

Final Project Proposal

(due March 10th 7:00p.m)

This document outlines the guidelines for the project proposal. You can start working on the project once your proposal is accepted and graded by your TA on gradescope. The entire final project is worth 25% of your final grade and the proposal takes account for **5%**. There is no late-submission on the proposal.

Submission Guideline

Download this google doc, fill the table and submit it in **PDF** format on Gradescope.

If you need some inspirations please feel free to take a look at:

[Showcase of Information is Beautiful Awards](#)

Update: Zoom capability added to Scatterplot, not GeoMap.

Project Proposal

	Description
Project Topic	NBA Player Stats
Dataset Description	<ul style="list-style-type: none">● Rk : Rank● Player : Player's name● Pos : Position● Age : Player's age● Tm : Team● G : Games played● GS : Games started● MP : Minutes played per game● FG : Field goals per game● FGA : Field goal attempts per game● FG% : Field goal percentage● 3P : 3-point field goals per game● 3PA : 3-point field goal attempts per game● 3P% : 3-point field goal percentage● 2P : 2-point field goals per game● 2PA : 2-point field goal attempts per game● 2P% : 2-point field goal percentage● eFG% : Effective field goal percentage● FT : Free throws per game

	<ul style="list-style-type: none"> • FTA : Free throw attempts per game • FT% : Free throw percentage • ORB : Offensive rebounds per game • DRB : Defensive rebounds per game • TRB : Total rebounds per game • AST : Assists per game • STL : Steals per game • BLK : Blocks per game • TOV : Turnovers per game • PF : Personal fouls per game • PTS : Points per game <p>1;Precious Achiuwa;C;22;TOR;73;28;23.6;3.6;8.3;0.439;0.8;2.1;0.359;2.9;6.1;0.468;0.486;1.1;1.8;0.595;2;4.5;6.5;1.1;0.5;0.6;1.2;2.1;9.1</p>
Dataset Link	NBA Stats
Why did you choose this particular dataset? What kind of story do you aim to deliver? (e.g “Sales analysis of company xyz”)	I am passionate about basketball and want to explore this dataset. I want to look for certain indicators that make players more likely to be all stars. The players that were made all stars can already be found online. The story will be narrowing down the entire NBA to the all stars by highlighting certain stats.
1 plot with 0 Key and 2 values	<p>i) Is there any relation between minutes played and points/rebounds/assists? Using this plot, we can begin to eliminate players by their minutes played.</p> <p>ii) MP and PTS</p> <p>iii) Scatterplot</p>
1 plot with 1 key and 1 value	i) Is there any relation between a player’s position and the number of points that they average? This will help us understand if just using points is a good measure of finding all stars or not.

	<p>ii) POS and PTS</p> <p>iii) Bar Chart</p>
1 plot with 2 keys and 1 value	<p>i) Are a combination of points, rebounds, assists a better measure of finding all stars?</p> <p>ii) POS and PTS/REB/AST</p> <p>iii) Stacked Bar Chart</p>
1 geometric visualization	<p>i) How is the distribution of all star level players across the nation?</p> <p>ii) PTS, REB, AST, TM</p> <p>iii) GeoMap</p>
1 visualization from - box plot, node-link diagram, adjacency matrix	<p>i) What is the relation between position and other important basketball stats. The width of the links could potentially represent the correlation.</p> <p>ii) PTS, REB, AST, POS, FG%</p> <p>iii) Node Link Diagram</p>

1 interactivity using Buttons	For the barcharts, users will be able to switch between sorting by position and sorting in ascending order. This will be done through the use of a button.
1 interactivity using Tooltips (Display data on hover).	Hovering over a bar chart will provide the exact data value for that bar. For the stacked bar chart, it could potentially provide the data breakdown.
1 interactivity using Animation.	I want to add a zoom in and zoom out feature in the Geomap so the users can navigate closer to a region of their choosing.
1 interactivity not learned in class	I want to have a feature that will hide the visualization and only reveal it when the user is ready to see it. I could do this by either initially covering the visualization or by never having it made until the user is ready to see it. I would add it to the node link diagram.
Any creative form of plot you want to try for the five you selected above? (e.g. pictogram)	I want to try making an informative NBA related pictogram, potentially summarizing the findings of the preceding data visualization.