# Unit 6 Reflection

Date: May 26, 2020

To: Mr. Fulk

From: Jeffrey Lee

Subject: “Dungeon Crawler” Project Reflection

**Accomplishments.** My main focus for this project was to focus on the implementation of the mechanics and functionalities of the game. My specific accomplishments to this project include:

* Implementing the entities (Entity, GameCharacter, Enemy, and User classes)
* Developing the functionalities of the Entities such as attacking, level, health, moving, user and enemy statistics, scoring, etc. (Entity, GameCharacter, Enemy, User, and Room classes)
* Implemented “Infinite Levels” in which the user can keep playing until they “die”
* Implemented a level-up system for the user and difficulty system for the enemies
* Developing and implementing the scoring system (setting up how scores are calculated and displayed)
* Implemented User input through the keyboard (Level and User class)
* Developing the Screens and how to apply and display them (Game, Screen, MenuScreen, and EndScreen classes)
* Developing how the game starts and ends (Launcher, Game, MenuScreen, and Endscreen classes)
* Located the majority of the assets
* Developed, finalized, and documented most of the planning and paperwork
* Finalized details in mechanics and fixed bugs
* Added any additional functionalities and mechanics as necessary (mostly to the Room and Level class)

**Learning Experience**. I rarely ever get the opportunity to work with partners on a project in Computer Science, so this was a very valuable experience that taught me a lot about the process of developing a big project whilst cooperating with a partner. Furthermore, I got to learn a lot about implementing graphics and GUI into a project and found it to be a very fun experience.

**Objectives**. Regarding my performance, I believe that I performed much better than I had expected. Throughout all of the weeks, I needed to find a way to juggle all of my AP exam studying, assignments, and this project and managed to produce results that were mostly to the best of my ability. However, because I was busy for the first several weeks, a lot of the results were only produced in the last several days before submission, but the overall result was satisfactory albeit, frustrating at times.

* Challenge When the project first began, I knew that I wanted to work on making a game with my partner. Although I had very little experience with making games or GUI, it took a lot of research and help from my partner in order to ultimately produce results. Thus, I would say that I challenged myself to a very large extent as much of the things that we used were completely new to me at the very beginning
* Effort I believe that I put a large amount of effort into this project. I believe that I can make this claim because the majority of the time that I spent this month was focusing on planning and developing this project. Although I needed to address my assignments and AP exams, I often forced myself to allocate time to planning for and working on this project, even if I were only able to get a couple of hours of sleep per day.
* Quality I believe that I did not do my work very well. Although I spent a lot of time and effort, a lot of my work was not efficient or productive and many times, a lot of the research that I dedicated to this project was wasted. The quality, although relatively satisfactory, is quite poor and could definitely be improved if we had more planning, communication, and time.
* Problem Solving I believe that I was quite resourceful, however, it was only possible due to the help of my partner. Throughout the course of planning for this project, the plan had changed many times without us communicating our objectives, as a result, we had different ideas on what project to do. It was only possible because my partner took the lead and as a result, I was able to adjust and solve problems relatively quickly because of the resources that were provided by my partner.
* Results At the beginning, a lot of my planning were a waste because the project plan was changing (and at the time, there wasn’t anyone leading). However, towards the end, I was able to produce many results and was rather productive in developing, testing and debugging.
* Teamwork In regards to my role in the team, I believe that I played the role as a manager whilst my partner played as the leader. Although I was the one who was directing ideas, resources, planning, etc. my partner was the one who took the initiative to lead the project. Towards the end, (after my ap exams) I was able to take the initiative myself and begin producing major results.

**Overall Assessment** For this project, I would give myself a letter grade of A- (while taking the extra credit from GUI into account). I have given myself a high grade because I feel that I was able to work on this project to the best of my ability and dedicated large amounts of time to its development. Furthermore, I had completed the majority of the planning, paperwork, and documentation mostly by myself to allow my partner to take the lead in development. I would not, however, give myself a perfect score because a lot of my work was unproductive and could be better in quality and efficiency. Furthermore, I did not spend a consistent amount of time to this project, letting my partner do a lot of work at the beginning.