



SQL Standard

SQL Select All Except

7 months ago • by John Otieno

I think we can all agree that there is no more common statement in SQL than the SELECT statement. It is like the “Hello World” of SQL being the one thing that we learn and that introduces us to SQL.

At the basics, we use the SELECT statement to retrieve the data from a database table. This includes specifying which columns we wish to include in the result.

Despite this functionality, we may come across instances where we want to select all the columns and rows from a given table except a few. Although it may not be common as you might think, you are bound to come across such an instance in your database operations.

In this tutorial, we will learn how we can select all rows and columns except the specific ones by utilizing various SQL techniques.

NOTE: For demonstration purposes, we use MySQL version 8 with the Sakila sample database. You can download the sample database on the official website and follow the provided steps to import it.

You can also use any other dataset that you deem applicable.

Example 1: Select All Columns Except One

One of the common tasks of “select except” is where you need to select all the columns of a table except one.

Let us take the Sakila sample database. Suppose we wish to retrieve all the columns from the “film” table except the “description” column.

We can do this using the query as follows:

```
SELECT
    film_id,
    title,
```

```
    release_year,  
    rental_rate,  
    length,  
    special_features  
FROM  
    film;
```

Yes, that's it. This method involves specifying all the columns in the table except the "description" column.

Example 2: Except Multiple Ones

The same case applies when you need to exclude multiple columns. You can exclude them from the SELECT query.

For example, let us exclude both description and "special_features" from the "film" table. We can run the following query:

```
SELECT  
    film_id,  
    title,  
    release_year,  
    rental_rate,  
    length  
FROM  
    film;
```

This should return all the columns from the "film" table except the "description" and "special_features" columns.

Example 3: Exclude a Row

In other cases, you may need to exclude a row. In such a case, we can take advantage of SQL conditional filtering using the WHERE clause.

For example, suppose we wish to exclude the records where the "rental_rate" is greater than 4.0.

We can use a query as follows:

```
SELECT  
    film_id,  
    title,  
    release_year,  
    rental_rate,  
    length  
FROM  
    film  
WHERE  
    rental_rate <= 4.0;
```

In the given example, we use the WHERE clause to specify the condition that filters out the rows with a "rental_rate" greater than 4.0.

Example 4: Select * Except

There is also a technique that we can use in conjunction with the SELECT * clause to exclude one specific column.