

Design:

After reading the directions for Assignment 4 I figured that I need to create a Team Queue, a Loser stack, I need a way to revive after an attack, ways to keep track of score for both the team as well as individual fighters.

So I first sat down and designed the Team Queue as well as the Loser stack. They were heavily influenced from our Lab 6. Once I got them set up to handle creature objects I tested it out to see if it worked. It was simple I just created two queues and tried adding some creatures to them and see if I could access their information by printing it out. It works well. Next was onto seeing if I could get them out of the queue and into my combat function from assignment 3. This is where I had the most difficulty. I could not for some reason get the creature out and into the combat function. I keep getting errors saying there was no call to that function. After posting a question on the forum I was able to figure out the problem was I was not returning a pointer to the creature object. It made feel incredibly dumb that I spent that much time trying to figure it out.

Once I got that working I started working on how I would get the losers into the loser stack and the winners back into their teams. I redid my combat functions so they would return the winner and at the end of the combat function I added the loser to loser stack. I had to create a get stack function to get the loser stack from inside the combat function and into main. After I coded all that I started testing it. Simply by cout statements to see that the players were going where they needed to go. It all worked well.

Next was onto the scoring aspect. I added a score integer for both the teams as well as the individual fighters. Before I returned the winners from the combat function I would add points to the winner and I would take points away from the loser. Once it was returned to main and I would determine what team the winner belonged to and add them back and then increment the points for that team. How points are awarded to each player isn't very fair but I just wanted something where I could tell it was working properly and made testing easier. Once they were done with combat and one team was out of players I determine a winning team. Then from there I go on to determine a individual winner. If any of the two teams have more than one player left inside their lineup they fight it out so there is one left. That one is the overall winner and the top two from the loser stack are second and third.

The biggest struggle for me was getting the creature out of the lineup and into the combat function. This was definitely a fun project and something I want to continue to work on. It is far from a perfect game. This was by far the most challenging assignment to date. There is still so much I would like to do but just don't have the time for.