Automotive Market Insights Platform: Gaining a Data-Driven Edge

This project aims to build a platform offering comprehensive insights into the automotive market. By integrating various data sources, it will empower stakeholders to make informed decisions, understand trends, and optimize strategies.

Key Features:

- Data Integration: Combines existing vehicle listings data in an ETL process with additional sources like features, sales transactions, customer reviews, demographics, and competitor data.
- Data Governance & Security: Ensures data accuracy, compliance, and security through defined policies, access controls, and monitoring.
- Data Democratization: Provides self-service BI tools and insightful dashboards for stakeholders to explore and leverage data independently.
- Scalability & Performance: Employs cloud-based solutions for scalability and optimizes data storage/retrieval for efficient use.
- Metadata Management: Creates a centralized repository for data definitions, lineage, and usage, promoting collaboration and knowledge sharing.
- Data Lifecycle Management: Defines data retention policies, automates archiving/deletion, and establishes safeguards for sensitive information.

Benefits:

- Actionable Insights: Enables analysis of pricing trends, sales patterns, customer sentiment, market segmentation, and competitor strategies.
- Informed Decisions: Supports data-driven decision making for optimizing business strategies and staying ahead of the curve.
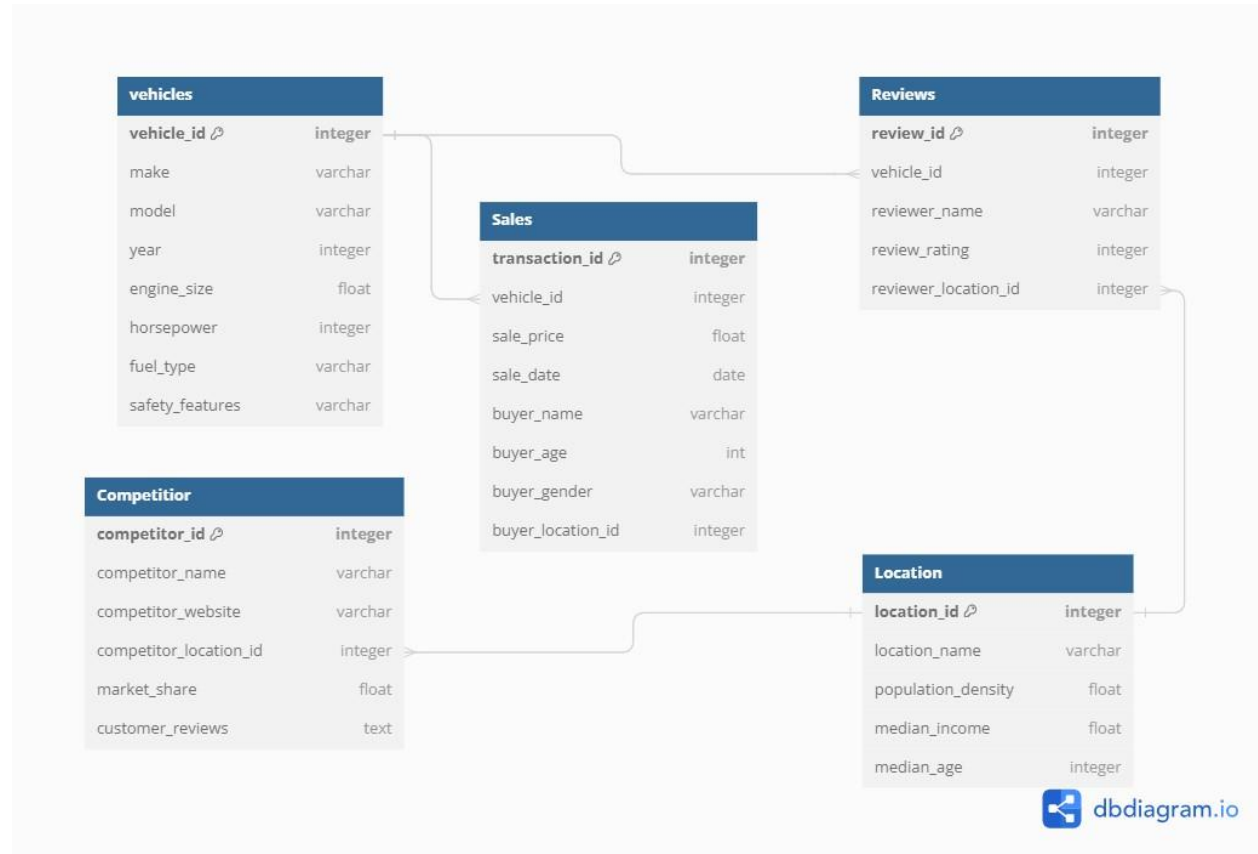
Deliverables:

- Interactive dashboards and reports with actionable insights.
- Data governance documentation for transparency and compliance.
- Training materials for users on self-service BI tools.
- Regular monitoring and performance reports.

Timeline:

- Phase 1 (3 months): Data integration, infrastructure setup, initial modeling.
- Phase 2 (6 months): Dashboard development, user training, testing.
- Phase 3 (Ongoing): Continuous improvement, data quality monitoring, expanding analytics capabilities.

Database Schema Design.

Data Warehousing Design.