Lab 4 - Team-42

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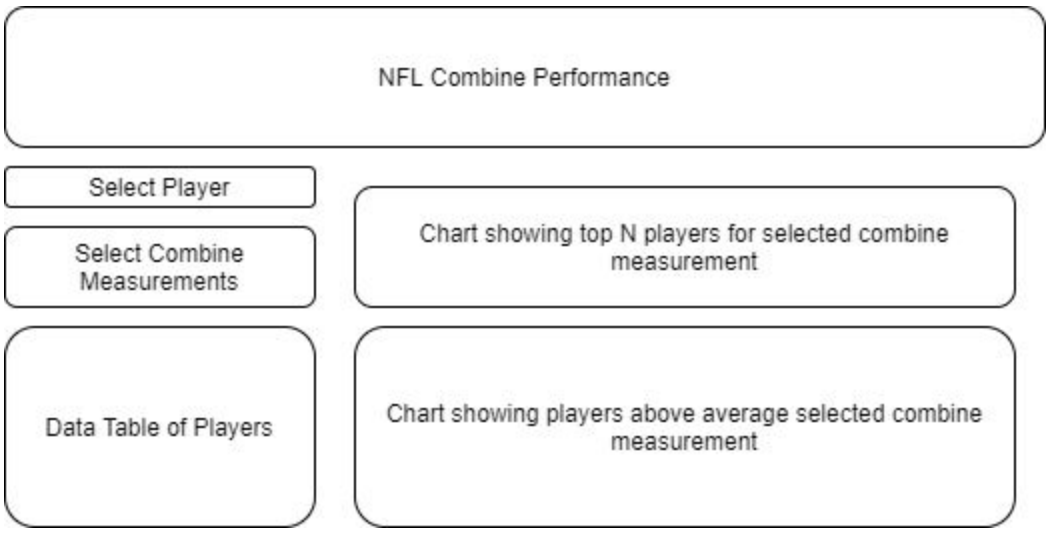
Features (user stories) to Implement in Next Sprint:

1. Combine
    a. Feature 1: as a user, top N players by combine statistic
    b. Feature 2: count of players above combine measure average (e.g. if average 40-yard dash speed was 4.5 sec, how many players were above that
2. Rushing
    a. Feature 3: Display top N rushers statistics of all time or team
    b. Feature 4: Display AVG rushing yards per game for certain player
3. Receiving
    a. Feature 5: Display AVG receiving yards per game for individual players.
    b. Feature 6: Display top n players by AVG receiving yards.
4. Passing
    a. Feature 7: as a user I want to select the top *n* players with the passing length *L,* passing outcome (complete/incomplete/interception), and year *y*
    b. Feature 8: as a user I want to see a count of players that are above the average total passing length.



Test Cases

1. Feature 1 test cases
    a. Test Case 1: as a user I want to see the top 5 40-yard dash times for WR
        i. Correct output: display correct top 5 40-yard dash times for WR
    b. Test Case 2: as a user I want to see how many players have above average 40-yard dash times
        i. Correct output: display correct players who have 40-yard dash times > average 40-yard dash times
2. Feature 2 test cases
    a. Test Case 1: as a user I want to count of players above combine measure average
        i. Correct output: display players above measure average

3. Feature 3 test cases
    a. Test Case 1: as a user I want to see the top N rushers for a certain team.
        i. Correct output: display top N rushers for certain team
    b. Test Case 2: as a user I want to see the top N rushers of all time
        i. Correct output: display top N rushers of all time
4. Feature 4 test cases
    a. Test Case 1: as a user I want to see the average rushing yards per game for a player.
        i. Correct output: display average rushing yards for a player

5. Feature 5 test cases
    a. Test Case 1: as a user when i search a player on the receiving statistics page i see the players average receiving yards per games played
        i. Correct output: average receiving yards per games played is displayed on receiving statistics page

6. Feature 6 test cases
    a. Test Case 1: as a user when i want to see the top n players by average receiving yards per games played
        i. Correct output: page displays top n players by average receiving yards per games played

7. Feature 7 Test Cases:
    a. Test Case 1: as a user in the passing statistics page, I can select to search top players, type in the number of players to display, enter a passing length, passing outcome, and passing year in a form.
        i. Correct Output: the site displays a table with the passing statistics for the selected number of top players with the selected passing length, passing outcome, and year

8. Feature 8 Test Cases:
    a. Test Case 1: as a user in the passing statistics page, I can select to see the count of players above the average total passing length
        i. Correct Output: the site displays a count of the players that have a total passing length above the average total.

TODO List

Done list of last sprint (week of 10/23 - 10/29)

1. Player Management Site
    a. Created front-end html template to render player management functionality to the client
    [Finished by Ford St. John/Kyle Dean, verified by team]
    b. Created front-end .css styling to style player management page
    [Finished by Ford St. John, verified by team]
    c. Created back-end functionality to edit a player's attributes from the loaded players dataset
    [Finished by Kyle Dean, verified by team]
    d. Created back-end functionality to add a new player to the loaded players dataset
    [Finished by Ford St. John/Kyle Dean/Robert Arenas, verified by team]
    e. Created back-end functionality to delete an existing player from the loaded players dataset
    [Finished by Eduardo Rocha/Kyle Dean, verified by team]
    f. Created back-end functionality to save edited pandas dataframe to a csv
    [Finished by Kyle Dean, verified by team]
    g. Created back-end API to read .csv datasets from Google Drive for consistent implementation of web application independent of local machine
    [Finished by Kyle Dean, verified by team]
    h. CSV parsing back-end function
    [Finished by Robert Arenas, verified by team]
    i. Creation of "user functions/objects" module for wider exportation to the rest of the application (libaries.py)
    [Finished by Ford St. John, verified by team]
2. Receiving statistics page
    a. Added css styling to page
        i. [finished by Robert Arenas]
    b. Added top n players section
        i. [finished by Robert Arenas]
3. Rushing statistics page
    a. Created function for web scraping the nfl.com site for player's images that exist in our dataset.
    [finished by Eduardo Rocha, verified by team]

b. Created column store format using a Bootstrap template so the user can see the Rusher's FirstName, LastName, ID, Total Rush Yards, and Team(s) played for. [finished by Eduardo Rocha, verified by team]

ToDo task list for next sprint:

1. Implement front-end top N visual for combine performance
2. Implement front-end visual of players above average combine measurement performance
3. Implement back-end computation of top N players for selected combine performance
4. Implement back-end computation of players above average combine measurement
5. Implement front-end top N visual for passing statistics
6. Implement front-end visual count of players above average total passing length
7. Implement back-end computation of top N players for selected passing statistics
8. Implement back-end computation of players above average total passing length
9. Implement back-end computation of top N players for selected rushing statistics
10. Implement front-end so that two forms can be displayed on one page
11. Add average receiving yard per game to the receiving statistics page. Adding front end and back end functionality.
12. Add top n players by avg receiving yard per game. Adding front end and back end functionality.