USER VIEW
Subset Of Database

• Suppose: Large corporate database
• Single user or type of user sees SUBSET of CONCEPTUAL DATABASE
  – Security Reasons
  – User Convenience
• Called an EXTERNAL VIEW
• Built on CONCEPTUAL LEVEL.
Construction from Conceptual View

- Include only some fields
  - Secretary: phone number but not salary
- Include only some rows
  - Boss sees only employees he supervises
- connect two tables
  - Employee table show only Dept Number
  - A View could show Dept Name too
- Calculate some totals
  - Count employees in department
External-Conceptual Mapping

• Each view needs a mapping:

• \( \text{USER VIEW} \leftrightarrow \text{CONCEPTUAL SCHEMA} \)

• Tells how to build the view from conceptual tables.

• Possibly: how to change the conceptual tables when the user changes information in the view.
EXTERNAL LEVEL
EXTERNAL LEVEL

CONCEPTUAL LEVEL
EXTERNAL LEVEL

External-Conceptual Mapping

CONCEPTUAL LEVEL

INTERNAL LEVEL