

Assignment 3 Major Project Reflection

Motivations for program design

My Location vector was set as a global variable so that my functions can access all the locations to check through the data and find relevant locations. Current Location is also a global variable to ensure that any method can access it as there are a multitude of ways that the player can be moved and current location is the tracker for that. The first location is always initialized as locations[0] because I thought there would be one definite entrance in a cavern. I did not directly place my player inside my Location class as it would be a hassle to delete and replace the player pointer after every move. Instead I allocated the current location to act as the "location" where the player is and the player class is just used for the attributes.

Implementation

The implementation of this was quite simple as all i needed to do was change the current location pointer with getNorth (for example can be any direction) function which would return a location pointer and allow me to change my current location value to that location.

What I would do differently

I think my code right now is almost as efficient as it can be except for probably getting the hazard effects as that is mostly hard coded. I would have liked to use a string variable to determine the character/hazard type and use that and append "Effect" to it. Then have a txt file where I would have detailed the description of what the hazard/character did to the player. And have my file reader do the work. This would have been much more efficient and much easier to change the details of the effects.

Also, finding a method that checks adjacent rooms, rather than checking all 8 directions would be able to get exactly the 3 directions that the room leads to then read only those 3. This would drastically increase the efficiency of my program as every time the player moves it reduces the if statements from 8 to 3, just for that function. There would be more if statements used in the check adjacent function.

Adding a more detailed description of each location each within a separate text file.