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OpenCourseWare

## Database

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## Exercise 1 (Topic Relational Model (2.1))

## ● ART DATABASE

Design a database that captures the information about art galleries.

The information to be collected in the database is the following:

The database keeps information about artists, an identifier, name, birthplace, birthdate, and style of art (impressionism, modern, etc.)

The information of a piece of artwork such as the year each piece was made, an identifier, title, the type of art (e.g., painting, lithograph, sculpture, photography) and the price for each piece of artwork must be stored.

Pieces of artwork are also classified into groups of various kinds, such as, for example, portraits, still life, or works of the 19th century; any given piece may belong to more than one group. Each group is identified by a code and a name that describes the group.

Finally, the database keeps information about customers. For each customer, the database store that person's unique name, an identifier, an address, the total amount of dollars spent in the gallery and the artists and groups of art that the customer tends to like.

You must:

- Obtain the relational schema/diagram according to requirements with the primary and alternative keys. Indicate the foreign keys with their delete and update options.
- Write additional semantic assumptions to the statement, if needed
- Write additional semantic assumptions to the scheme, if needed