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## IS-MU – Analysis patterns propositions

## Party pattern

- User + Faculty party possibly for some use cases, e. g. for shopping rights we would like to avoid students buying equipment in Faculty name, but maybe in representations in events it does not matter which Faculty stuff is included directly
- Teacher + Course option for instance for teachers to act in the course name sending notifications, setting rules
- User can act as a party already, some more detailed divisions are possible: Student + Teacher party, Student + Alumnus party...
- Thesis is a party already in some use cases there is no need to distinguish between bachelor and master theses

### Accountability

- User as party for different roles within the IS we want to have different types of relationships between the same people, e. g. Student Teacher: Teacher teaches Student / Student is still studying and teaching at same time
- User (subsclasses) + Faculty for different users different relationships with the Faculty different rights, access, duties for the active Student or Alumnus or Applicant
- Theses there can be different types of relationships between theses: e. g. bachelor thesis is referencing some master thesis, master thesis is continuation of some other bachelor / master thesis

#### **Organization hierarchies**

- Faculty as an organization:
- \* Faculty includes several branches of study. Faculty includes users (Student, Teacher, Alumnus, Aplicant) Each study program has some students, teacher, etc... + courses.
- Courses as an organization:
- The course study materials are available (study documents as child under course).
- The course is incorporated to course catalog (every course has specification -> credits, semester, optional, compulsory)

- Theses as an organization:
  - Theses are classified in various departments (Informatics, Biochemistry, etc..)
  - Cooperation with external companies
  - Bachelor thesis or Master Thesis

## Quantity

The business center offered courses. Each course has a price. Another unit can be specified length of the course (hours).

Study fee -it is defined in the money. Study period (time).

### **Conversion Ratio**

Currency conversion (CZK – EUR - USD) – for courses. Time conversion (day – week – month - year) – for courses, study period

# **Compound units**

Merging study statistics (such as number of credits per semester).