

PROBLEM STATEMENT:

To keep a current ordered list of the National Football League teams and their records. The list should have the ability to be expanded. Ordering is maintained according to the listing in the newspaper. The list is ordered by conference, division and descending order of percentage. When percentages are equal then the teams are listed alphabetically ascending. Percentages are calculated as follows: wins divided by total games played. The input file provided will have fields for team name, win, loss, tie, and win-loss-tie for Home, Away, Division and Conference. Also there will be a code field representing the conference and division. The list should have the necessary operations to start the list, make necessary changes, (including adding and deleting a team) and be able to recall the list created at the next run. Of course, the list should be able to be viewed at any time. When a game is entered home-away win losses should be updated. Changes, if desired , should have the ability to be written to a new file.

CODE:

Construct an object that is a doubly linked dynamic list. This must be a class. You may either

- Use our current list.h - turn it into a correctly functioning doubly linked list
- Use STL doubly linked list - in this case your programmer manual must clearly document in the programmer manual, where the use of doubly linking occurs and is used. Failure to do so will result in a **30 point deduction**.

Also in the programmer manual, include a discussion of the the algorithmic efficiency of using a doubly linked list over a single link list for this project. Also include a discussion of the pro and cons of using an array/vector for this project.

Program must read the appropriately formatted input file (see NFL_standings_10162018.tsv)

Note: the input file has an extra field that can be used to identify the league and division of a team.

You should probably create a file, say team.h, which will contain a team struct and a file, say standings.h, which will contain the class Standings which inherits you list. Teams/standings are updated by entering the *full team name*.

DELIVERABLES:

hard :

- In a bound folder
 1. documented source code
 2. user manual.
 3. Programmer manual(s) (one for each class also)

soft:

- in a zipped file, called CS132_Football_Frenzy_yourLastName
 1. all source code
 2. release version executable

submitted in Blackboard to CS132_P2

Due Date : 6:00am 9 November 2018
Demos will commence 7:15am 9 November 2018

Status reports are to be electronically submitted by 6am on
31 October 2018

These zipped updates must include source code and a pdf file explaining the status/progress of the project(what has been completed, what needs to be done, etc)