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Senior Project Proposal

For my senior project, I am considering creating a random generator for the tabletop role-playing game Dungeons & Dragons. I wanted to create something that not only met the senior project requirements, but a program that I would also use being a Dungeons and Dragons player myself. I plan to include a dungeon map generator, a random enemy generator, and an NPC generator. If time permits, I would also like to expand the map generator to include a town and world map feature. The goal of this project is to streamline the preparatory work that goes into Dungeons & Dragons, making it more efficient and straightforward.

I will be using Python to develop this project. However, I do not currently know Python, so I will learn it as I work. By doing so, I hope to achieve proficiency in a language that is widely used in the professional world. I will rely on online videos and tutorial websites such as w3schools.com to guide my learning. I also want to become familiar with using libraries and integrating them into projects, as well as generation techniques. Specifically, I will focus on map generation and character generation with random attributes taken from a table.

For the scope of this project, I will not be focusing on 3D visualization, artificial intelligence, or complex story generation. However, I do plan to provide a simple GUI for the user and include some predefined options for characters and dungeons. I believe this scope gives me enough time to learn a new language while also challenging me to explore concepts I have not yet encountered.