Mathematical Logics
Description Logic: Tbox and Abox

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6. ABOX: reasoning
7. Closed World Assumption (CWA) and Open World Assumption (OWA)

CWA vs OWA

Closed world Assumption CWA (in Databases): anything which is not explicitly asserted <u>is false</u>

Open World Assumption OWA (in Abox): anything which is not explicitly asserted (positive or negative) <u>is unknown</u>

NOTE 1: a Database has/is <u>one</u> model. Query answering is model checking.

NOTE 2: an ABox has <u>a set of</u> models. Query answering is satisfiability.

NOTE 3: In ABoxes, like in databases, we use CWA.

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