Assignment 09: Post Mortem Report

Team Game: Odyssey
Team Name: Team 02
Team Number: 2
Team Members: Daniel Gonzalez, Norberto Gomez Rosales, Winston Pham

Game Summary: The concept of the game started with our team wanting to develop a 3rd person platformer video game. We were heavily influenced by our past love for video game titles such as Ratchet and Clank and Outer Worlds. We wanted to create a game with the same feel and aspect that these games had. They were linear, yet the open world was aesthetically a very beautiful landscape. The world felt massive but alive. To create a story for the open-world we thought all about how old school games had a simple but intriguing storyline that is good enough to hook the player throughout the story. This inspired the idea of a crash-landed adventurer who needed to collect rocket shards to fix his ship.

The story becomes more in-depth as you realize the nearby villages are being attacked and it's up to you to save them. The storyline remained consistent with virtually no changes to the original script. We would like to add as a fun trivia fact that there was a more in-depth story to the rocket shards as to why the enemies dropped them and how they can be used to repair ships. The rocket shards themselves are a special material that is used in the villagers' everyday lives as it is extremely malleable and conductible, thus it can be used to repair the rocket ship. This idea stemmed from a recent movie called Black Panther where the Wakandans had this special material called vibranium that allowed for advancements in their society. There was a great detail of logic put into our storyline to make everything seem sensible. Due to time constraints, we felt that we could not make this part of the story clearer through the gameplay. We had to omit the assets for the villagers and leave out the part where the player can see the enemies stealing shards from the farms.

Game Story: To convey the simple story of the game the user can click on the start, how to play, or exit button. The how to play button gives a quick paragraph explanation of the crash-landed adventurer and what they must do, along with a set of instructions on how to play. If the user avoids the how to play buttons and proceeds to click start, the player will spawn into the world facing the crashed rocket ship and behind the adventure is a cute, little robot that will tell you how to play. This visual of the ship and environment gradually explains the crash-landing part of the story. To convey the story further, all the player must do is journey through the open world to be able to pick up on some story hints on what is going on such as the villages nearby and skeleton enemies. There is also the user interface in which the top right bar says "rocket shards 0/20" that prompts the user to go and try to collect them as if it is telling the user to go collect it for their ship. We also included an objectives tab on the top left of the game UI that briefly lists the objectives which help convey the story. We use different audio throughout the game but do not communicate the story.

Challenges: One of the challenges we faced in our development was enemy AI. Enemy AI was a challenge to implement throughout the semester because of the interaction with terrain and colliders. While researching on how to implement an AI for our enemy, we found helpful videos that assisted us in creating a movement for our NPC's. However, many videos did not explain the

terrain and how we would fix movement bugs that come with it. A good majority of these helpful videos seem to only demonstrate NPC movement on flat planes rather than rocky hills or uneven terrain. Throughout the semester, we noticed 'plane' was the central aspect. Therefore, when making an enemy NPC, we added colliders that would complement a flat plane but tried to tweak the colliders to fit our terrain. However, fixing colliders was still a challenge because the final result of enemy AI was our 3-4th implementation. The solution was more like modifying our colliders to fit our terrain because our ground wasn't flat. Overall, the enemy AI was a solid implementation compared to our first attempt.

Another one of our challenges throughout our design and implementation was using free assets that would fit our game. As the semester went on, we would find a free asset to use for the upcoming assignments and we decided to continue to move forward with it. When we wanted to revamp our game to perhaps find better assets for our story, we found that there weren't many options. The way we approached the problem was to continuously search for better options. Our solution was not a bad one. However, we decided to keep the assets we originally found to focus on working with the animations that come with those particular assets.

The third challenge of ours in the design and development of our game was lacking game development experience overall. Initially, we had more ambitious ideas for what our game could include. As time went on, we realized that we were simply not experienced enough, and did not have sufficient time to research everything we wanted to learn. The way we handled the problem of lacking experience was by watching several tutorial videos on how to implement certain features. These features included the combat mechanics, the enemy AI, working with the terrain of the world, and several more features. I would say our solutions worked well considering that we managed to submit a game we were happy with.

Successes: One of the things we succeeded in for our game was our combat system. We managed to implement a randomly generated damage output per attack. This attack damage was generated between two thresholds to ensure that the enemy would die in 2-4 hits. The reason this system went well was that we managed to successfully work with the colliders and triggers. We managed to create an enemy health manager to handle their health as they receive damage. The reason this system made things easier was that it was a core aspect of the game, and by successfully implementing this the game feels more complete.

Another thing we succeeded in was the level design that successfully guided the user to play the game and made it visually appealing to our audience. Seeing the crashed ship and how it distorted our ground was a good idea because it shows that we've come from space and crash-landed. Afterward, the player's path was a successful implementation because it was easy to follow and wasn't just a flat passage, which made the game more appealing. You see villages, lanterns, caves, and wells throughout the path. The level design gave our game an open-world feel, which was our intended goal. Overall, our level design was a success and visualized our idea on our limited knowledge at the time.

Lesson Learned:
One thing that our team would avoid next time is selecting the character models for the game that does not incorporate enough features to use. For the main character, there are moving

animations but it only shows them moving forward. This takes a bit of the realism out of the game when the adventurer moves backward but does the forward movement animation.

Kudos: One of the excellent contributions to the game was the enemy AI implemented by Norberto. In addition to the core aspect of the combat system, the enemy AI was one of the features that we agreed was vital to the game. He managed to successfully create an enemy AI that lets the enemy chase and attempt to attack the player.

Another one of the excellent contributions to the game was the dedication to the refinements of our current combat system, user interface, and game experience done by Daniel. The interface, game sounds, our assignments, and combat system is only up to their current level because of his hard work.

Another one of the excellent contributions to our game was the video editing and research done by Winston. When making the necessary videos for our game, Winston's creativity allowed him to market our game as the exciting adventure game we wanted to create. His continuous research progressed the game development cycle throughout the semester.

Other Notes: Other comments or suggestions for future students in this course is to research the different types of 3D games that have been created. Creativity has allowed many groups this semester to create some fun, unique games so it's a good idea to look for inspiration. In addition, as you progress throughout the semester, it is important to research the different features needed in your game and how to implement them. With more time, we would have loved to implement additional aspects that added to the gameplay.