SchoolERM

A school information system for an HTL is to be developed: The departmental structure of an HTL is to be reproduced. Each **teacher** is assigned to a **department** as a master department, but can also teach in **class**es of other **department**s. Each **department** is headed by a **teacher** as head of department. For each form of education of the **department**s, the **curriculum** specifies which **subject**s have to be taught in which year and to what extent (theory and practice lessons). The **class**es of a school year are taught by the **teacher**s in the individual **subject**s to a certain extent (theory and practice lessons). Each **student** is assessed with one semester and one year mark per **class** and **subject**. The system should be able to record this information for several school years. It should be possible to find out the class leaders of the different classes, as well as by whom which functions (class representative, cashier, etc.) are or were exercised. **Teacher**s are not remunerated according to the number of hours they teach, but according to the value units they hold: Each **subject** is assigned to a specific compulsory teaching group (I to VI). A factor (1.167 to 0.75) is defined for each teaching obligation group, which is used to convert lessons into value units. A **parent** is responsible for each **pupil** (unless the **pupil** is a self-entitled guardian). If siblings attend school, this should also be able to be determined.

**Relational Model:**

**primary key** ; *foreign key*

- department: (**name: varchar(32)**; form\_of\_education: varchar(32); head\_teacher: int)  
- teacher: (**ID:int**; units: int; master\_department: varchar(32))  
- subject: (**name: varchar(32)**; **extent: varchar(32)**; teaching\_group: varchar(32); factor: double)  
- class: (**name:varchar(32)**; **year: int**; class\_leader:int)  
- student: (**ID:int**; **year: int**; funtion: varchar(32); semester\_mark: int; year\_mark: int)  
-parent: (**ID:int**)  
- curriculum: (*year: int; class: varchar(32)* )