

Nullology

The Zen of Database?

by

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ABSTRACT

Nullology is *the study of the empty set*. Sets *per se* crop up all over the place in the relational world; the question is—and it's a crucial one—what happens if the set under consideration happens to be empty? For example, a relation contains a set of tuples: What about the possibility of a relation containing no tuples at all? Now, this particular possibility is reasonably familiar; a relation with no tuples is much like an empty file. But even in this case, there are some interesting aspects to consider that are probably unfamiliar to most database professionals. And there are many other places in the relational world where the empty set rears its head, several of them both unfamiliar and of *fundamental importance*. Such matters are the subject of this presentation.

Topic outline:

- Relations with no tuples
- Relations with no attributes
- Empty lists of operands
- Empty heading partitions
- Empty determinants and empty keys
- Empty types (domains)

Duration: One hour (approx.).

Prerequisites: Attendees will be expected to have a broad familiarity with the relational model.