

The LittleDiagrams

The LittleDiagrams is the new nursery that is going to open at the University of Huelva, which is intended to be an Andalusian reference for its modernity and good work. Part of the concern for quality is reflected in the exclusivity in dealing with children and families, in the importance given to the activities and the provision of the different classrooms. We will create a database that collects the following requirements:

Each **child** must keep a **unique identifier, name, emergency phone number, date of birth** and **photo**. In addition, we will store data about **family members** or any **other individual that is authorised to collect each child** at the end of the school day (**ID, name, and family relationship**).

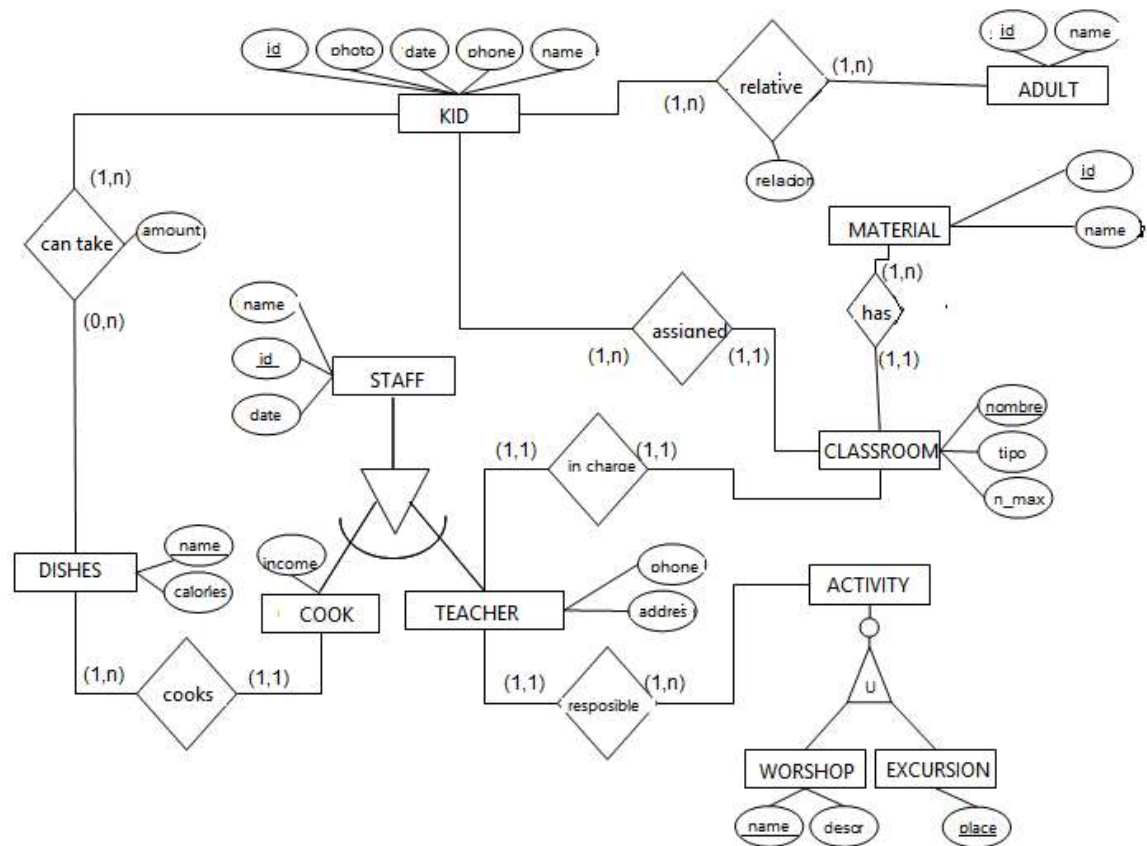
Depending **on their age, children are distributed into small groups**. Each group is **assigned to a special classroom**, equipped with objects, toys and materials appropriate to the age. **Each classroom** will have its **name**, the **type of classroom**, the **list of materials** it contains and the **maximum number of children** who, due to its size, can be part of the group assigned to that classroom.

The **nursery staff** is made up of **three** different positions: on the one hand, a **group of cooks** responsible for preparing the different dishes offered by the dining room service, on the other hand a **group of nursery teachers**, responsible for tutoring each group and directing activities with the children and finally, a **group of Support Workers**. Of these three types you must keep the **name, ID and age**. The **kitchen staff 's salaries must be saved**, and the **group of nursery teachers will store their address and telephone number**.

The **activities can be** either **specialised workshops** (music, painting, psychomotricity) **or excursions** to places of interest for children (trips to visit a farm school, attend a children's play, etc.). In both cases, there will be a **teacher responsible for the Organisation of the activity**.

With respect to allergies and religion, some children may have different dietary requirements. You have to know, in addition, which **cook is responsible for preparing each dish** and the **amount of a certain dish that can take as a maximum each child**.

The conceptual model that emerges from these requirements, in the form of extended entity-relationship diagram, is as follows:



PART 1

After this first version of the conceptual model, New requirements have arisen that suggest the existing model requires modification. Using the objects of the Entity-Extended Relationship diagram, modify the proposed scheme so that it collects the following new requirements:

- Some children may have brothers or sisters in this nursery. It is required to know who the brothers/sisters of each child are. Additionally, it is essential to store the following information about the Support Workers: telephone number, photo and any criminal conviction
- It is possible to carry out the same activity on different dates, with different people in charge.

c) Adults can participate in the activities organised by the nursery, however, if someone has participated in a workshop he/she cannot do it on a trip and vice versa.

For each option you must redraw only the part of the diagram that is affected.