IT360: Applied Database Systems

Exercise Set

ER To Relational

Chapter 6, 7 in Kroenke

ER to Relational - Summary
ER Model

Relational Model
SQL: Creating Tables

CREATE TABLE table_name(
    column_name1 column_type1 [constraints1],
    ...
) 

Table constraints:
• NULL/NOT NULL
• PRIMARY KEY (columns)
• UNIQUE (columns)
• CHECK (conditions)
• FOREIGN KEY (local_columns) REFERENCES foreign_table (foreign_columns) [ON DELETE action_d ON UPDATE action_u]

Specify surrogate key in SQL Server:
    column_name int_type IDENTITY (seed, increment)
Specify surrogate key in MySQL:
    column_name int_type AUTO_INCREMENT

Transform to Relational Model
Transform to Relational Model

Transform to Relational Model
Transform to Relational Model

Transform to Relational Model
1:N Recursive Relationship – Transform to Relational Model

Transform to Relational Model