S17 T01: Bases de dades relacionals – *Eduardo Baffi*

Descripció

Aprendre a crear un model relacional i diagrama entitat-relació.

Nivell 1

- Exercici 1

Crea una base relacional d'exemple utilitzant un document de text o a mà. Dissenya-la perquè contingui les següents taules, i estableix les relacions que consideris necessàries entre elles:

- *Taula de compres (transaccions)*
- *Taula d'establiments*
- *Taula de treballadors*
- *Taula de clients*
- *Taula de productes*
- *Taula de tipus de productes*

Defineix les propietats de les relacions (1:1, 1:n, n:n), i crea algunes de les variables que podrien contenir, per exemple:

Taula d'establiments

- *IDestabliment (unique key)*
- *Nom*
- *Localització*
- *Superfície*

The tables and their variables are show in the following table.

The relationship between each data point (schema) is shown by different color of rows in the tables and searching through those relationships is easy.

The connectivity of the relationships (1:1, 1:N, N:N) is shown in the Exercise 2 – Diagram made with the Dia software.

RELATIONAL DATA BASE – TABLES, VARIABLES AND RELATIONS

ESTABLISHMENTS
Store ID
Product ID
Surface
Name
Location

PRODUCTS
Brand
Product ID
Availability
Exp. Date
Price
Store ID
Type Code

WORKERS
Worker ID
Name
Birthday
Position
Working hours
Store ID

PRODUCT TYPE
Name
Category
Shop Name
Description
Type Code

COSTUMERS
Name
Costumer ID
Address
Mobile
E-mail
Transaction ID (*Purchases*)

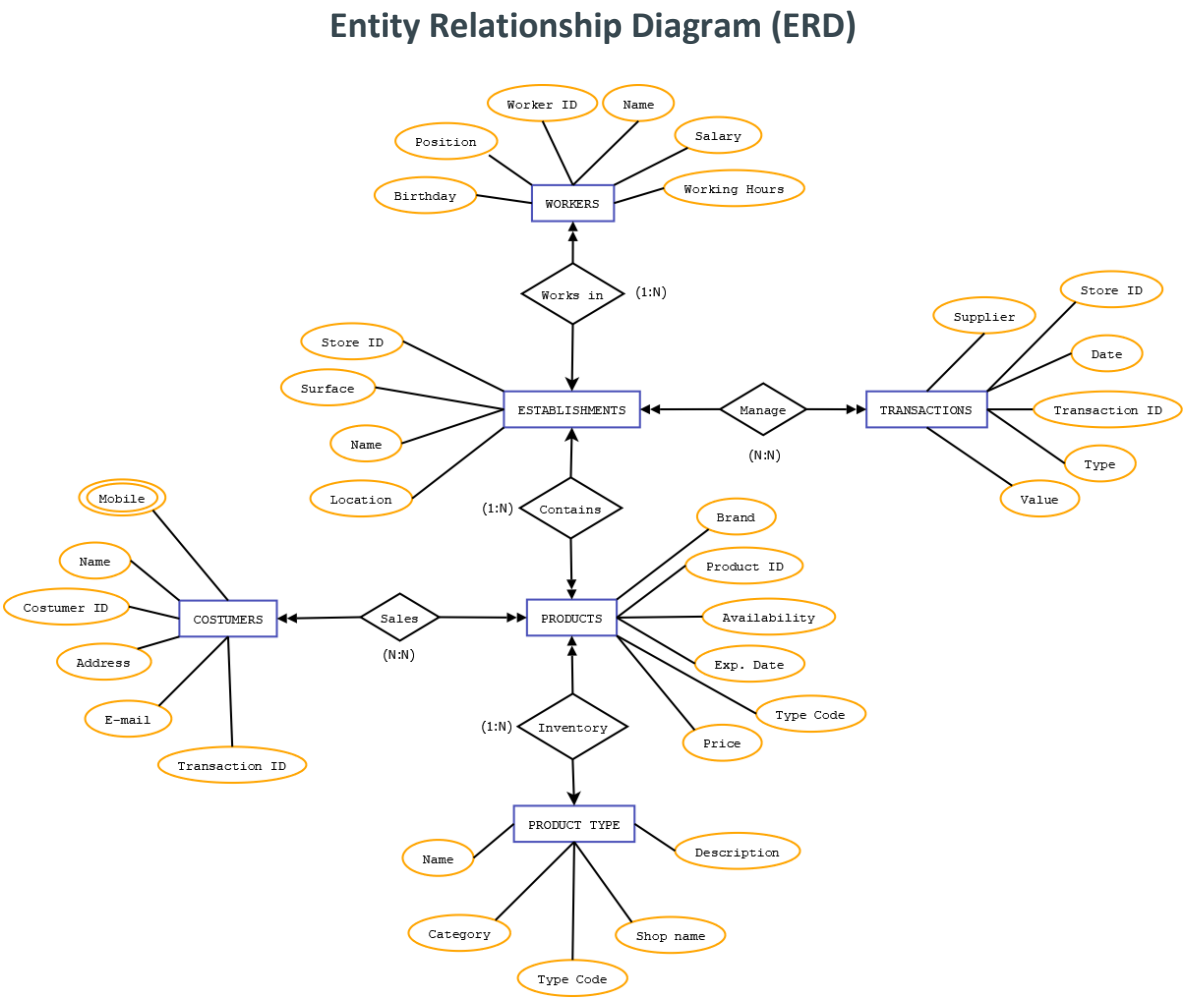
TRANSACTIONS
Store ID
Supplier
Date
Transaction ID
Type
Value

Nivell 2

- Exercici 2

Utilitza un programa de creació de diagrames entitat-relació com http://dia-installer.de per crear el diagrama.

The diagram was exported to an image file to be inserted in this document. The original *.dia* file and a png version were uploaded to GitHub.



Nivell 3

- Exercici 3

Utilitza el Workbench de MySQL per crear un model relacional.

The model was exported to an image file to be inserted in this document. The original MySQL Workbench files and a png version were uploaded to GitHub. It was used *Forward Engineering* to export the schema design to a MySQL server and the script is also available at GitHub.