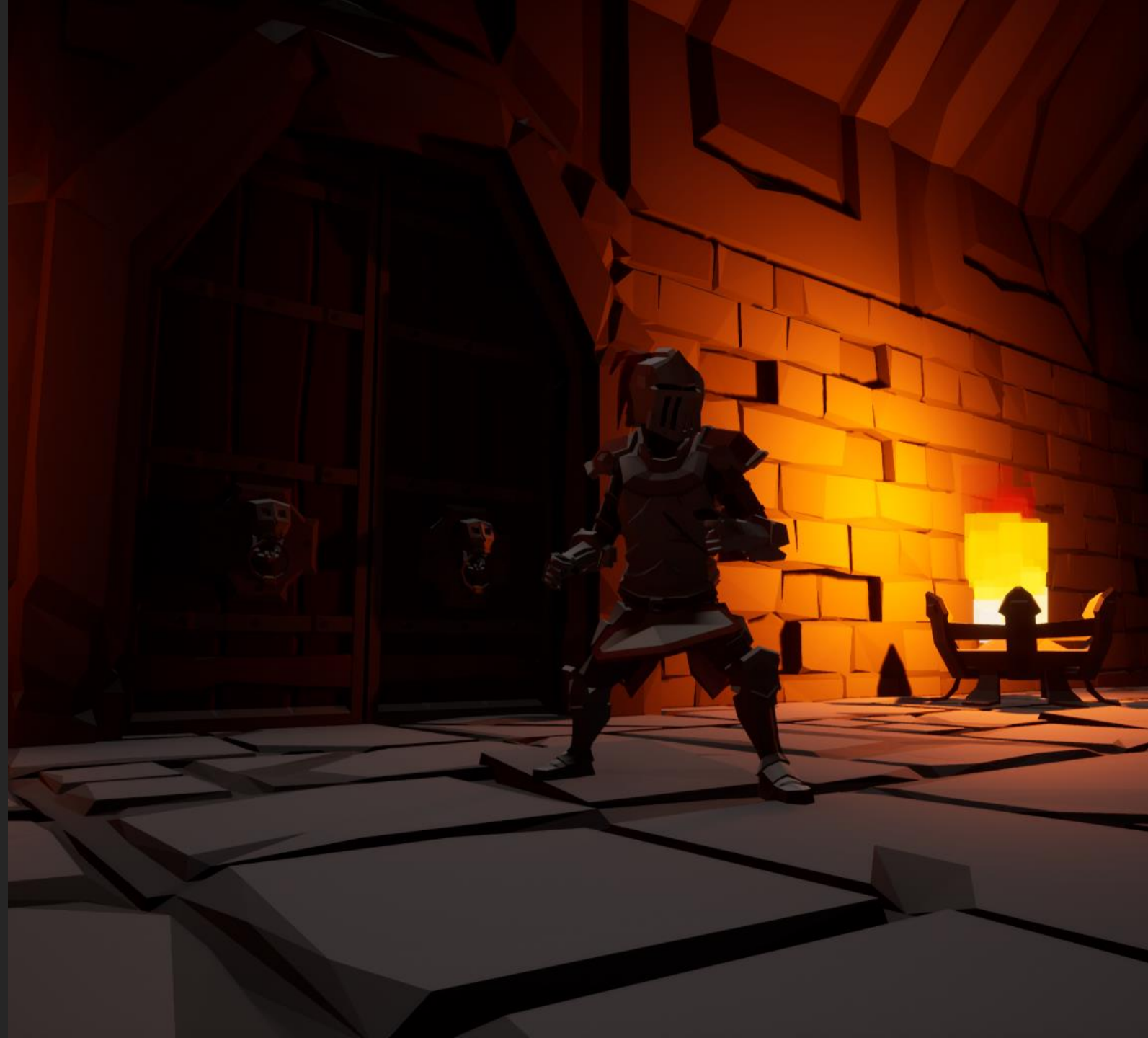# FINAL YEAR PROJECT PROGRESS REVIEW – DUNGEON OF OMENS

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PROJECT DEVELOPMENT
PROJECT DELIVERABLES AND CHANGES

During the being of the project, I prioritized focusing into areas that I felt I was unfamiliar with and would require my attention from the start of the project to make sure to make sure things later down the production pipeline would run as intended such as animation and the games basic mechanics, I also rescheduled my production plan as it was clear my attention was needed on having the projects basic mechanics working correctly before I was able to move on building the projects main focus being the level design this lead me into researching on how I could get my games basic mechanics and animations working correctly early on in the projects production line.

Although I have faced new challenges within this project, I feel that the research and resources I've been using during the production of my game have helped guide myself into finding solutions for any issues I've currently encounter when creating my project.

PROJECT DEVELOPMENT
PROJECT DELIVERABLES AND CHANGES

When I originally planned how I wanted my product to turn out I had classic isometric dungeon crawlers in mind that I would look towards for inspiration and ideas on how I would proceed within production of my product, although it was clear from an early point in the project that an isometric camera angle might pose a lot of issues that would conflict with my project's focus being the level design because of this I made some design changes to my product that would allow me to focus more on the games overall level design while staying true to the dungeon crawler style of game I was intending to create for the project.

I believe the changes I made to my project where justified as I had changed the camera from an isometric point of view to an over the shoulder angle I believe this change will be beneficial to my product as not only does this allow me to focus on other aspects of the product but during testing, I found that this new point of view within the game showed off my products level design more as the front and center of my product rather than just relaying on the products mechanics.
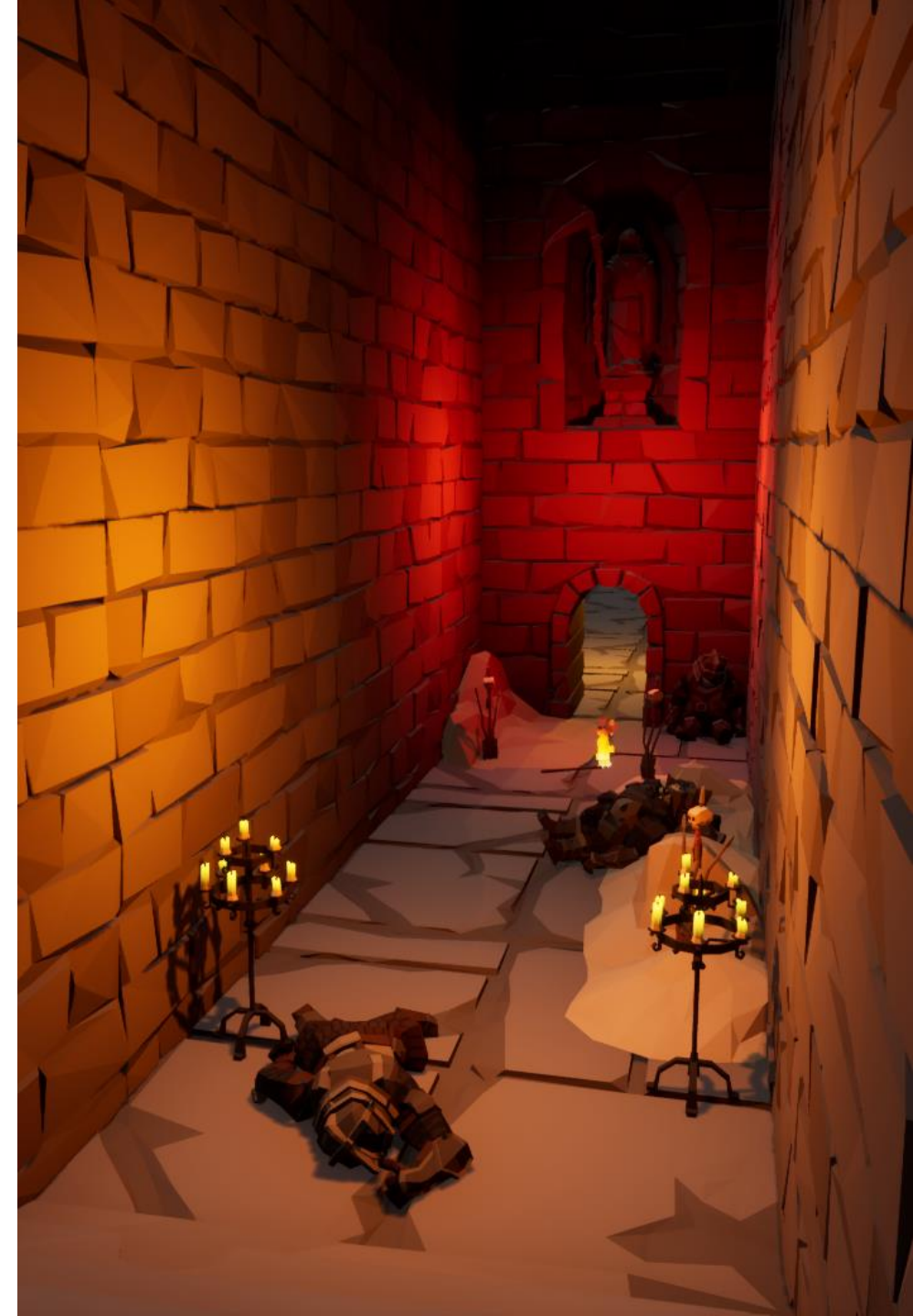
PROJECT RESEARCH – CHARACTER ANIMATIONS

Within my research I looked towards Mixamo for my game's animation and found a perfect pack of animation that I intend on using for character animations within my game although when I originally tried to get animation to work within my project, I was met with serval issues that caused my animations to not work with the Polygon characters that I was using within my project.

In order to get my animations to work correctly with my character I needed to do further research into Unreal Engines skeleton rigging system and how to properly set up my characters skeleton to work with my animations, after researching into this I found a solution to my animation issues and successfully found that I could apply my animations to my player character to be used within game.
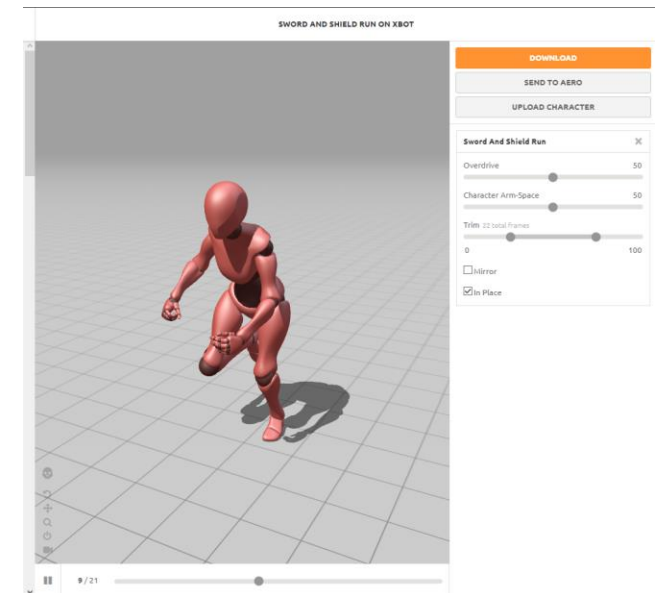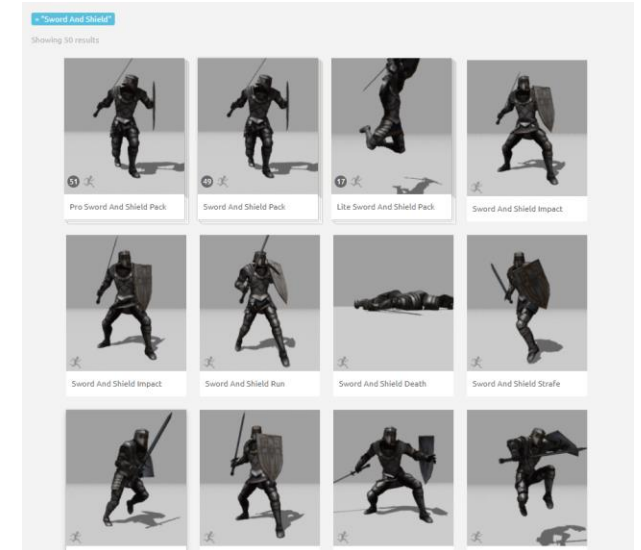
PROJECT RESEARCH – PICK UP SYSTEM

As I was making progress on serval of my project's milestones, I started looking into how I could apply a pickup to my character things that the player would be able to interact with when exploring the games levels, it was also important that I researched in how to apply these pickups to the characters model to be used such as any weapons that the player might find and wish to use.

Since I had already researched deeply into Unreal Engines skeletal tree system and had been looking into serval tutorials on how to achieve weapon pickups, I found this rather simple as I had created a system already that would allow me to interact with objects that I make as an intractable after this I simply applied a socket to the characters right hand to hold weapons that the player would interact with although at this stage I believe it could do with some further improvements overall am pleased with the progress made in this area.
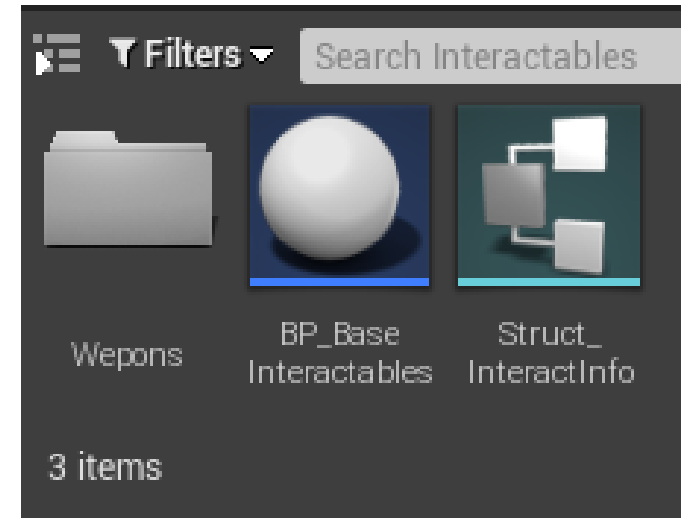
PROJECT RESEARCH – LEVEL DESIGN

When planning out how I wanted my levels to look, I took time and consideration when planning how I would begin design my levels as I was using Polygon asset pack to use to build my level, I looked at the levels that came with the asset pack to help myself gather an idea on how I would start to build with this new asset pack.
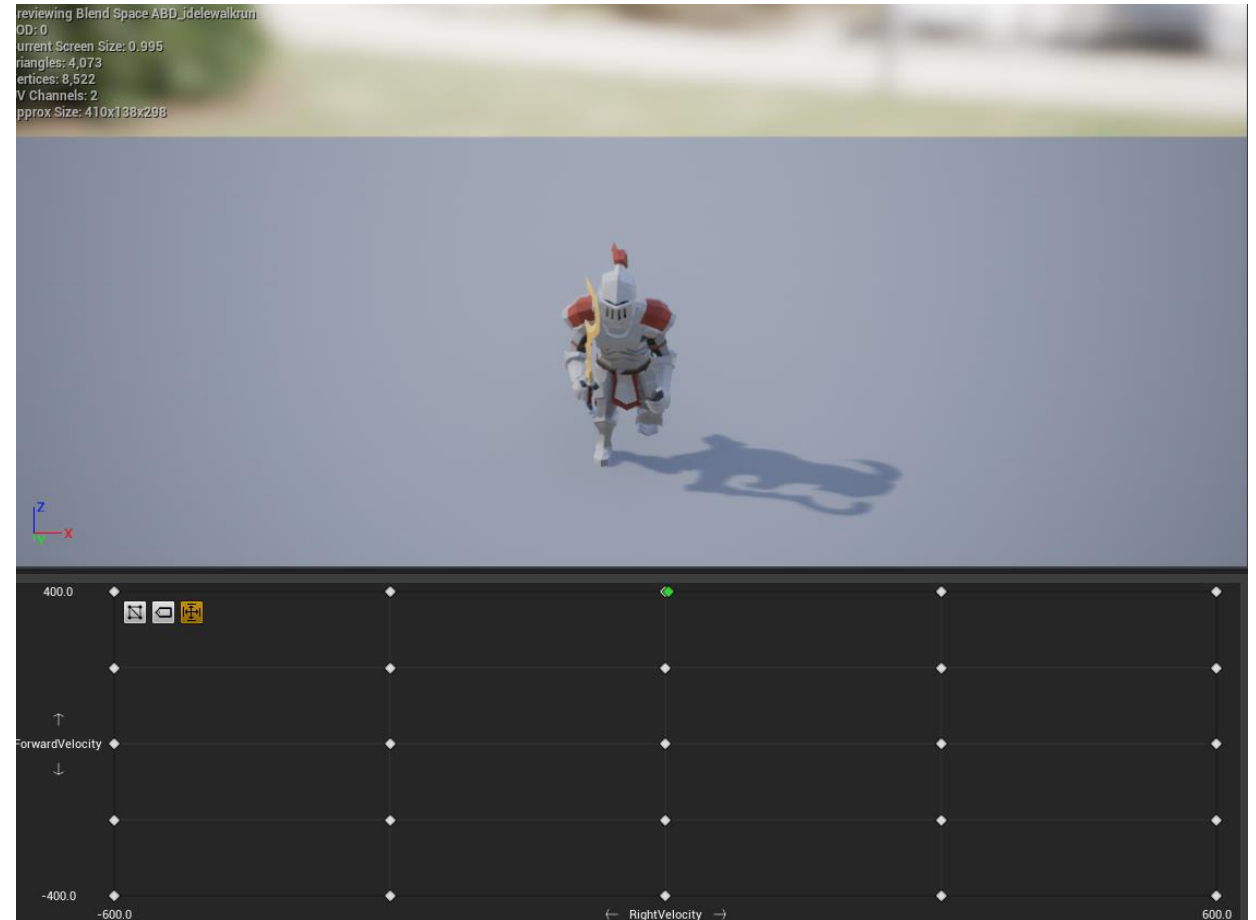
While playing around with these asset packs I grow more confident with building, so I took to creating a new level and mapping out my first level.

PROJECT DEVELOPMENT – CHARACTER ANIMATIONS

I used Unreal Engines blend space along with the animation I had downloaded from Mixamo to blend a set of basic movement for my player character although I faced the most issues so far within setting up animations, I believe my research from looking online at several guides and webpages helped me understand how to set up animations for hominoid characters within the future of this project and others.

My next milestone for animations within the project would be to have the player's combat animations along with implementing some basic AI into the game to test applying animation on for the game enemies.

PROJECT DEVELOPMENT – PLAYER MOVEMENT

During the time of implementing my animation to my player character I was following a guide online to help me with blueprinting my games mechanics, this guide had me create several blueprint classes to help create the player movement I know have within my project, I have found that this method of research has helped me in areas such as creating game mechanics and helping me solve any issues I've encounter along the way.

PROJECT DEVELOPMENT – PICK UP SYSTEM

With both my animations and player movement were working together as intended I moved on to working on the pickup system that would allow me to equip a weapon into the players hand.

As mentioned previously I found this process rather simple after working on the animation and the players skeleton mesh along with having blueprinted a system that allowed me to catalog items as an intractable making the process of adding in weapons easy to do.

Along with adding in weapons as a pickup for the player I also started to implement the games HUD elements such as the players item box and a display that appears as the player enters the hitbox of any interactable within the level displaying the items name, along with this the games weapon slot will change icon depending on what kind of weapon type is selected from swords to axes and daggers each having their own icon display that will appear on the players HUD.
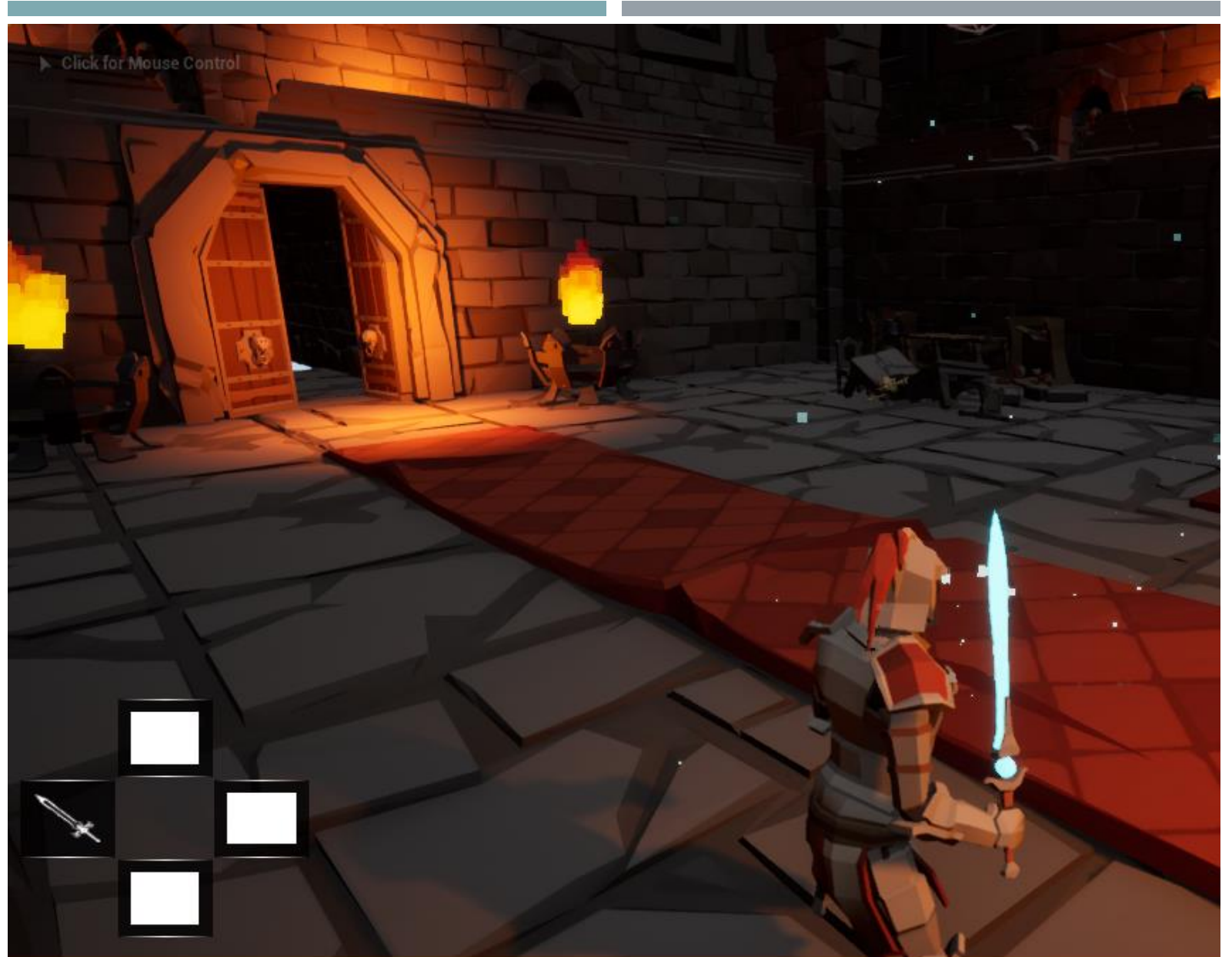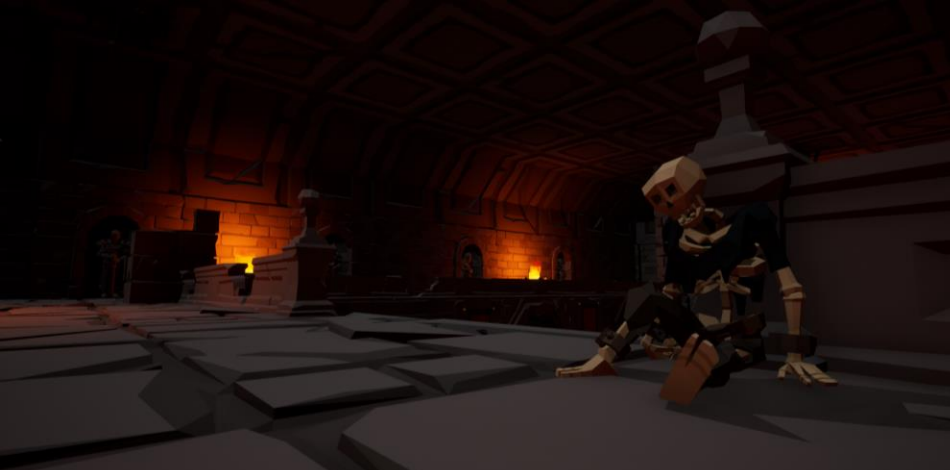
PROJECT DEVELOPMENT – LEVEL DESIGN

As a level designer it was crucial to me and my project that the level design would work with the games mechanics and movement while being fun and engaging to explore while telling a story with well-placed assets, because of the level of importance to this task I had created the games mechanics first as I knew this would later help me within testing my games levels once the mechanics where out the way I began on my games first dungeon.

I first started by laying out the game's first open room that the player would spawn within during my research I found it was important within level design such as a dungeon crawler to allow the player to move freely around the level being able to uncover secrets and hidden paths that make the overall level design less linear, I kept this in mind while laying out the layout for my games level and started to plan out multiple directions that the player would be able to pick from at the start of this level.

During the creation of my games level, I intended to create this first level as a tutorial of sorts with each path the player can take leading them to an encounter that would then further show off the games different mechanics I intent to implement.

PROJECT DEVELOPMENT – WHAT'S NEXT?

Overall, with the guides I've been following, and the progress made so far in several areas that originally, I found to be a struggle to grasp I strongly believe that am on schedule for my project as I now have several of the basic mechanics already in place within the project along with this, I have begun creating my games levels.
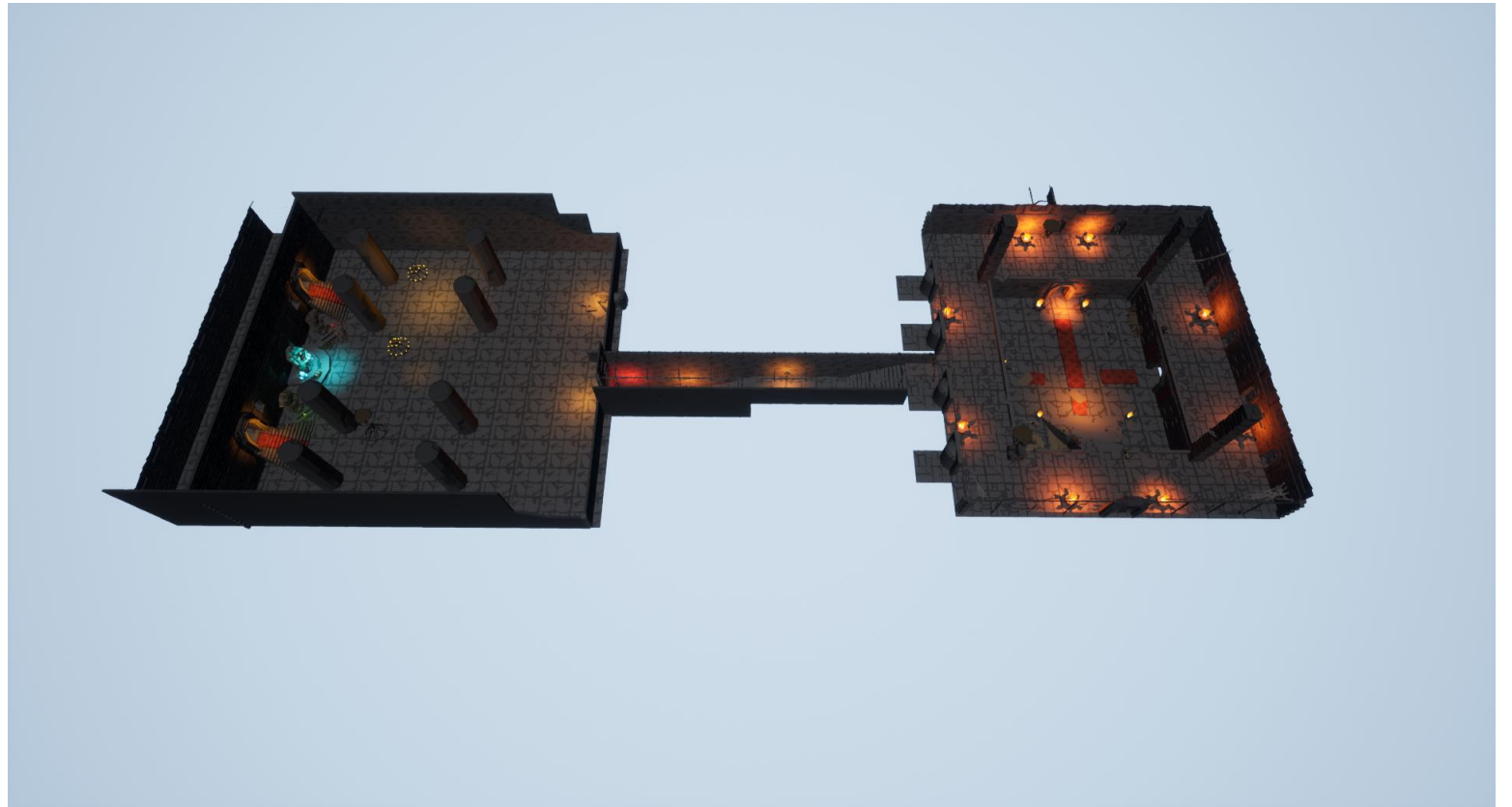
Within the next several weeks during March I have set myself several milestones that I intent to meet in order to keep on schedule for my project as I still intent on creating several level along with a set of mechanics that work within the games setting to create a fun and engaging dungeon crawler.

March 15th – Easy level complete

March 20th – Further pick up mechanics implemented

March 23rd – Combat mechanics started to be implemented

March 28th – Medium level complete

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