Jonathan Ayala

Title: SQL Project Proposal

Link to Github Repository

Job Description: The Data Analyst role at SpaceX focuses on optimizing supply chain operations through data analysis. Key tasks include using SQL to identify inefficiencies and improve vendor performance. This role aligns with my studies in Information Systems and Business Analytics, combining my interest in technology and data-driven decision-making. The position supports my goal of applying data analysis in technology-driven industries, like aerospace, and developing skills relevant to the automotive and tech sectors. I'm excited by the opportunity to work at SpaceX, where data directly impacts operational improvements in an innovative, high-tech environment.

Problem: Identify inefficiencies in SpaceX's supply chain by analyzing delays and vendor performance to optimize operations. This aligns with the role's focus on identifying and solving supply chain inefficiencies to improve performance and reduce risks. Using SQL, I'll analyze supply chain data, automate processes with a data pipeline, and visualize insights in Power BI. **Data Sources:** Provide key insights into transportation logistics, fleet performance, and safety. These data sources are essential for identifying inefficiencies in delivery times and vendor performance, helping optimize SpaceX's supply chain operations.

U.S. Department of Transportation (DOT) API – logistics and supply chain information. Federal Motor Carrier Safety Administration (FMCSA) – data about transportation operations. **Solution**. The data will be processed in SQL, visualized in Power BI/Tableau, and A/B tested to identify improvements. This will help optimize SpaceX's supply chain and vendor performance.