**CIT 490 – Senior Project Proposal**

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D&D Hub

**Assessment and Alignment of Needs**

I still have the same interests as I did in my first proposal and I believe that I can achieve similar goals in another way. I will create a D&D hub for my son and his friends. This hub will allow them to upload maps, generate NPCs and shop contents, and will provide suggestions for free sources. In this way, they can more easily access free content and resources and share it with each other. Doing this will allow me to explore the processes I was planning to explore with Cold Creek. I will get to tie an external database with an existing WordPress site, as well as add custom code to the WordPress database.

**Project Outcomes**

1. Create a basic WordPress site that looks clean and professional.
2. Develop the user registration process, enabling login and search by username for content.
3. Connect to an external API to generate two random generators.
4. Create a web scraper to find and display relevant news or free content.

**Measurable Goals**

Objective One:

1. Create website on WordPress containing the following main pages:
   1. Home
   2. Maps
   3. Generators
2. Maps can be uploaded and displayed on the maps page after login.
3. Site has a good flow of information and everything displayed works.

Objective Two:

1. User is able to register, login and has permission only to add or update their own content.
2. User is able to upload and display maps, and is able to make them public/searchable.
3. Content that has been marked as shareable can be searched.

Objective Three

1. A random NPC generator is created which randomly populates necessary fields.
2. A random shop generator is created which will generate random shop contents based on number of items desired in each category.
3. At least one of the generators will connect to an external API.

Objective Four

1. A web scraper is created that compiles free map-making tools and displays the top five on the maps page.
2. This web scraper will utilize the myphpadmin database associated with the WordPress site.

**Growth Expectations**

I plan to experiment with React.js with forms, particularly the search feature. I plan to experiment with Python while creating the web scraper. Another consideration is that to make these goals possible, I will need to familiarize myself with WordPress hooks and their uses. All of these are completely new to me, and will be skills that will increase my marketability. They will stretch my capabilities as a developer.