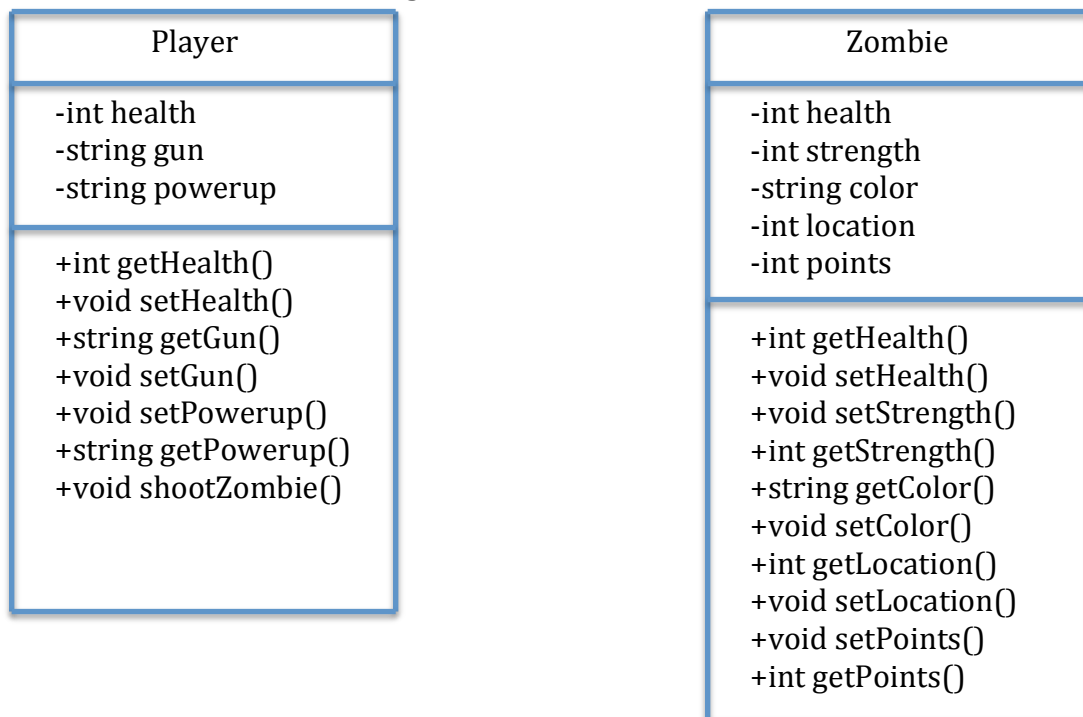


Steven Anderson
CS 172 Final Project
Proposal

My idea for the final project is to create a zombie fighting game. The game play will be round based where more zombies attack each round. The player gets points for killing each zombie as well as passing each round. During the course of the game, the player will get the opportunity to upgrade guns, increase health and similar actions.

The largest piece of code for the game will be a central while-loop that will create a new round as long as the player is alive. In this loop will be a random number generator that, based on the numbers, will create a certain number of zombies, give the zombies health, determine whether a new gun is dropped, decide hit or misses, and such. Once the player dies the loop will exit and the high score will be submitted to a high score file along with a name the player chooses. The program will have two different classes: a class for the player, and a class for the zombies. Here are the UML diagrams for both classes.



The main problem when making this game will be to make the game fun and to make it seem like there is skill involved. Because it is text based, there won't be the skill factors of speed or dexterity, so I'll have to find ways of making decisions where strategy is needed. I'm hoping the random numbers will help change the gameplay up and not have it be the same every time. Another challenge will be the interactions between the player and zombies like taking and giving damage. I think for the most part the solution will just be trial and error. Looking at the UML diagrams, I'm pretty sure I'll need to change them but I just don't know to what yet. Looking ahead I see we are learning recursions, that could be a nice substitution for the main while-loop, though I don't know if it would work any better.

I ended up with two main loops; one was for making each level and then another one was inside that loop controlling everything turn-wise. I added a living class that had the basic health functions that both the zombie and player classes inherited. For the iofile, I originally had a vector for reading in the high scores and outputting the new ones but found doing separate arrays to be much simpler. I also added +getdamage() functions to both the main classes.