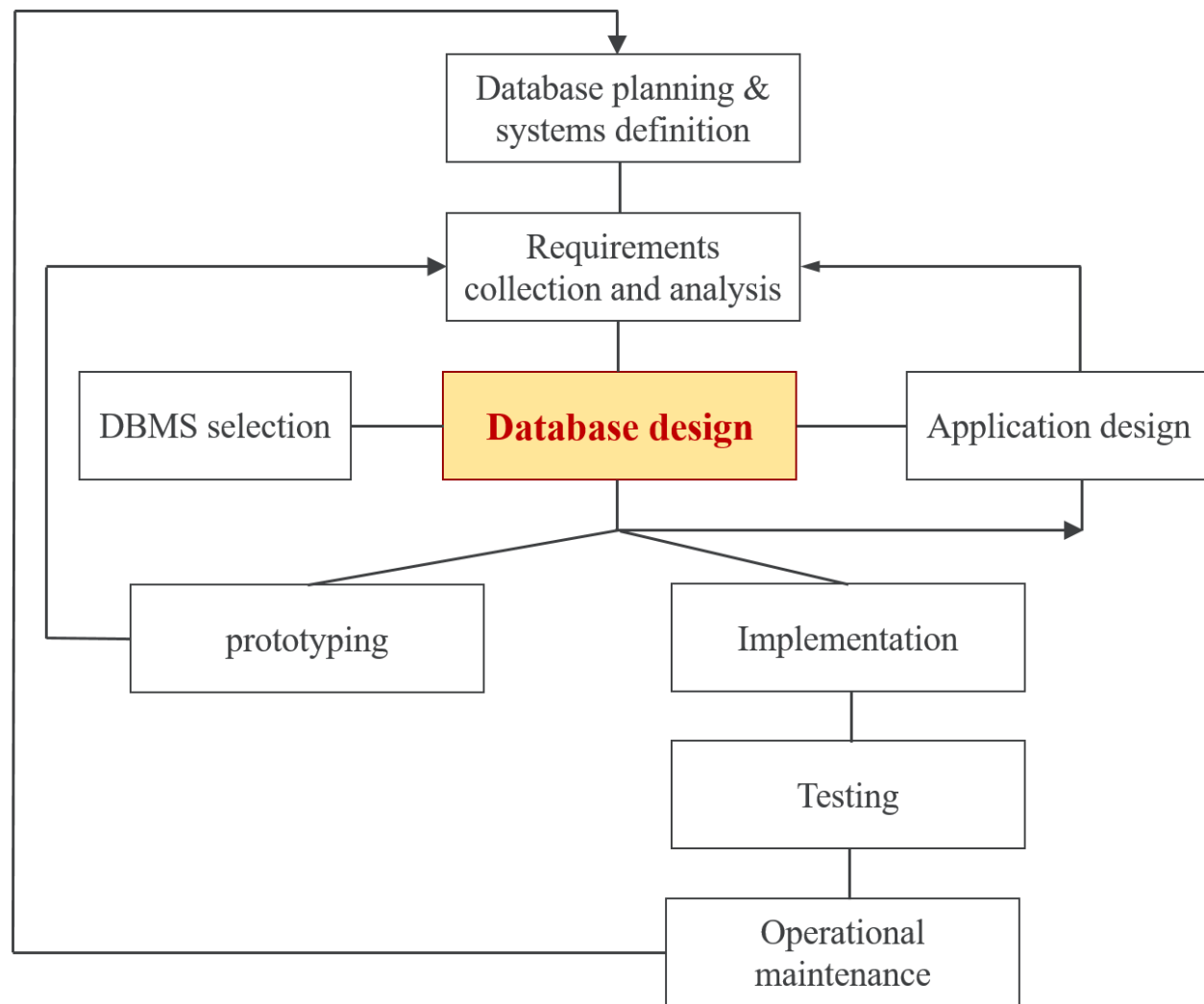


数据库设计方法学

讲解人：陆伟 教授

关于方法学

方法学：支撑达到目标的要素，包括过程、技术、工具以及文档，有时也涵盖理论指导。



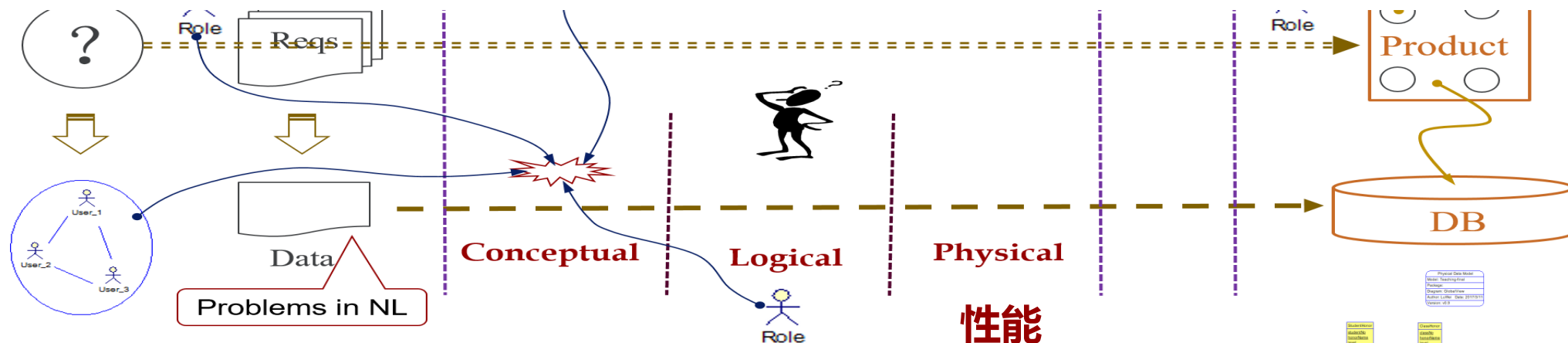
数据库设计方法学

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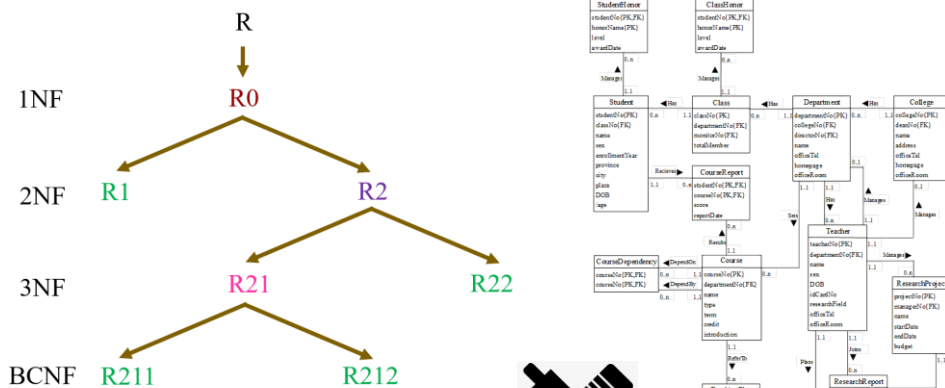
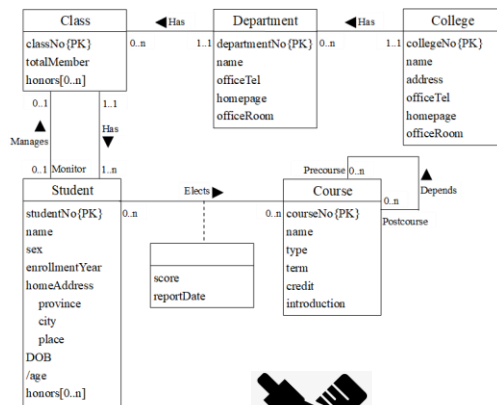
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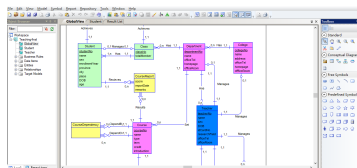
ER 建模技术

性能
完整性约束
安全

规范化理论
ER模型向关系模型映射



工程



实践

数据库设计各阶段目标

□ Conceptual database design

- The process of constructing a model of the information used in an enterprise, **independent of all physical considerations**. 对需求负责

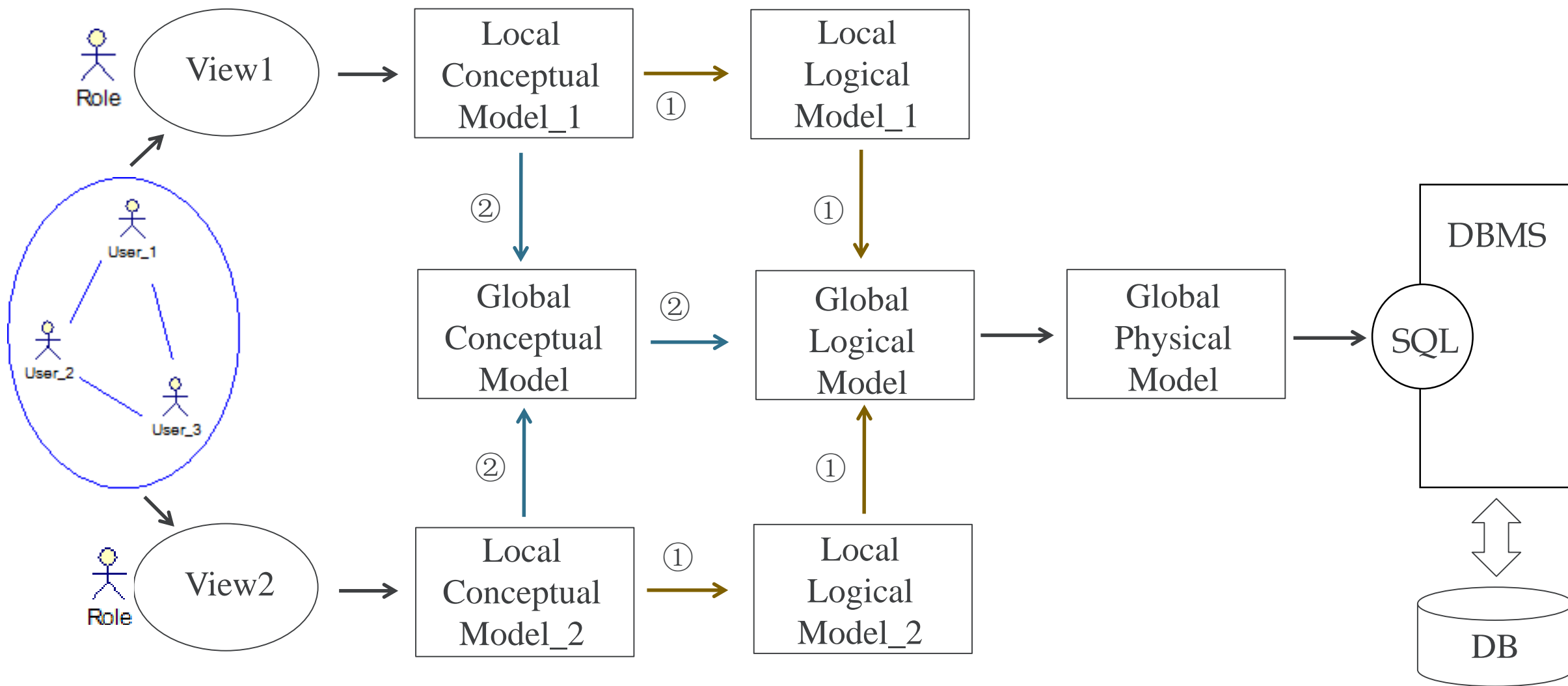
□ Logical database design

- The process of constructing a model of the information used in an enterprise based on a specific data model, but **independent of a particular DBMS and other physical considerations**. 对目标模型负责

□ Physical database design

- The process of producing a description of the **implementation of the database on secondary storage**; it describes the base relations, file organizations, and indexes used to achieve efficient access to the data, and any associated integrity constraints and security measures. 对具体DBMS负责

工程中复杂系统设计分解



数据库设计各阶段步骤

□ Conceptual database design

- Step 1
 - Step 1.1
 - ...

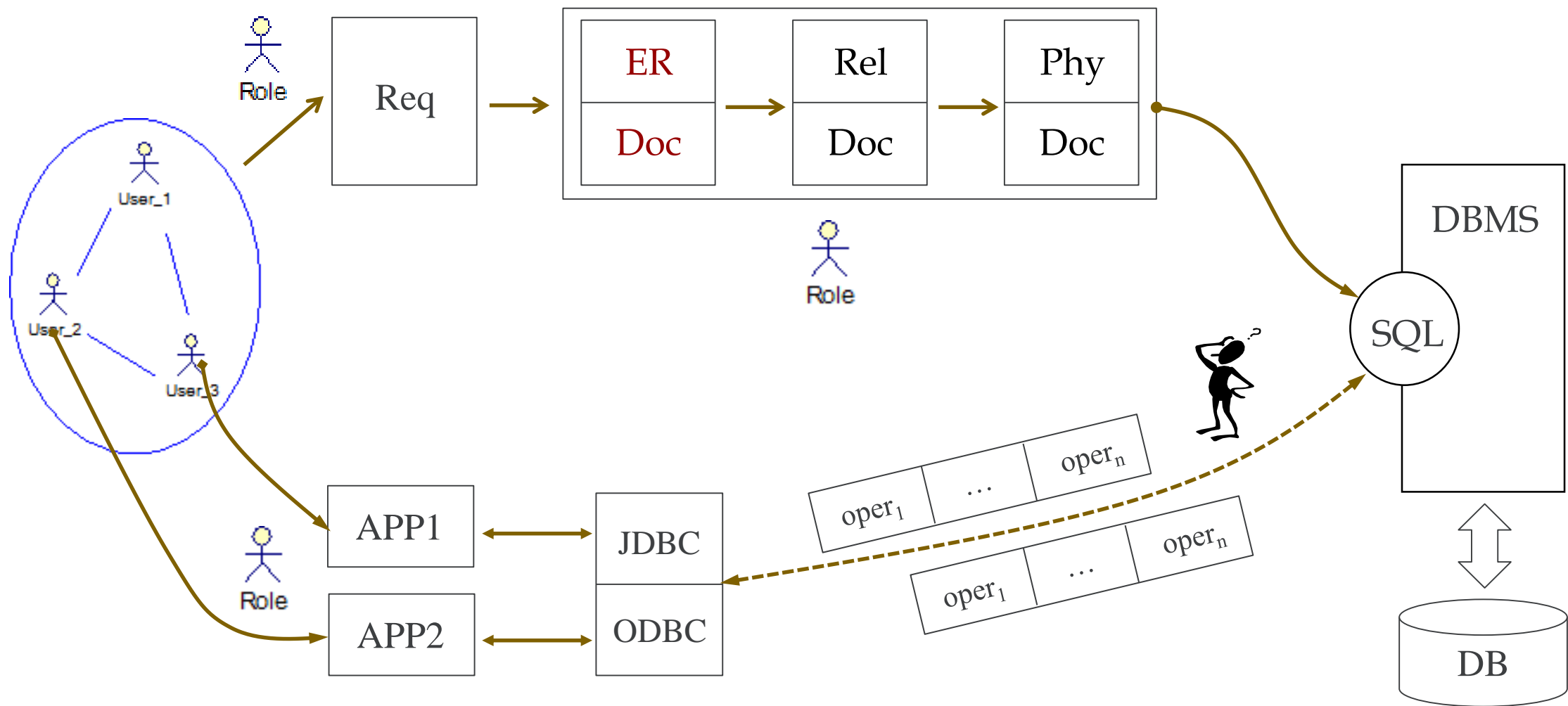
□ Logical database design

- Step 2
 - Step 2.1
 - ...

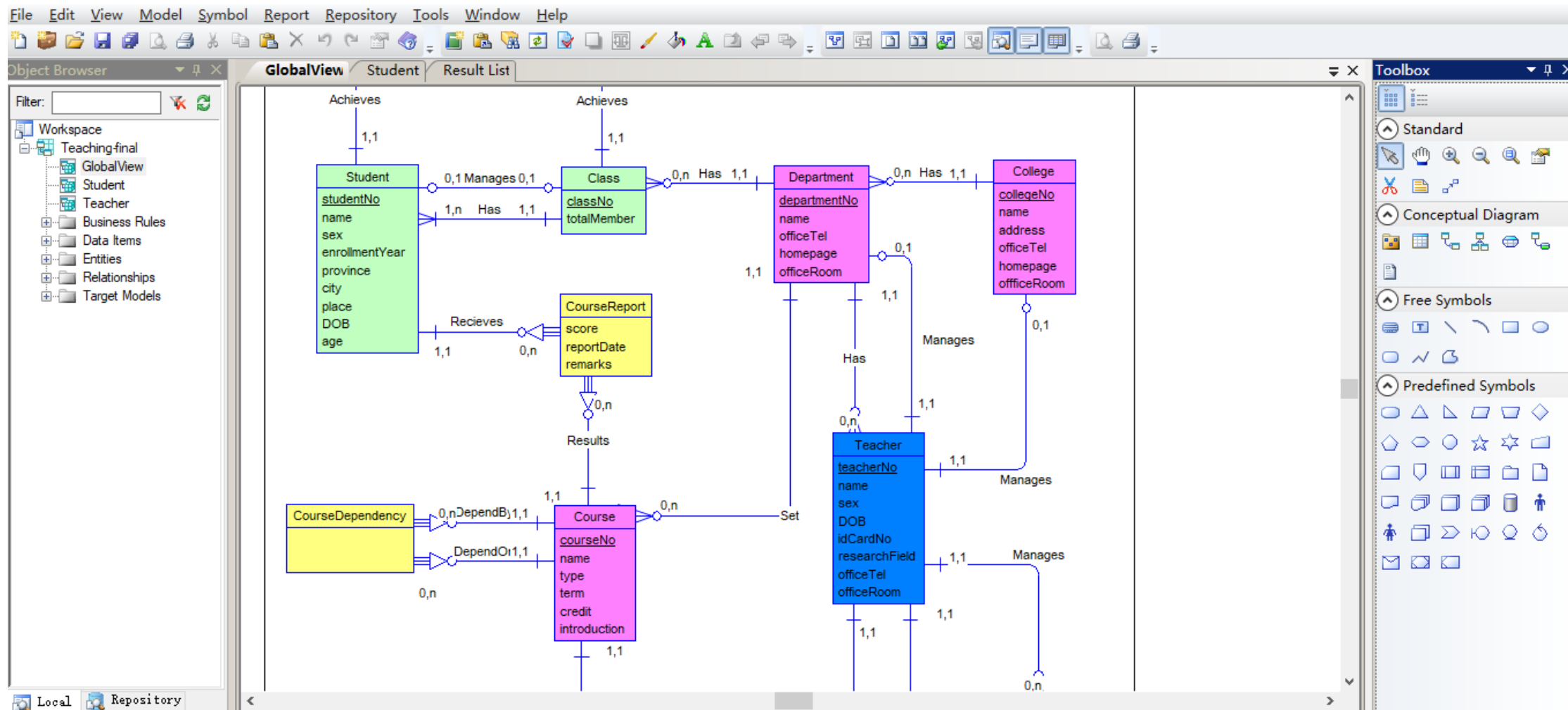
□ Physical database design

- Step 3
 - Step 3.1
 - ...

数据库设计与应用的闭环



数据库设计CASE工具



关于本讲内容



祝各位学习愉快!

感谢观看！

讲解人：陆伟 教授