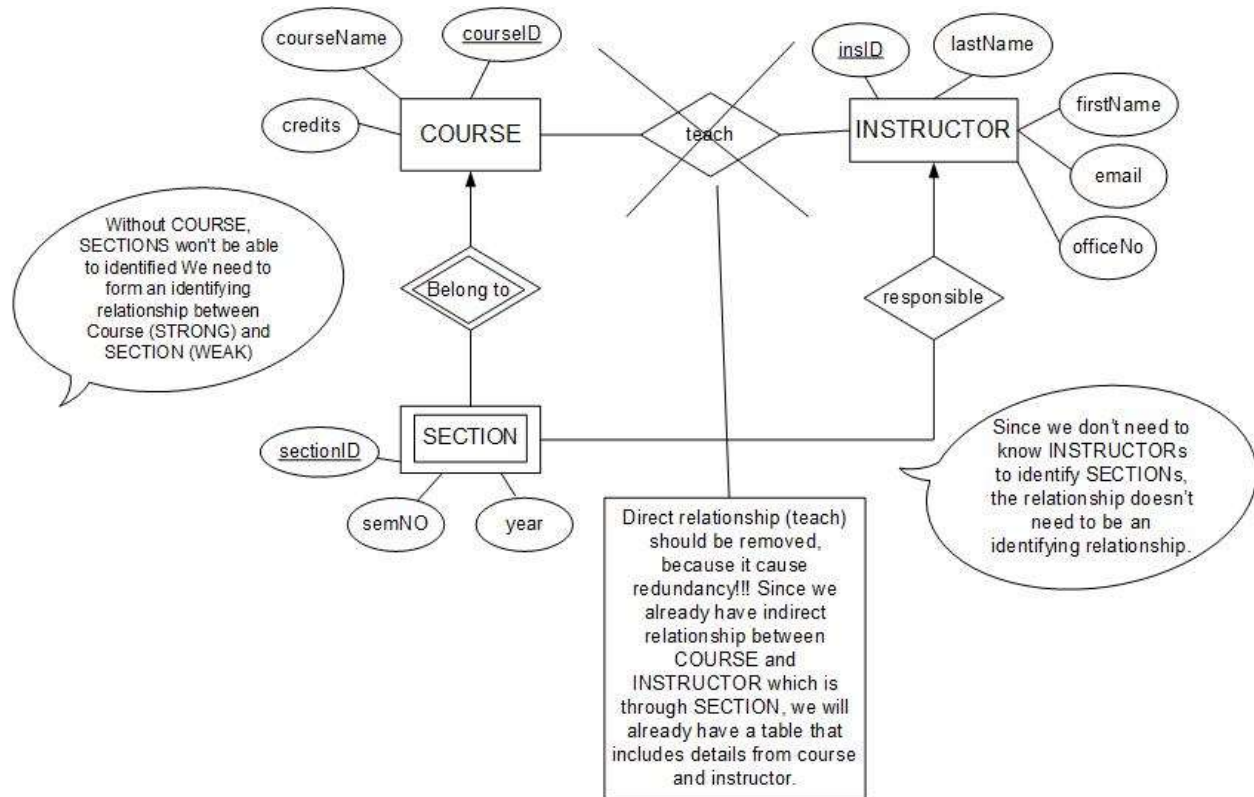# ITEC212 – Lecture Session (09-APR-2020)

Solution to Practice 2 (LECTURE 3)

Relational Schema (List of tables that represent an ERD)

In ERD, we show entities, attributes of those entities and the relationship between the entities

In Relational Schema, we create tables for each entity that we have in the related ERD.

- Entities become tables
- Attributes become columns of tables
- Relationships –depends on the multiplicity- we add an Identifier (Primary Key) of some of the tables to other tables as link (FOREIGN KEY)

Let's convert ERD (Practice 2) to Relational Schema
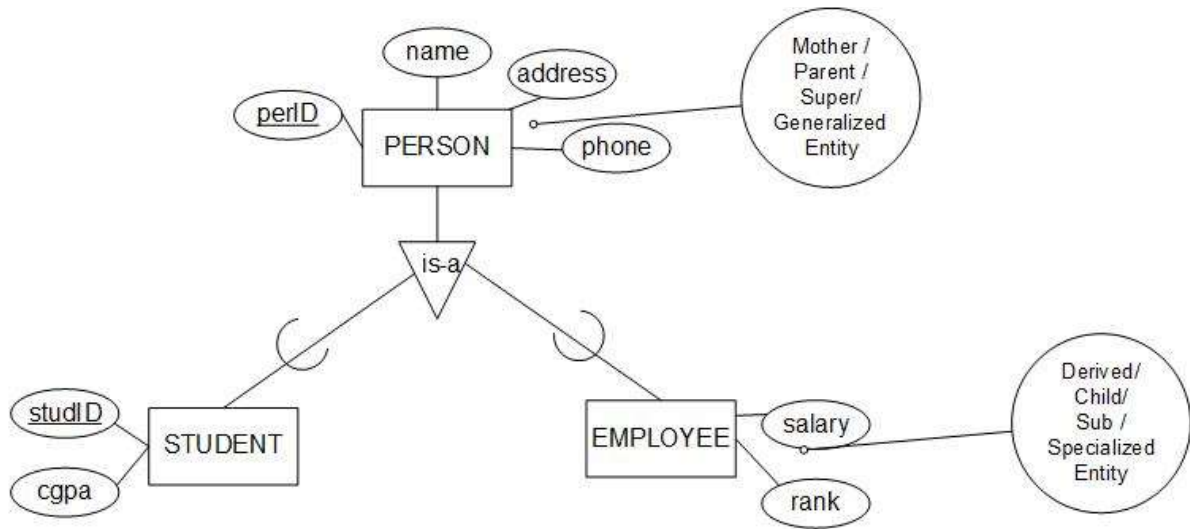
Course (courseID, courseName,credits)

Instructor (insID, first_name, last_name, email, officeNo)

Section (sectionId, semNo, year, courseID, insID)

- courseID: references COURSE(courseID)
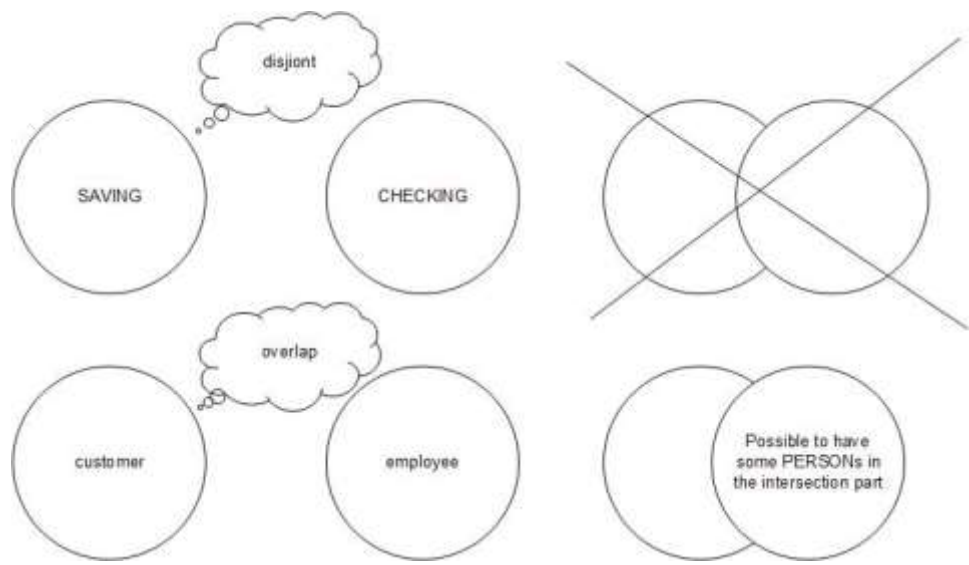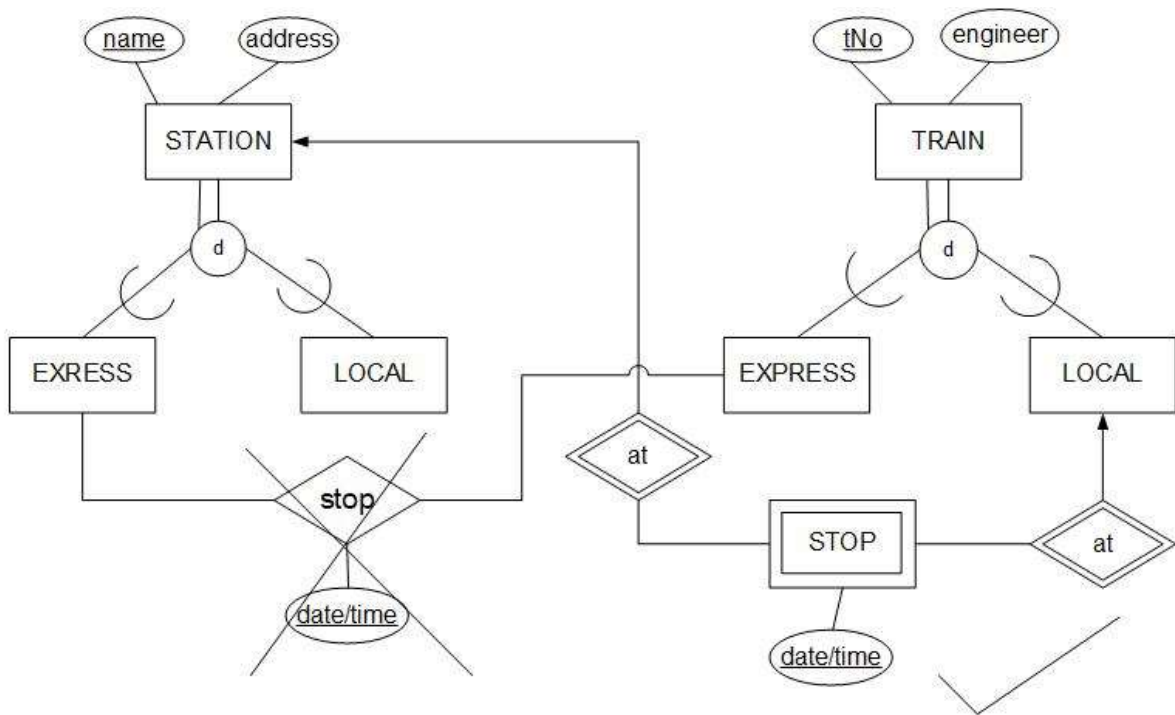- insID: references INSTRUCTOR (insID)

INHERITANCE RELATIONSHIP

EXAMPLES

CHILD entities inherit all characteristics (attributes) of the MOTHER entity.
If child-entities have their own identifiers, we use them as Primary key in the database (implementation phase), otherwise, we borrow it from the PARENT entity.

The attributes of entites (Mother-child)
PERSON(perId, name, address, phone)
STUDENT(studID, cgpa, perID, name, address, phone)
EMPLOYEE(salary, rank, perID, name, address, phone)

Train1 stops at **Station1** on 8-Apr at 10:30
Train1 stops at **Station2** on 8-Apr at 12:30
Train1 stops at **Station1** on 8-Apr at 14:30
IMP NOTE: We are not allowed to show partial/primary key
attached to relationships!!!!
Another way of showing many-to-many relationships would be
using WEAK entites!!!