

Lehrstuhl für Datenbanken und Informationssysteme
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Fulfillable XML-Specifications

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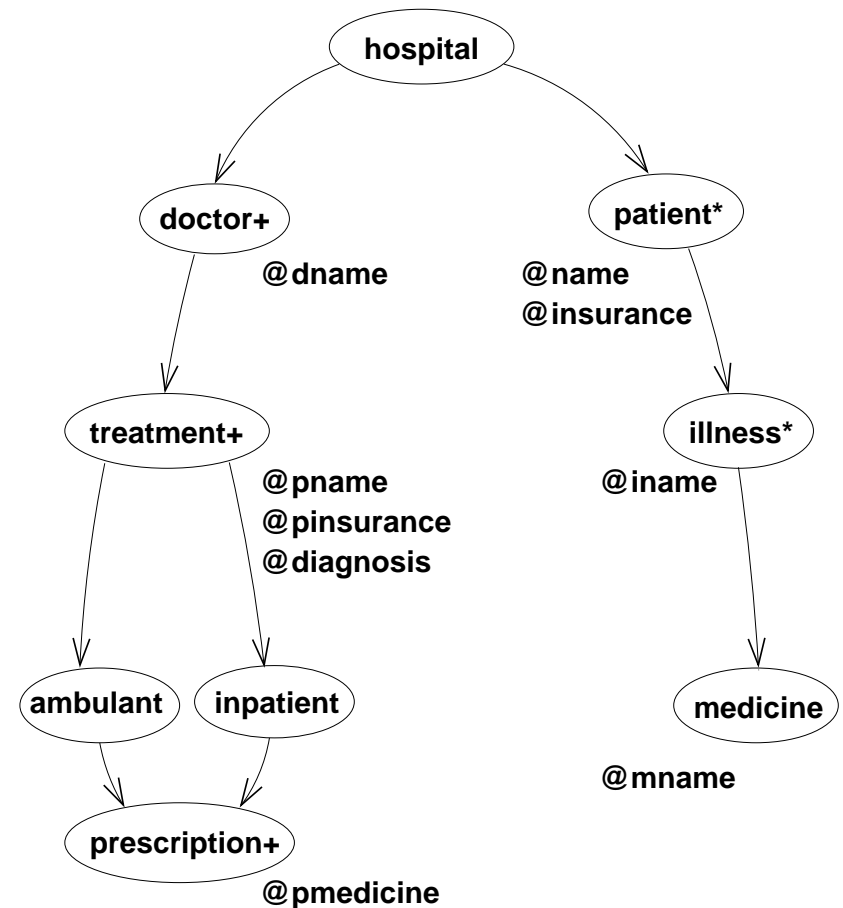
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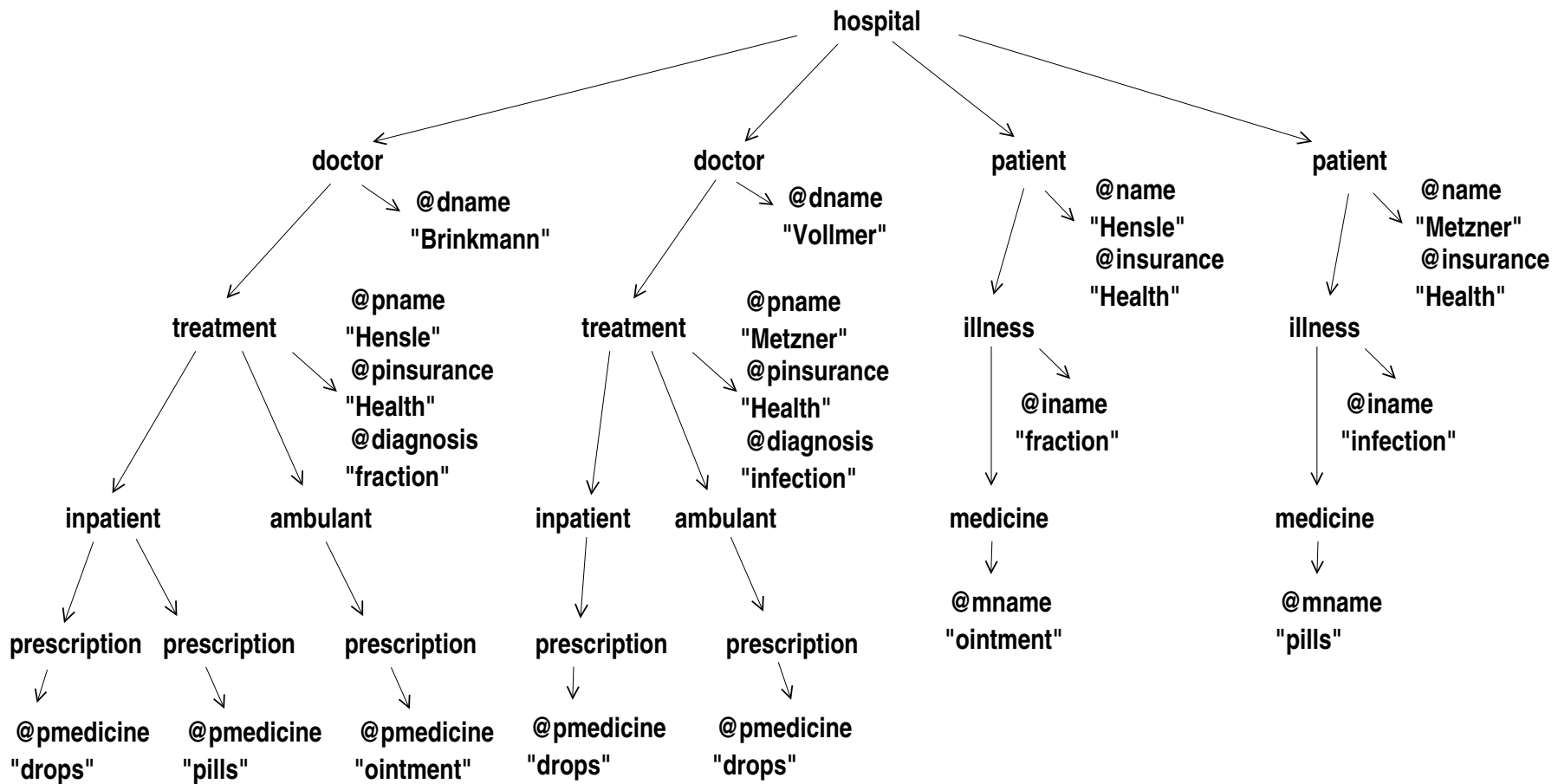
- New developments build on XML
- Concepts of relations model can be transferred
- Some XML-Specifications are not fulfillable
- Development of tools

Example XML-Specification

- Information system of a hospital
- Store data for doctors, medicaments, patients
- Consider integrity constraints
 - Key identifies *prescription*
prescription.medicine \rightarrow *prescription*
 - Inclusion constraint relates attributes
prescription.medicine \subseteq *medicine.name*



Example XML-Tree



Development of Tools

- Determine fulfillable XML-specifications
- Transformation generates constraints (MONA)
- Formalization proves correctness of the constraints (Isabelle)
- Determine circular XML-specifications (Florid)