Casey Mulkerrins: Basketball Data Science SQL Project

https://github.com/cmulks/sql project

Job Description

Based on the job description, I thought that this job was both interesting and achievable given my current skillset. A career goal of mine is to leverage data-driven insights to make impactful decisions in a field that I'm genuinely passionate about, sports. This role at the Utah Jazz offers a great opportunity to fulfill this ambition. I am a huge fan of the NBA and one day, I would love to do sports analytics in order to make a positive impact for my favorite teams.

Problem

I plan to solve the problem of predicting player performance. By gathering data insights from past games, I should be able to see trends of player stats based on opponent, lineup, etc. This problem is very relevant to the job. A big part of sports data is predicting player performance, hence the popularity of sports betting. Given most of the performance data is publicly viewable, there shouldn't be too many problems when using SQL and Tableau.

Data Sources

In addressing the challenge of improving player performance, I intend to use the ESPN API and web scraping from ESPN's website. After examination of the ESPN API documentation, I will sift through the endpoints to identify the most suitable option that aligns with the specific data requirements for performance analysis. Also, I will employ web scraping techniques to extract player performance statistics from the Utah Jazz team page. Given ESPN's high status as a leading source for sports statistics, these data sources hold major relevance to the task at hand.

Solution

To address the challenge of improving player performance using data, I will follow a comprehensive approach that integrates data collection, analysis, modeling, and actionable insights. For my SQL and visualization work, I will likely perform various aggregate functions over time in order to see trends of the Utah Jazz players.