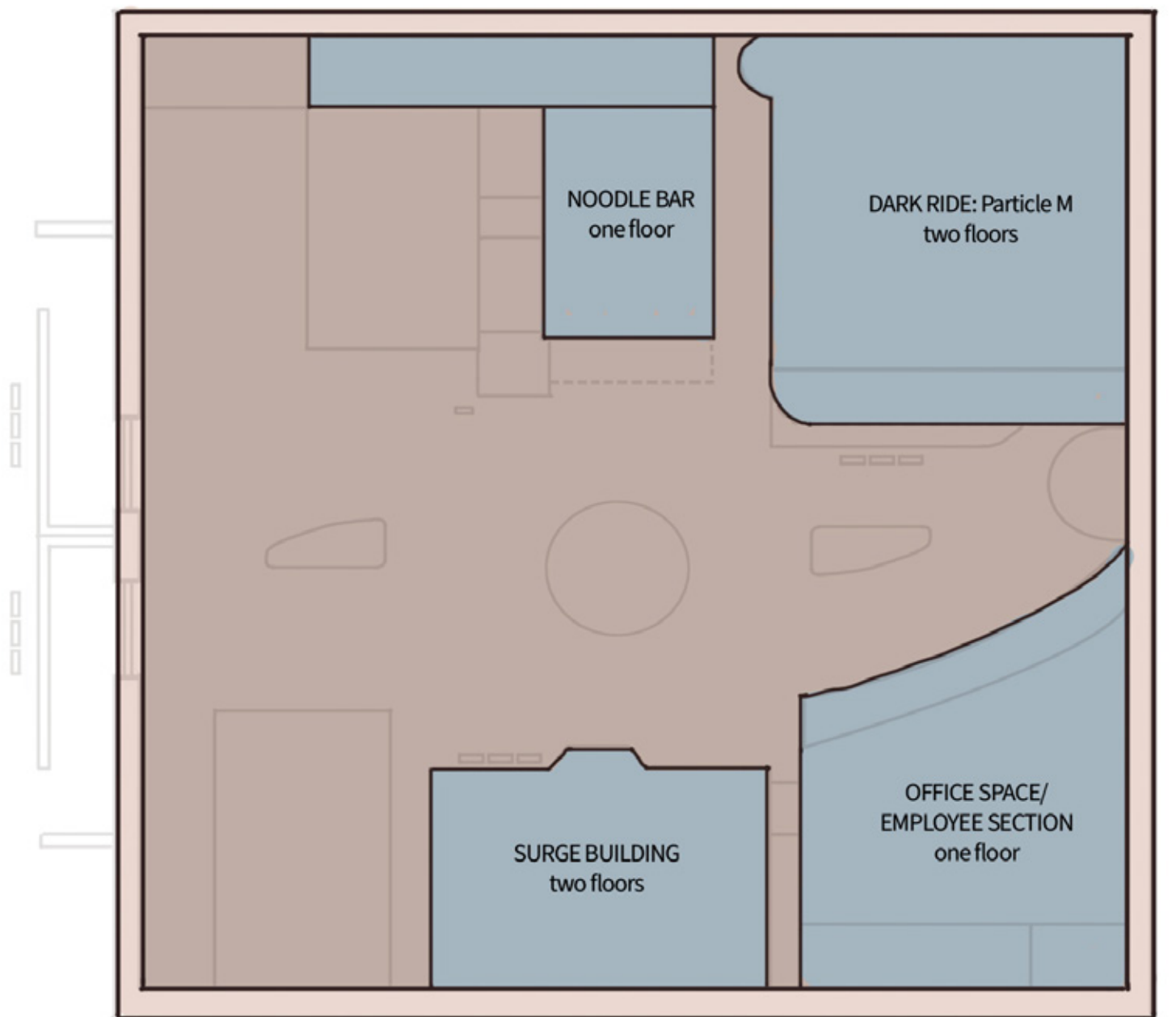
DAY/NIGHT CYCLE

Is there anything more romantic than a theme park at night, bathed in little lights? HAVEN might be an indoor affair, but why not adjust the lighting in the second half of the day to simulate night-time! Depending on opening hours, the place might even be switched to night mode by 4 PM, so younger guests get to enjoy a moment of it, too.

A nighttime atmosphere works well to further enhance the idea of the hub being a place to eat and relax. Turning on the lights for the evening will be a show moment, with a theatrical and musical performance on the stage.

SUSTAINABILITY

The thematic concept of sustainability in HAVEN goes very well with its practical counterpart. Ideally, the entire place should be built using the most sustainable materials and techniques.

Solar panels on the roof would make a lot of sense. There are green areas in the hub with shrubberies. A large tree stands at its centre. The plants fit within the storyworld, help provide an element of calm in the hub, and play a role in purifying the air.

Local produce will be bought to stock the kitchen for both of the restaurants and the food truck. Portion sizes would be something to look into, though we'd want to strike a balance between being responsible in the fight against food waste, and not coming across as stingy in the process.

Another part of the efforts around food is to join the Too Good to Go program, or implement a similar one, which allows guests (and potentially others) to buy unsold food items at lower prices at the end of the day.

THE ART DIRECTION OF HAVEN

We define the art style of HAVEN as retro-futuristic. While most retro-futurism is rooted in the 1950s and heavily influenced by "Americana," we aimed for something different. This community diverged from our own in the 1970s and has since evolved parallel to ours. The colours, wallpapers, and wood accents draw inspiration from the 1970s. Our buildings feature many beveled corners, and you'll notice that they are rarely straight—"tight but not straight" is the best way to describe them.

Technology in the 1970s often had a beige colour scheme, which informed the futuristic look of HAVEN. Old monitors, TVs, phones, and similar devices served as key inspirations, though in our storyworld, these items have evolved over time.

In our narrative, scientists had different priorities from those in our world, leading technology to develop in an entirely different direction. For example, they never focused on making monitors or TVs smaller—there was simply no need. Everything remains very analogueue and tactile, and touchscreens like ours were only introduced when HAVEN opened to guests.

HAVEN is a hub born out of the collaboration between nature and technology. Nature plays a significant role in our hub and integrates seamlessly into the otherwise "tech" appearance of HAVEN. Wood accents on the buildings highlight this harmony.

ACCESSIBILITY IN HAVEN

On the right you see a pedestal with on top a miniature of a building in HAVEN. There is one of every building. Guests with a visual impairment can feel how the building looks while hearing the sounds that go along with it.

Below you see an example of how our kiosk has a variant that is built to accommodate guests in wheelchairs, smaller guests and children.
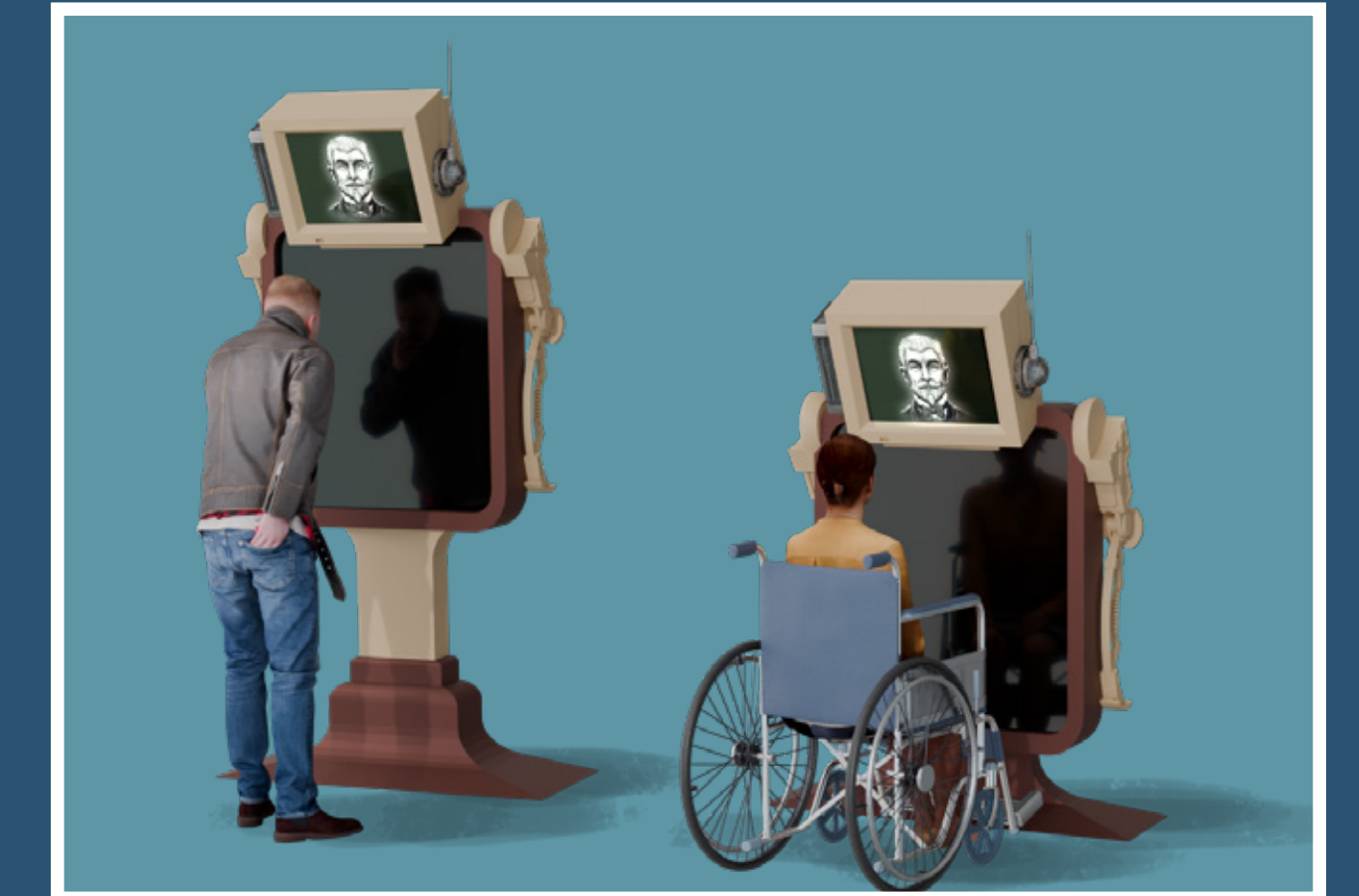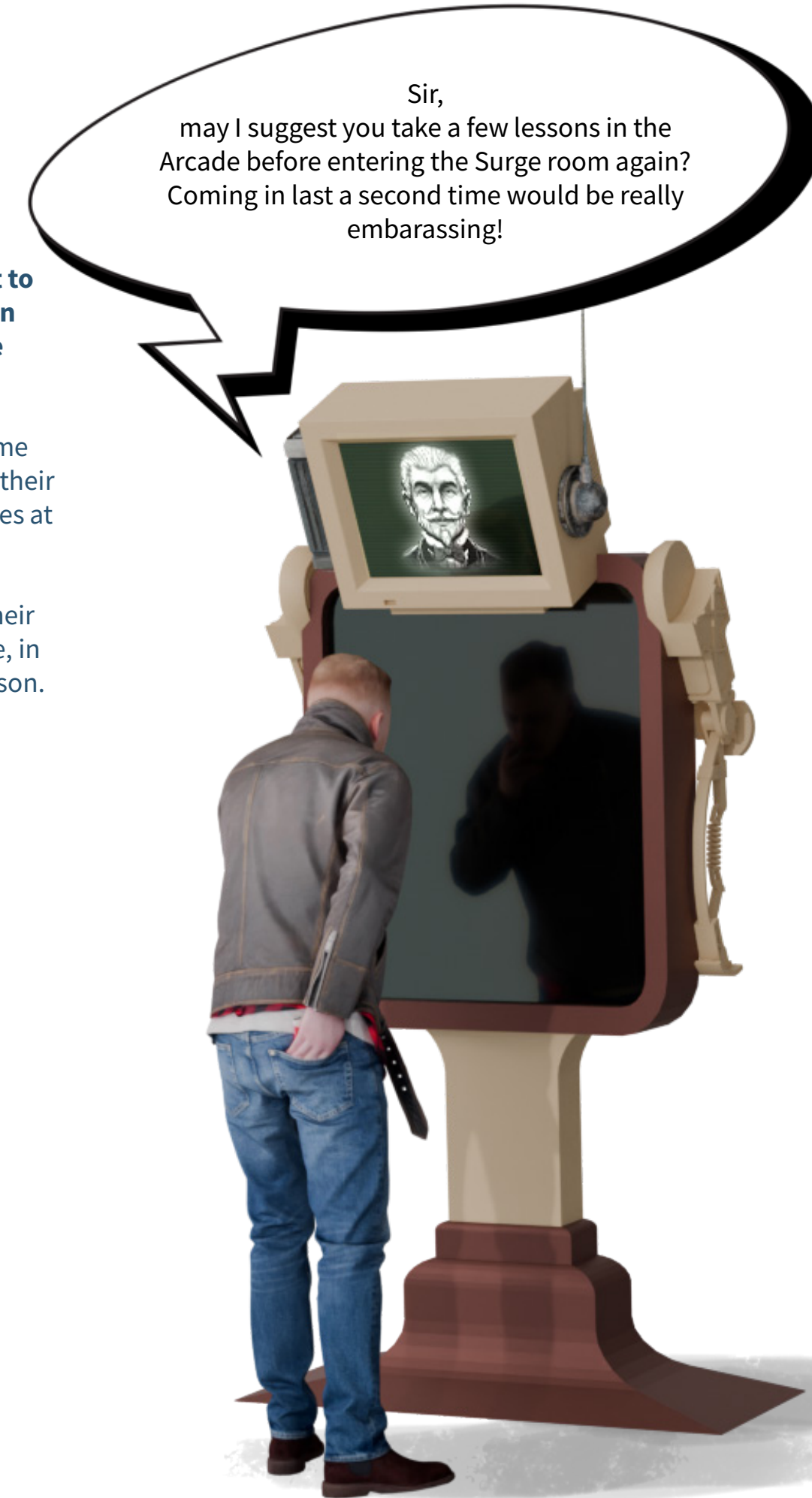
THE DISCUS

THE DISCUS

WHAT IS THE DISCUS

Guests are welcome to consider themselves recruits for HAVEN's many future plans. In recruitment, it's important to keep track of a person's interests and skills. If guests wish to, they're welcome to use a Discus - an interactive token the size of a badge, with a chip inside. The Discus helps provide guests with a personalised experience. It can store information about the guest's activities and achievements over the course of one visit, or several.

Guests may choose to use a J4-M35 terminal by the entrance to input some information onto the chip. Think of their name and whether they're joining Team Tech or Team Nature. They make this choice for a team intuitively, right at the start of their visit. During their stay, by tapping the Discus against interactive elements, guests will unlock reactions to their adventures at HAVEN. Depending on a guest's age and personality, the reactions they get via J4-M35 can be sassy, or less so.

For example: the Discus can be docked into the "guns" in the lasertag-type experience, Surge. The Discus knows what their score is. Later on, when the guest taps the Discus to a J4-M35 elsewhere at HAVEN, they will hear feedback on their score, in the form of a selection of pre-recorded dialogue from J4-M35 or their team leader, professor Campbell or doctor Andersson.

Sir,
may I suggest you take a few lessons in the Arcade before entering the Surge room again? Coming in last a second time would be really embarassing!

PERSONAL STORYTELLING

Opting-in to the interactivity through the Discus is entirely voluntary, and up to each individual guest. There is, of course, no penalty for not doing so, although in that case, personalisation will be limited.
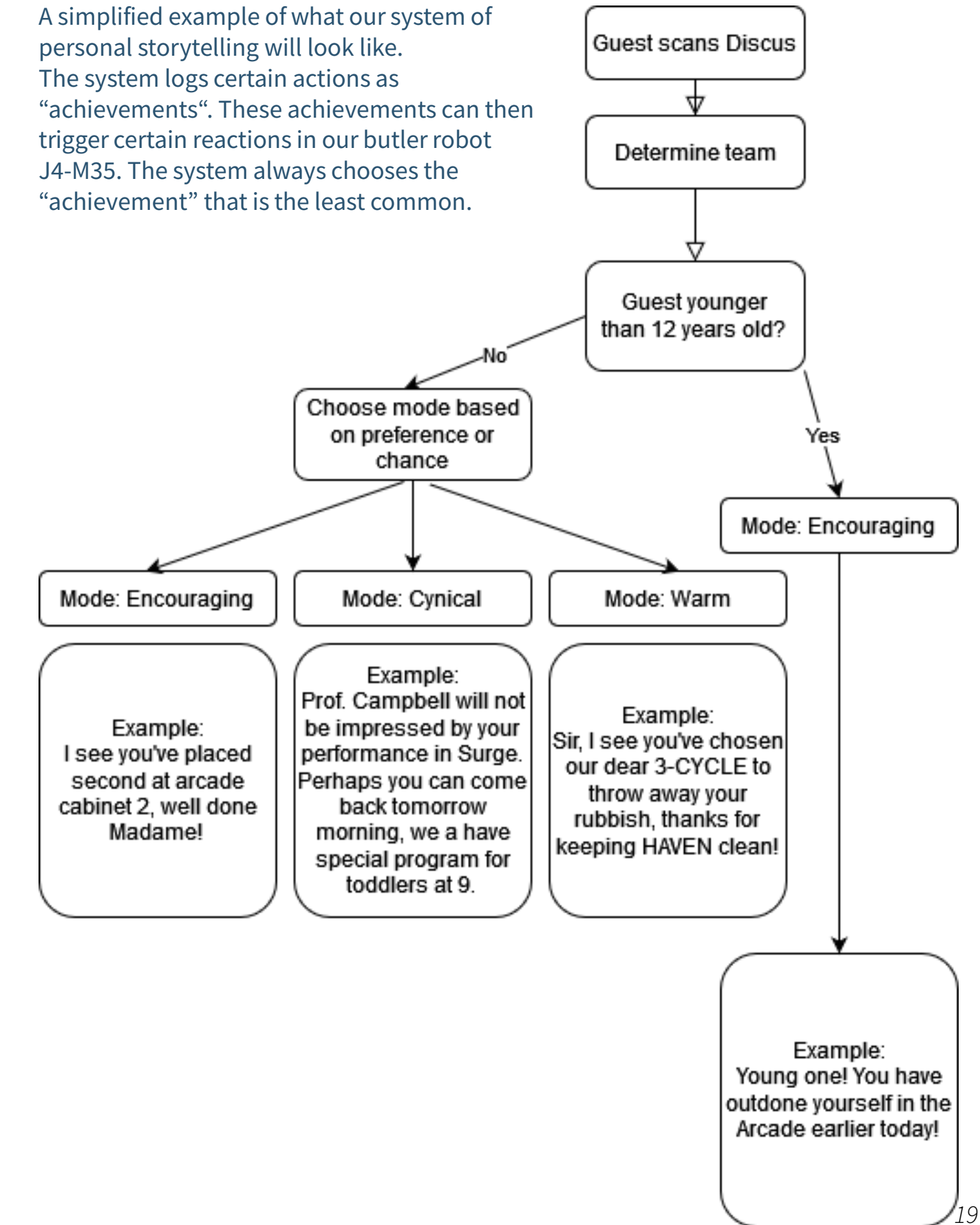
In the House of Trade, various items pertaining to the Discus are available for purchase. There's a strap to tie the Discus to your wrist, a lanyard, and a standee to display it in when guests come back home.

Each Discus contains an NFC (near-field communication) chip. The chip stores information on the guest's activities. It communicates with our software, which contains a flowchart of audio and animations as reactions to the information. The Discus has been designed to be a desirable souvenir. However, it is the type of object that can easily be discarded by more nonchalant guests. We therefore include a deposit in the entrance fee, which can be redeemed when guests hand the Discus back in at the end of their visit. Guest who wish to, are welcome to take the Discus home. By working with a deposit, we hope to avoid having those who don't want to keep it be careless with it.

EXAMPLE FLOWCHART

A simplified example of what our system of personal storytelling will look like.
The system logs certain actions as "achievements". These achievements can then trigger certain reactions in our butler robot J4-M35. The system always chooses the "achievement" that is the least common.

Guest scans Discus → Determine team → Guest younger than 12 years old?

No → Choose mode based on preference or chance

Yes → Mode: Encouraging

Mode: Encouraging
Example:
I see you've placed second at arcade cabinet 2, well done Madame!

Mode: Cynical
Example:
Prof. Campbell will not be impressed by your performance in Surge. Perhaps you can come back tomorrow morning, we a have special program for toddlers at 9.

Mode: Warm
Example:
Sir, I see you've chosen our dear 3-CYCLE to throw away your rubbish, thanks for keeping HAVEN clean!

Example:
Young one! You have outdone yourself in the Arcade earlier today!

THE HUB

THE HUB

ENTER THE WORLD OF HAVEN

Welcome, everyone, to HAVEN! Under this one roof, guests will experience the thrill of a lasertag-type game in Surge, the humour and majesty of science in our dark ride Particle M, they'll compete against their friends or even against themselves in the Arcade hall, they can savour food & drink options made with local produce, and they can extend their exposure to the storyworld by buying further HAVEN stories in the form of books and comics.

Oh, and did we mention there's a playground for the youngest guests? We mustn't forget the themed event space, perfect for anything from birthday parties to business meetings in an inspiring environment. Plus, HAVEN employees need a quiet place to get changed out of or into their own clothes, and a nice big balcony terrace for lunch and other breaks, overlooking the hubbub of the hub.

The hub is where all of these experiences start and end. HAVEN's hub is modelled after a cosy townsquare. All of the attractions, the shop, the restaurants - they're all there, in that first eyeful of HAVEN guests get when they come in. And then there's the calming greenery. The inspiring Tree of Origin, that's growing around the statue of HAVEN's first mayor. Wait… in the back… is that a waterfall? Wow! It'd be a shame to ignore the stage in front of Surge, where in-character performers tell stories and sing songs of HAVEN's fascinating history, while guests sit comfortably on the benches or at the tables in front of the restaurants.

Ah… this is a place where you want to spend a day, enjoying the fun attractions and the relaxing atmosphere.

The hub is where the 1970s retro-futurism art style truly comes to life.

Analogue solutions are prevalent here, particularly in how we achieve visual effects. The sky projections on the white screens above the buildings, for example, feature moving images of clouds during the day and a starry sky at night. These projections are purposely designed to look like fabrications of what was available at the time, adding to the authenticity of HAVEN's retro-futuristic feel. The ceiling lighting adjusts to HAVEN's time of day, gradually transitioning from a vibrant blue sky to a deep night sky.

Large speakers create an uplifting and serene soundscape. These speakers are hidden in plain sight, designed to blend seamlessly with HAVEN's aesthetic, featuring an orange colour and rounded corners.

Beyond the technology, natural elements also play a significant role in the hub's storytelling. The Tree of Origin was designed to eventually engulf the founder's statue, symbolising the harmony between humans and nature. This tree deepens HAVEN's narrative, with a plaque explaining the story of HAVEN's founder.

The hub in this version of HAVEN is designed so that all the buildings are visible from the entrance as you walk in. The tree in the centre creates a sense of curiosity, drawing guests to explore what lies around each corner as they navigate the hub.

There are also more subtle ways in which we've enhanced the immersive quality of our storyworld, which are explained on the next page.

"A PUDDLE WITH THE DEPTH OF AN OCEAN"

The world is, at best, about 4,100 m² in size. However, this should not be the limit of the storyworld. For example, our employee backdoor is disguised as an elevator. Every time an employee passes through, the numbers change, just like with an elevator. This makes the guests believe that there's an entire world just beneath their feet. The lift list makes it even more intriguing, as some of the levels are redacted.

IMMERSION THROUGH THE MUNDANE

Having small details throughout the storyworld really enriches the experience overall. Small things like:

- Stickers that refer to the energy source presented in the Dark ride: Particle M.
- OSHA-like certificates from the HSU (Haven Surge Unit) from the Surge game.
- Employees dressed in appropriate clothes that fit their roles, whether it be cleaner or security
(See the Characters chapter for more.)

QuickLift
powered by Particle M
Employees only

GF	Guest center
01	Housing 1
02	Housing 2
03	Lab
04	HAVEN industries
05	Experimental
06	Cultural center
07	Sports
08	Retail
09	Studios
10	[REDACTED]
11	Farmland
12	Treefarm
13	Biolabs
14	[REDACTED]
15	Executive floor
16	R&D/Power

THIS FACILITY IS POWERED BY
PARTICLE M

HSU
Certificate
of Completion

Big Burger Bistro

Proper Surge Handling

PARTICLE M

PARTICLE M

PARTICLE M

Science can inspire awe - and it can be funny, too! Sometimes, experiments go wrong in harmless, hilarious ways. You can't make progress without first making a few mistakes. And hey, sometimes those mistakes get you splashed or scorched, but only lightly, hopefully… The trick is to have a sense of humour about it.

Professor Henry Campbell invites guests on a tour through the HAVEN laboratories. Here, the brightest minds are working on sustainable solutions to society's wicked problems. Campbell guides guests through the testing facility by "live-streaming" from his own lab. There, he has been testing Particle M for its potential for ages, and he's about to share a breakthrough!

After guests board their PUCs (Prototypes Under Caution), the trackless ride system carries them to the first experiment. Here, we see mechanical chickens being brought to life with the power of Particle M. But something's not quite right, as the chickens seem to lack power. Hm… Onwards to the next experiment, to see if a better powersource can't be found.

Since the testing facility is in full swing, guests will experience the experiments for themselves. How does their PUC fare against a windmachine for producing green energy? Has the waterpower installation been sealed shut? And are the scientists quite sure the PUC itself is working properly to ensure a smooth ride?

The excitement rises further as guests arrive at a heavy metal door. Behind it is professor Campbell's lab. The guests are just in time for the grand finale. Campbell has figured out that it's music that stimulates the mysterious Particle M to give off the most energy. A concerto ensues, with Henry Campbell as the conductor. With every crescendo, the chickens flare with energy, and the flowers and plants around the lab bloom and sway!

With the full potential of Particle M unlocked by science and art, it's time for the PUCs to be taken in for a check-up. In the elevator down, the joyous music can still be heard. Then, guests disembark and are free to roam the rest of HAVEN.

TECHNOLOGY

The ride system is based on the trackless mover from ETF. This is a very versatile system where the mover can make all sorts of movements that would be harder with a n on-track system.

We put a big emphasis on the music and sounds in our ride, using sound showers above the mover. This makes it so we can really choose what a guest hears and when - without using the, often inferior, onboard speakers.
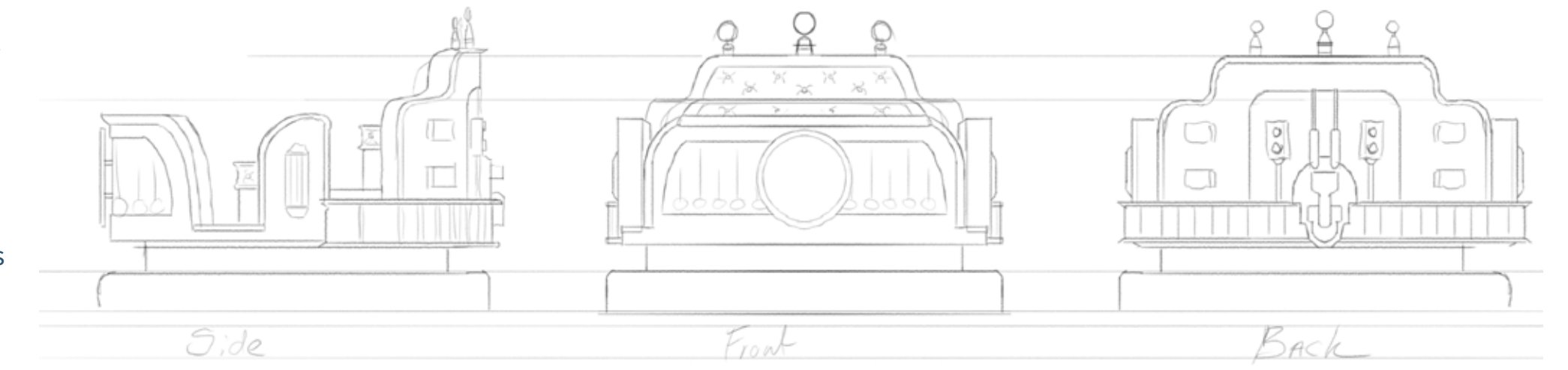
DESIGNER'S NOTES

The PUC (Prototype Under Caution) is based on the ETF trackless mover, as mentioned above. We wanted the PUC to be understated, as we felt that an extravagant design wouldn't fit the aesthetics of the lab.

The colour scheme we use throughout HAVEN is reflected here, along with the wallpaper from the exterior of the lab building. Many parts on the side and back are exposed to give it that prototype/R&D look. This contrasts sharply with the seating area, which is modeled after a classic 1960s couch.

The metal gauges on the back are a callback to what the guest may have already experienced, or might yet have, in the Surge game.

Follow along with this video presentation of the dark ride. While this booklet explains all you need to know, you really get a sense of space, flow and even the music (Video length: three minutes)
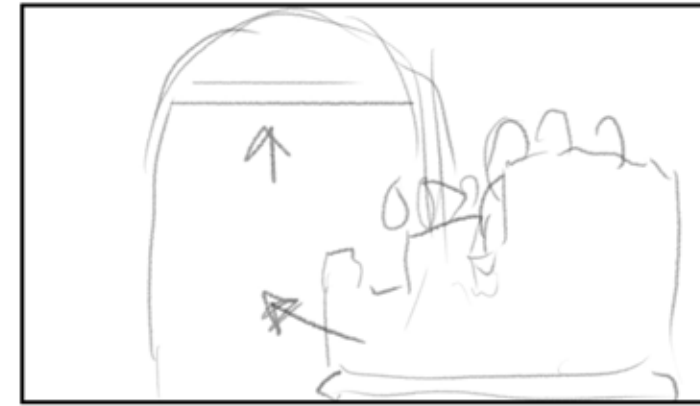
1: The ride starts and a robot with a monitor with the Tech Leader's face, reveals to the guests that they are about to embark on a tour of the Particle M labs: a particle with an unknown source of energy.
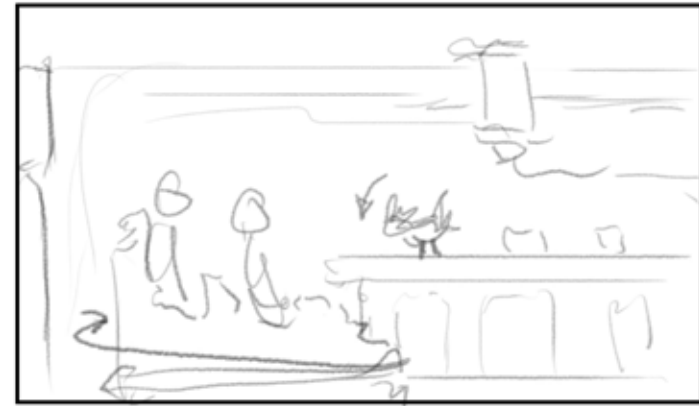
2: The ride continues as the vehicle turns away from the robot, towards the first table. Where a mechanical chicken is being powered by Particle M. They're trying to activate the particle with a solar panel.
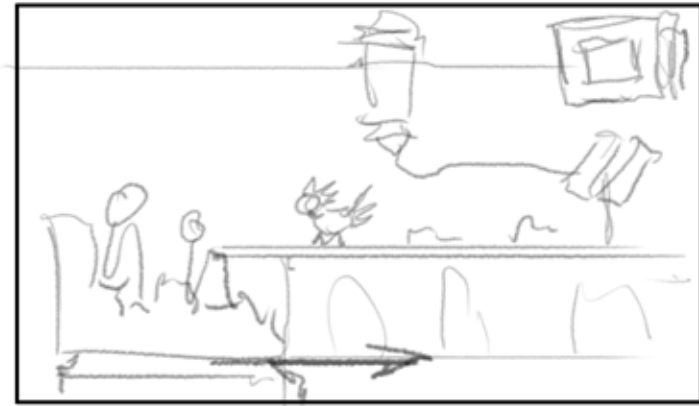
3: Only to realise that of course, the light in HAVEN would never be strong enough. The message comes from a monitor with the Tech Leader's face on it.

4: The vehicle moves on as the voice explains the next logical step: wind energy. A few small turbines are aimed at hanging vials of Particle M. There is some activity but the results are not great. The guests feel a small breeze.
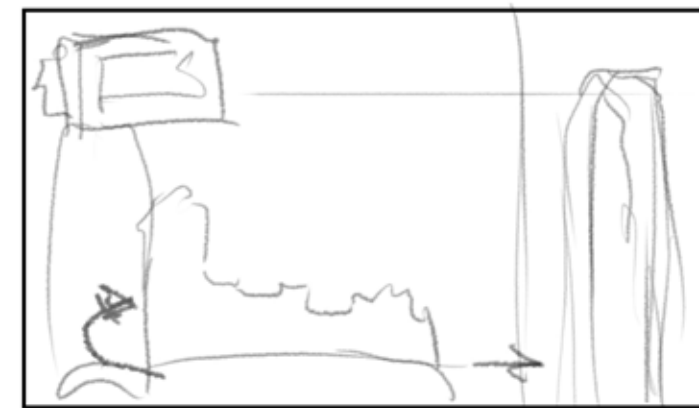
5: "We saw some results, but we felt we needed a bigger stimulant." The guests make a dramatic turn away from the small turbines.
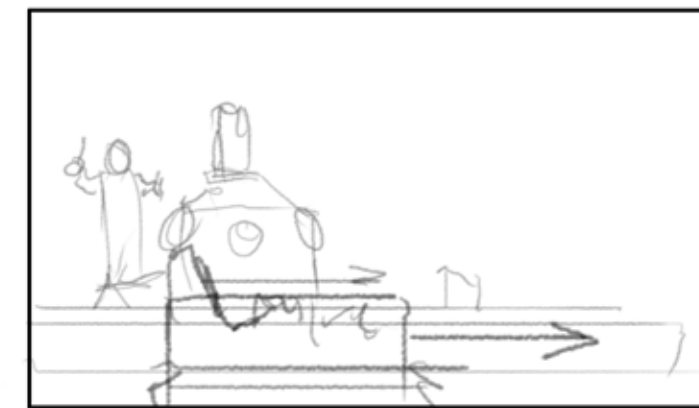
6: The turn reveals a massive fan that is then activated. The vehicle tries to move forward, but keeps being pushed back by the wind. The guests feel a strong wind in their face.

7: This "trying to push through" part works as a stalling mechanism to wait for the elevator to return. The voice on the monitor calls loudly for the fan to be turned off.

8: The fan dies down and the vehicle turns down the hallway towards the lift.
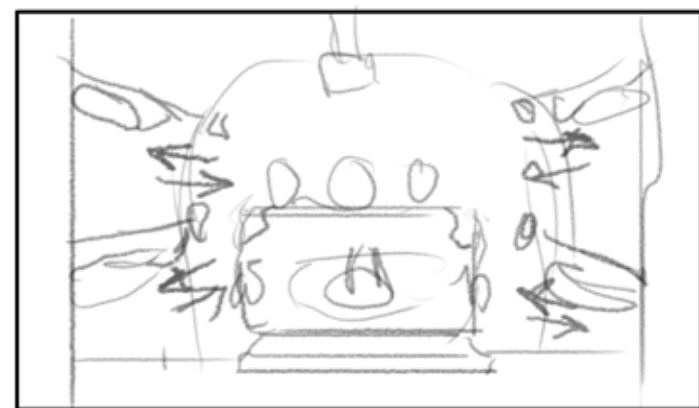
9: A shocking moment where the cart comes to a halt and four firenozzles come out of the wall. "After trying the wind, we thought we might as well try fire!" The nozzles start glowing, "But we felt the only reason wind worked was the vibration, which the fire wouldn't provide."

10: After that little (almost) fire incident, the guests get in the lift.

11: While the lift goes up, the guests hear a "elevator tune" of the music that plays throughout. The disembodied voice of the Tech Leader explains they tried water as well.

12: "We did however have some problems with the pipes." A small amount of water splashes onto the guests while they move through the hall. In this hall, the guests can see the attempts of using water to activate the particle.
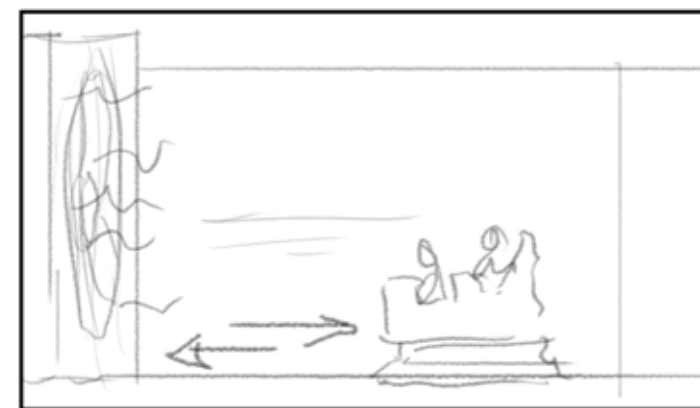
13: At the end of the hall, the last avatar of the Tech Leader presents the guests with the findings. "The vibrations being the main stimulant gave us a unique idea. What if…, well, you'll just have to see for yourself."

14: The guests make a 90 degree turn towards the door as the music SWELLS. The door opens to reveal…

15: An animatronic (real) version of the Tech Leader. He conducts an orchestra of instruments. Some without players, jerryrigged together. "We found that the vibrations of the music are the optimal stimulants for the particle, from then on called Particle M for Music!"

16: The guests move around the big scene while the final part of the music plays, while turning to points of interest. Flowers bloom, robots activate, light shines.
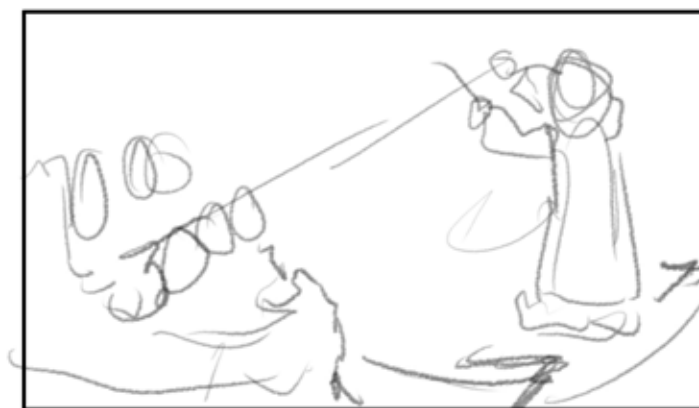
17: The conductor goes around the podium with the vehicle, sometimes slower, sometimes gaining on the vehicle. The guests turn around the last wall, still seeing the Tech Leader conducting the music..

18: The music still plays when the guests are going down in the elevator, giving a sense that the music plays ever on.The guests only hear the final when exiting the elevator, waiting to exit the dark ride.
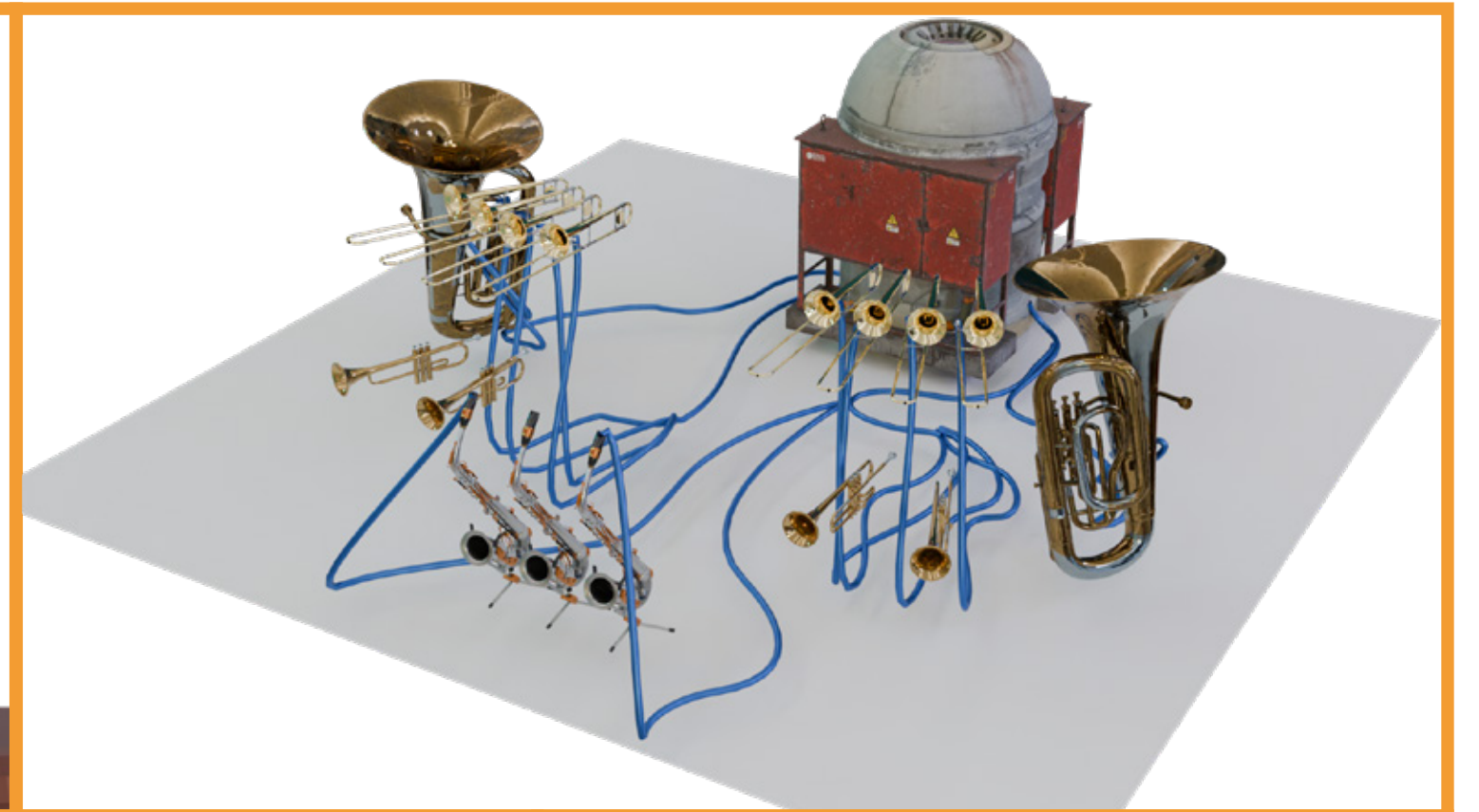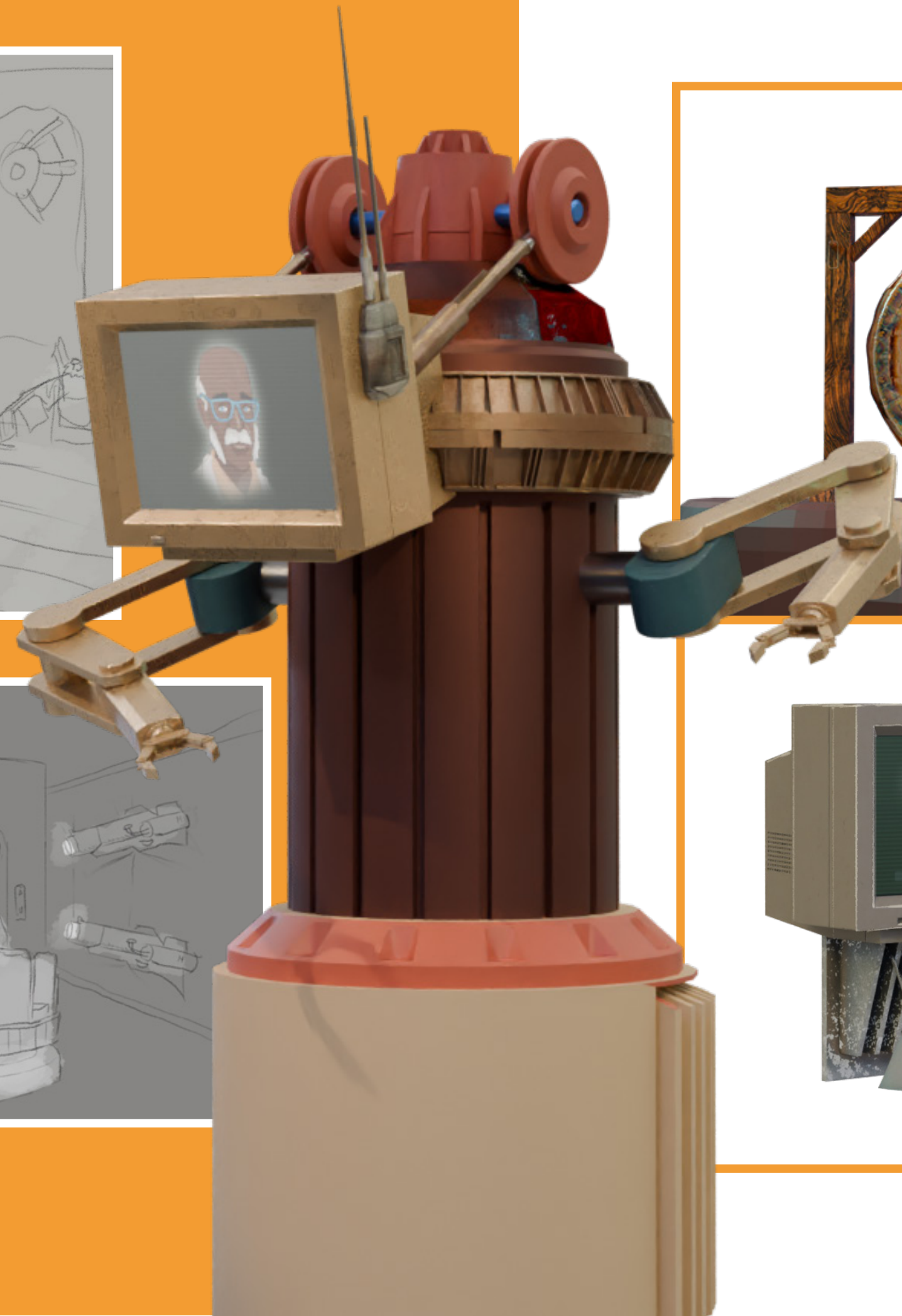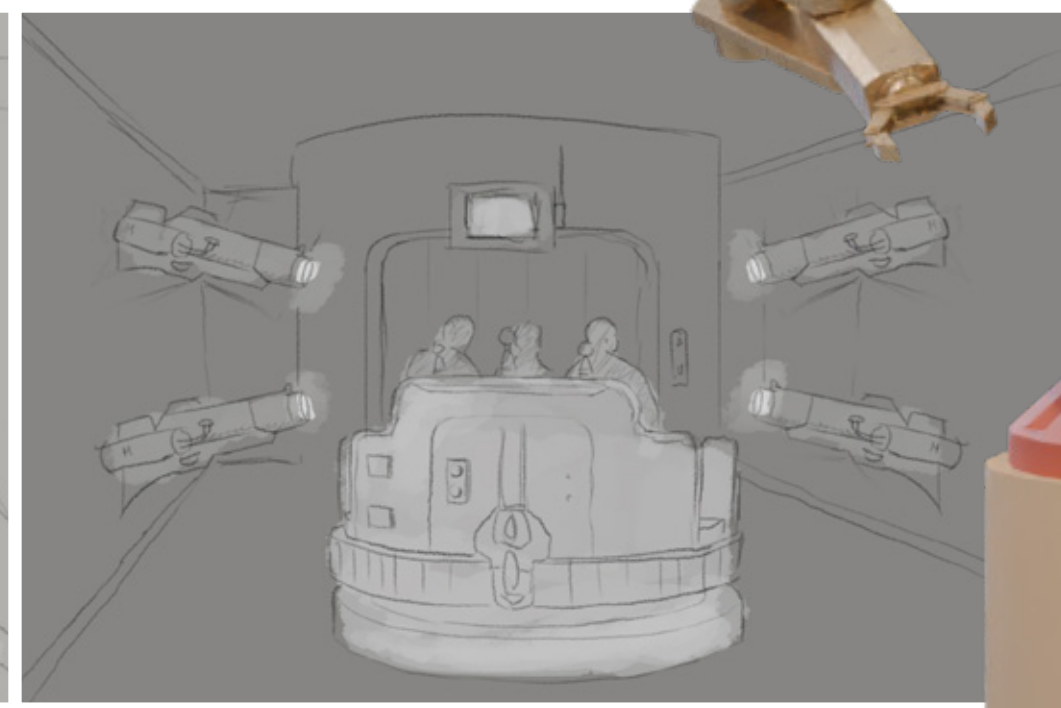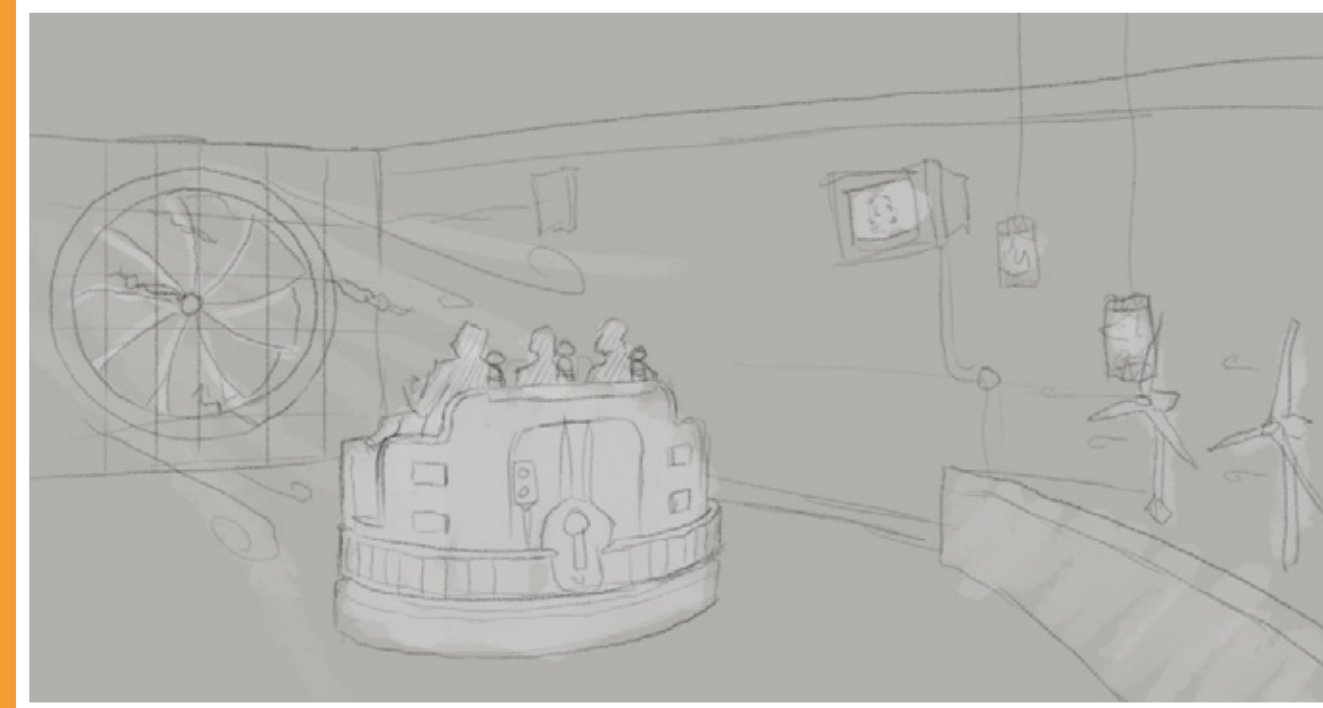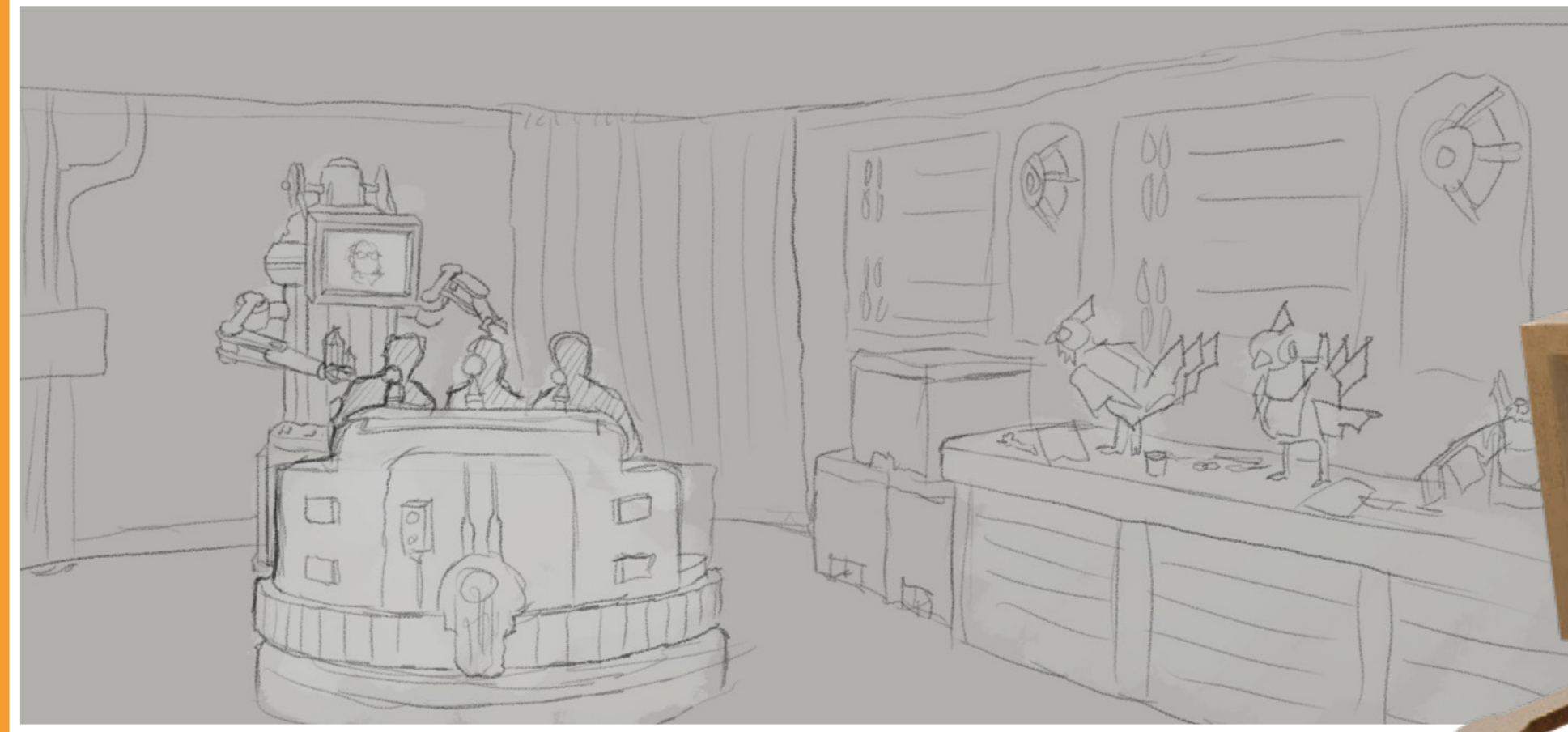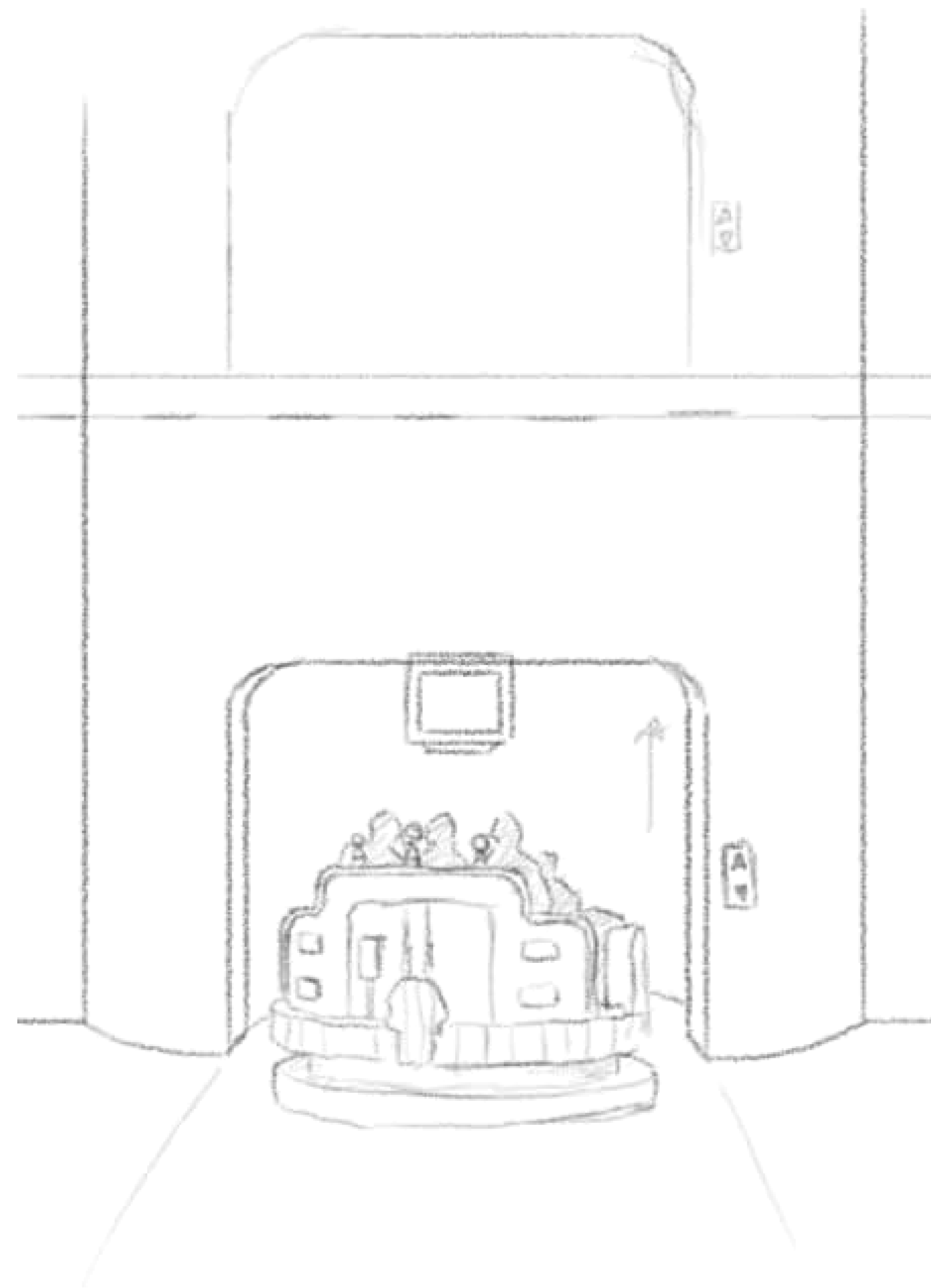
ACCESSIBILITY: AUDIO DESCRIPTION

All of the attractions need to be as accessible as possible for everyone. In this case, at least one but ideally all of the ride vehicles should be accessible for wheelchair users.

For guests who have a seeing or hearing impairment, many elements to this dark ride are still right there to be experienced. They feel the motion of the vehicle the same as other guests, they get blown back by the big fan, and feel the water dripping on them. Those who can't hear will unfortunately miss out on the music in the grand finale. For those who can't see or who have limited vision, audio description is available.

The audio description is voiced by the actors playing professor Henry Campbell (the same lines as are spoken in the ride) and doctor Ellie Andersson. Her lines are spoken as if she's sitting next to the guest in the PUC, commenting in-character on what there is to see in the labs.

SURGE

SURGE

WHAT IS SURGE?

ZZZZT! CRACKLE! In their rush to create sustainable energy, HAVEN's scientists have not yet mastered the art of harnessing all of the power they are producing. Power surges occur regularly, overloading the electricity circuit if left unaddressed. This is where HAVEN's Surge Unit comes in - recruits who are undergoing training to capture the rogue energy from surge stations and syphon it off safely.

Guests become these recruits, as they strap the chargeable battery packs onto their backs and take the syphoning guns into their hands. Sent into what is known as the "engine room" of HAVEN, it is their task to hit the right nodes and the stations they are connected with to collect surplus power before the stations get overloaded!

Each surge station can be controlled by two nodes. On each of the nodes, guests must complete a Simon Says-type of minigame sequence to activate the node. Once both nodes are activated, the corresponding surge station is unlocked and guests can syphon off the energy.

Once the rogue energy is stored safely in their high-tech backpacks, guests must hurry back to Base to unload it. They're then free to get back into the field and control the next batch of surges.

Multiple game modes are available, including Co-Op Mode in which everybody gathers energy as explained above, and a Tag Mode in which guests can drain energy from their fellow players' backpacks to become the top scorer in delivering energy back to the Base. A second way of thwarting the other players in Tag Mode is by deliberately sabotaging nodes. Whenever a wrong sequence is punched in, a node goes offline for ten seconds, blocking access to the corresponding surge station.

WHAT TECHNOLOGY DO WE USE?

The real-world technology behind the Surge attraction is that of Location-Based Entertainment classic, laser tag. To fit with the theme of HAVEN, the explanation behind it has been tweaked to minimise the idea of attacking and prioritising fun instead. Instead of "shooting", guests will be "collecting energy".

Tag Mode most closely resembles the classic laser tag experience. Here, still, the level of implied attack is kept to a minimum, with guests aiming to "steal energy" from each others' backpacks, rather than outright firing at their fellow players. The technology behind it, however, works the same.

DESIGNER'S NOTES

HAVEN's world has been tailored to a specific aesthetic with rounded corners, vibrant colours, and natural elements. Surge is in stark contrast to this philosophy. A machine room that would normally be out of sight for its people and customers is now the play area for a physical and stress-inducing game. We felt that the contrast was needed to evoke a sense of urgency and unease in the players. The colour scheme we adhere to does return, but in muted versions. It is matched with hard surface metals and cables as decoration.

The cleanest part of it all is the asymmetrical gameplay room (mentioned later in this chapter). An office is usually cleaner and more decorated than the warehouse below it, and we felt it would be a good idea to adopt that feel.

INTERACTABLE OBJECTS

Each surge station consists of a screen, a (fictional) electricity box, and a point from which players can syphon off the energy with their syphoning gun. The electricity box is home to a few light and sound effects that will help sell the experience of wrestling with energy. The screen tells players how much energy can be drained here, in a bar under the words "surge warning". It also informs players whether the nodes that are linked to this station are "active" or "inactive".

The nodes are easy to understand and to use touchpads with four buttons that light up. Having to follow and repeat a short sequence should add a pleasant level of stress for the players.

In Tag Mode, manning a node is the perfect opportunity for a competitor to steal some energy from the busy player's battery pack.
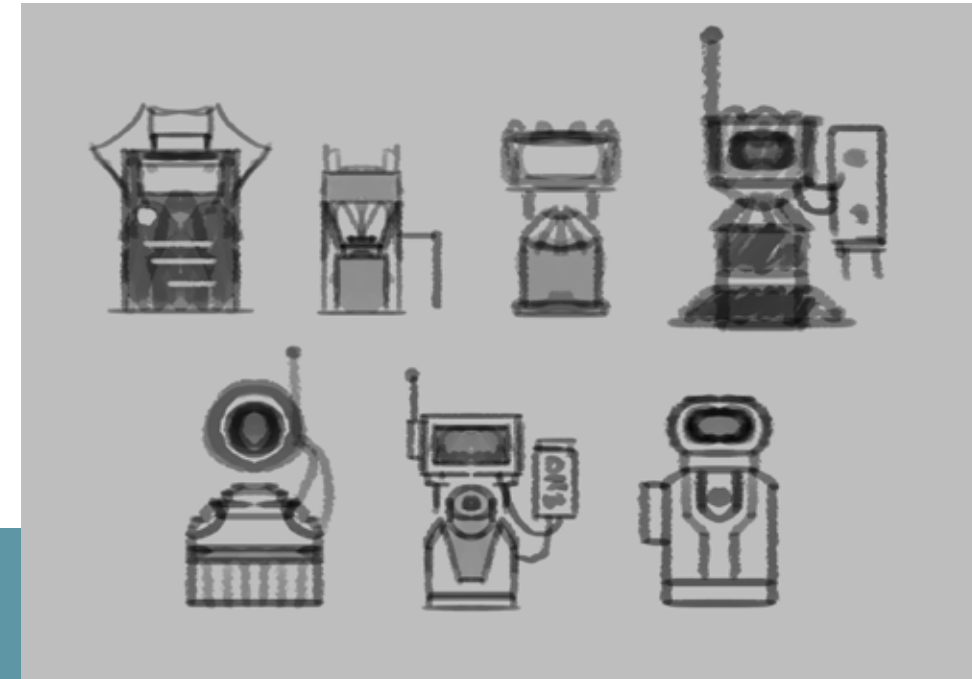
THE SUIT

Both the guns and the backpacks feature LED lights to show how many units of energy a guest has collected at any given time. Points are not scored until the units of energy have been unloaded into the unloading station, comparable to HQ in classic laser tag games.
Instead of re-energising their equipment there after being hit, here guests "unload" the energy they've collected.

DESIGNER'S NOTES

The suit has been designed with two big batteries on its back.
To emphasise the aforementioned sense of unease, the play area is not well-lit. Players will have to use the flashlights on their shoulders to navigate.

The surgehose has been designed as a gun with a flexible hose at the end, which can be inserted into the surge station. In this way, it really sets it apart from a "typical" laser rifle.
The analogue gauge on the top indicates the power level; if full, the player has to deposit its power. The gauge was chosen to adhere to the late 60s/early 70s aesthetic, where only a handful of displays were digital. It also has a pump lever to decrease the time it takes to unload the energy, making this part of the game less passive.

The surge stations are designed around a more muted version of the HAVEN palette. Cables are visible, and it has a very rudimentary, simple digital display that conveys the information the player needs.

The Node has a simple design where a lightbulb lights up when active. To activate the node, the player presses one of the buttons to start a "Simon says" sequence. After inputting it correctly, the node is activated.
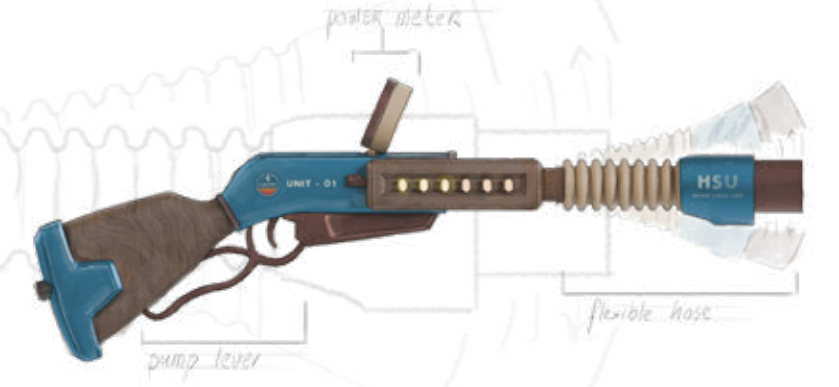
ACCESSIBILITY: ASYMMETRICAL GAMEPLAY

Surge has an asymmetrical gaming element: the Base is manned by one guest who keeps an overview of the room, informing the others over the intercom where the next surges will be. The unloading station is placed right in front of the Base. This guarantees regular face-to-face contact between the players in the field and the player in the control room, to reinforce the fact that they're playing the game together.

This "control room" element is perfect for guests in wheelchairs, who might otherwise have difficulty navigating the "engine room". The control panel features Braille on each button, making it more accessible in another way. To further give guests with a seeing impairment an immersive experience, sound effects serve a guiding function.

In Tag Mode, the player in the control room is in with a chance to become top scorer, by being faster in completing minigames that mirror the ones on the nodes.

NODE 1   NODE 2
SURGESTATION A

ENTRANCE

UNLOADING
STATION

ASSYMETRICAL
GAMEPLAY
ROOM.

TECHNICAL
ROOM

STORAGE FOR THE
SUITS

SURGESTATION B

PRESHOW/
TUTORIAL VIDEO

SURGESTATION C

NODE 3

NODE 4

SURGESTATION D

HAVEN ARCADE

HAVEN ARCADE

For a society to function well, many people with various types of skills are needed. Like in the real world, teachers at HAVEN have found gamification a wonderful way to approach mastering skills and to learn to work together well.

Four different games will be available on the consoles. They all have a single player mode, and a multiplayer mode centred around co-op rather than competition.

City-building game: put together your ideal version of HAVEN!
Transport simulator: pilot a public transport submarine without hitting anything!
Puzzle game: recombine parts of scrap to create new tech!
Action maze chase game: gather the mechanical chicken's eggs before they go bad!

In addition to the digital console games, there are multiple copies available of two analogueue challenges along the lines of fairground games. These have singleplayer and multiplayer options as well, with the multiplayer variant here being competitive.

Surge practice: hit marks with painted-on energy surges to collect points ("power")!
Claw machine: practise reaction speed by trying to grab souvenirs from the House of Trade!

DESIGNER'S NOTES

The design of the arcade's exterior and interior draws inspiration from the old carousel palaces that once graced Europe. This design integrates the classic "arcade" arches and the numerous lights characteristic of those palaces, reimagining them in a futuristic context. Inside, the lighting is soft, and combined with the carpeted floors and warm-coloured wallpaper, it creates an overall cosy atmosphere with a hint of charming, old-fashioned kitsch.

CHARACTERS

THE CHARACTERS OF HAVEN

HAVEN is a world of pioneers, and their offspring. Some of the original founders are still around, as are of course many of the now grown-up children they brought with them all those decades ago. And then there are those who were born within HAVEN.

For the three leaders who currently run this place, please see to the right. They are so important to the storyworld that they get their own little bios here.

Behind the restaurants are two families. More about them can be found in the Food, Beverage & Retail chapter. For the walkaround (well, drivearound) T-robots, see overleaf.

Guests can encounter human character performers on the modest stage in the hub. These include storytellers, who share some of the highlights and lowpoints of HAVEN's history with the audience, and local singers and bands, whom we'd like to give a chance to work their magic.

MAYOR YÛHARU NODA

As a very young child, Yûharu Noda served as inspiration for his mother, Noriko, to want to make a difference in the world. She took him with her when she co-founded HAVEN. With her enthusiasm and diplomatic skills, Noriko was the first mayor of HAVEN.

While three others have been mayor between Noriko's term and now Yûharu's own term, Yûharu found it difficult to escape from his mother's formidable shadow. The statue of her, that had been erected when she passed away, at first intimidated him. A year ago, Yûharu managed to make the switch to consider her legacy an inspiration. His leadership has markedly improved as a result.
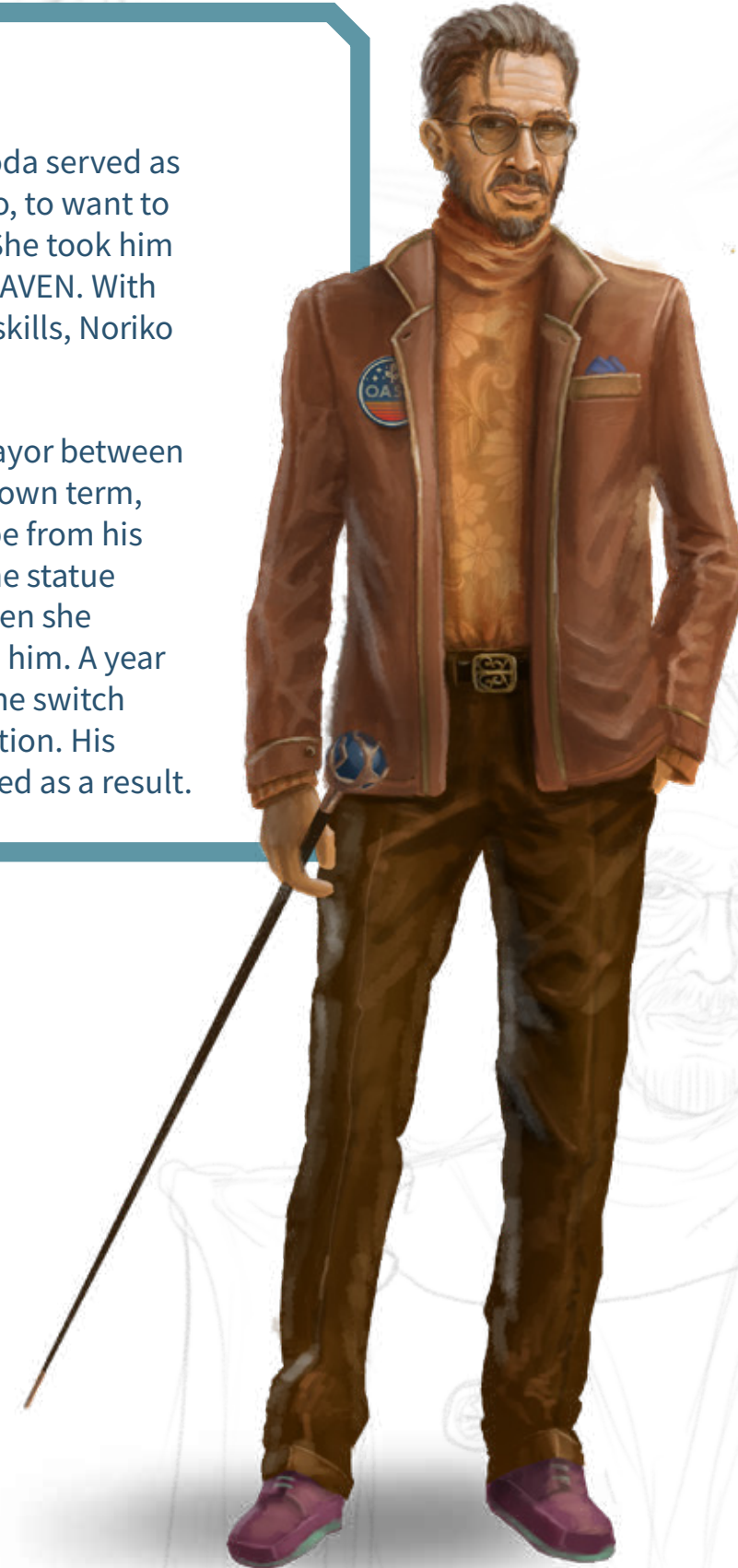
PROF. HENRY CAMPBELL

Upon graduating from university in the 1970s, Henry Campbell joined the group of bright minds whose plans would soon take shape as the HAVEN project. Campbell's input was limited at first, as he chose to learn from his superiors before speaking up. As he became more vocal, HAVEN's society benefited greatly from his knowledge and wisdom.

Currently, professor Campbell is the widely-appreciated tech lead at HAVEN. Many of his inventions have played a fundamental role in advancing HAVEN's technology. Campbell has succeeded in bringing together scholars from various fields, to accelerate progress in all sorts of ways.

DOCTOR ELLIE ANDERSSON

Despite having been born within HAVEN, doctor Ellie Andersson credits her Scandinavian roots for her deep understanding of nature. From the start, nature has been important in HAVEN, but Andersson's studies and suggestions have repeatedly kicked the level of eco-friendly sustainability up a few notches.

An accident that ended the fourth date with her now-wife left her in a wheelchair. During rehabilitation, Andersson decided the chair could use some embellishment. She added little pots for her favourite plants. Since then, Andersson has been affectionately referred to as "Mother Nature on wheels".

J4-M35

Throughout HAVEN, guests can turn to J4-M35 units to get an answer to their queries, to order food and drink, or to check in with the leader of their chosen team. There are taller ones for able adults and shorter ones for children, for short people and people in wheelchairs. J4-M35 is butler-like, but with some bite, and with simple animations on the upper screen for a face. Their "torsos" are the type of touchscreen found everywhere now, for guests to select their choices.

T-Robots

Invented by Campbell's predecessor, professor Stuart McLuhan, the T-robot is a three-wheeled little helper that comes in three variations. The brown ones are seen most often around HAVEN, as they help keep the place clean with small trash cans on their backs. The blue ones are good with their hands, so to speak, and work on things like welding and construction. Beige ones are more rare. These robots function as personal assistants for those who need them.

DESIGNER'S NOTES

The J4-M35 (James) kiosk functions as a check-in point, a food ordering point, and even an entry ticket point. It functions as a butler, and the design reflects that. The colour palette is composed of muted tones, similar to how a traditional butler would be dressed. The robot's arms are curved towards the back, giving the illusion of a butler-like posture. The feet of the kiosk are elegantly designed, further enhancing this effect. The face on the monitor has only a few frames of animation while speaking and features interlacing lines, adding to the more analogue feel of HAVEN. The voice is that of an elderly, posh British person.
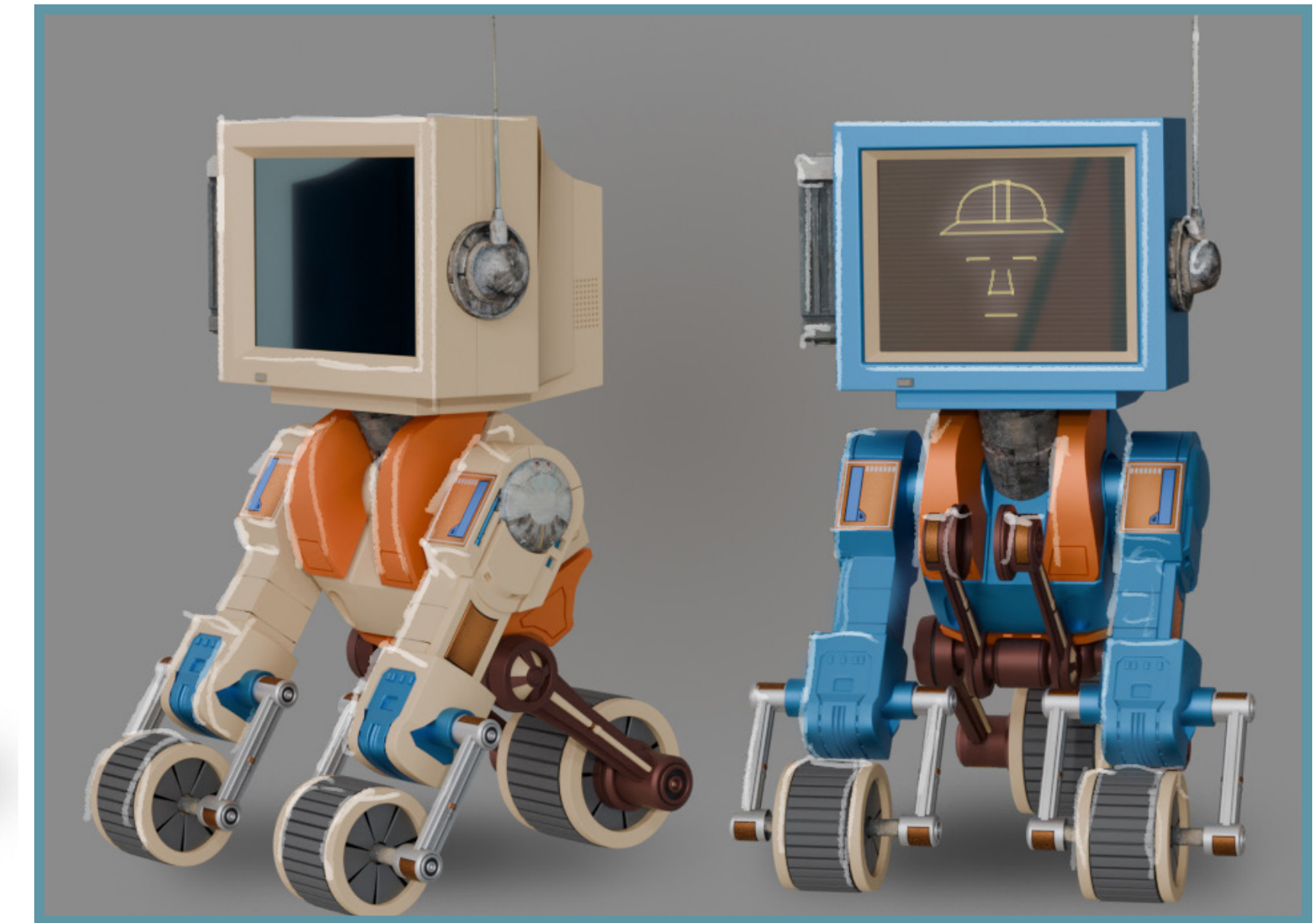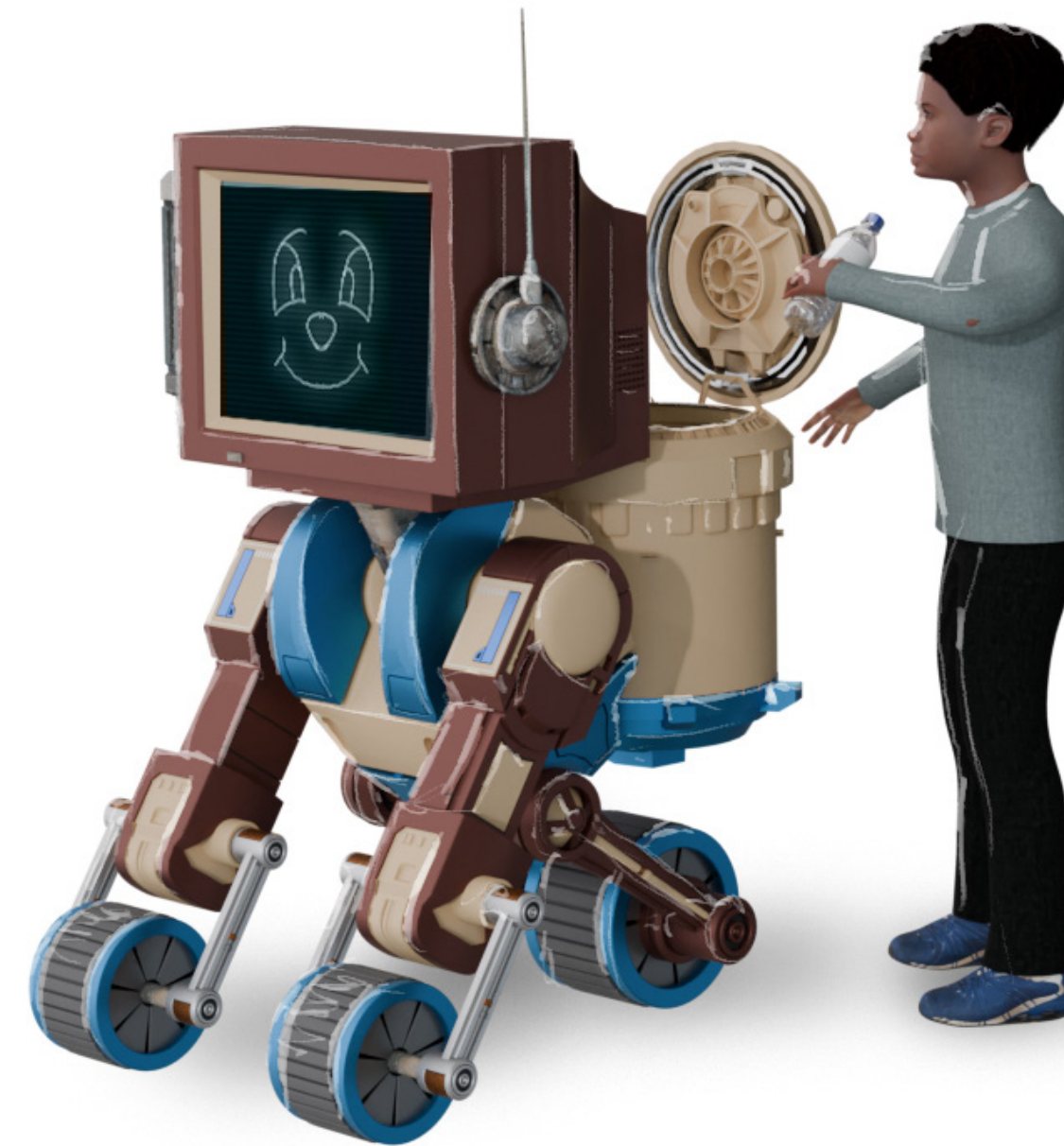
REGULAR EMPLOYEES

HAVEN is populated by guests, by named characters and robots, but perhaps most crucially, it is populated by the people who work there - both in-story and in the real world. Employees will be dressed in specific clothes that match the aesthetic of HAVEN, and their roles within it. For three such roles, artwork can be found below: the general look for employees, the security personnel's outfit and the cleaners. Whenever employees need a tablet for their work, they are provided with a normal tablet, but it will be hidden from guests by enveloping it in a case that matches the look of other examples of technology at HAVEN. This tablet can be tapped with a Discus, whereupon it reads the stored information. It can aid the employee in offering the guest anything from playing a dialogue clip from their team lead, to advising what activity they might do next.

REGULAR OUTFIT

SECURITY OUTFIT

CLEANER OUTFIT

FOOD BEVERAGE RETAIL

FOOD AND BEVERAGE

THE HOSPITALITY OF HAVEN

Food & beverage is another department that is committed to sustainability. Local producers provide the two restaurants and the indoor food truck with their ingredients. What's left of the food at the end of the day is then made available at heavily discounted prices by the entrance to the hub, in a Too Good to Go type of system.

The restaurants come to life through the stories of characters, represented in the menus, with photographs on the walls, and in objects around the restaurants.

The burger restaurant is run by Owen, who has been doing so for twenty or so years now. The neighbouring upstairs noodle bar is run by Jennifer, who, too, has been doing this for a long time. Owen and Jennifer have always seen eye to eye - until recently. When Owen gifted his daughter Katie her own food truck and parked it right in the middle of the two restaurants, Jennifer started to worry about losing customers. A playful battle of one-upmanship began, which means guests are regularly in for a surprise as to what's on the menu, or how the food is presented.

In reality, the three food venues have been positioned so closely together, so they can all share one kitchen in the back. This is invisible to the guests, but should prove very practical for actually running the place.

DESIGNER'S NOTES

The three restaurants share a kitchen located behind the building, which streamlines operations while presenting three distinctly different dining experiences that complement the scale of the world. The Noodle Bar, situated on the second floor, uses a dumbwaiter to transport food. Upon entering HAVEN, guests can view all the dining options at once, creating a striking silhouette against the Particle M building.

The Bistro and Noodle Bar are original structures that have been in place since the beginning, showing subtle signs of wear and tear. In contrast, the food truck is a newer addition, with a pristine and more modern aesthetic.

The building's roof is adorned with various items, enhancing the sense of a lived-in environment. Tarps provide additional "shade" for guests and employees, even though it is not necessary indoors. This feature complements the simulated sky projection, adding to the overall immersive experience.

RETAIL

THE HOUSE OF TRADE

Available for purchase in the open construction that is the House of Trade are souvenirs that extend the guests' exposure to the storyworld of HAVEN.

Who can resist bringing one of the mechanical chickens home? If you're attracted to them because they're cute, there's a fluffy stuffed animal version available. If it's their technical function that you think is cool, we've got a wind-up toy chicken for you. Looking for something smaller? Go for the keychain!

The cookbook, full of tips aimed at minimising food waste and making sustainable choices, is written as if authored by the characters from the restaurants. Child-friendly sections from Katie are alternated with grill tips from her dad Owen, which are followed by noodle recipes from Jennifer.

Elsewhere on the bookshelves, we find comic books telling us of the time doctor Andersson accidentally bred a poisonous plant, and of the day all of the J4-M35 terminals mysteriously showed videos from the outside world. There's a Young Adult book, too, chronicling the adventures Noriko Noda lived through when she co-founded HAVEN. And then there is the cute children's book centred around 3-CYCLE, the robot with a trash can on its back.

Finally, a reasonably cost-friendly souvenir to produce, but potentially very popular: the HAVEN Collectible Trading Card Game. Featuring concept art from HAVEN's real-world creation, many places, inventions and characters are waiting to be collected by guests who love the storyworld.

DESIGNER'S NOTES

The House of Trade is inspired by traditional market halls, specifically the Market Hall of Apeldoorn, Netherlands. Furnished with 1970s-style furniture and adorned with charming, retro lamps, it creates a warm and inviting atmosphere. Guests can even find space to relax around a central tree while their friends or family explore the store.

CREATIVE PROCESS

CREATIVE PROCESS

GETTING STARTED

Design a Location-Based Entertainment concept? Okay, that's new! Interesting! Daan knew he had to take part in this challenge, and he quickly invited Philip along for the - ahem - ride (bad puns don't count if they're in the Creative Process chapter, do they?).

We knew right from the start that, in terms of the overall theme, we wanted to do something different. None of the themes you might expect to see would do. So what's left? In our estimation, eco-retro-futurism is relatively untouched, so that's what we landed on. Especially since we have some affinity with the subject matter.

What's a creative process without gathering inspiration? Or better yet, going on a field trip? Our "local" park is Efteling, so the choice was easy. This was before the briefing had been sent around, so our goal was to come up with our own design parameters while learning from how Efteling seems to approach matters. We found that the theming there is as close to 360 degrees as possible. Even the windows guests look through made complete sense as part of the houses in the fairytale forest. We decided we wanted that too: as much as possible, everything the guests see and experience should be a logical part of the storyworld. As a nod to our observations at Efteling, we referred to this rule as the "window" rule.

On the right side of this page you can see four sketches that were made very early into this project, they absolutely wouldn't fit into the world we ended up making, but they were fun exploration pieces.

FROM OASIS TO HAVEN

Once we received the briefing from Storyland Studios, the first thing we did to help us make clear choices, was sketch a block-out of the space we were given. To our minds, it was a puzzle, a mystery box. What could fit in there? What types of attraction do we like? Oh, and let's check what the most popular attraction types are, because not everyone might agree with our personal preferences. Through this process, we determined what would fit and what we'd go for.

Originally, we called our storyworld: the OASIS. But something didn't feel right. After a few weeks, we realised it's a name you find in several other places, including Ready Player One. Oops! We changed OASIS to HAVEN, though by then, Yūharu Noda had already been designed. Have you noticed he's still sporting the old logo on his jacket?

In studying the examples Storyland Studios provided us with, like the Legoland Discovery Centre, we felt confident we could add a partial second floor to some of the elements that make up HAVEN. To err on the side of caution, we made sure to bake modularity into the design.

Testing fonts for our storyworld, still called OASIS at the time, the rounded letters were informed by our overall artstyle

READY FOR THE NEXT STEP

Though we had briefly joined forces on a portfolio piece before, this was the first time we worked together properly. Most of the meetings we had went just over two hours. Discord was our medium of choice, as it's easy to video chat and share large files there. With every meeting, we noticed more and more that working together was really easy! We'd often be thinking in similar directions, without having had prior talks about it. And there was a lot of room to speak up if something wasn't shaping up quite as it should.

We hope, no – we feel confident that in HAVEN, we've created a viable first concept for a physical location, with a very physical, real presence of the people and things in it. We've strived to create a place people want to spend time in. There are thrills and there is peace.

Now, we wait to find out how our concept has done. Of course, we have our hopes, but we have no idea what the competition has been doing. If all that comes out of this challenge for us is this document, we're very proud to have taken this step. And we're ready to take whatever step will turn out to be the next one! Thank you.

The logo before we changed to HAVEN

ACKNOWLEDGEMENTS