Production of The Untold Story of Vísdómír

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Game World Design

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Contents

1 Personal Note

When I began my master's program, my primary goal was to deepen my programming skills and, of course, to create great games. Although game design itself wasn't my main area of interest, I knew that working in smaller studios often requires versatility. Programmers often wear multiple hats, and for that reason, I chose the Game World Design course. I wanted to understand better how game worlds are structured, as I felt this would be valuable in my career. At first, I struggled with the team-building process. The other students quickly formed groups, and I wasn't sure where I fit in. Fortunately, I reached out to David, our creative director and his game idea immediately sparked my interest. He proposed a concept where the player would be lost in a town without any navigation aids, a game design approach that I had always enjoyed. I was reminded of Deus Ex: Mankind Divided (Eidos-Montréal, 2016), where, in one quest, I needed to use a map previously collected to navigate, without any quest markers. This forced me to pay close attention to the surroundings, making exploration engaging. Inspired by this, I wanted to incorporate a similar mechanic into our project. Though creating a game with only two people seemed challenging, we decided to expand the team and slowly, we formed a solid group. Honestly, before I contacted David, I had considered dropping the course. I doubted I would find a team, but I'm very glad I stayed. The experience was a rewarding one. Another challenge was stepping into the role of Producer, which was completely new to me. I had often been frustrated by the lack of structure in past projects, so I saw this as an opportunity to change that. After reading A Creative Production Process (Lemarchand, 2021), I started to appreciate the value of structure in creative projects. My job was to ensure the project's scope stayed manageable, and I worked hard to meet this responsibility. I also took on the roles of tech lead, sound designer, and level designer. Combining the producer and tech lead roles allowed me to define tasks clearly and plan effectively. Reflecting on the project now, I'm proud of how well our team communicated and collaborated, creating an atmosphere where feedback was welcomed, and stress was minimized.

2 Production Process

As the producer, I started by setting up our team's work environment. I created a Discord server for communication, Notion for collaborative writing on the game design document, Miro for brainstorming sessions, and Google Drive for file sharing. We used the Gantt Chart provided by our teachers, and I began planning the different phases of the project.

2.1 Ideation

The ideation phase was crucial, not only for brainstorming ideas but also for familiarizing myself with different aspects of project management. One of the

most useful resources was A Playful Production Process by Richard Lemarchand (Lemarchand, 2021), which explained the various production phases and the responsibilities of the team during each one. I also learned about the iterative development process (Bond, 2017), which I planned to implement during production. During ideation, we agreed that the game would take place in a town with a first-person perspective, and we decided to keep gameplay mechanics simple due to our limited resources. Since we only had one artist, we knew we'd have to rely on an asset pack. The look of the assets strongly influences the narrative and other aspects of the game, therefore needed to be decided as fast as possible. I assigned tasks to our designers, including defining the core player experience, creating the town layout, and developing the clue mechanic, which would become central to our gameplay. The team went through multiple ideas, focusing on the town environment and the clue mechanic. The final concept emerged late in the ideation phase when Emma, our narrative designer, suggested we set the game in a world without religion. Instead, the world was governed by an oppressive force focused on controlling knowledge, dividing society into groups.

2.2 Pre-Production

For pre-production, I aimed to focus on three deliverables as outlined in A Playful Production Process (Lemarchand, 2021): a vertical slice, a game design macro, and a schedule. Creating a full vertical slice was not feasible given our limited time and resources, Lemarchand (2021) mentions that a team of highly experienced professionals usually needs six weeks of full-time work to create a proper vertical slice. So we focused on multiple prototypes instead. I scheduled tasks to create the map layout, design the clues and how they integrated with the narrative and lay out the town square board gameplay mechanic. We also began prototyping the player controller and developing the core features of the game. As part of the macro chart, Emma provided a layout with the location of all clues in the world and what they represent. Using that information, I organized the different areas on the map and used them to categorize the macro chart. Once we had a draft, David and Emma helped refine it, allowing us to visualize the game concept more clearly. The last deliverable for pre-production is the schedule. For this, I used some methodologies from Scrum (Bond, 2017). I created a product backlog with all the tasks we needed for production. I also referred to Lemarchand, 2021 (2021) for guidance on creating the task list and used the template provided in the book. I scheduled production in three sprints, each lasting two weeks. As a group, we agreed to work 7 hours per week on the project, which means that during production, each person had a workload of 7 x 6 = 42 hours. After estimating the workload for each task, I noticed that the art department had a particularly heavy load, 63 hours, to be exact. I discussed this with Nicholas to get his thoughts on the workload. Since he's a very motivated person, he accepted the challenge and completed his tasks efficiently throughout production. I also wanted to use the burn-down chart. Because we didn't do daily meetings it was not easy to determine how much

time was left for each task. I also didn't want to bother my team every day by asking them how far they were with their task. That's why I ended up not maintaining the burn-down chart.

2.3 Production

Compared to the other two phases, production was a more relaxed phase. Even though we had a bigger workload, the project backlog I created made it easy to see what needed to be done during each sprint. Our meetings started to become shorter since we mostly focused on discussing bottlenecks in our tasks. After each sprint, we held a sprint retrospective (Bond, 2017) where everyone presented what they had worked on. As mentioned before, I wanted to follow the iterative development process described by Bond (2017). So, I scheduled us to attend our university's playtest event during each sprint. With the feedback from these playtests, we were able to further polish the game. The first playtest was especially productive. We got valuable opinions on the movement system and the size of the town, and we also tested the narrative using a paper prototype. Unfortunately, due to schedule changes in the organized playtest sessions, we were only able to participate in two playtest during production.

2.4 Post Production

The production phase went very well, and we were able to finish around 80% of the game during that time. In the post-production phase, we focused on analysing what the game was still missing and brought everything together. We spent a lot of time polishing and iterating on our level design. Since we had already started working on the Game Design Document earlier, we only needed to complete the missing chapters and update any information that had changed during development.

3 Tech Lead Responsibilities

The role of the tech lead was initially uncertain, as we weren't sure who would take it on. We based the decision on the game engine we chose. Since our game was a 3D first-person experience with relatively simple mechanics, I suggested using Unreal Engine 5, which offered ready-made solutions for our needs. The first-person template in Unreal Engine included a working character controller (Epic Games, n.d.-b), which saved us valuable time. Additionally, I had a library of asset packs on FAB, that integrated seamlessly with Unreal, which made it a practical choice. Given my experience with Unreal Engine 5, I took on the role of technical lead. For version control, I recommended using Git and GitHub, as I was familiar with them. I also worked with Nicholas to set up a Kanban board in GitHub for task management. Our project wasn't technically complex, so I kept things simple and focused on Unreal Engine 5 supervision and preventing merge conflicts. We adopted a branching model where each task

was developed on its own branch. All tasks, not just technical ones, underwent review. Code reviews are a long-standing practice known to improve code quality (Ackerman et al., 1989). I was the sole person responsible for merges and conflict resolution, and I aimed to minimize conflicts by assigning tasks to different parts of the codebase and using Actor Components (Epic Games, n.d.-a) to modularize the gameplay logic. Actor Components follow the classic component pattern, where logic is divided into separate components (Nystrom, 2014). To facilitate collaborative level design, I divided the main map into sub-levels (Epic Games, n.d.-c), allowing multiple designers to work on different areas simultaneously without interfering with each other. This made it easier to track changes in Git and ensured that no two team members worked on the same level. Being the tech lead was a rewarding experience. I was able to guide the team through technical challenges and ensure smooth collaboration while applying my technical skills.

4 Design Responsibilities

While my primary focus was on project management as a producer, I also wanted to gain experience with design. I took on sound design and some level design responsibilities to explore this area.

4.1 Sound Design

Before developing the sound design concept, I researched how similar games handled soundscapes. In Outer Wilds (Mobius Digital, 2020), the ambience is defined by wind and footsteps, elements that create a rich environmental response. Firewatch (Campo Santo, 2016) and Dear Esther (The Chinese Room, 2012) also use wind as a base sound, while dynamic footsteps enhance immersion. I adapted these elements for our game. Location-specific sounds play a key role, for example, outside the town, players hear birds, distant creaks, and wind through trees, while inside, the sound of footsteps echoes on cobblestones and faint wood creaks hint at movement within buildings. As Totten (Totten, 2014) notes, sound shapes the player's understanding of space. Therefore, I implemented 3D sounds and reverb zones to enhance the ambience dynamically. Additionally, sounds tied to player actions, like rattling locked doors or paper being touched, provide feedback. Unlike Dear Esther and Outer Wilds, which use music to mark narrative moments, I opted to forgo music, as our game lacks clear narrative triggers. Instead, the minimal soundscape reinforces the game's sense of loneliness.

4.2 Level Design

As the level designer for the natural environment, I sculpted the landscape, including the forest and river. Nicholas initially created the landscape with a height map, and David sculpted the town area, while I focused on the outskirts.

Figure 1: On the left is the town Vianden, Luxembourg. On the right the final environment design

The setting draws inspiration from small towns surrounded by forests and rivers, as shown in Figure 1.

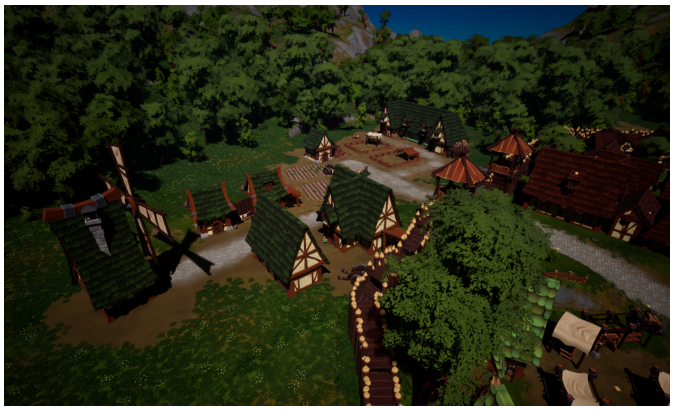

Figure 2: Farm area of Vísdómír

I also designed the farm area (Fig. 2), which is crucial to the narrative. The area was cleared by the Enlightened after failed animal feed experiments caused livestock deaths and the outbreak of a virus. They erased all evidence, forcing an immediate evacuation. In line with Totten's principles of architectural level design, which emphasize aligning the environment with player expectations and using spatial design to convey story elements (Totten, 2014), I focused on creating an atmosphere of sudden departure and hidden tragedy. Visual cues, such as overturned tools and overgrown fields, suggest a long-abandoned space (Fig. 3). Empty animal pens and feeding areas reinforce the town's reliance on livestock. A hidden fire pit behind the farm building implies a secret cover-up, suggesting infected animal bodies were burned there (Fig. 3). These environmental details not only support the backstory but also invite the player to uncover the hidden history.

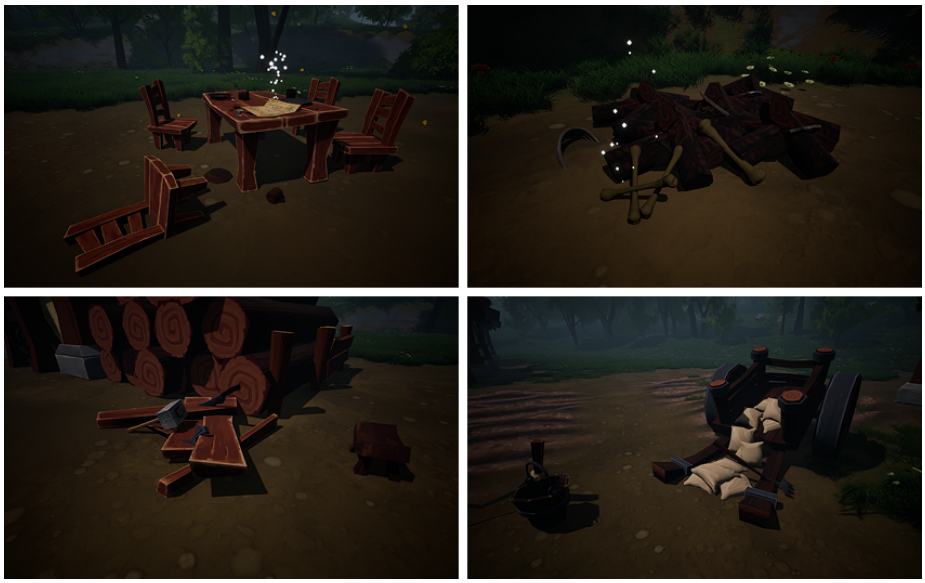

Figure 3: Points of interest in the farm area

5 Conclusion & Future improvements

I think this was my favourite of all the student game projects I've worked on. My main goal for this project was to create a manageable scope, and I'm really happy to say that I achieved this. After pre-production, our scope was clearly defined. We had a solid understanding of how we wanted the game to look, and we were able to implement everything we set out to do without having to make any compromises. However, there were some things I would improve. We didn't playtest as frequently as we should have, and I would certainly want to include more playtesting in future projects. I also want to explore using burn-down charts more effectively in larger projects to track progress. If we were to continue the game, I would expand the map and add narrative locations, such as a library where players could uncover the dark history of the Enlightened. While this project didn't change my career goals, it reinforced my desire to work in roles that combine both creative and technical aspects. I see myself potentially becoming a creative director in the very far future, managing both the technical and artistic sides of game development.

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