

A Study of SQL and NOSQL A Comparative Analysis

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Abstract: *This paper provides a comprehensive comparative analysis of SQL and NoSQL database technologies. SQL databases, characterized by their structured schema and ACID compliance, are ideal for relational data and complex queries. In contrast, NoSQL databases prioritize scalability, flexibility, and performance for unstructured and semi-structured data. The study aims to highlight their key features, use cases, and trade-offs, helping developers and organizations choose the most suitable database technology for their specific needs. This comparative study draws insights from technical journals, books, and online resources to provide a balanced understanding of both database models.*

Keywords: Databases, Commands, Structured Query, Access Control, scalability, ACID compliance