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Current Module: Object Oriented Programming
Project Name: dungeon_dudes

Project Goals:
Build a game in which the player traverses a dungeon (or other sequence of areas) while fighting enemies via dice roll combat, and acquiring treasure.

Considerations:
o Most elements of this project's design would be best build as objects.

Initial Design:
Dungeon_dudes.py will contain all code. Dungeon, room, monster, and player will all be build as structures.

Data Flow:
On launch, the player/hero class will be initialized, along with the dungeon class. The dungeon class will, via list comprehension, initialize its contained room structures. Each room structure will in turn, again via list comprehension, generate its contained monster structures.

The hero and dungeon structures will be passed to the "game" function, which will be the main loop. In this loop, initiative will be rolled between the hero and first foe. Menu will be called so the player may select their actions, and the enemy will attack, the order depending on initiative advantage. This loop will continue until either the player dies, or the end is reached, popping out dead enemies and completed rooms as appropriate.

Communication Protocol:
No networking was required, and none were implemented or used.

Potential Pitfalls:
o Construction should be relatively straightforward.

Test Plan:

User Test:

Multiple runs of the game, using every variation/combination of options and inputs the player can think of.

Test Cases:

All test cases completed with correct output.

Conclusion:
The design of the game, in order to be built most effectively for the present and for potential future adjustment, was planned out using class objects, each containing a simple set of

properties needed for the object type. Once the objects were built, all that remained was game flow, and functions for actions such as dice roll and combat.