

# **Data Visualization:**

## **Assignment 4**

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# Design

## Dashboard name and purpose

National Basketball Association Analysis Through Teams and Players.  
Our main goal is to create an interactive dashboard that shows the information about NBA teams, players and history. We want to present some fundamental facts regarding the best players through the history of the NBA, nationality of players and games between teams.

## Tasks solved using the dashboard

0. - Create a framework. Create a homepage. There should be an image of Michael Jordan, quote of Michael Jordan, our own logo and short description of the dashboard. Also put the name of the authors.
1. – Create a datatable which shows the name of each team in the NBA, from which state given team is and from which year. Use the ‘Search’ tab to select your favorite team. Click on *csv*, *copy* or *excel* button to choose given action.
2. – Create a map which shows the localization of each team. Map should be interactive - you can zoom in or zoom out the map. You can click on the given place and see more details
3. – Create a grid with logos of each team, and a ‘Search’ tab to choose between *Western* and *Eastern*. Add localization on the right of the grid.

Datatable, map and grid should react to the button - when you click on it you can change between these three visualizations.

4. - Create two bar plots which show how many teams were founded or were closed in a given period of time.

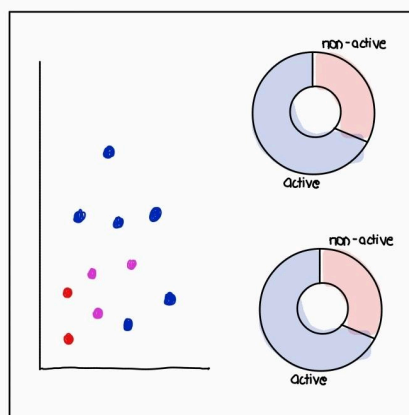
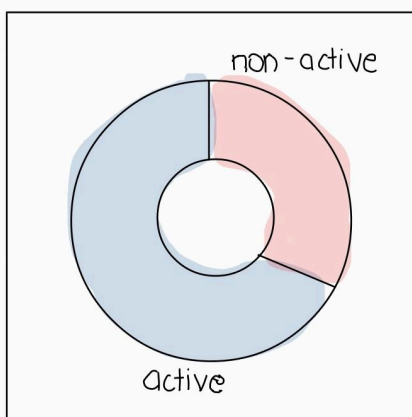
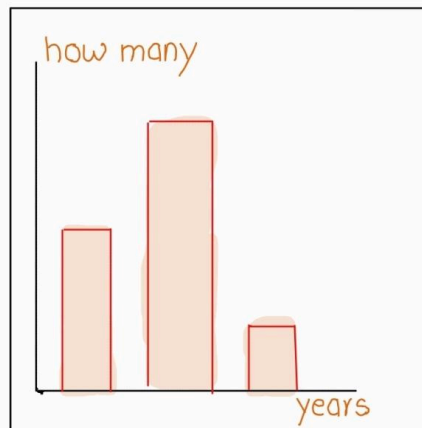
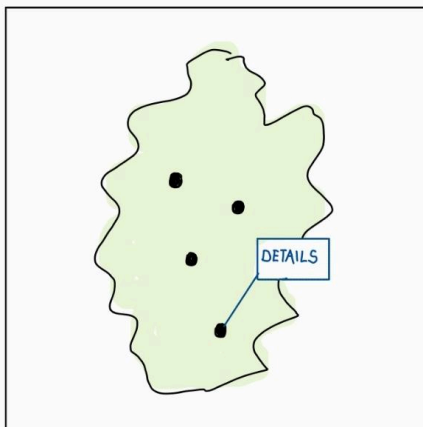
Bar plots in the history section.

5. - Create two pie charts (in the form of a ring) which shows:  
first one → percentage of active players and inactive players,  
second one → percentage of active teams and inactive teams. Clicking on the point on the map should show more details about the teams in a given place.
6. - Create a grid which shows details about two players you can compare. Choose a given team and given name and see which player is better.

Datatable and grid in players section.

**Summary of tasks - all tasks were specified on the github repository in the 'issues' tab.**

# Sketches



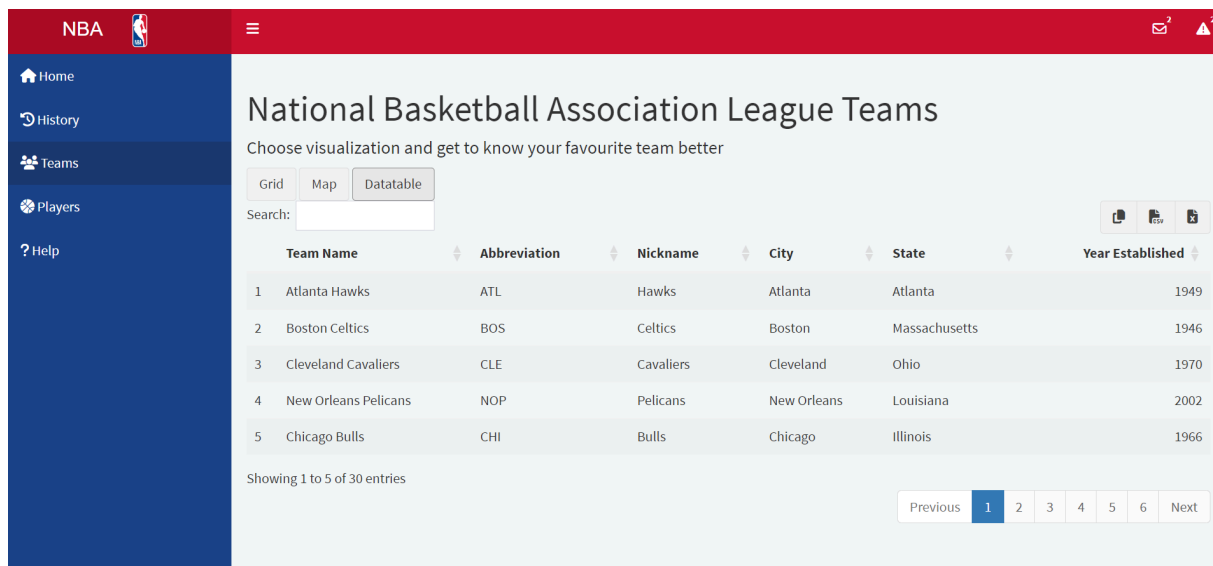
# Implementation

## Screenshots

### Task 0.



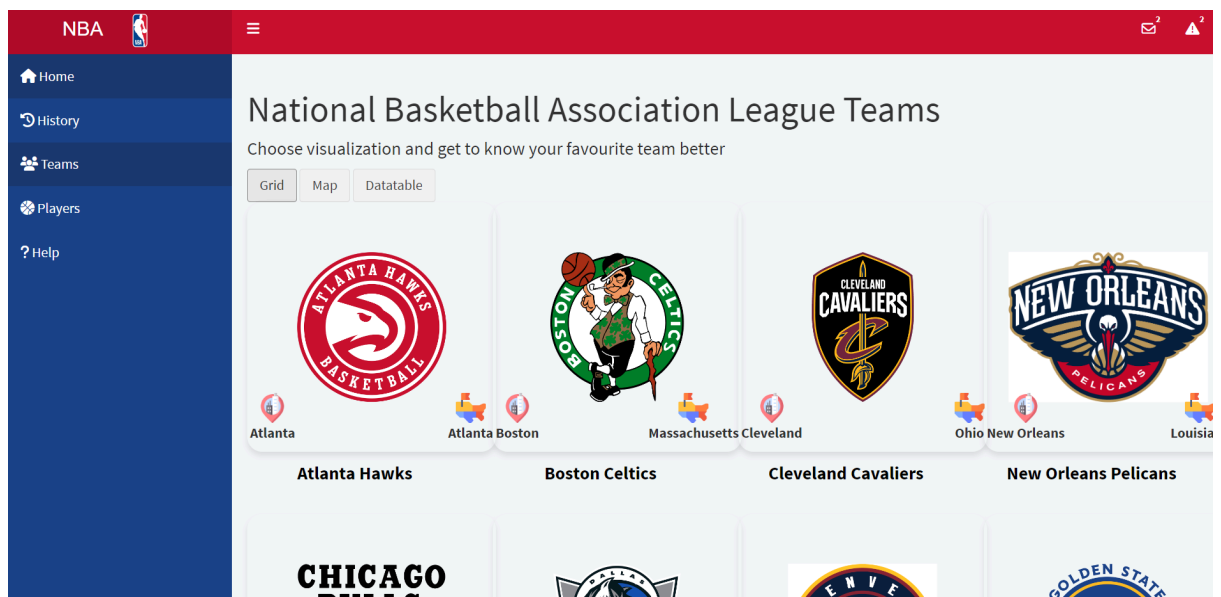
### Task 1.



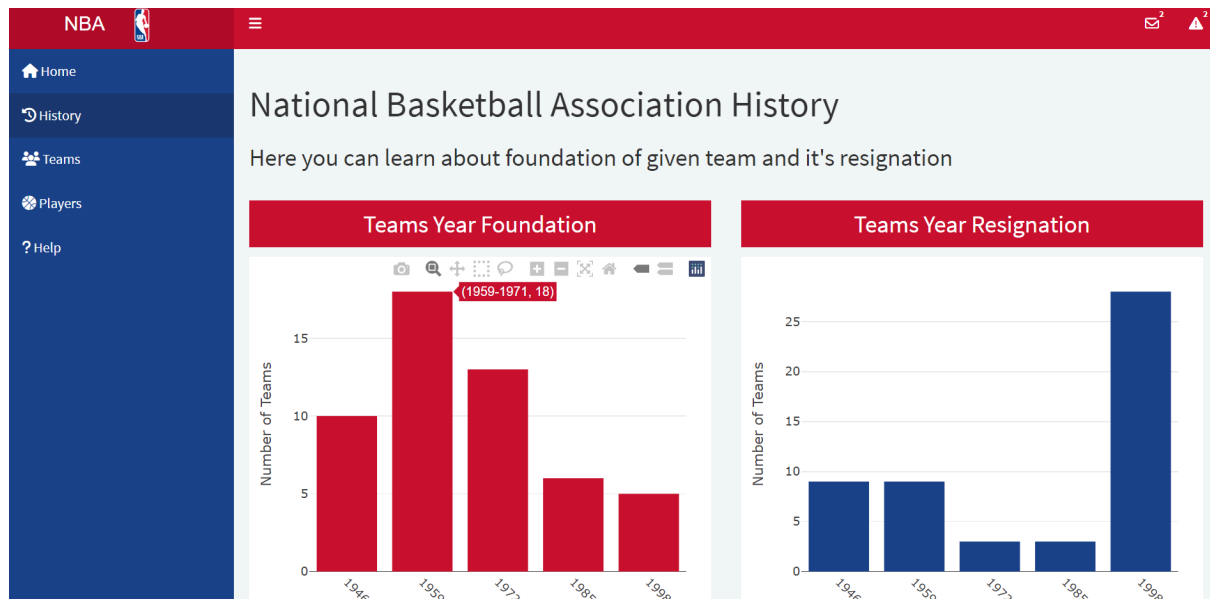
## Task 2.



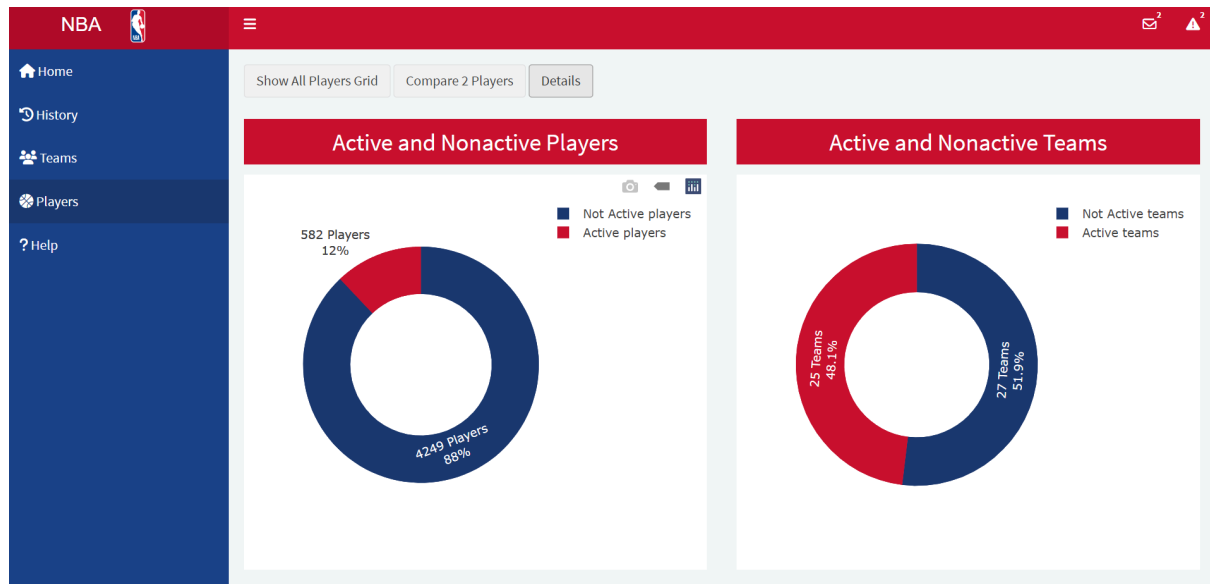
## Task 3.



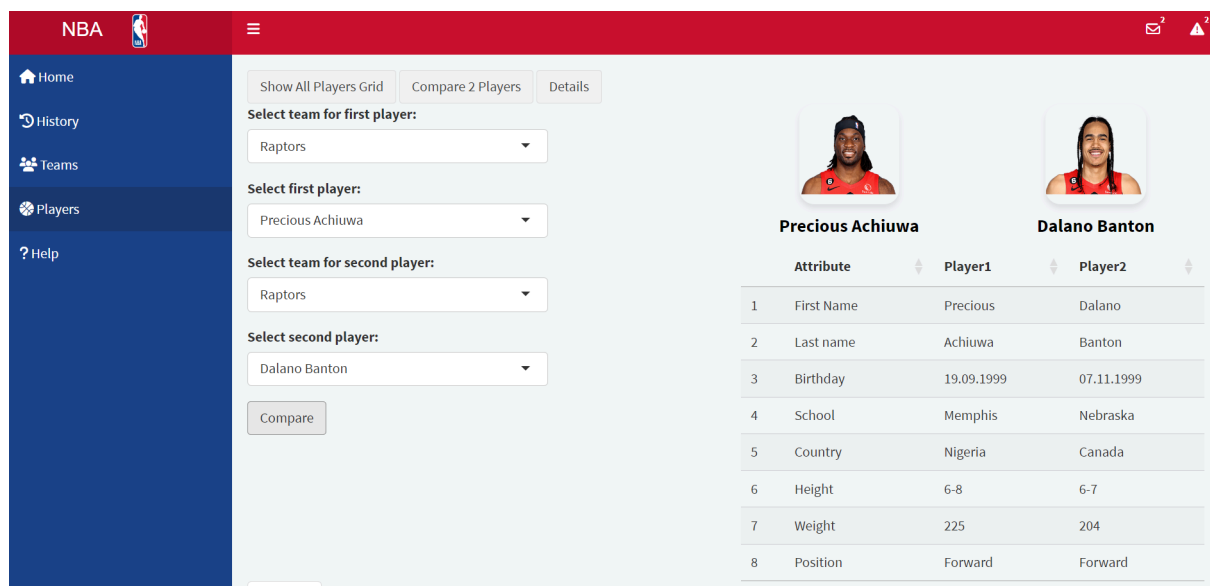
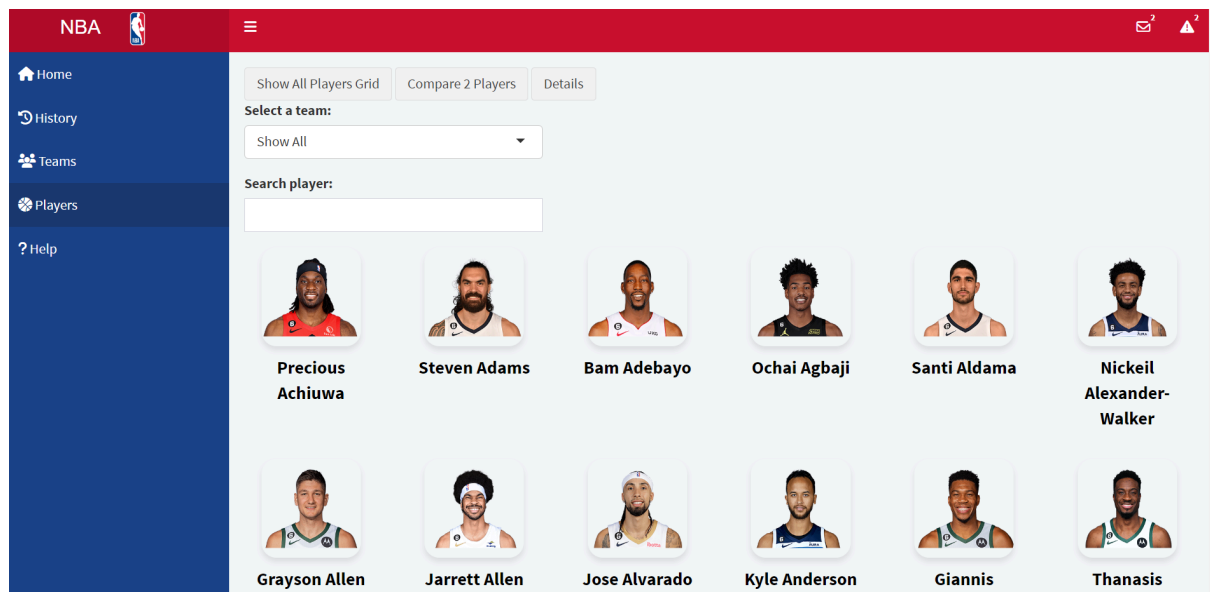
## Task 4.



## Task 5.



### Task 6.





## **Github:**

[Github repository - DataVizLab4](#)

[Shiny AppIO repository](#)

## **Link to live demo**

[Live demo](#)