GAM 651: Prototype Game Development
The Oasis

Postmortems: Hits and Misses, Reflecting on the Project

<u>Rieson Blumer - Game Designer:</u>

Summary. Our project, *The Oasis*, went through a fairly rapid development process that made it difficult to design and implement everything we would have wanted in the game, but overall things went smoothly and reached a satisfying conclusion. The project began the week of February 13, 2022 and ended March 25, 2022. The first design pass was completed the week of 2/21/2022, when the project was still called *The Emperor's Tomb*. The next week, our Art Lead proposed new found art assets to the project that changed the feel and experience of the game. The change ended up improving the overall experience, but signaled a shift in the design and story of the game. This called for a redesign of game mechanics and further documentation - the game was now *The Oasis*. The week of 3/7/2022, we began to implement our puzzle designs in earnest while improving the player experience with the addition of NPCs and UI. And in the final week, we cut the final puzzle we had been hoping to use as a capstone to the player experience, finished implementing the art assets for the game, and called the game done.

What went right. Overall, our game turned out better than I expected it would after our mid-project change in direction. The art assets and terrain gave the game an open-world-esque beauty that is enjoyable for the player to explore. We were able to find a way to retain most of our puzzle design ideas and implemented them into Unreal without too many scripting/coding problems. New ideas, such as the inclusion of NPCs and a new puzzle, came up mid-development and improved the game without derailing the project. One of our concept artists, Mingjie Guo, came up with a really interesting creature design that worked well to give character to our NPCs, and our other concept artist, Yijia Xin, created a beautiful illustration that we could use as the background for our title screen. Liam Fang, our sole 3D artist, did an excellent job modeling the NPCs based on Mingjie's design. I was able to take some time to experiment with puzzle design ideas and prototyped my first major 3D game mechanic, without much prior experience scripting in Blueprints. The NPC dialog and voice lines were

successful in helping the player to explore the history and player goals of *The Oasis*. Throughout the entire development process, I was able to practice many new skills and develop a few existing ones, all while collaborating on a 3D project for the first time.

What went wrong. We introduced a major change to the project mid-development that meant we had to walk back about a week of work. We never had a concrete schedule to keep us on track - only a vague timeline and a list of tasks to guide us. We had difficulty using the skills of our two concept artists in the context of such a rapid development process and they felt directionless for the entire latter half of the project. I would have liked to have gotten our game mechanics into the game earlier so that we could better test the gameplay, but because we weren't using a robust version control (instead passing the project in zip files back and forth between members of the team) and because the project was fairly large due to the great number of art assets, we were unable to see gameplay in action until the final phase of development. The collision on our art assets were throwing errors to the console when we tried to build an executable of the game, making it harder to make early test executables of the game to distribute to playtesters. Finally, my inexperience with Unreal and 3D game design meant a lot of my assumptions set us back when it came to implementing features in the game.

Risk management. Personally, I took on a lot of new responsibilities and unfamiliar tasks. I think I took on a lot of risk in my game design ideas because I often presented my ideas before I was sure how to implement them in the engine. However, Blueprint scripting turned out to be even more intuitive than I guessed, and I was able to script most of the functionality I wanted without too many problems slowing me down. I was able to create a fairly solid dialog system using the concept of class inheritance that I had only recently learned. Also, I felt taken care of by my team, who all had a lot of prior experience and were able to guide me. We were fortunate to have on our team programmer Rory Rao, who was able to implement many of our puzzle design ideas, as well as one of his original designs.

Conclusions. I think it's OK to begin a project by taking some major risks and with more game design ideas than you will need in the final game, because if something seems like it will not work in the time you have, you can fall back to a simpler design or implementation. Especially when making a prototype of a game, I think it's important to focus on one design aspect (for us, it was puzzles) and take a few big risks, while working in a few

spaces that are familiar. Our big, unexpected risk was the mid-project decision to change the art direction. I think our game turned out better for it, because the original underground environment may have been less interesting for the player to navigate and explore and it would have required additional systems, such as collectibles, combat, and traps, to make an interesting player experience.

However, I would say that the mid-project change could have been avoided with a more careful pre-production and planning stage. It is important to ensure that all team members are on-board with the design as documented by the designers. All needs of the team should be addressed early - it is especially important to ensure that your design can be implemented in the time that you have and that all team members will be able to put their skills to use for the project. While it is difficult to get the team to read design documentation, I should think of new methods to engage the reader. The big takeaway for me: I should have solicited more input from the art team during the initial design phase. I think we needed more meetings early on in the process, but it is difficult in a short time period to balance between the need to spend more time in pre-production versus getting started with implementation.