

HANDLING NULL VALUES

Principles of NULL values:

Setting a NULL value is appropriate when the actual value is unknown, or when a value would not be meaningful.

A NULL value is not equivalent to a value of ZERO if the data type is a number and is not equivalent to spaces if the data type is character.

A NULL value can be inserted into columns of any data type.

Importance of NULL value:

It is important to understand that a NULL value is different from a zero value.

A NULL value is used to represent a missing value, but that it usually has one of three different interpretations:

The value unknown (value exists but is not known)

Value not available (exists but is purposely withheld)

Attribute not applicable (undefined for this tuple)

It is often not possible to determine which of the meanings is intended. Hence, SQL does not distinguish between the different meanings of NULL.

NULL VALUE HANDLING FUNCTIONS:

1.Never pass null as an argument:

This is one of the most important principles of good coding, but if you don't know it already, you deserve an explanation.

It has two big disadvantages:

You need to read the function's implementation and figure out if it, and

potentially every affected function down the way, can handle null value correctly.

You have to always be careful when changing function's implementation not to throw away something that might handle nulls for its users. Otherwise, you have to search through the whole source code to check if null is being passed anywhere.

2. Use Exceptions Over Nulls:

One strange case when you might see people using null is exceptional situations. This is an inherently error prone practice, as critical errors can be omitted or resurface in different places of the system, causing debugging to be a pain. Therefore, always throw an exception instead of returning null if something went wrong.

3. Test Your Code:

Well, this advice is related to all kinds of bugs, not just unexpected nulls, but it's so important that I felt it should make it to the list.. Never release a piece of code without making sure it works. There's no such thing as "a quick, simple fix that doesn't require testing."

Need for Handling Null Values:

Missing data can reduce the accuracy of the model.

While doing pre-processing, the visualization that we get for a particular feature can be misleading because of the presence of null values.

The model created at the end can be biased.

These null values can create problems in real life.