

MySQL Fundamentals Part 2

MYSQL VIEWS



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Outline



Introduction to View

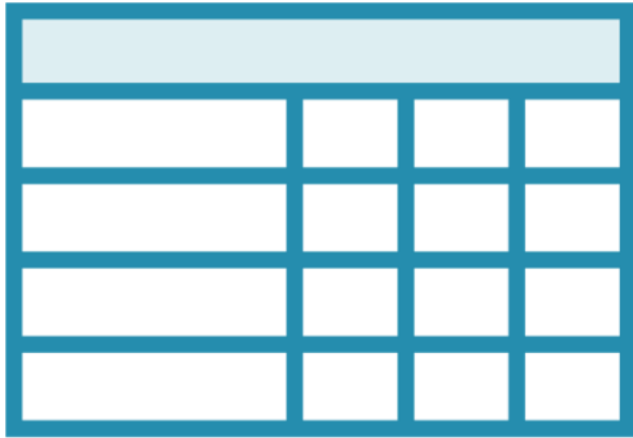
Advantages of View

Restriction of Updatable View

With Check Option



Introduction



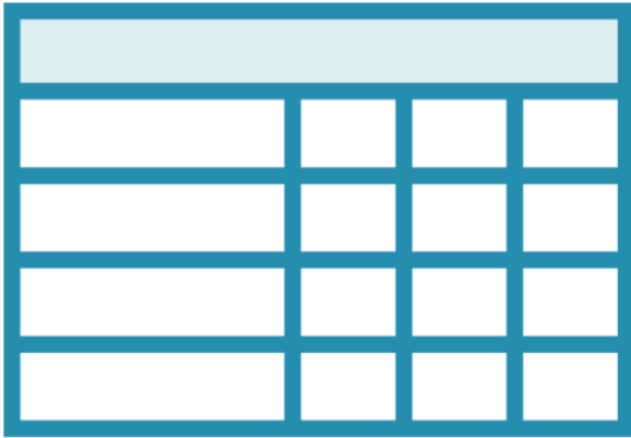
A view is commonly known as a virtual table

A view is a virtual table based on the result set of the SQL statement

A view consists of a `SELECT` statement that is stored as an object in the database

The tables referenced in the Views are known as a base table

Introduction



Technically views do not store any data.
The data are retrieved at run time from
the base tables

MySQL supports nested view —
a view that is based on another view

MySQL does not support materialized view



Advantages of Views



Simplified Queries

- Summarize data from various tables and contain complex logic



Data Security

- Restrict access to data by using SELECT statement with WHERE clause



DML Operation Over Data

- Update, Insert and delete data from base table (with restriction)

Restriction of Updatable View

A view is not updatable if it contains any of the following:

Aggregate functions (SUM(), MIN(), MAX(), COUNT(), and so forth)

DISTINCT

GROUP BY

HAVING

UNION or UNION ALL

Subquery in the select list

Certain joins (see additional join discussion later in this section)

Nonupdatable view in the FROM clause

A subquery in the WHERE clause that refers to a table in the FROM clause

Refers only to literal values

Uses ALGORITHM = TEMPTABLE

Multiple references to any column of a base table.



With Check Option



A view created with With Check Option will prevent modifying a row in such a way that it would no longer be part of the view result



Summary



A view is a virtual table based on the result set of the SQL statement

The tables referenced in the views are known as base tables

The advantages of the views are:

- Simplified queries

- Data security

- DML operation over data

View does not store data within, but retrieves data from the base tables at runtime

