Project Proposal: Sports Diversity
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Overview:

Recently there has been a great deal of discussion of race issues in the United States, and professional sports has become a symbol and a battleground for competing views of racial diversity and racial equity. Many publications have tried to show the racial diversity present in sports organizations, but as data consumers we usually just see the summaries and the headline numbers, e.g. the "Racial and Gender Report Card" from the Institute for Diversity and Ethics in Sports. Unfortunately, we can't really explore the raw data ourselves. Our goal is to present the racial diversity data from the NBA in an interactive and accessible manner that will allow users to explore the data for themselves.

Data:

Our data comes from tidesport.org (https://www.tidesport.org/nba) and it includes the current and historical data for racial (and gender) equity in sports franchises. The data includes both headline numbers, such as coaches and majority owners, and also behind the scenes data, such as trainers and professional staff. Our project will:

● 	Explore trends and patterns in the racial diversity of different roles in the organization over time.

● 	Organize the data so that the user can look at the details of the dataset in an interpretable and interactive way.

Depending on what we find in the exploratory analysis we may investigate other aspects of the data, For example, we may add a geographic element, comparing the racial makeup of NBA teams from different parts of the country. We could also extend the project to other sports such as MLB or the NFL.

Final Product:

We will first clean and organize the data and then create a database to power our visualizations. We will focus on producing a "custom 'creative' D3.js project" that allows the user to explore the data interactively. The visualizations may include:

- A tooltip that hovers over and displays the racial diversity information for different teams or different roles.
- A dygraph that allows the user to zoom in on data points over time.
- Drill down charts that allow users to zoom in on specific data points.
- Circle packing that shows relative importance by circle size.

See the attached screenshots and sketches for reference.

1: Interactive time series with zoom function and tooltip hover for data details. (http://dygraphs.com/)
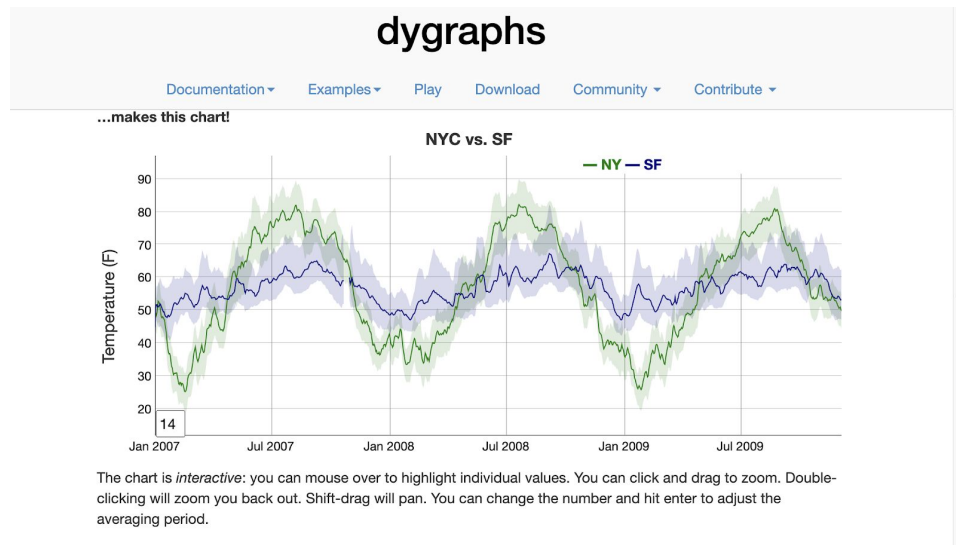
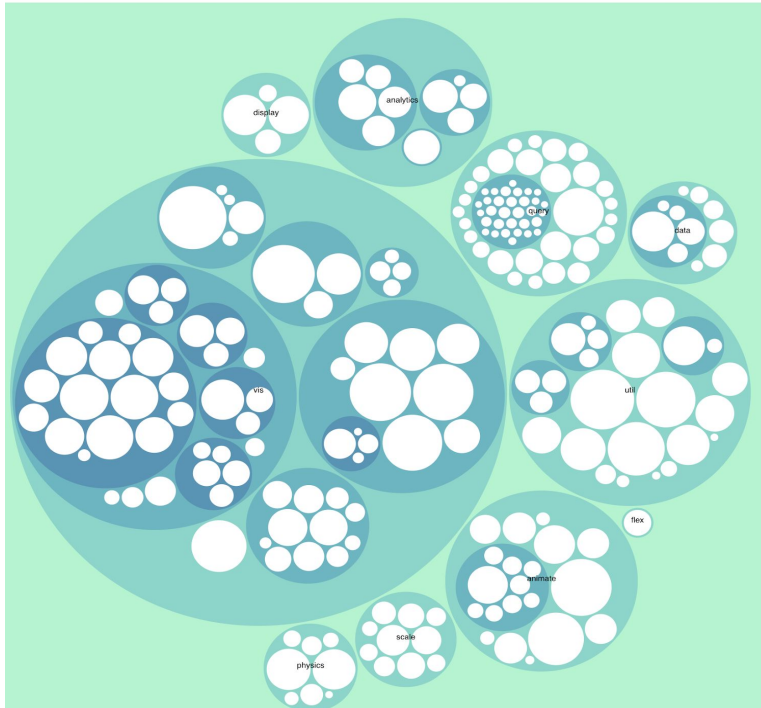2: Drill down chart https://canvasjs.com/javascript-charts/drilldown-chart/

overview
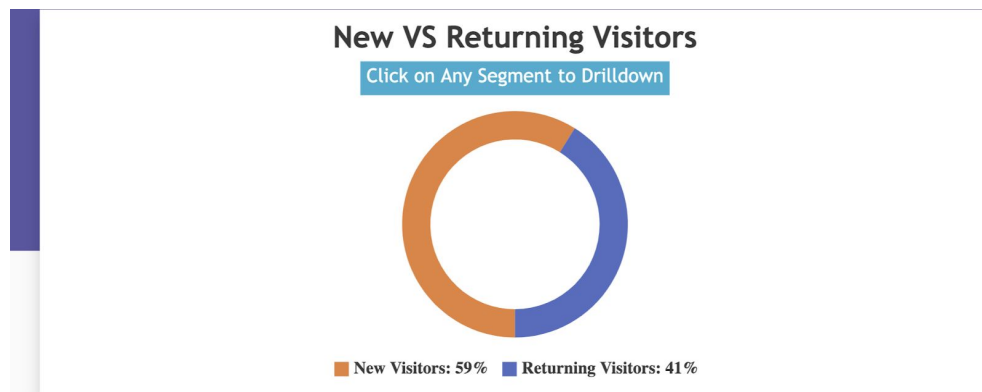
Specifics (Drilldown)

3: Circle packing https://observablehq.com/@d3/zoomable-circle-packing

Zoomable Circle Packing

Click to zoom in or out.

Page Layouts: home page

Map page:

Leaflet Map for Data

Toggle Layers Possibly

Analysis Page

Dashboard for Multiple Analysis on our Data

List of Sports or Leagues from our Data.

Select one to change which analysis to show.
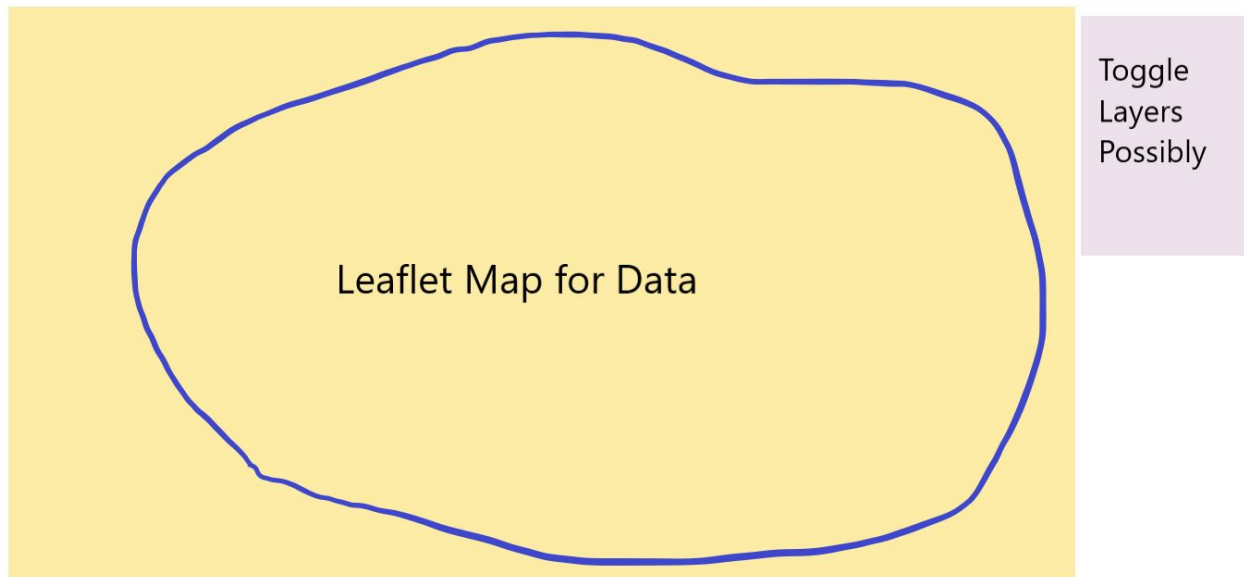
Analysis
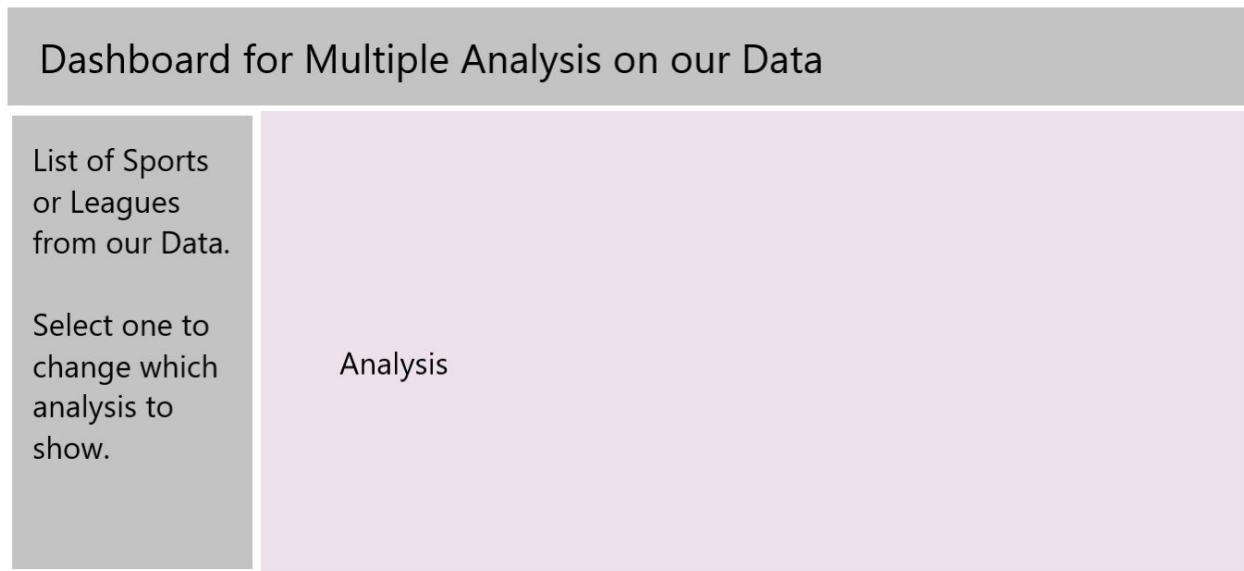
For more information, please go to our github page.