

Practice Class 3

Objectives

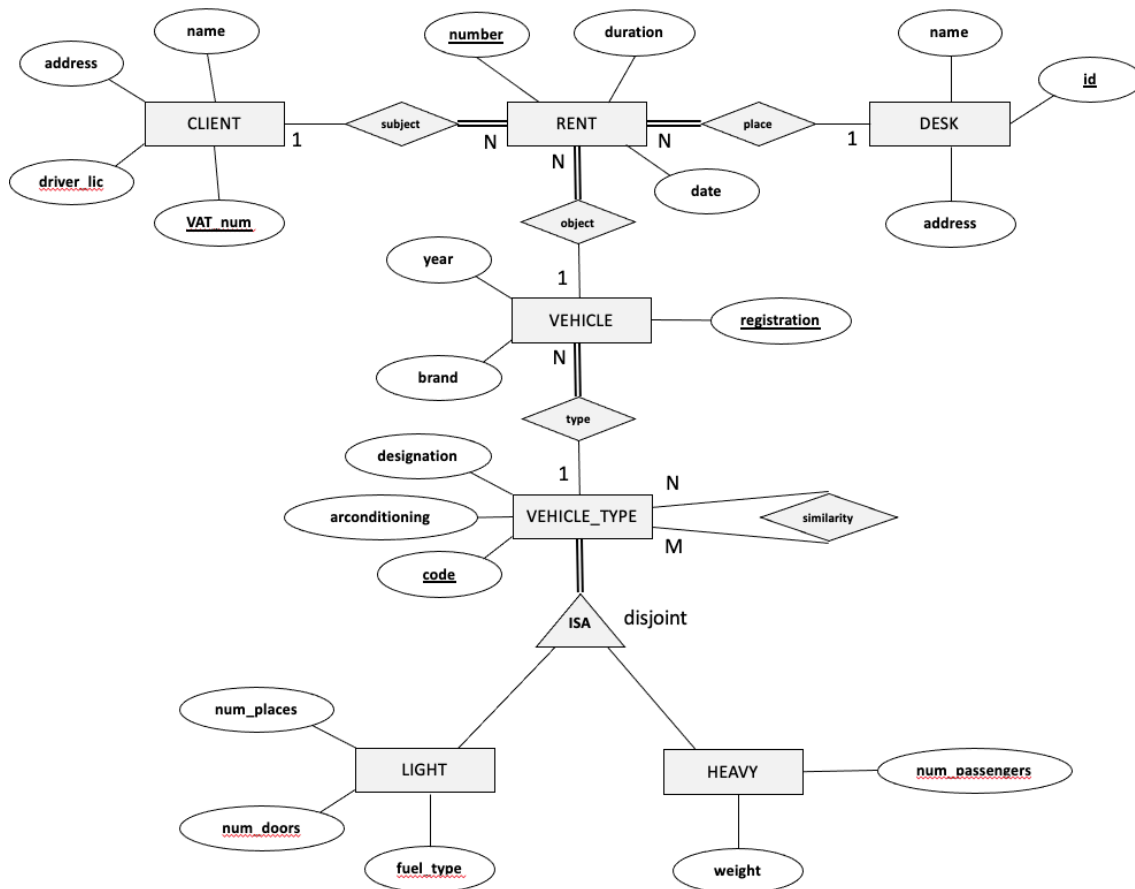
Relational Model

Converting Entity-Relationship Diagram (ERD) into a Relational Model

Note: You must follow the response template provided and only legible diagram submissions in PDF or image format (PNG, BMP, JPG and SVG) are accepted.

Assignment 3.1

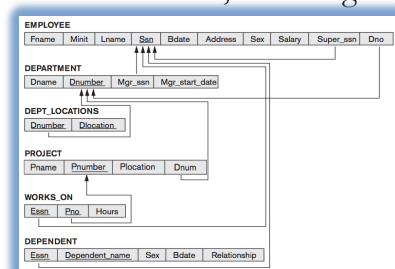
Consider the following ERD of a Rent-a-Car Management System:



Using the rules for the transformation the ERD into the Relational Model, deduce the BD schema:

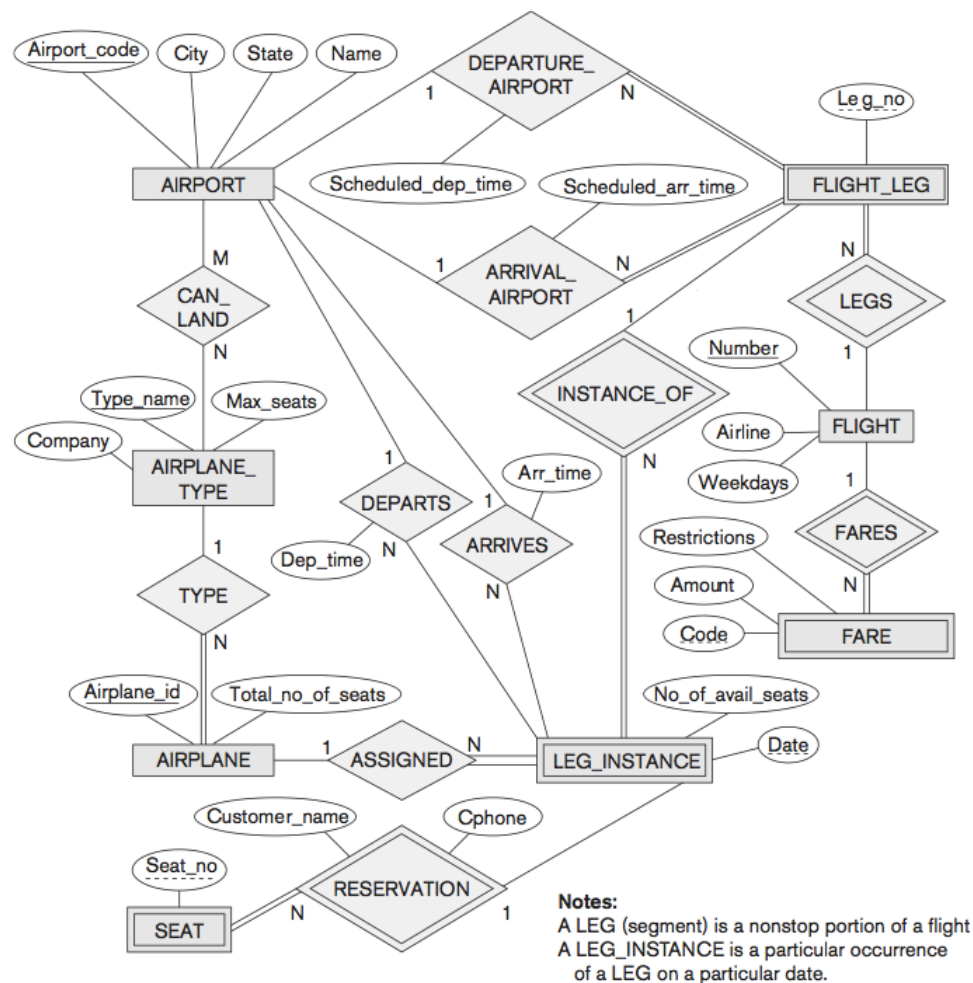
- Identify all relationships (tables) and define your $r(R)$ relationship scheme;
- Identify all candidate, primary, and foreign keys;
- Present a visual diagram (see example below) with the BD schema, including relationships between tables.

Example scheme of BD



Assignment 3.2

Consider the following ERD of a Flight Booking Management System:



Using the rules for the transformation the ERD into the Relational Model, deduce the BD schema:

- Identify all relationships (tables) and define your $r(R)$ relationship scheme;
- Identify all candidate, primary, and foreign keys;
- Present a visual diagram of the BD schema, including relationships between tables.

Assignment 3.3

For each of the exercises in lesson 2 (2.1, 2.2, 2.3 and 2.4) make the transformation of ERD into a relational scheme. Present a visual diagram with the schema of each BD, including the relationships between tables.