

My term project is an open world RPG game created with Pygame. The navigable map will be generated randomly with every new session of the game, through the use of a 2D Perlin noise function. Players must visit several specific locations, also placed randomly on the map (determined by checking if there's enough room in the current map generation to place each feature), and complete tasks (puzzles, mazes that could also be generated randomly, ect.). There will be minor encounters with enemies of varying levels and, given enough time, an optional automated battle system for handling the encounters. Players can interact with objects, collect key items, obtain new weapons/abilities, and gain or lose health throughout the course of the game. The game is completed when the player has collected and returned all the needed items to a specified end location. Games should be able to be saved and reloaded at future points.