

### Weekly Report 4: Senior Design Project

This week I think I have completely implemented the melee action along with the enemy AI “death”. I have also refined the pathfinding implementation to a point where I actually like it more than the previous version. I began to work on the spawning of enemies at a constant rate in the scene just for testing, but there I ran into a problem. I do not believe that the AStar pathfinding code that I am using works for creating prefabs in Unity (at least I have not gotten it to work). Thankfully I have found another set of tutorials that can possibly help me with a different implementation that will work the way I plan on it working. If I cannot get the AStar to work I will just switch over to the other tutorial I found and its implementation. This may be a slight setback in my progress, but I do not feel like it will derail my constant progress. I believe if I need to change implementation, it will only take about an hour or two in just one day. I wanted to add pictures and videos, but I do not believe pictures will show very much and I was having a bit of trouble with uploading videos. If I may, I would like to show my work in class during the discussion.

#### Milestones for the near future (by week starting from now):

\*I realize that I do not actually have a set plan for how I will get most of my game done. I just plan on getting done what I feel is possible and makes the most sense to do at that moment. From there, I will begin to piece the separate components together to have my final product. Here is a tentative list that I have so far:

1. Learn how to make a proper field of view for the AI entities.
2. Implement that field of view so that the enemy AI only begins to pursue the player after entering the field of view.
3. Implement the enemy AI “patrolling” on platforms and areas.
4. Implement the player jumping ground checker (so that the player will only be limited to double jumping).

5. Add player health (this one will take probably just a few minutes).
6. Add the default weapon to the flying enemy that I have created (just a non-automatic projectile weapon for now).
7. Add the default projectile weapon to the player (I already have the default melee).
8. Implement the next form of enemy of the enemies list I created in my first week (second week of class), most likely just the normal melee enemy.