

Database Design \Rightarrow State of the art technology

Ex. Objective/Aims to meet
user data requirement.

(user supervision is
often needed)

ID: Foreign Key \subseteq Refined Primary Key

Reference 2 file contains data for Exercise 3.

Download DBX Software tool from www.udw.com.hk

data consistency \Rightarrow e.g. YYMMDD is a date format
for all date field

data inconsistency \Rightarrow e.g. YYMMDD and MMYYDD
not consistent

data Semantics are lost in logical schema
after mapping from conceptual schema to
logical schema in forward engineering.

Semantics Conflicts \Rightarrow data inconsistency
when two schemas are integrated
provided that they have

- (1) data consistency
- (2) data relevancy
- (3) user supervision

Result of schema integration \Rightarrow data semantics
preservation
without loss of information

No need to specify foreign key in ER model
which is translated into one-to-one or one-to-many
cardinality in ER model.

ID:
total ~~partial~~ participation \subseteq partial participation