RAMBUZ

This 3D Game was created by five game design students of the HTW Berlin in the 3rd semester within four months.

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What’s It About?

RAMBUZ is a 3D action high score game. Race your bus through an endless, colorful landscape. Passengers are waiting everywhere in anticipation, eager to be taken along for the ride. Collect them with your giant arms and shoot them at the flying targets to earn points and trigger fruity explosions. Drive as wildly as you can to keep them entertained for as long as possible. Floor the gas pedal, knock sheep and chicken out of the way and blast your horn to clear the path. The faster you go, the more fun your passengers will have and you'll be able to score a lot more points in big combos. But be careful that you don’t crash into every tree, because otherwise the mood will drop and your ride will be over quickly. Put on your helmet and beat the high score!

Our goal was to create a short and satisfying game with a focus on rewarding feedback that is accessible and easy to learn.


29445
795
50
X21

How to Play

The bus moves forward automatically and can be steered using the left stick. With the triggers, you can extend arms on the left and right side of the bus. Hold the A button to enter speed mode and accelerate. You can launch passengers with the X button and activate the horn with the B button.


LEFT—MOVE ARMS—RIGHT
SHOOT
DRIVE
HONK
SPEED
Y
X
B
A

Mechanics

The foundation of the gameplay is driving the bus. Due to the automatic acceleration, the player can focus purely on steering and the sideways movement.

Using the arms on the sides of the bus, the player can collect and take along up to 24 passengers. They can be launched at targets, trees or other obstacles to score points.

There are many animals scattered around the map. Ramming them is encouraged and rewarded.

Entering speed mode greatly increases the driving speed and rewards the player with a score multiplier.

To prevent a crash, the horn can be activated, which destroys obstacles and knocks away passengers and animals.

Another important core mechanic is the fun display. Fun can be gained by scoring points. The fun bar constantly decreases, forcing the player to be proactive. If it runs out completely, the player loses. The decrement becomes greater the longer the player survives, making the game substantially harder over time. If the player crashes into an obstacle, they immediately lose a big chunk of fun.


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580
20
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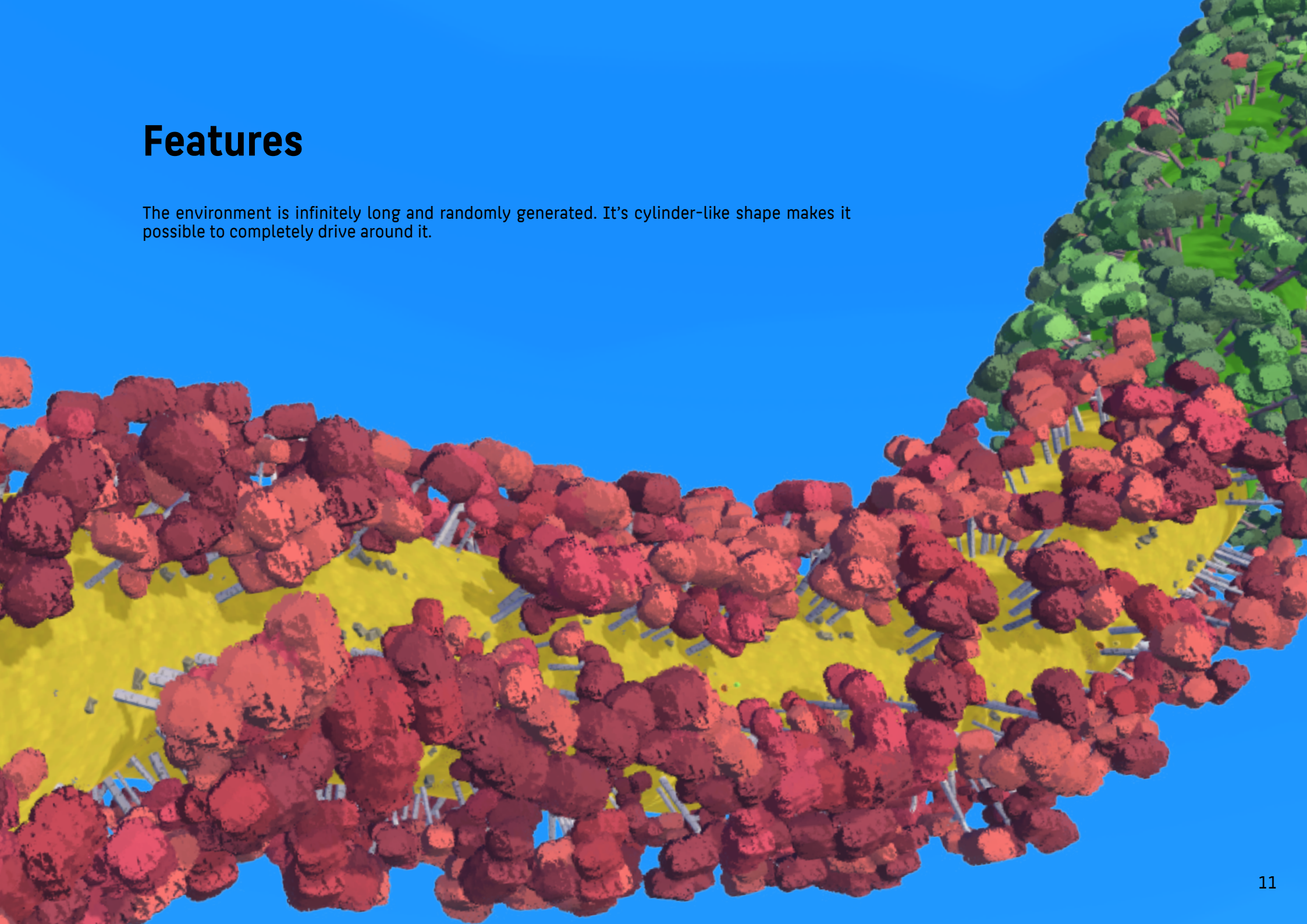
X12

Features

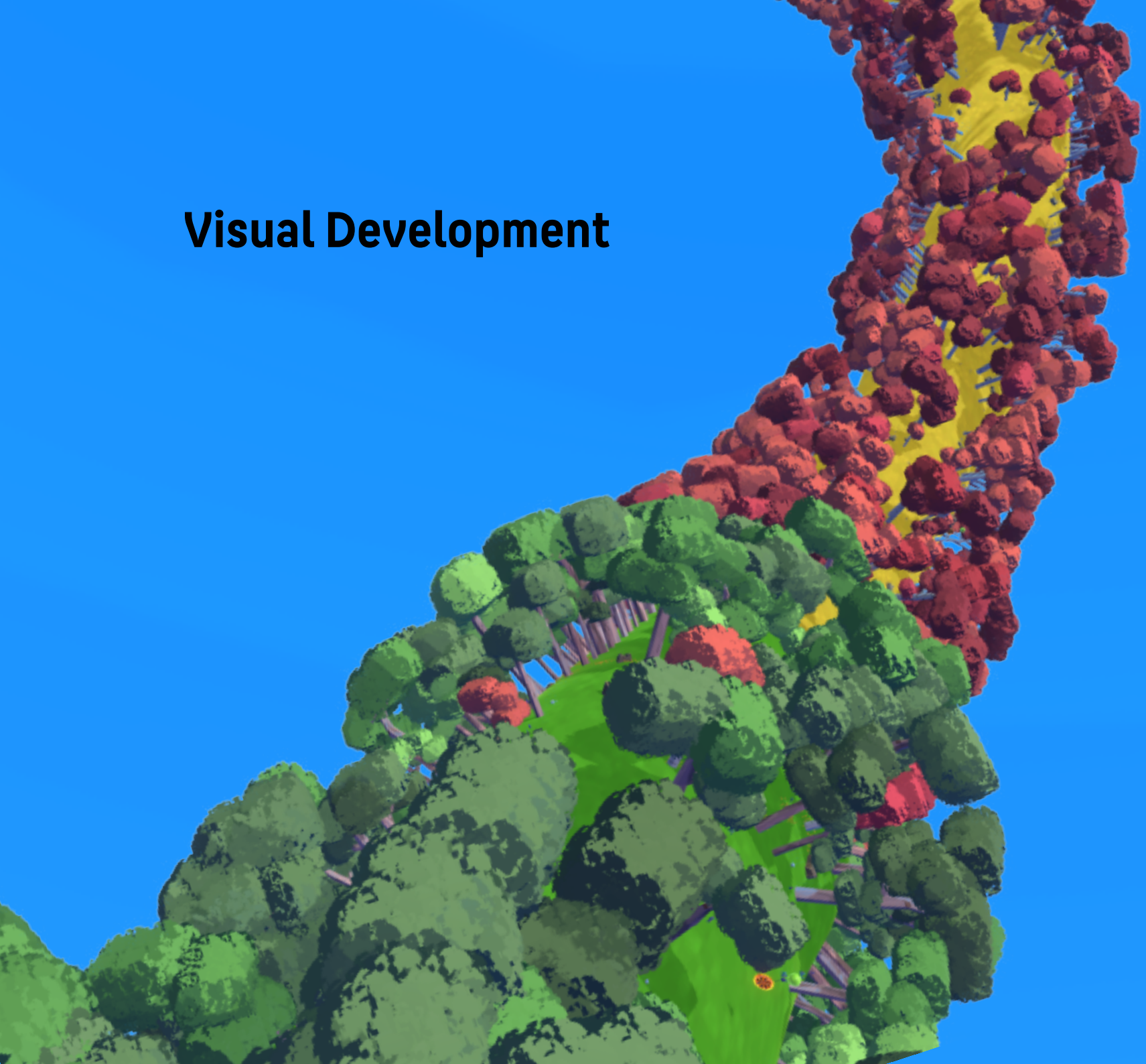
The environment is infinitely long and randomly generated. It's cylinder-like shape makes it possible to completely drive around it.



The player mainly scores points for hitting targets with passengers. If a target is hit five times, it explodes and gives off a great amount of bonus points. Hitting the balloon instantly destroys the whole target and grants the most points.

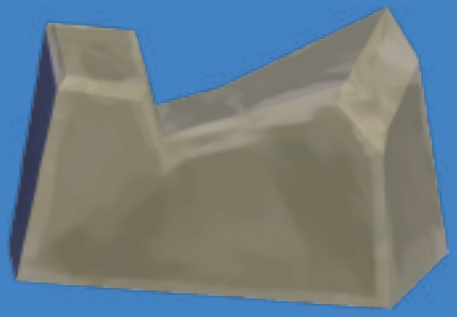
The ability to perform combos significantly impacts the gameplay. The longer the player manages to keep up the speed mode without crashing, the higher the score multiplier becomes. This makes taking the risk of increased speed and dodging obstacles very rewarding.

Visual Development



Environment

It was very important to us that our environment reflects the colorful, fun and dynamic nature of the game without distracting from the important gameplay elements.



Targets

We made our targets look like fruit slices to support the game's absurd atmosphere. The compartments function as hit indicators, and the bouncy consistency shows that the passengers are not hurt on collision. The glowing orange color is the same as the bus' and makes sure that the target is clearly visible.

Passengers

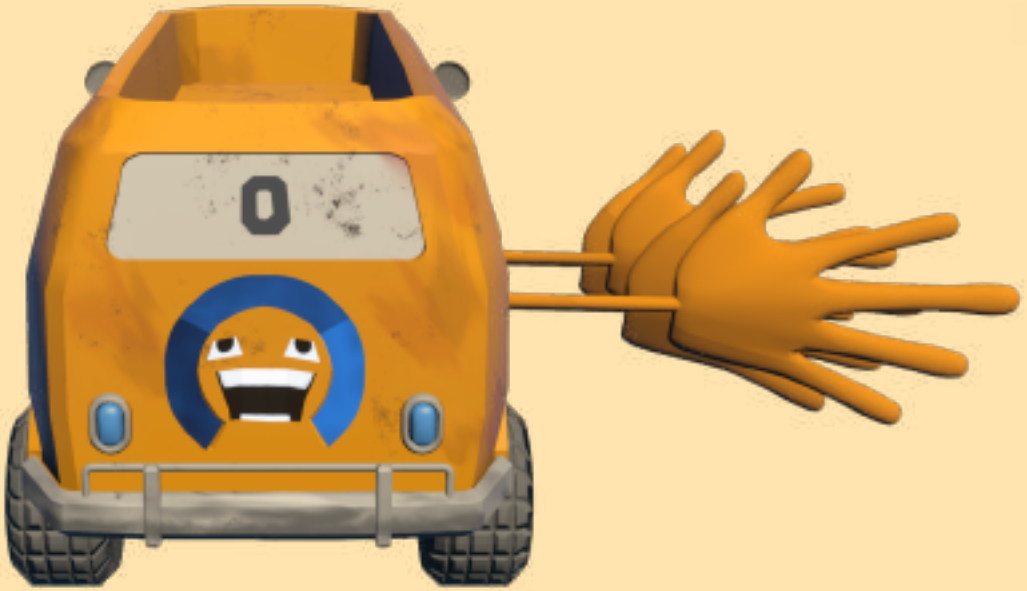
The passengers are geared up and ready to join the ride. We wanted to make them look excited and crazy. Their blue color is complementary to the orange bus and ensures the passengers' visibility.

Animals

The animals are designed to look cute and slightly stupid. They support the playful feeling and shouldn't make the player feel bad for running into them.

Bus

The bus needed to seem inviting and cute, while at the same time looking sturdy and suit to drive off-road. It has an open top to show the passengers during the ride, and its orange color signals speed and catches the player's attention. The arms on the side and the face in the back give the bus penality and make it look alive.



User Interface

We kept the user interface to a minimum and aligned the visible elements in a vertical line in the middle of the screen. This makes it easy to see the most important information without looking away from the environment ahead.

The animated passengers in the main menu are designed to catch the players' attention and instantly introduce them to the goofy game-feel.

Visual Feedback

Visual feedback was essential in making the world feel alive and every action impactful and rewarding.


40
40
30
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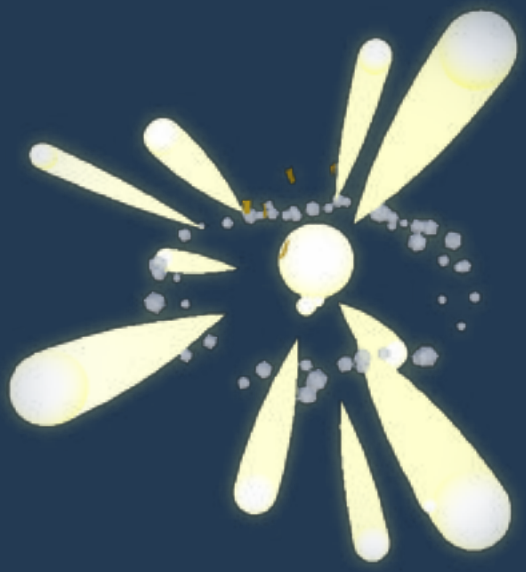
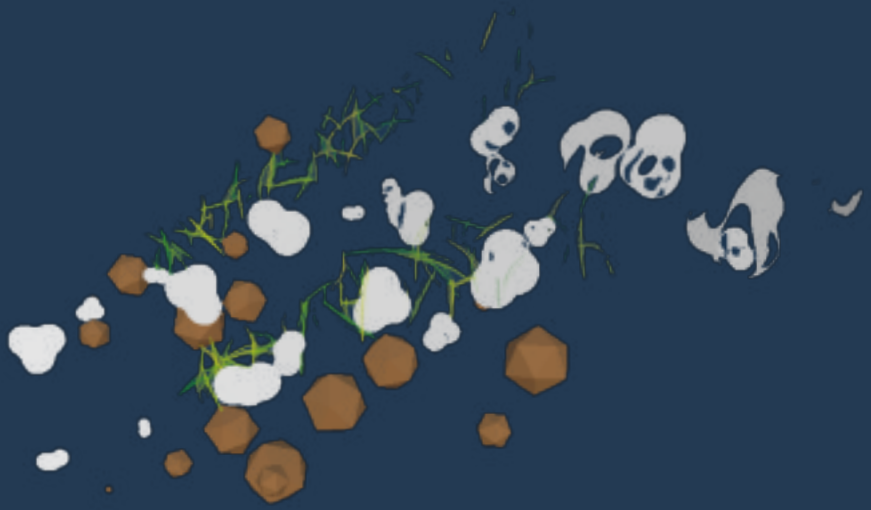
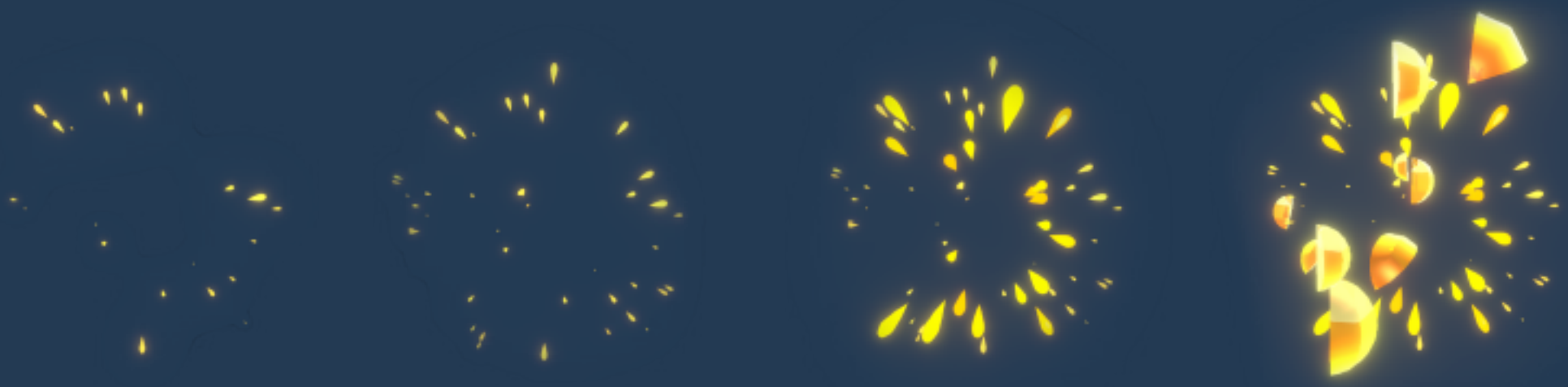
40
18
2



Crash

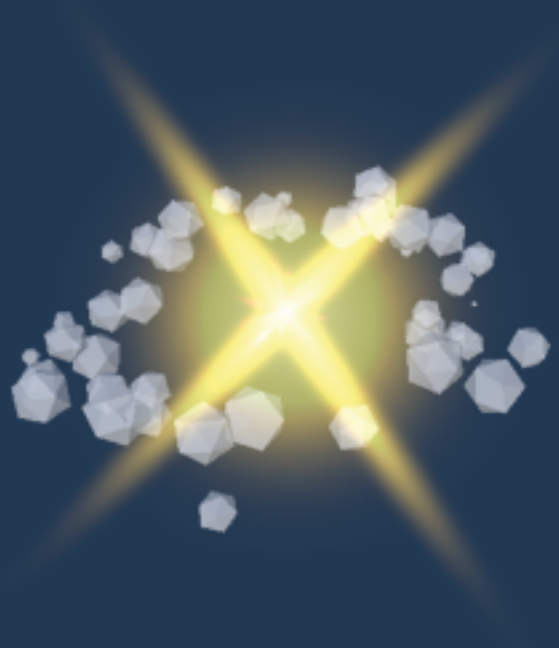


Dirt Trail

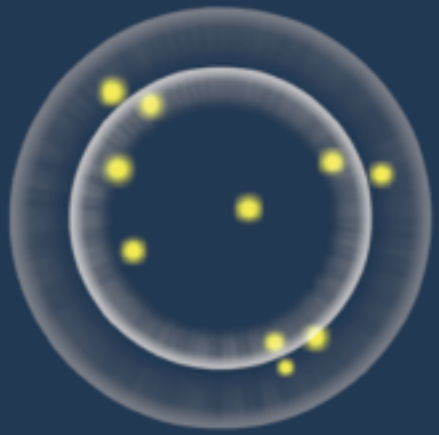


Target Destroy

Passenger Trail

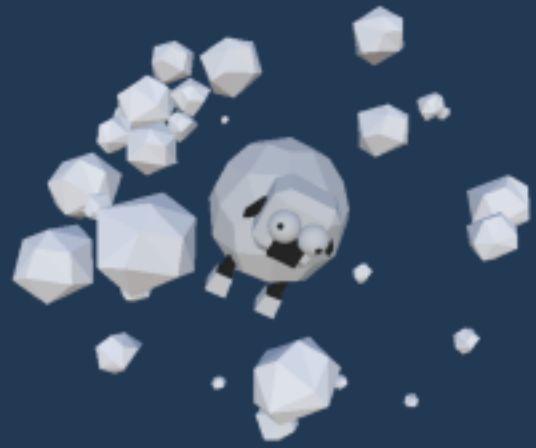


Ejection



Passenger Collision

Chicken

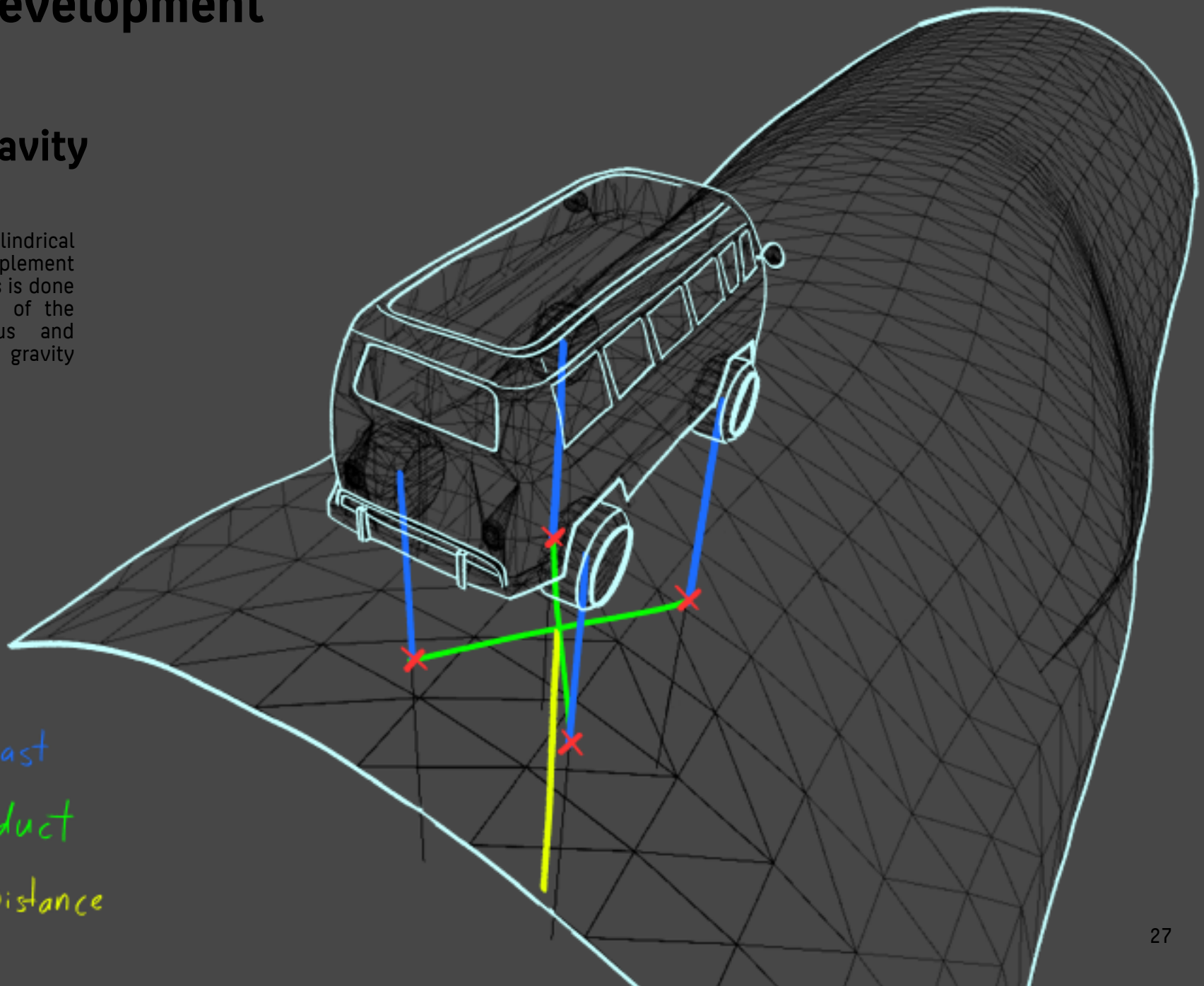


Sheep

Technical Development

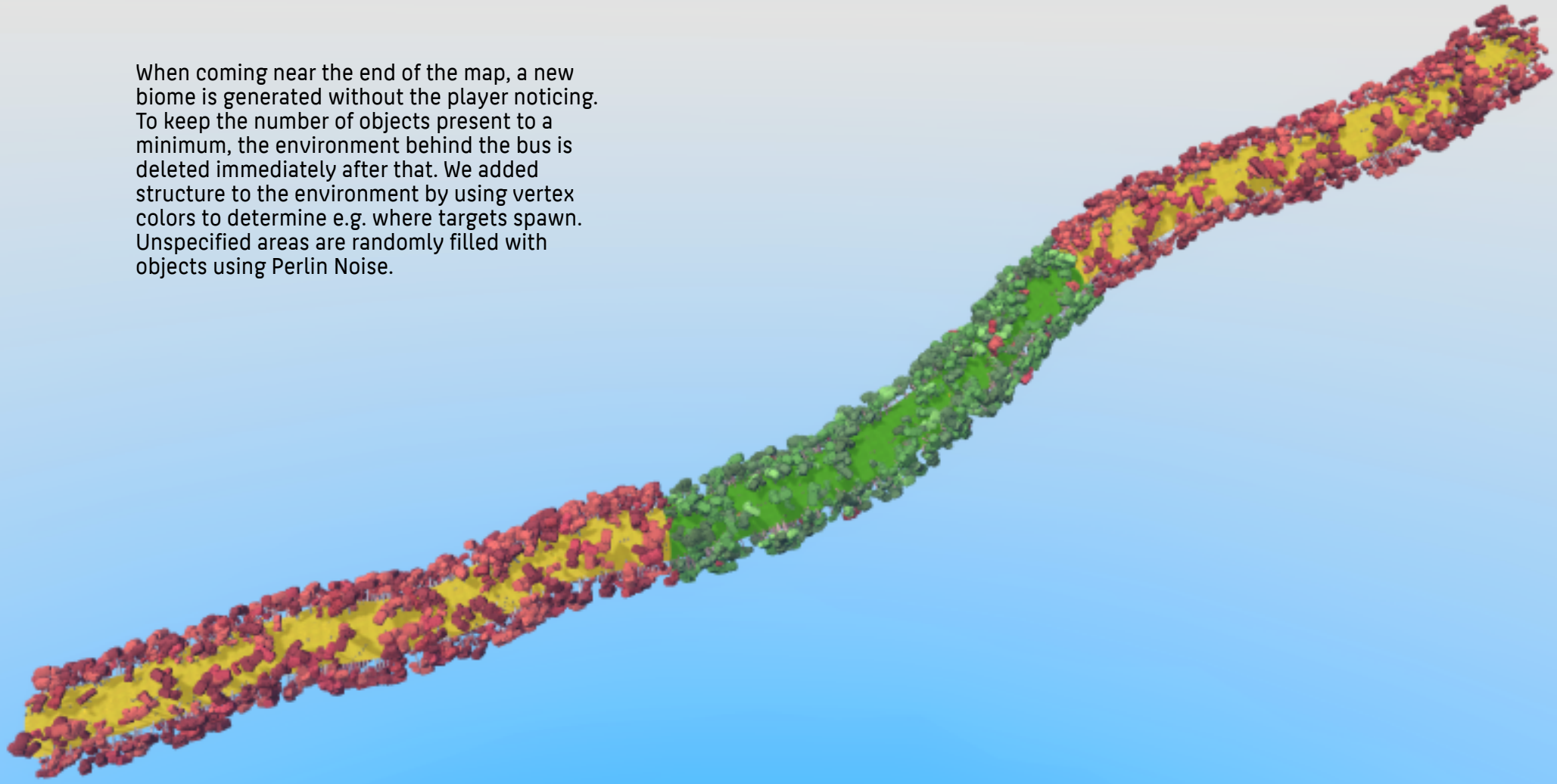
360 Degree Gravity

To be able to drive on the cylindrical environment, we had to implement our own gravity system. This is done by analyzing the direction of the ground beneath the bus and adjusting the direction of gravity accordingly.



Infinite Spawning

When coming near the end of the map, a new biome is generated without the player noticing. To keep the number of objects present to a minimum, the environment behind the bus is deleted immediately after that. We added structure to the environment by using vertex colors to determine e.g. where targets spawn. Unspecified areas are randomly filled with objects using Perlin Noise.



Sound Design

The sound design had to complement the visual feedback and convey fun and excitement without becoming annoying after playing for an extended amount of time. To achieve this, we recorded most of the sounds ourselves and made sure to use many different variations, tones and pitches.

Playtesting

The playtesting showed us which mechanics are used the most and feel the best, and thus let us set our focus on the most important elements to achieve our desired feeling. It also immensely helped us with adjusting the handling of the bus and making sure the driving feels good.


16060

Future Ideas

The existing game can be easily expanded upon.

There is much potential for an enormous variety of biomes, which could contain new obstacles, new animals, different interactable objects beside targets and maybe moving elements.

There could also be some sort of currency, for example the total amount of collected passengers. This would be used to unlock new biomes and buses, or buy parts to tune the current bus and adjust it to different playstyles.


x5

Thank You

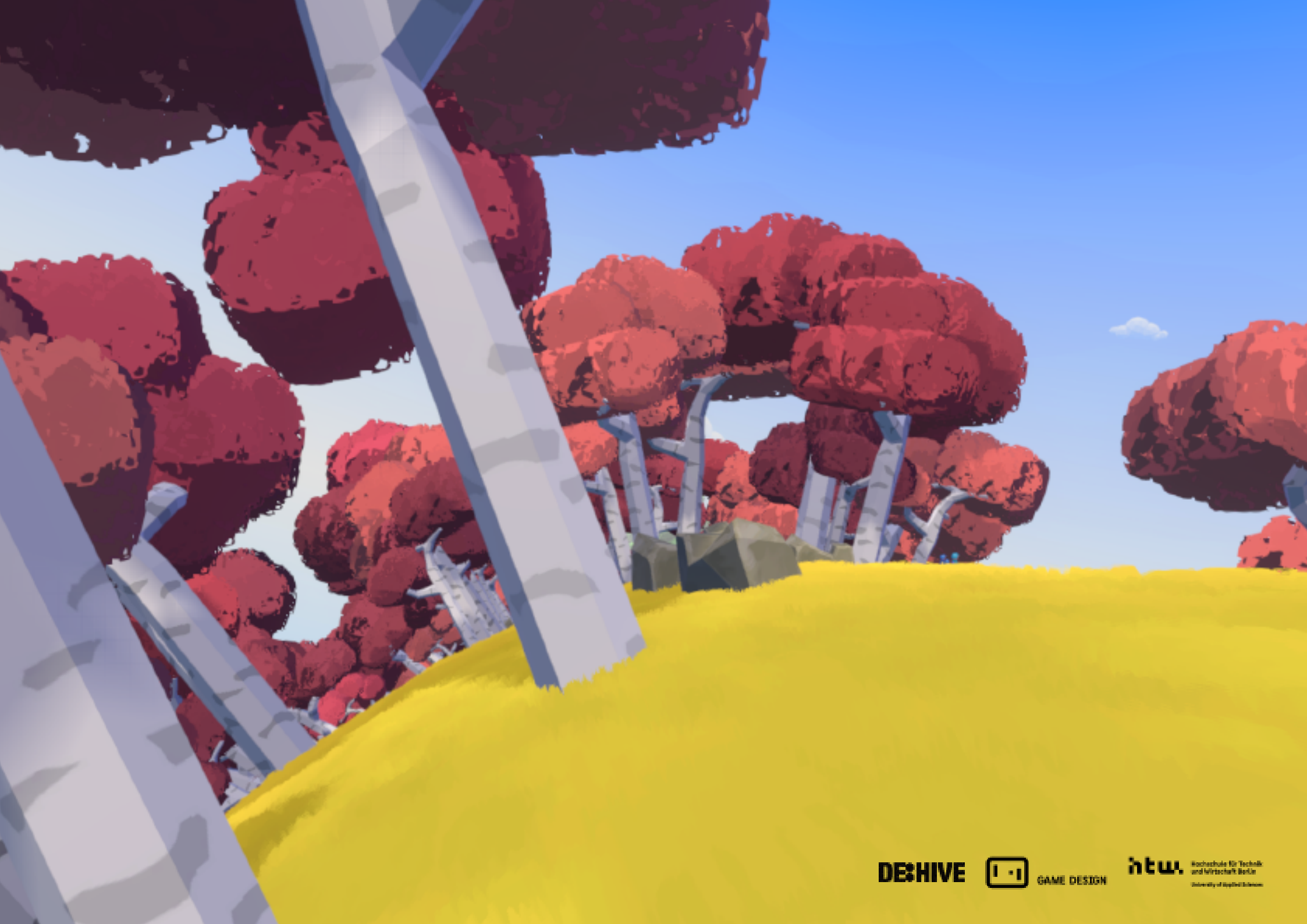
To Prof. Susanne Brandhorst and Prof. Thomas Bremer, who gave us the opportunity and space to work on this project.

To our co-coach Philip Hildebrandt for the constant feedback, helpful suggestions and guidance during our first 3D game.

To Morten Newe, who continuously supported us with solving all sorts of technical challenges.

To Zwi Zausch and Timo Falcke for helping us find the right art style and optimizing the game's performance.

To Paul Schnepf, who gave us a helping hand in fixing a variety of problems.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GAME DESIGN
htw.
Hochschule für Technik und Wirtschaft Berlin