

Study stream : Computer Science
Level: 2nd Year Bachelor's Degree
Module: Information Systems
Instructor: Dr. Bouneb M.

Practical work N°02

Objectives:

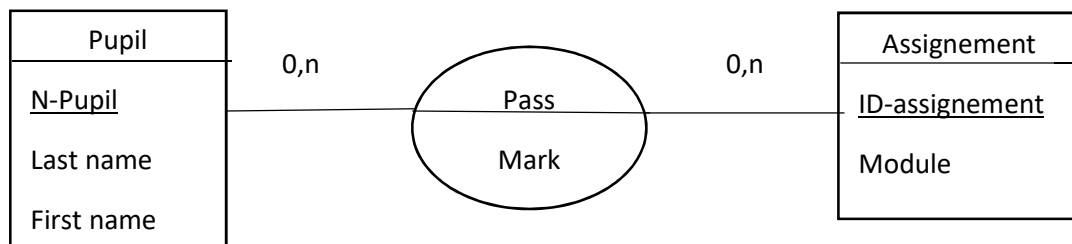
- ☞ Discover the PowerDesigner environment.***
- ☞ Learn how to create an entity.***
- ☞ Learn how to create an association.***
- ☞ Learn how to define cardinalities.***
- ☞ Learn how to define properties.***
- ☞ Learn how to define a primary key.***
- ☞ Master the creation of a CDM (Conceptual Data Model) with PowerDesigner.***

Exercise N°1: Discover the PowerDesigner environment

1. Install PowerDesigner.
2. Open your tool now.
3. Create a new model (choose "Create Model").
4. Select "Conceptual Data Model" -> "Conceptual Diagram."
5. Now choose a name for your model.
6. Configure your model: right-click -> "Model Options." In "Notation," select "E/R+Merise" model. Click "OK" and confirm your choice.
7. Explore the component palette.
8. Create two entities.
9. Create an association between these two entities.

Exercise N°2:

Let the following conceptual data model be:

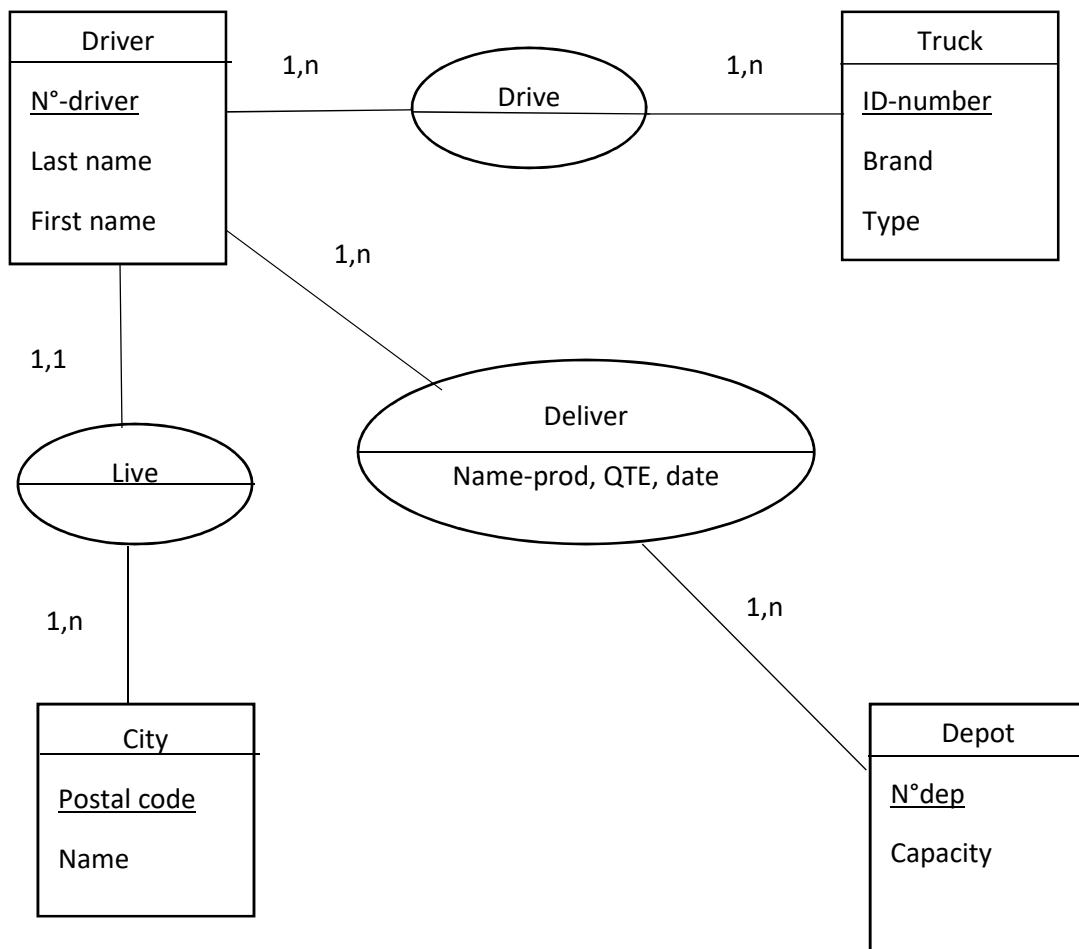


Questions:

1. Create the entity Student.
2. Create the properties of the entity Student.
3. Define a primary key for the entity Student.
4. Create the entity Assignment.
5. Create the properties of the entity Assignment.
6. Define a primary key for the entity Assignment.
7. Create the association Pass.
8. Define the properties of the association Pass.
9. Define the cardinalities for the association.

Exercise N°3:

Let the following conceptual data model be:



Question:

Create this CDM by power designer.