



Reading: Four key elements of database schemas

Whether you are creating a new database model or exploring a system in place already, it is important to ensure that all elements exist in the schema. The database schema enables you to validate incoming data being delivered to your destination database to prevent errors and ensure the data is immediately useful to users.



Here is a checklist of common elements a database schema should include:

- **The relevant data:** The schema describes how the data is modeled and shaped within the database and must encompass all of the data being described.
- **Names and data types for each column:** Include names and data types for each column in each table within the database.
- **Consistent formatting:** Ensure consistent formatting across all data entries. Every entry is an instance of the schema, so it needs to be consistent.
- **Unique keys:** The schema must use unique keys for each entry within the database. These keys build connections between the tables and enable users to combine relevant data from across the entire database.

Key takeaways

As you receive more data or business needs change, databases and schemas may also need to change. Database optimization is an iterative process, which means you may need to check the schema multiple times throughout the database's useful life. Use this checklist to help you ensure that your database schema remains functional.
