



Tutorial N°3: MERISE (CDM)

Exercise 1: course questions

- MERISE is a method: systemic object-oriented analytical Cartesian.
- What does the word CDM mean in merise?
- What does the word E/A mean in merise?
- The conceptual level of merise is about describing: "HOW" "WHAT" "BY WHOM"
- The data dictionary is a necessary tool for building CDM. True false
- List the information found in the data dictionary.
- What do synonyms represent in the data dictionary? Give an example.
- What do polysemies represent in the data dictionary? Give an example.
- A relation representing a link between entities is called:
- Give an example of an association with a graphical representation.
- The number of entities participating in an association is called:
- An elementary data that characterizes an entity or an association is called: Give an example.
- The possible cases of cardinalities are: (0,1), (n,n), (n,1), (0,0); (0,n), (1,1), (1,n).
- Assigning values to various properties that characterize a given entity gives information called:
- One or more properties that allow identifying each occurrence of the entity uniquely are called:
- Among the data below, which could be decomposable? Give, for those that are, the data that compose them.
 - An appointment with the doctor.
 - The location of a book in a library.

Exercise 2:

Draw the CDM corresponding to the following management rules:

1. A client can place one or more orders.
2. An order is placed by one and only one client.
3. An order contains one or more products.
4. A product can appear on multiple orders, or may not be ordered at all.
5. Each order is associated with one and only one invoice.
6. An invoice contains one or more orders.

Exercise 3

In the information system related to the academic administration, the following management rules are recorded:

- A teacher can teach one or more modules.
- A student cannot change sections.
- A student can obtain multiple grades in a module from different exams.

Question: Represent each management rule with an Entity/Association model (E/A model).

Exercise4:

Commande
 N° commande :
 Date commande :
 N° client :
 Nom client :
 Adresse client :

<u>Ref</u>	Désignation	PU	Quantité

Facture
 N° facture :
 Code commande :
 Date facture :
 Matricule client :

<u>Ref</u>	Désignation	PU	Quantité	Montant

Montant total :

Question : Draw the data dictionary corresponding to these two documents.

Exercise 5:

A client likes certain brands of fish, a restaurant serves certain brands of fish, and a client frequents certain restaurants.

Question: Model this statement using Entity/Association.