Tuan Tran CS 162 Project 4 Reflection

## **Describe Original Design**

I originally design this program by using my initial design from Project 3 and would add the Queue from the Lab 7 I did last week. I ran into several errors when using my lab 7 code with Character Objects so I decided that I needed to repurpose my code but clean it up. I had trouble keeping track of the character objects and also had lots trouble adding characters to the back of the line up after they had won a battle.

## Describe Changes From the Original Design and Describe Problems Encountered and Solutions

I ended up using code from Lab 6 and used a DoublyLinkedList which worked a lot better than the Circular Queue from Lab 7. I was able to keep track of the head and tail of the linked list much easier and was able to move characters in and out of the lineup very easily using a linked list. I used a linked list to track the line up for Team 1, Team 2, and the Loser List. After repurposing the code from my Lab 6, I was able to have a linked list of Character Objects and have multiple characters on a team.

## Test Plan/ Test Results

Test Case	Input Values	Expected Output	Actual Output
Enter letter that is not in menu for character selection	Input 'z' for character selection (valid inputs are 'a' - 'e')	Prompt User to Please Enter a Valid Char Character	As expected
Exit Game	Enter 'n' at start of game	Program will end	As expected
Putting an Integer at Start Menu for Playing game	Enter '1' instead of 'y' or 'n'	Please enter 'y' or 'n'	As expected
Enter an Integer instead of 'y' or 'n' to continue round	Enter '6' instead of 'y' or 'n'	Prompt user to enter 'y' or 'n'	As expected

Combat is over and user wants to view the Loser List	Program will output correct loser list form last defeated to first	As Expected
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