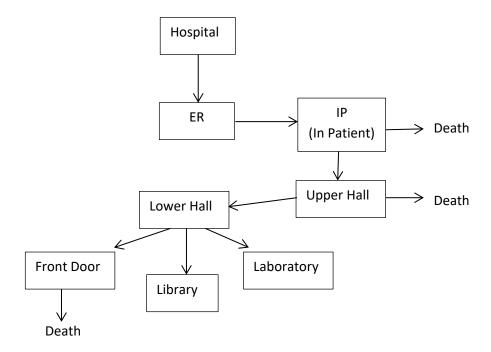
# CS 162 – Final Project

## Design

My text based game is completely menu driven. This is an attempt at a room escape type game. It involves being at OSU and then waking up in a hospital after passing out while running. The player has a set of symptoms displayed. The player will have to make their way through the hospital to the Lab. As they make their way, I have devised ways that they may die. Each option needs to be evaluated because death is just a heart attack away. I wanted the game to be accurate and as a result, I requested assistance from my girlfriend, who is a Laboratory Scientist, to bring the medical accuracy to the game.

I made sure that even with medical jargon, the player will not be required to understand medical terminology to play or beat the game. However, this can be a slight learning tool in my opinion because at the end, the player will have lab test ran and will try to diagnose what deadly disease they have. The disease is static in the end, but some of the paths in the game have randomness added.

# **Design Map**



### **Testing**

- If the user enters anything other than an integer, then my verification will not accept the input until it is an integer.
- The somethingHappens() function in my classes are designed in a way that it a user inputs a
  integer that it is not an option, then it will end and tell the user to enter a valid choice. The
  program will then continue and loop back to the choice options.
- In areas that allow for a user to visit more once, the user will not receive a story that was outputted when they first went to that area.
- If a user tries to pick up a key more than once then they will receive an invalid response.
- Each Item can only be used once, and the user can only hold one item at a time. It is designed that if the user does not use an item and then pickups up a new one, they can still complete the game.

#### Reflection

This final project gave me difficulty. It took me a little bit to understand what I needed to do and once I thought I knew how to attack the project I went and started to create the game map.

I was having a lot of trouble when trying to implement the pointers to each room and I recently found out after looking at the Canvas forum for the Final Project that I am did it wrong. However, the time I figured this out it was too late and I do not have the time to do a large redesign.

As a result, I made the choice to make sure I can submit a complete game. This means that instead of having 3 different classes with object pointers, I have each room as their own class and I am using my main function to point to a single created dynamic object for the class.

I know that I will not be satisfying the pointer aspect of the code and the 3 different classes with 6 different rooms. Instead I have one pointer in main that uses 7 different classes that goes in a linear sequence with the ability to travel back and forth between rooms on the lower hall level.

If I had more time, then I would implement the OOP pointer system. It may have may the game a lot easier to create. Instead I developed a loop system that will play the game to the end or until the player dies. This allowed me to have only one main integer input section that goes through my integer validation function I developed a few labs ago.

I feel like I did a thorough test of all the possible outcomes and if the player goes back to a previous area they are unable to pick up the same item as the first time they picked it up.