

Adventure Project – First Iteration Postmortem

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Working on the Adventure Project for my class opened a lot of new doors that I didn't quite have the key for. I had a multitude of problems, but each of them led to important learning experiences. Throughout this document, I'll try to explain the larger points in detail. Let's start with what I feel went right.

What Went Right:

1. Maintaining Connection

At the beginning of the project, I made sure to reach out to my team to get a jump-start on us integrating our maps with Source Control. The members I had that participated were communicative on what steps they had taken, and we were able to have our levels migrated within the first few days. Throughout the course, we used instant messaging to keep each other updated on any errors, concerns, progress, or other relevant information. This also allowed us to provide support, as when errors arose, we used our knowledge to help each other out. If we didn't have an answer, we were able to direct them to someone who could.

2. The Level

Once we migrated our levels together, we were able to line them up to allow the player to experience a concise path of exploration. The level started in mine, an underground prison. After the player escapes, they must then explore the tower grounds and cross the bridge, which was all constructed by my second team member, Chance. From Chance's bridge, the player must then find a key in a small village, which allows them to escape into the forest lodge. Though this was our first project, it's clear that we all were able to conform to a solid level design.

3. The Blueprints

With pre-coded interactive blueprints, it was very simple to set up different assets to have unique functions. I was able to design a gate around this code, which the player needed a key to unlock. Additionally, I created personal assets without the pre-coded functions, so that valves could be incorporated to prevent the player from backtracking. Myself and my other teammates also used treasure chests, providing additional exploration that the player can choose to collect or ignore. The blueprints are really what brought the level together in the end.

4. Attentiveness

As we were working on the project, everyone was thorough in paying attention to what was happening. If someone had an asset checked out, but another needed to work on it, we were

sure to get that resolved quickly. Everyone also paid close attention to the instructions provided by instructors, to ensure our level could be as done as we could get it. This was especially important as we constructed a Gold release for our project. Though, it had benefits for our Beta, Alpha, and Pre-Alpha as well.

5. Troubleshooting

As mentioned in Maintaining Connections, we had some issues within our team project. Along with errors and other conflicts, it wasn't the easiest project to build. As errors arose, everyone did the most they could to try and resolve their own issues. This allowed us to gather information we may not have known. Personally, I learned how to identify the SDK version of my Unreal Engine. I found I had an outdated one, which prevented me from packaging my own build.

Now that we've gone over some of what went right, it's time to explain a few significant problems we came across.

What Went Wrong:

1. The Walls

This was the most significant issue for my contribution. Being among the first to migrate my level, I had no issues immediately. Further progressing, my teammate integrated his level. After doing so, he wasn't able to move his level due to a conflict in the blueprint he used for his walls. This caused errors with mine, and the only solution was to delete the blueprint entirely. Since this made up my level, I had to re-construct the entire level layout from scratch, essentially having to do an entire month's work in the span of a week with more limited time.

2. The Final Product

We had team members that migrated their level, but then proceeded to not do any further work. This led to us having parts of the level that are ready to release, but then the player runs into a blockmesh level. We haven't had any communication from those team members, so we don't know if they just stopped building, or other extensive circumstances arose. I've been keeping a close eye on our source control to see if any additional progress has been made, but no further updates have been made to bring our final gold release to its full potential.

3. The Assets

Due to us using shared SuperGrid Blockmeshes, we had multiple instances of the materials resetting, and us having to repeat the work we've already done. This happened about 4 times, but eventually we were able to identify and resolve the problem by duplicating our meshes. This was a very minor issue that created a significant headache. Once resolved, it put the rest of our team at ease while we were continuing to work.

4. Offline Work

This pain point applies solely to myself. Due to my walls blueprint having to be deleted, I worked on an old revision of the project in order to reconstruct my level. This caused my team to not know how much progress I had made, since they couldn't see my updates or changelists in our Source Control. I worked as hard as I could, and was sure to have my level built as soon as I could. I was not able to have this done until in time for Beta, requiring an extension to be sure it could be completed in time for the class.

5. The Vision

Though our team was very communicative, they weren't very informative on what they were trying to accomplish in their level. I had to deduce what our team was trying to do by playing through their level. Even then, on some portions I lacked direction and took longer to determine how to finish the level on my first few playthroughs. This didn't feel like it was intended though, but rather that the design was too rough to be followed without being in the mind of the designer.

That concludes our postmortem. With such a great team, it's clear that a lot went right with our project. The blueprint code is the one that stood out the most to me, as this is what really allowed our level to come together in the end. It's important to know though, that level designing isn't going to be easy and there are many roadblocks. My biggest roadblock was the walls, as that forced me to have to reconstruct my level offline, and out of sync with the team. A lot was learned from this project, and it's opened up the door to many new ways to improve.