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Senior Design II

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**Self-Assessment**

The building and completion of all tasks indicated in the project timeline/milestones was completed by me. Unfortunately, my original team member was unable to take the second part of Senior Design this semester, but I will discuss this in more detail later. I applied all the skills that was identified in my initial assessment last Fall, and even gained additional skills that I had not intended at the time. The original plan was to create the game from scratch in C++, as I was most familiar with it, and build a simple engine from it and create the music analysis and game mechanics with this engine and additional libraries. However, due to the additional workload I took in order to get this project finished, I decided to use the Unity Engine to assist with some of the development. This made it possible to get a working base game to expand off with the ideas that I had envisioned. Unity also made the music analysis easily accessible, and in no time, I was able to get the major components developed to drive any additional game objects I wanted to add.

Overall, learning how to create with Unity, since I had no prior experience, was the major obstacle. But once I was past that, trying to get the music analysis to properly mimic the “feel” of the music I tested was the harder obstacle. The solutions that I came up with worked in the scenarios that I have in the game currently, but with other ideas that I had, several things would need to be changed. Specifically, being able to analyze the sound that would be played during the next frame of the game was something that I did not have time to complete, and had to be put on hold so I could finalize other components. If I had more time, this would be the next part that I would develop on, and I believe I could make even more interesting and interactive experiences for the player.

Since I was the only member of this group during this semester, all the group accomplishments were my own and are stated in my assessment above. Last semester, after completing most of the assignments myself and having difficulties getting my partner to participate in a timely manner in said assignments, I knew this semester was going to be a similar story. When I found out that my partner was not taking the course this semester, I was somewhat relieved. It is unfortunate that my experience with groupwork did not go as well as I had hoped, but I have had experiences like this before, and it has never stopped me from completing my goals. And it didn’t stop me with this project.

Even with this experience, I am far from turned away from group-related projects, and I still view this project as an overall success and highlight of my college career. If I had a team member or two with the same motivation as I do, then I believe this project could have been expanded even further, meeting the future goals I mentioned above and even more functionality that I had envisioned during the planning last semester. Overall, this project showed that motivation from all members is necessary for the whole group to be successful. As every group is only as strong as their weakest link. Once those links either removed or improved, then it is possible for the group to be fully productive and complete its tasks.