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NBA Data Web Application

Data Set:

We are planning to use the NBA data we used to complete the previous API assignment, which can be found here: <https://www.balldontlie.io/#introduction>. It is open source and the owners of it encourage people to build projects with it, an example of which can be found here: <https://www.balldontlie.io/#introduction>. We will acquire and be able to use the data by either making calls to the API or if that is more troublesome just contacting the owners of the website for their data.

While the data doesn't contain more advanced statistics like true shooting percentage or real plus-minus, it has statistics about every NBA player and game going back to the 1979 season. The most interesting pieces of data are the averages of NBA player for individual seasons or their boxscore for any game that they had played in, which includes statistics such as shooting percentage, free throws attempted and whether and the outcome of the game.

Intended Audience:

The intended audience for our application is anyone who is interested in the NBA and wants to know specific NBA player data. To give an example, let's say two friends, Ben and Duncan, are arguing about who is a better player this season: Kawhi Leonard or Jimmy Butler. To support his argument for Kawhi Leonard, Duncan might want to first compare their counting stats, such as how many points, rebounds, and assists they're averaging that season. If Ben learns that Kawhi averages more points, he might then want to compare their defensive stats, like the number of blocks and steals they average. Seeing that they have similar numbers for both statistics, Ben would want to be able to compare slightly more advanced stats like their field goal percentage, how many threes they shoot, and how many free throws draw per game. Now if this was an argument about which player had a better career, being able to access career averages would be more useful.

Functional Requirements:

- System must be able to retrieve player statistics for each season they were active

- User must be able to search players by name
- Website must be able to display player stats
- User must be able to select to view a player's stats from a particular year or their career.
- Search accounts for players with the same name

Non-functional Requirements:

- Stats are organized and displayed so that the user doesn't have to search for the specific stat they're looking for
- Statistics are displayed in a format that is easy to interpret
- Color Scheme of website meets general accessibility standards
- Each set of season and career averages are split up intuitively and don't clutter webpage

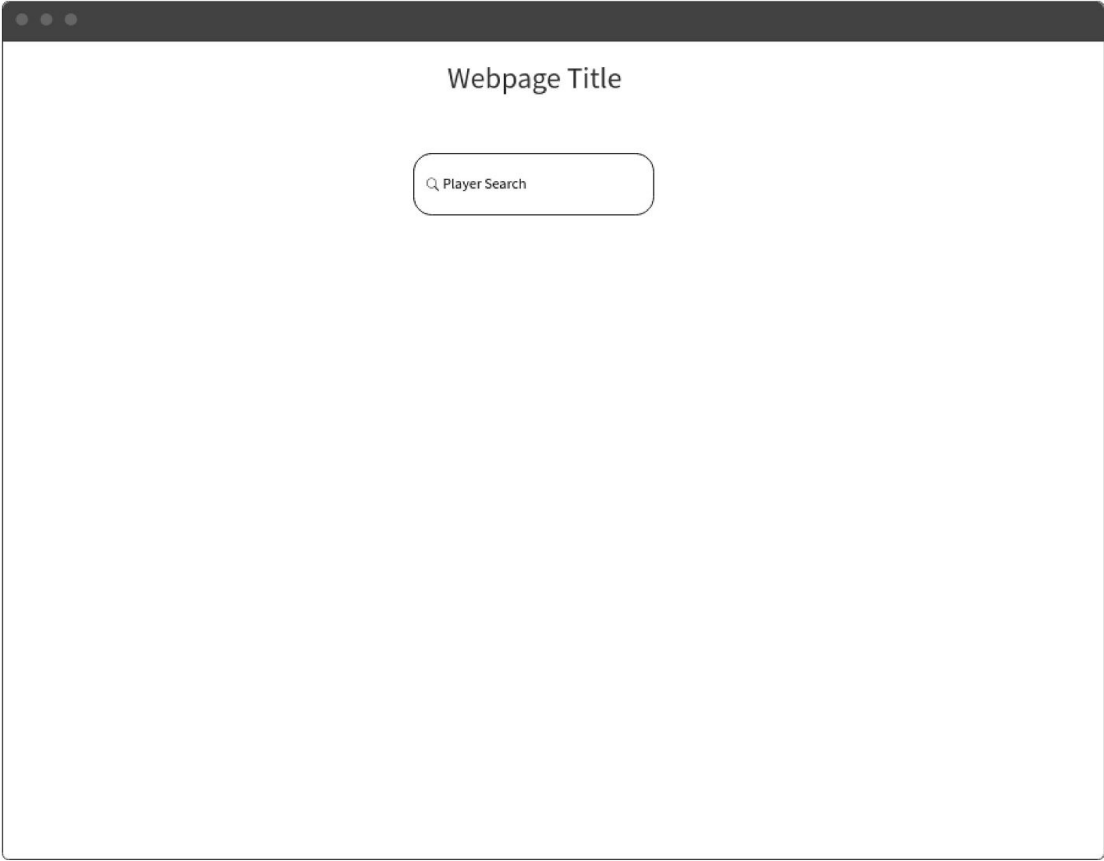
Key Features:

- Search bar for users to find specific players
- A search results page to give a list of players that matches the search query, sorted alphabetically.
- When looking at a specific players, having some sort of drop down list for the user to be able to select what season stats they want to look at.
- Actually correct stats for selected season and players.

Mockup:

Contents

1. Homepage
2. Player Summary
3. Search Result



Webpage Title

Q Player Search

Player Name

List of Seasons

Team: Player Team for Selected Season

Position: Player Position

Key Statistics

	Games	Points	Assists	Rebounds	Blocks	Steals	Turnovers
Year of Selected Season							
Career							

Advanced Statistics

	MP	FG%	3P%	FT%	PF	ORB	DRB
Year of Selected Season							
Career							

Webpage Title

Player Search

Number of Results: x

Name 1

Most Recent Team

Most Recent Season

Name 2

Most Recent Team

Most Recent Season

Name 3

Most Recent Team

Most Recent Season