Name: Ethan Yu

Project Name: NBA Player Performance Trends

Link to GitHub Repository: https://github.com/eyu10/SQL-Project.git

Job Description: Product Analyst at PrizePicks

Why This Job?

The opportunity at PrizePicks stands out to me because it intersects my passion for sports, particularly basketball, with my analytical skills in SQL and data visualization. The role's focus on utilizing data analytics to inform product decisions and enhance the user experience aligns with my career objectives. The company's growth and commitment to an inclusive and innovative culture further motivate my desire to contribute to the team.

I am particularly excited about applying analytical skills to the evolving landscape of sports analytics, especially within the context of the NBA. The ability to impact the product directly by leveraging data to understand and predict player performance is both challenging and rewarding.

Problem:

Right now, prize picks offers simple data and insights such as a player's point average over the last 5 games. I plan to analyze NBA player performance data to identify additional insights that focuses on aspects such as injury impacts and matchup advantages.

This analysis directly supports the decision-making process for participants by providing actionable insights, aligning with the role's responsibilities at PrizePicks to analyze data for product feature recommendations.

The project is feasible using SQL for data analysis and a visualization tool like Tableau for presenting insights. These tools are accessible and sufficient for conducting in-depth analysis and creating engaging presentations of findings.

Data Sources:

API Data Source: https://balldontlie.io/

Web Scraping Data Source: ESPN Fantasy Basketball

Collection Method: Python for API requests and web scraping

Relevance to the Job: These sources provide additional analysis that sports bettors can use.

Solution:

The project will culminate in a dashboard that presents key trends in NBA player performance. SQL will be used for data cleaning, manipulation, and analysis, focusing on identifying patterns that can predict player success in different contexts.

SQL Queries: Queries to calculate player performance metrics, such as effect of injuries on performance and performance against different teams.

Visualizations: The dashboard will feature charts and graphs that display trends over time, comparisons between players, and impact analysis of external factors (e.g., injuries, game location) on performance. These visualizations will be designed to provide clear, actionable insights for users.