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Senior Design

The senior design project involves working as a team and showing off our knowledge from classes, co-ops, and side projects. This will include our ability to work in a team and discuss our varying viewpoints. I have played around with the idea of making games but haven’t delved deeply into it. This will be a new experience for me making a game with other people so I’m looking forward to learning more about it. This will teach me more about how the game development process is while working on deadlines like this. This class will give more experience moving forward when looking for jobs after college and a game to show off when applying.

One of the best classes that helped me prepare for working in teams was Engineering and Design Thinking 1 & 2 (ENED-1100 & ENED-1120). I had transferred from Cincinnati State in 2021 and was working with teams that had no idea on programming. With the group I learned how to explain code and they taught me more about physics and the building process. This experience will help me with planning and discussing plans with my group members. The other main class that should help out is AI: Principles and Applications (CS-4033). The reason for this is because enemies and projectiles will be moving around and having it search for the quickest path in the most efficient way will improve the gameplay for the user. The experience and knowledge about communication, team planning, and efficiency should help with the project.

My only co-op has been at KLH Engineers as a co-op programmer. I worked in a small team of 1 programmer who was part-time on the project and then a project manager. It taught me how to flip between talking about the technical solution with the other programmer and the base functionality of the project with the manager. When working on the solution I had to manage the revit add-in, database and migrations, and the web solution. This taught me quite a bit about sending commands, designing objects, and creating entities that would be stored in the database. I think the experience with working in a small group here will also help me out in the group project, however, the technical skills of working with objects will be similar to the characters and enemies that we will include in the game.

The main reason why I’m interested in this project is that game design is always something I’ve thought about and wanted to try it out. I’ve always grown up playing video games and some of my free time now is spent playing it with friends. If we can create a single player game that works well I can have my friends try it out and get me into that space of creating games. The initial design is to create a game that takes aspects of risk of rain with more of a dungeon crawler vibe to it. We are hoping to get a good group of maps built into the game so most likely start with level design. Next aspect would probably be the main character and the enemies. After that we would move onto the items and collectibles after testing and improving the movement.

I’m expecting a functioning game that I will feel proud to share with my friends and to possibly put on the steam store. If the game runs smoothly without crashing or having other problems come up I would also view it as successful. Overall though I think it will be an accomplishment if the game feels nice to play and people other than us enjoy playing the game. The best way to check if the contributions are useful would be to track user stories and bug fixes. Making sure time is being tracked and used appropriately with solid progress being made would be a good way to check. Finally, comparing the progress between each week will be a good way to indicate how well it’s going. It won’t ever be fully done since things can always be added to a game but if it gets to a point where it feels like it could be released then that would also be a success.