CS 411 Stage 4 Project info

AF1: For our advanced function 1 We will be doing an in depth statistical analysis for each individual player. On each individual player page we will display their average score, total points, and other basic statistics. All of these stats will be updated based on week range selected so you can see a players average points from weeks 1-7, or 5-10, or just points week 12. The challenging part of this is we are also going to include the players ranking compared to players at their position, and overall players. We will compare this to the average player over that time span and rank how many points on average they scored above other players and what they ranked at their position. The challenge in this is we will have to compare lots of player data simultaneously, but quickly as we do not want our webpage to be slowed down every time you change what you are looking for. We will also have a graph of the player compared to other players. All of this information will appear for each player on each individual players screen.

AF2: We will be using Mongodb for this part of the project. Our data will be the same data that we have been using before (NFL data retrieved from pff.com). What we will be doing differently with the AF2 is instead of making the tables weeks, and the listing all the player data, we are going to use the flexible schema that comes with MongoDb to make player objects that store player data. This will make it easier for us to compare individual players, and access individual player data. With MongoDB instead of calling multiple joins, group bys and filtering for each player, we can instead just search the database for each player.

Methods/tools: To complete the remaining functions we will continue to use python, Django and SQL. We will also start using of MongoDB as well.

Work timeline:

1. After we turn this in our main focus will be on the midterm for this class, and after that completing HW 6, so realistically we won’t get started working on the project until Wednesday/Thursday of next week.
2. Have MongoDB setup (AF2) done plus other functions smaller functions that need to be implemented. (Done By 16th of November by 11:00am so before class that day)
3. Finish AF1 and any other functions not completed in part 2 (Done by 20th of November)
   1. Ideally we will be done by break.
4. Thanksgiving break, tune up project put finishing touches on, plan presentation
5. Post thanksgiving: do final presentation and report.

Work distribution is TBD we will have a todo list and when people have time they will work on the project and try to get as many things done off of the todo list as possible.

Unresolved challenges:

1. Combine rushing and receiving data on main page. I want the end table to look similar to the example
2. Default should be highest to lowest points for fantasy points
3. Add buttons on main table to sort based on category
   1. Click up arrow to see who has most passing yards and down arrow to see who has the least passing yards.
4. Add passing yards, passing TD’s, and int’s to table for running/receiving.
5. Add position of ‘QB’ to all passing stats (DONE)
6. Make button and form for add (DONE)
7. Make button and form for update (DONE)
8. Make button and form for delete (DONE)
9. Make player page for each individual player (working on)
   1. Start thinking about how to use NoSQL to show data on here
10. Add something for custom scoring (semi optional?)
11. Combine all the tables so the initial Home page is weeks 1-17
12. Be able to advanced search so you can see weeks in ranges like 1-4 or 5-8.
13. Add player search
14. Add table that goes onto a different page. What I mean by this is have it display 50 players on the first page and then 50 on the next and so on.
15. Update individual player page so header displays name.

Example: <https://fantasydata.com/nfl/fantasy-football-leaders>