

The Red Line

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1 Formal game proposal

1.1 Game description

1.1.1 Setting

»The Metaverse has become unstable. I'm trapped in the now surreal parts of what once was a detailed simulation of 21st century Munich. The only escape: Find the Trainman. Who that is you ask? It's not a person, you know. More like a program. You wouldn't understand. All I know is that if there's any chance finding it, it would be somewhere in the Subway. Just got there. Everything's getting weirder by the minute. Just upstairs some guy was squashed by a gravitational anomaly. Poor lad. Couldn't have helped him. Shit. There's something down here. Gotta find the ticket machine quickly now. If I at least could see anything. There is this thick mist in the whole station. And something's closing in on me. Gotta run to the machine, it's right over there. Reached it. Now follow the protocol to call the Trainman. Single, Single, Group, Single, Return. The ticket is printing. The airstream is fiercing. Rattling, the train is crushing in. It's a bit twisted. Doesn't matter. Getting in now. On to the next Station.«

The game is set in a survival horror atmosphere, where surreal representations of everyday situations and objects of munich turn hostile to the player. Constantly the player is questioning about what is a real danger and what can safely be ignored. The dark and twisted atmosphere of the game is set to contrast with the otherwise typically clean look of Munich city.

1.1.2 Gameplay

The Goal of the game is to find a way through the maze present in every subway station. As the players solves the stations maze he is able to proceed into the next station with a different puzzle to eventually find an exit from the subway. In addition to the maze the player also is handicapped by a random *obstruction*. E.g. the eyesight could be blurred or he may suffer from hallucinations. In order to set the player under pressure to solve the maze quickly he is endangered by a *peril*. This peril could manifest in physical dangers like closing walls or gravitational anomalies, or by some evil entity. As an example of

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such an enemy, statues representative to munich could be chasing the player when he is not looking at them. The players actions are limited to movement and some single level specific action, like e.G. switching lights on and off. With these gameplay elements, the player is both challenged both intellectually and by skill.

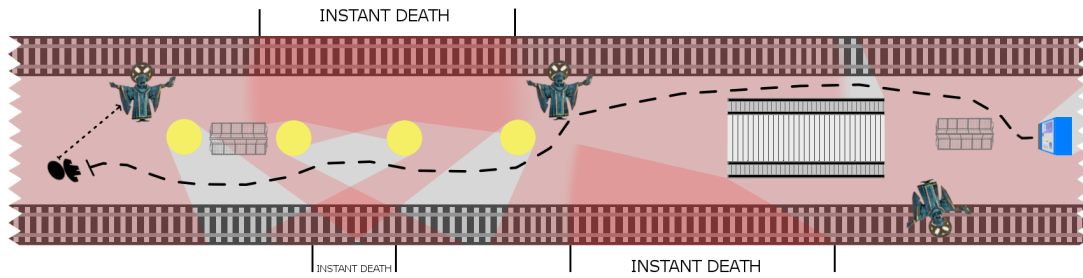


Abbildung 1.1: Puzzle mockup

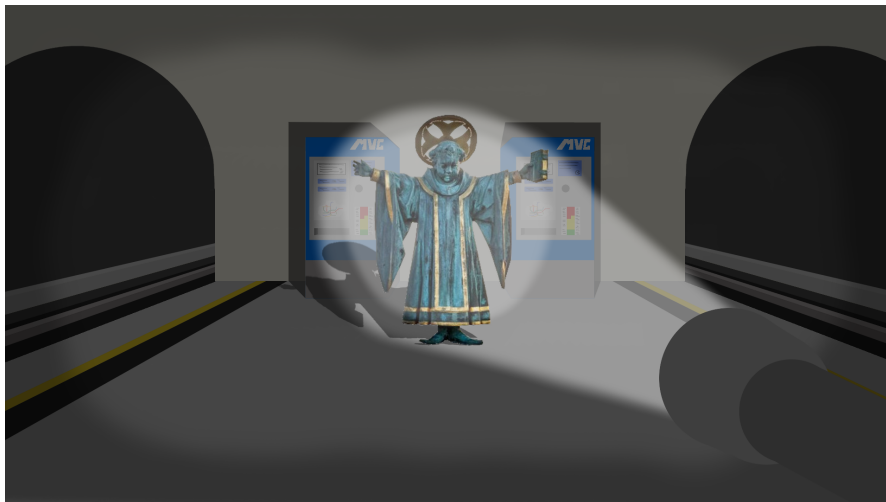


Abbildung 1.2: Muenchner Kindl

1.2 Technical Achievement

We will be using a combination of various concepts to allow a immersive game experience. At first to discuss is asset generation. We will be using a structure from motion (Photogrammetry) technique to generate most of the models and textures. By this, a photorealistic scene can be produced at reduced effort. Also we will record sounds that are heard everyday in the subway of munich. Using a three dimensional sound engine

the player is engaged by the important audial sense. To allow stunning visual effects, a physically based renderer is applied. All of this will be implemented in our own engine, Helix. We will enhance this engine by a editor to give us the possibility to create and modify the levels more easily.

1.3 Big idea



Abbildung 1.3: Big idea bullseye

1.4 Development Schedule

In order to provide a **functional minimum** the following features must be implemented:

- Single subway station model
- A rudimentary editor that allows some debug output
- Logic and model for an enemy
- Logic and model for a maze
- PhysX support
- First person camera
- Scripting

To at least reach our **low target** these features are needed:

- Sound recording and playback
- A solid editor that allows modification of game scenes
- Photogrammetric models
- Assets from assetpacks

If things go reasonably well, we should reach our **desireable target**

- Shadows
- PBR
- 3D Sound recording and playback
- PPFX
- Reflections
- Model of the subway
- Scenic models
- Single level

It might even be possible to reach our **high target**

- Advanced effects
- Mostly photogrammetric models
- Voxel cone tracing
- Various enemies and puzzles
- Multiple levels
- Voice acting

Some **extras** that we thought of, but won't be able to implemented

- Outside area
- Shooter mechanics
- Animated enemies
- Binaural audio

Task	Proposal	Interim	Alpha	Playtesting	Final
Photogrammetry	M S D	M S D	M S D	-	-
Extern Assets	D F S	?	-	-	-
Sound	M D	M D	-	-	-
MVG Request	D	?	-	-	-
Modelling	-	S D M	S D M	S D M	-
Scripting	-	S D F M	S D F M	S D F M	S D F M
Playtesting	-	-	S D F M	S D F M	-
3D Sound	M	M	-	-	-
Shadows	-	F S M	F S M	-	-
PPFX	-	-	S	-	-
PhysX	F S M	F S M	-	-	-
FP Camera	-	D	-	-	-
Reflections	-	F S	F S	-	-

Tabelle 1.1: Development Schedule

1.5 Assessment

We want to create a dense and horrifying atmosphere, taking place at the subway station 'Fraunhofer Straße' while also focusing on realistic visuals. The player should be able to recognize the looks and the sound of the station, as well as other munich themed assets and objects. Survival horror and puzzle solving are the core gameplay mechanics that define our game. Our core audience are fans of survival horror games from munich, who enjoy games like Amnesia and Silent Hill.



Abbildung 1.4: Helix logo

2 Game Prototype

2.1 Physical Prototype

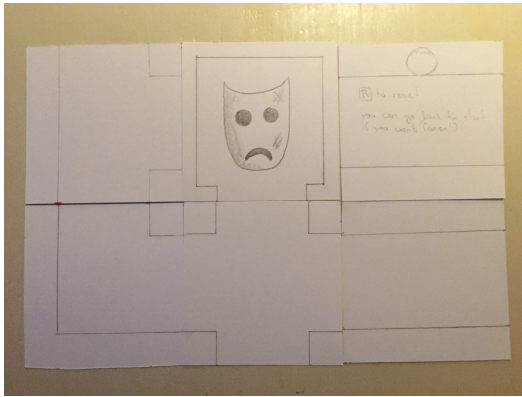
2.1.1 Introduction

Two players play the game as allies. Their main goal is to get into the subway train with a valid ticket. While exploring the surrounding rooms, to find some money for the ticket machine, various dangers await you as a player. In some rooms there are mysterious signs scratched into the walls. Every time one of these catches your eye you hear a terrifying sound not too far away. After the third time it becomes obvious that you are being followed by one of these monstrosities. Could it be this creepy statue you saw earlier?

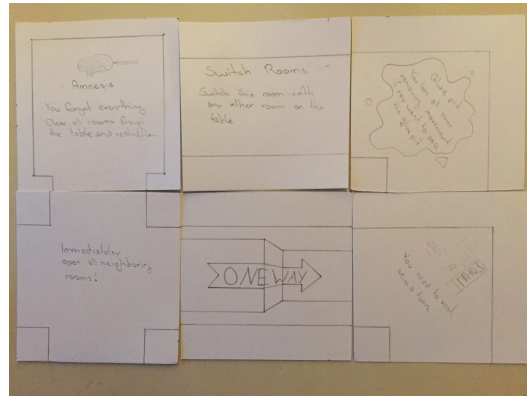
2.1.2 Rooms

Our paper prototype game is based on the game "Betrayal at house on the hill". It is a turn based labyrinth puzzle, where the playery start at a predestined location. The start room consists of eight doors and at the beginning the players draw six room cards and place them around the start. These room cards themselves are equipped with one to four doors. Each round a player rolls a die which determines how many steps he can take (1-2: 1 step, 3-4: 2 steps, 5-6: 3 steps). The player may extend the map with a blindly drawn room from the room pile, by walking through a not yet opened door. The player now finds him or herself in the room and immediately is affected by any room effect. This he can do as often as there is movement left. There are five kinds of room cards like *T-junctions*, *cross junctions*, *L-turns*, *straight corridors*, *one way rooms*, *glue pits* that slow the player down and also special rooms that have only one entry and can also have special abilities. The *lift room* transfers the player to a desired location when they roll a 3-6 otherwise they miss a turn. Other special rooms are e.g. *the oracle* that allows you to look top three room cards and a *amnesia* event room which teleports the player to the next statue room. Lastly to win the game the player also has to find the *ticket machine*, where he can buy a ticket for the subway in exchange for three money tokens. Some rooms are *dark*. In these the player is slowed down similar to the glue pits, unless he possesses the flashlight item.

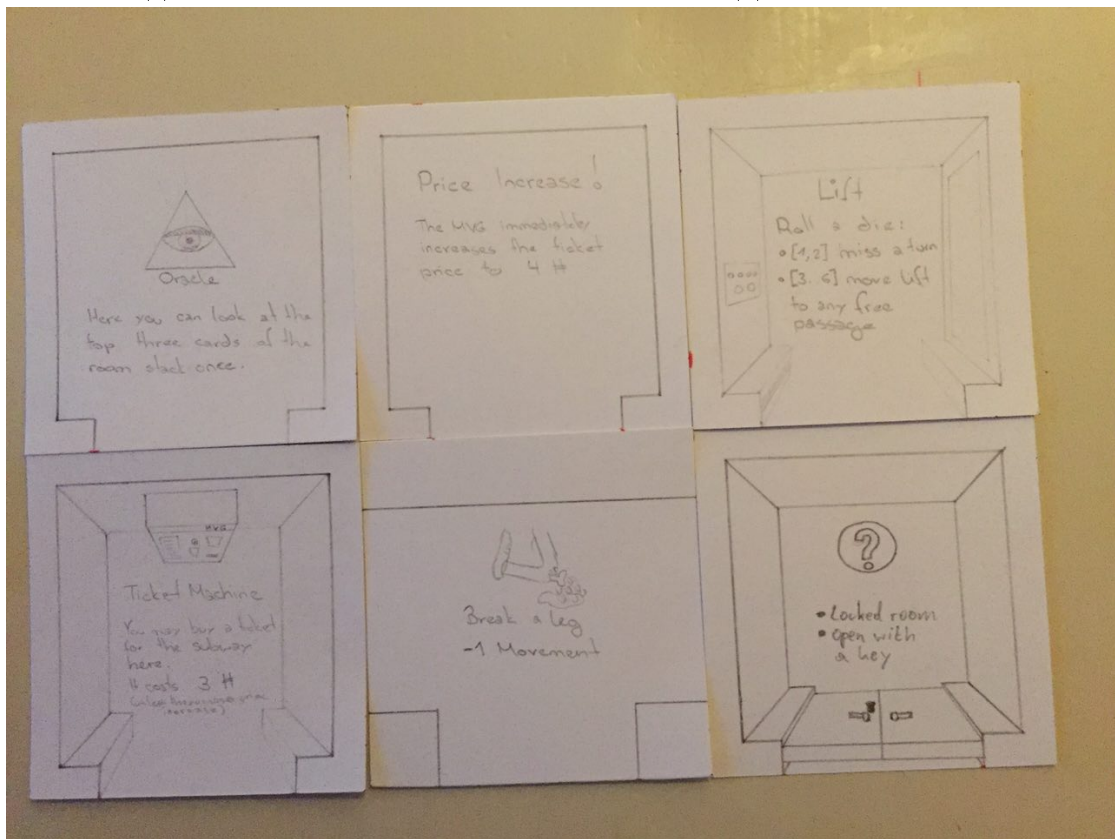
2 Game Prototype



(a) The basic room cards



(b) Special Rooms



(c) Special Rooms

Abbildung 2.1: Room cards

2.1.3 Items

In some rooms the players will find items. As soon as a player opens a room with a item card, he may draw an item from the item pile. With these randomly drawn objects, they can enhance his abilities and also eventually win the game. To exchange items the players must be in the same room.

1. Bomb (consumable): explodes and destroys a passage
2. Flash-Light: dark rooms behave like Glue-Cards (lose your remaining moves) with the addition that items must not be picked up if there is no Flash-Light in the inventory
3. Portal-Gun (consumable): move through the wall to a neighboring passage and miss a turn
4. Money x 7(consumable): exchange for ticket
5. Ticket (consumable): enter the train
6. Rusty-keys (consumable): open locked doors

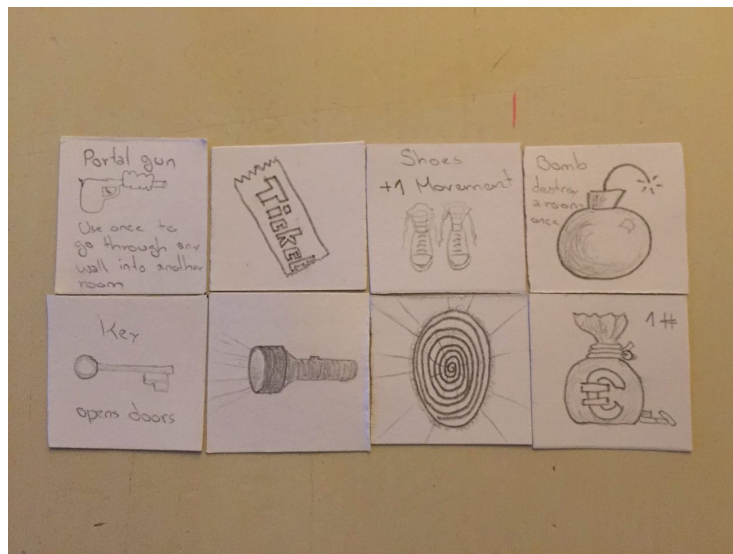


Abbildung 2.2: Items

2.1.4 Statues

The enemy of the player are the masked statues. The first one is in a room right next to the starting room. A second one may be discovered by the player while exploring rooms. At first these are immobile, but only until the third sign of the mask has appeared on the map. Then these statues begin to move, one step per turn in the direction of the nearest player. As soon as a statue is in the same room with a player's piece, the statue kills the player.

2.1.5 Gameplay example

Both players start by in turns placing rooms around the start room. Immediately they discover two mask signs. After a few turns the first player finds an item. It is a portal gun which allows to shoot a hole into a wall to the adjacent room once. In the following rounds, the player finds two coins. Soon after, player two also finds the ticket machine, but since he does not yet have enough money to buy a ticket he leaves the place to explore some more. Some rounds later player one finds some money as well. Player one and two meet in a room to exchange the coins to player two. In an effort to take a shortcut, player two discovers the second statue room. Unfortunately there also is another mask sign on the wall and therefore the statues become active. Player one hurries to the ticket machine to purchase a ticket. While working that task, the statues were closing in on him. Player one tries to bait the statues away from player two, but soon has to abort this dangerous mission. With the ticket in one hand and the portal gun in the other, player two blasts a hole in the wall to get to the next room. With the statues right behind them the players finally reach the subway train and with it their safety.

2.2 Results

2.2.1 Questions

Report on your experience playing the game. Was it fun?

At first the tabletop game was designed to be a single player game. This was problematic, because until the statues spawned the only action for the player was to constantly explore. This led to an indifference about the choice of exploration. Turns could be neglected, because it always would be the player's turn. As we introduced multiplayer, the game changed. It became much more strategic, hence to succeed the players had to coordinate their movement and item usage. In the main game, this extension will not be used. For a

game where atmosphere plays a key role any interaction with a cooperative player may be destructive to the immersion.

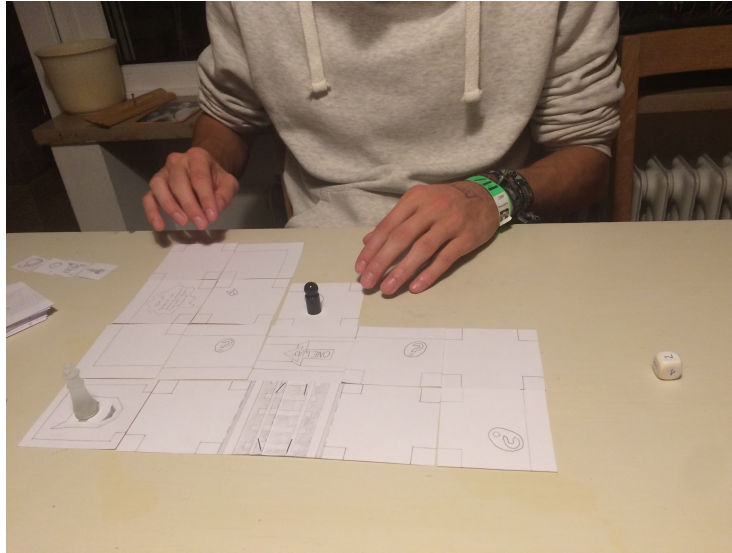


Abbildung 2.3: Playing the game

Explain what you have learned from creating the prototype. What has proved to be harder (or easier) than expected?

In the process of creating rooms and puzzles for the tabletop there immediately sprouted ideas of analogous concepts that could be used in the final game. E.g. a ability for the player to alter the environment with keys and bombs would allow for a more complex level interaction.

We could not really test out the horror setting, that we plan for the final game, since transporting such an atmosphere in a tabletop would require extensive story scripting, which was not possible due to time constraints. Therefore we decided to focus on game-play instead.

What design revisions have you made to your game (idea) based on your experience creating the prototype?

The gameplay of our final game will rely heavily on the insights obtained from the paper prototype. The concept of announcing and triggering a powerful enemy by signs spread out on the map will terrorize the player excellently. Also we will try to adopt

the exploration based gameplay, although randomized rooms are not directly applicable to a subway station's architecture. Also location based events can be taken over to the final game to obstruct the player. We plan to borrow the simple inventory system from the tabletop to be able to pose more interesting puzzles to the player. Another idea we liked in our tabletop are dark rooms, in which the player is hindered by blindness. While playing the game in early iterations, it turned out to be difficult avoiding several fast enemies at the same time. Movement, speed and action radius should be carefully balanced in the real game.

3 Progress Report

3.1 Editor

Developing the editor was a primary goal for the last period. A sophisticated editor is fundamental to allow creation of complex levels as our subway station. We chose QT for window management because of its portability and customizability.

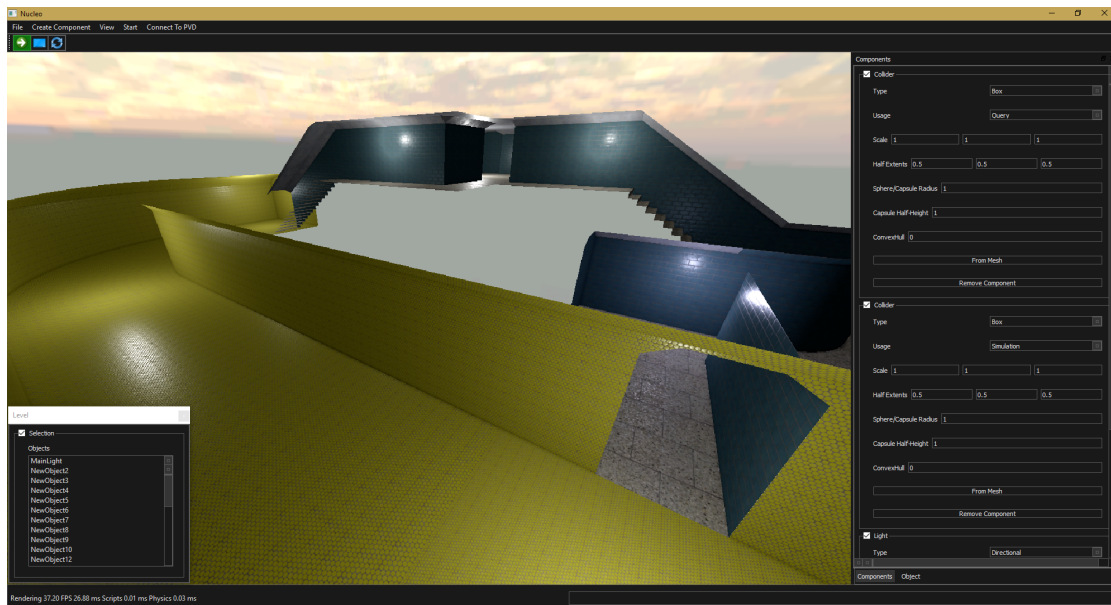


Abbildung 3.1: The Editor

By raypicking, the user can select an object in the level to observe and edit the object's attributes. Parameters of the same component and functionality are grouped into moveable widgets. In code, when creating new components, it is easy to register the components parameters to the components editor panel.

The editor also includes an asset importer with which various filetypes can be converted and loaded into the engines filesystem. The importer is quite versatile in terms of file

formats and e.g. allows import of .fbx objects and scenes into separate objects with material information and useful optimizations, all common image formats to DDS with mip map generation and also Wave sound files.

In the viewport, selected gameobjects can be moved and oriented with a transform gizmo. This feature turned out to be more problematic than expected. Screenspace manipulation of worldspace objects needs to be adjusted carefully to achieve good user acceptance.

3.2 Engine

The engine itself was another receiver of attention in the weeks of ongoing development.

We revised major parts of the engine to allow components being attached to gameobjects. There are now three types of gameobjects, a base type with only a transform and components, a render object which can be displayed in the scene but is not part of the PhysX scene and lastly a gameobject with complete functionality. Currently there are only three types of components. As the engine expands in functionality more components are sure to follow. For now, there is a light component for the various light types, a shape component for the PhysX scene and also a sound component. The user may also create custom components which are similar to scripts.

For any survival horror game 3D sound is key to immersion. Therefore we replaced the engine's very rudimentary audio player by a much more sophisticated 3D sound functionality. We used X3DAudio together with XAudio2 to compute a realistic stereo signal that gives the impression of spatial sound. In the editor the level designer may attach a *Speaker* component to any gameobject, for it to be a source of sound. Then, multiple sound files can be attached to the component and player independently.

3.3 Assets

We used photogrammetry to create realistic textures for our game and therefore spent hours in strolling the subway of Munich, hunting good photographic data. Using a pipeline consisting of Agisoft PhotoScan, Autodesk ReMake and Maya, xNormal and Allegorithmic's Substance Designer we were able to generate high quality PBR materials from our photographic captures of real world objects. This pipeline yields real thus authentic maps for height, normals albedo, a manually created roughness and a metallic map if needed.

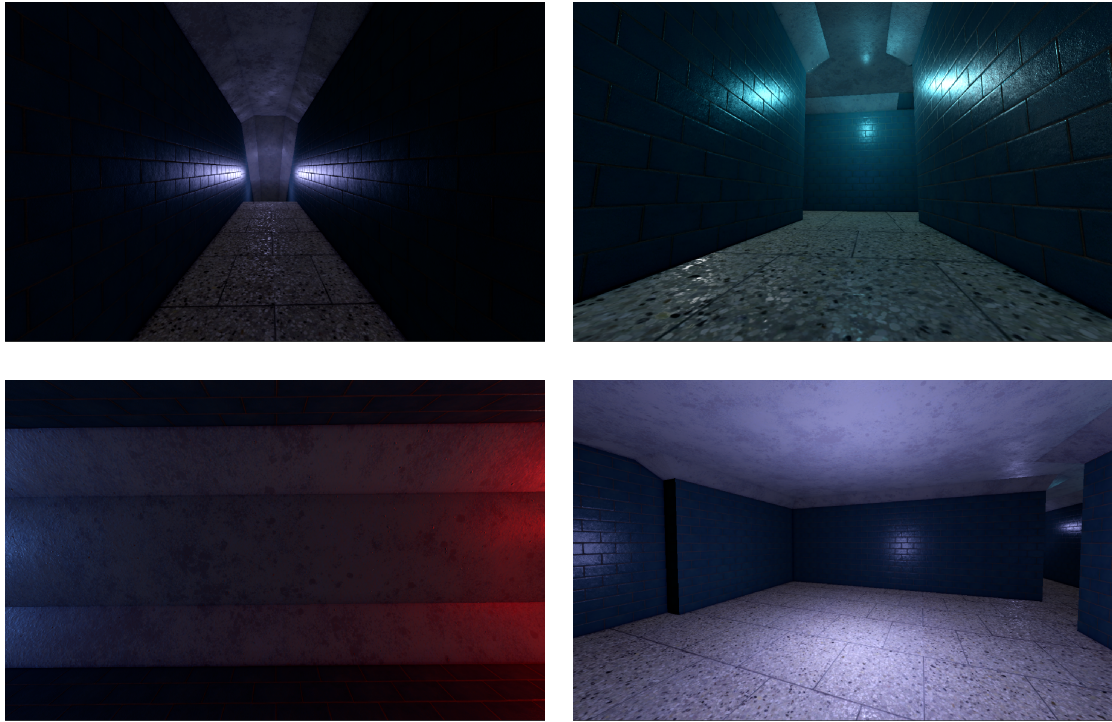


Abbildung 3.2: Basic level

Another kind of asset we created with a photogrammetric method were 3D models. We scanned various objects, such as stairs, wastebins, ticket machines etc in our visits of the subway stations of Munich and the MVG-Museum. Some of these Objects are quite difficult to capture in photogrammetry, because of their smooth and glossy surfaces. Many of them required heavy manual correction.



Abbildung 3.3: In the MVG-Museum

Another reason for field work was recording of sound for the game. We had to struggle with microphones being unfit for the task, capturing almost always present background noise. Using post processing filters such as lowpass we were able to improve the quality of the recordings to some degree. We plan to hide the remaining noise by constantly keeping a level of desired background sound with music and scenic effects.

3.4 Summary

We currently are still hard at work developing the game elements which will be combined into a playable version in the near future. All the beforementioned tasks are important steps to our survival horror game. With the editor being in a well developed state, the engine providing all desired features and the asset pipeline being fully specified, there is no more hindrance to create a alpha of 'The Red Line'.

4 Alpha Release

We were hard at work accomplishing the eager goals we set for our alpha version. Up to the last Milestone we were in a process of building the foundations for being able to create the game, such as the editor and the pipeline setup. Now, in the weeks before the alpha milestone, features had to be added to the Helix engine to make our project a game. These included modifications and extensions in the rendering architecture, the physics simulation and game logic. Another major task was in using all the before mentioned features to create a showcase game.

4.1 Rendering

For the rendering we needed an efficient way to draw multiple materials (textures and properties) per gameobject to be able to uv-map complex objects without losing texture resolution. Our approach is to split the gameobjects mesh (MeshCluster) into several parts called SubMeshes, which reside in the same continues vertex and index buffers. Each of these SubMeshes is assigned a material instance which holds lighting and shading properties and references to textures. These properties can be used to select different shader permutations at runtime, allowing special shader features for each part of a gameobject. Since SubMeshes of a gameobject reside in the same buffer, its possible to render a gameobject without reuploading vertex and index data for each draw call. Additionally we also introduced normal encoding and relief mapping to our deferred renderer. The normal encoding reduces the data amount we have to transfer in between our draw calls from 24 bit to 16 bit per pixel. The relief mapping works similar as parallax mapping and helps the player to get a better understanding of depth by providing visual cues.

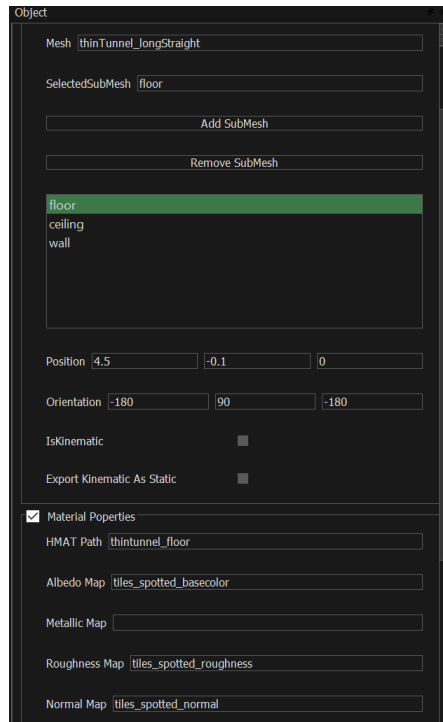


Abbildung 4.1: Editor representation of SubMesh and Material properties

4.2 Physics

In most current games, a convincingly correct physical model is the core of game interaction. Our game is no exception, as we believe that hardcoded constraints and gameplay can be harmful to the immersion of the player, that is so important to a survival horror game.

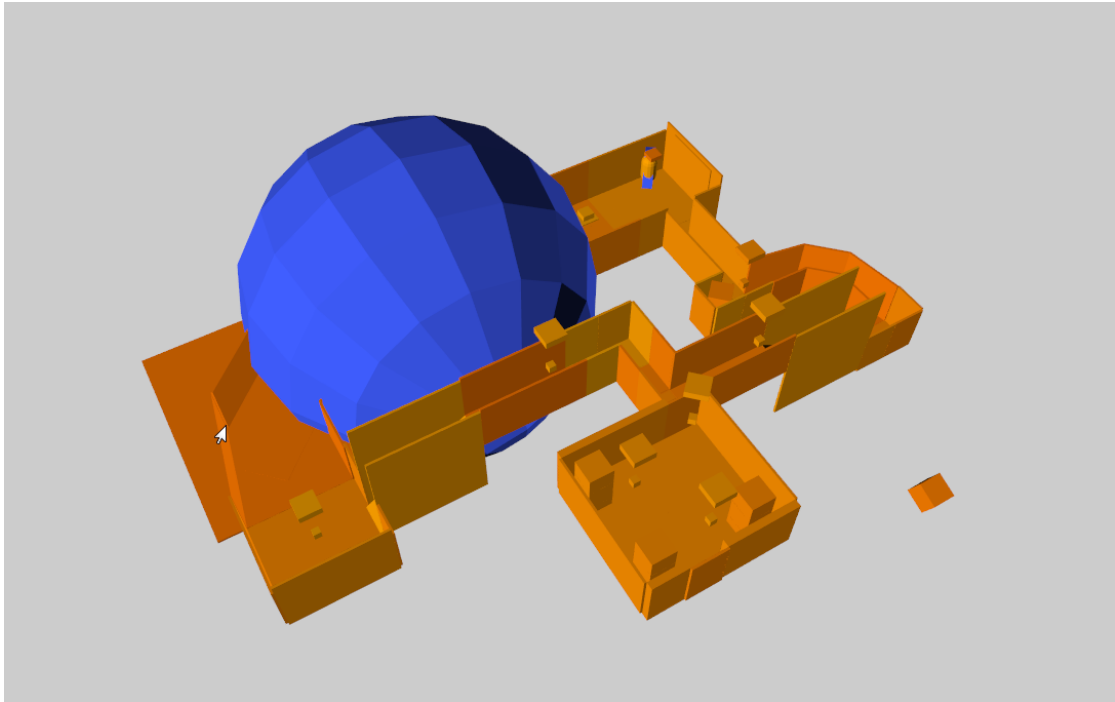


Abbildung 4.2: PhysX scene of our level

4.2.1 Trigger and Contact Callbacks

As we used Nvidia PhysX, most of the actual physics simulation was ready to use. The main work was to interface PhysX with our representation of game objects in the engine. While pose and shapes were already coupled with the respective PhysX objects, we still needed an option to receive simulation events, such as when a gameobject enters a trigger volume or when objects collide. To do this efficiently, these events are only invoked, if any of the involved gameobjects were registered previously.

4.2.2 Character Controller

As our game is being played from a first person perspective, the camera must be moveable by the player in a physical way. The camera therefore is a component attached to a game object which is part of the physics simulation. If the player gameobject would be just like any dynamic physics object, controlled by forces, velocity and such, steering the character would be too indirect for the player to control. All our characters therefore use the PhysX character controller extension which allows kinematic objects still being influenced by

collision resolution. Another feature of the character controller is to create an abstraction from raw movement. Character controllers are moved by easy to use methods, such as Walk, LookAt or Turn. The application of our character controller is not limited to the player character. We also successfully applied it to the moving statues which are the main enemy of the player.

4.3 Gameplay

Currently our gameplay still is very limited. There is a statue following the player and a simple button based puzzle which has to be solved in order to move on to a formerly hidden part of the level. These types of interaction with the game reflect our early gameplay concepts.



Abbildung 4.3: Statue following player

4.4 Assets

For this chapter of the project, we generally refined the geometry used in the showcase level. Also, a very important part of our new workflow is splitting the geometry in multiple SubMeshes that use different materials, instead of working with a texture map that

incorporates multiple textures into one material. This allows for an easier workflow, a higher effective texture resolution and easier switching between materials. To enable the character controller to traverse the level, we added colliders to all walls and the floor. The floor-switches use trigger volumes to register the player's presence. The high quality of our assets helps to convey the subway-like level design to the player.

5 Playtesting

5.1 Changes ahead of Sessions

5.1.1 Engine

Upon feedback from the other groups we added dynamic shadows by implementing dual paraboloid shadow maps for up to 18 lights visible in the view. An adaptive depth of field effect was added to focus the player's view. We also extended our physics integration to be able to model gameplay mechanics more easily. The statue AI was also improved significantly before and during the playtesting.

5.1.2 Level

Added new level sections and elements:

1. Departure hall
2. Puzzle room
3. Roller doors
4. Ticket machine and stamp
5. Emergency lights and lever
6. 2 more statues
7. Additional sounds



Abbildung 5.1: New level elements

5.2 Sessions

We organized the sessions so that each player was questioned separately and at different locations (at home or university). For some players we did not explain the objective nor the controls to see whether they could beat the game without any instructions, others got a short intro to the goal and gameplay mechanics. In total we had 7 testers (2 female, 5 male) of relative young age (19 - 27) and different experience levels.

5.3 Questions

Our questionnaire is divided into 4 categories: general, gameplay, graphics, parameters.

General

1. How much time per week do you spend video gaming?
 - a) 0 - 20h, 4,85h on average
2. Would you describe yourself as an experienced or less experienced player?
 - a) approximately 50% experienced / unexperienced
3. What is your age and gender?
 - a) age 19 - 27, 5 male 2 female
4. Have you played any survival horror games before? Which were your favourites?
 - a) 2 out of 7 played no horror games before
 - b) The other 5 testers played some of these games: Amnesia, Doom, Last of Us, Beyond Two Souls, Resident Evil, FEAR
5. Are you easily frightened by horror settings or not so much?
 - a) 4 were easily, 2 average, 1 not frightened by the game

Gameplay

1. Which aspect of the controls was not intuitive to you?
 - a) Toggling the flashlight [F] was not obvious (for non FPS players) for 4 players
2. How would you describe the responsiveness or lack of responsiveness of the controls?
 - a) very responsive
3. When were your tasks in the game unclear?
 - a) Where to put the ticket, 2 player
 - b) What to do after the alarm was disabled by the player, 1 player
 - c) The push button puzzle was too hard, buttons hard to find, 1 player
 - d) Unclear which objects are intractable, 1 player
4. When were you especially engaged in the game?
 - a) When the statues came alive, 2 players
 - b) At the push button puzzle, 1 player
 - c) Whole time, 1 player
 - d) At the ticket machine, 2 player

- e) During the alarm, 1 player
- 5. When were you the least engaged in the game?
 - a) At the beginning in the big hall, 2 players
 - b) In the dark sections of the level, 1 player
 - c) Running backwards look at the statues, 1 player
- 6. Would you describe the experience as more over-challenging or more under-challenging?
 - a) over-challenged, 3 players
 - b) under-challenged, 1 player (also not frightened)
 - c) neither, 3 players
- 7. How did the encounters with the statues influence your gameplay?
 - a) Hindered orientation by walking backwards, 2 players
 - b) Statues increased difficulty, 2 players
 - c) Statues made the game scary, 3 players
- 8. Were you scared playing the game or not so much?
 - a) not scared, 1 player
 - b) scared, 6 players

Graphics

- 1. What is the aspect of the graphics that was hurting/helping the atmosphere/gameplay the most?
 - a) Shadows helped the atmosphere, 3 players
 - b) Authentic assets helped the atmosphere, 2 players
 - c) Darkness hurt the atmosphere, 3 players
 - d) Level geometry hurt the atmosphere, 1 player
- 2) Which aspect of the graphics did you like the most/least?
 - a) Recognized (high quality) textures from train stations, 3 players
 - b) Dynamic shadows, 3 players

Parameters

- 1. Was the height of the player too tall, too small or just right?

- a) alright, 7 players
- 2. Was the movement speed of the player too fast, too slow or just right?
 - a) too fast, 2 players
 - b) alright, 5 players
- 3. Did the ability to run help or hinder the fun in the game?
 - a) helped, 6 players
 - b) didn't use sprint function, 1 player
- 4. Was the flashlight too bright, too dark or alright?
 - a) alright, 6 players
 - b) too dark, 1 player
- 5. Was the range of the flashlight too far, too short or alright?
 - a) too short, 2 players
 - b) alright, 5 players
- 6. Was any source of sound too loud or too quiet?
 - a) alright, 6 players
 - b) statue sound too quiet, 1 player

5.4 Changes

After our first playtesting session we directly addressed the problems mentioned by the player.

The flashlight was too dark and lasted too shortly. The overwhelming darkness introduced by this hindered the player to understand the underlying structure of our level and thereby prevented a good playing experience. To address this issue we implemented a logarithmic intensity decrease to replace the old linear one. Also, the light falloff was modified to achieve a larger lighting radius.

As a second problem we figured that the statues were too hard to locate, because they had no visualization of their state. Now, the eyes of the statues will glow red when they are actively searching for the player.

Another point of frustration was our button puzzle in which the player had to trigger the buttons in a correct order to get to the ticket machine. This seemed very easy with only four buttons to choose from, but with two statues following it was very hard to do since the player always had to move backwards to keep a safe distance to the statues.

6 Final Conclusion



6.1 Project and course structure

Were you able to follow your development schedule, or did you deviate significantly from it?

At the beginning, we had doubts that developing the needed engine features would take too much time, leaving too little for gameplay implementation. For some milestones this was correct, but in the end we managed to reach our desired target.

How did the different elements of the project structure contribute to or hinder your progress?

Instead of focusing on the exact development schedule, we planned from milestone to milestone and implemented what was needed for an interesting presentation. Some of the time we spent on the prototype would have been better invested in implementing engine features, since most of the changes made in the prototype were not applicable to the actual game.

Do you feel there wasn't enough time or that the schedule was too compressed?

In general there was enough time to complete our game but the timespans between alpha presentation and playtesting, playtesting and final presentation (1 week) were too short for the appropriate amount of work.

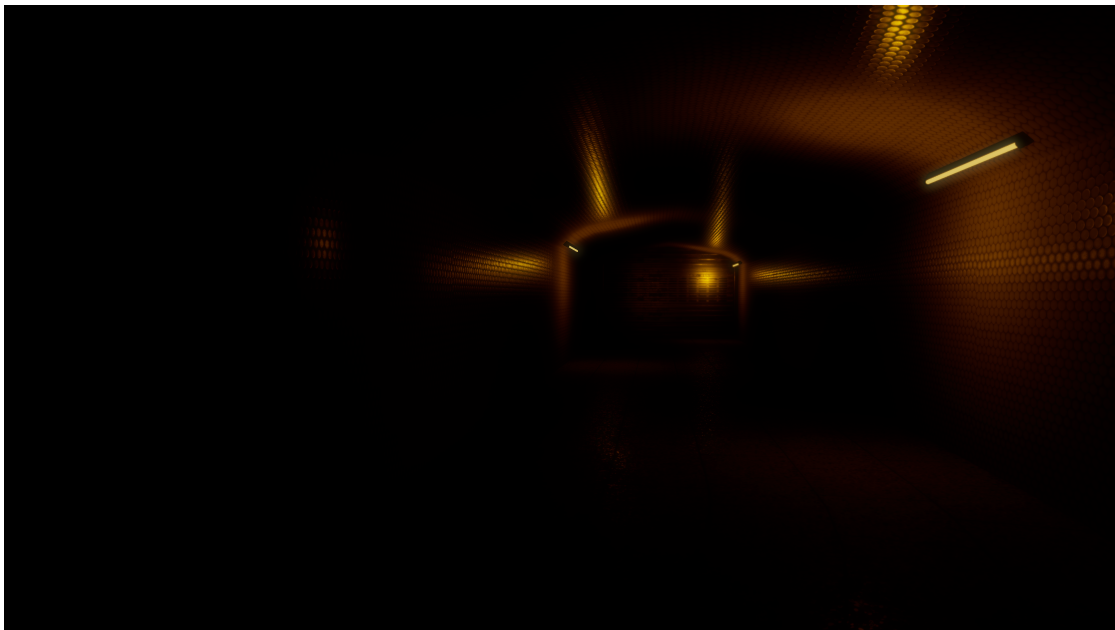
Do you think the theme enhanced your game, or would you have been happier with total freedom?

The gameplay mechanics probably would not differ too much with a free theme, but the overall setting and assets were influenced by Munich.

What improvements would you suggest for the course organization?

Please get the wiki online and working before the course starts.

6.2 Evaluation



Comment on any significant changes from the alpha release:

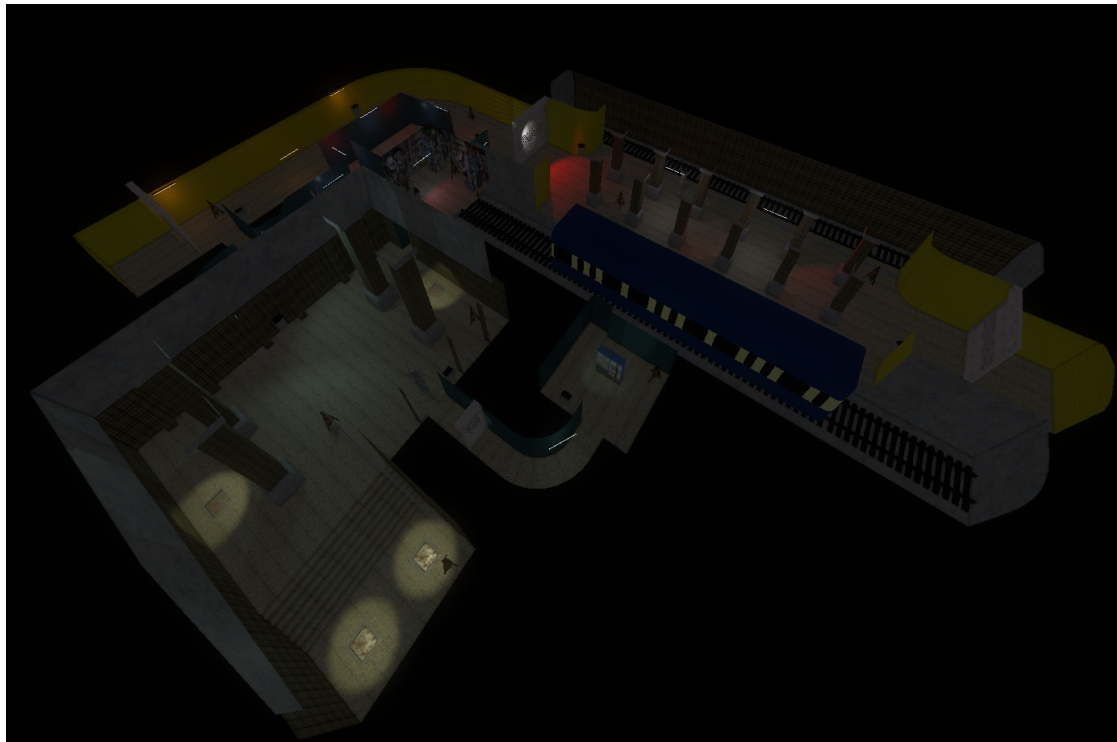
After the alpha release we extended the level by several rooms, adding more complex puzzles and enemies as well as rendering effects like dynamic shadows and depth of field. These changes had significant impact on gameplay and atmosphere.

How well did your initial design ideas materialize into the final game?

We planned to have a set of photogrammetric models to make the game as authentic as possible, but generating these assets is extremely time consuming and other milestones (playtesting) were more important at that time.

What was the biggest technical difficulty during the project?

Due to the fact that we were working with our own engine, we had to overcome several technical difficulties. For example integrating PhysX into our game world (callbacks, triggers, rigidbodies) to enable gameplay coding. Paraboloid shadowmaps were also quite tricky to tweak (remove visual artifacts). Multiple materials per object turned out to be hard to incorporate into the pipeline (Maya, our editor). A lot of time went into engine code and making it possible to develop a decent game, instead of focusing purely on gameplay code with a third party engine like Unity. A major challenge was to create an usable and feature rich editor to create our levels. This was first time we created such a complex GUI with the Qt framework and we had to acquire several new skills to achieve our goal.



Are you happy with the final result of your project?

From a technical perspective we are very proud of our game, but due to the time cons-

traints the game got rather short and some of the planned surreal effects are still missing. In comparison to our last gameslab project “EddyFlux“, we compressed the milestone targets to a reasonable amount of work and did not set our own expectations too high.

What would you do differently in your next game project?

The combination of an urban style and photogrammetry proved to be more difficult than we thought. The results of the photogrammetric process never were exact enough to achieve a smooth surface, for example required by the ticket machine. In all those cases we needed to manually redraw the meshes to create the models we needed. In a next game project we probably would apply the photogrammetric process to create realistic natural surfaces such as bark or cobbles.

What was your greatest success during the project?

Our greatest success during the project was realizing an actual playable game with good visuals in our very own engine.

Do you consider the project a success?

Yes, we had a lot of fun working on the project. We met our desired target on time, realized our big idea bullseye “Subway survival horror, realistic visuals“ and created some stunning assets. This will not be the final chapter for our game. We will continue our effort to create an atmospheric horror experience called “The Red Line“.

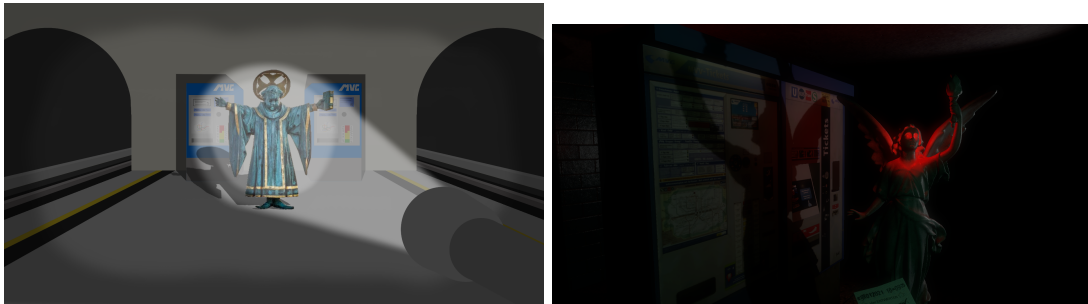


Abbildung 6.1: From concept to reality