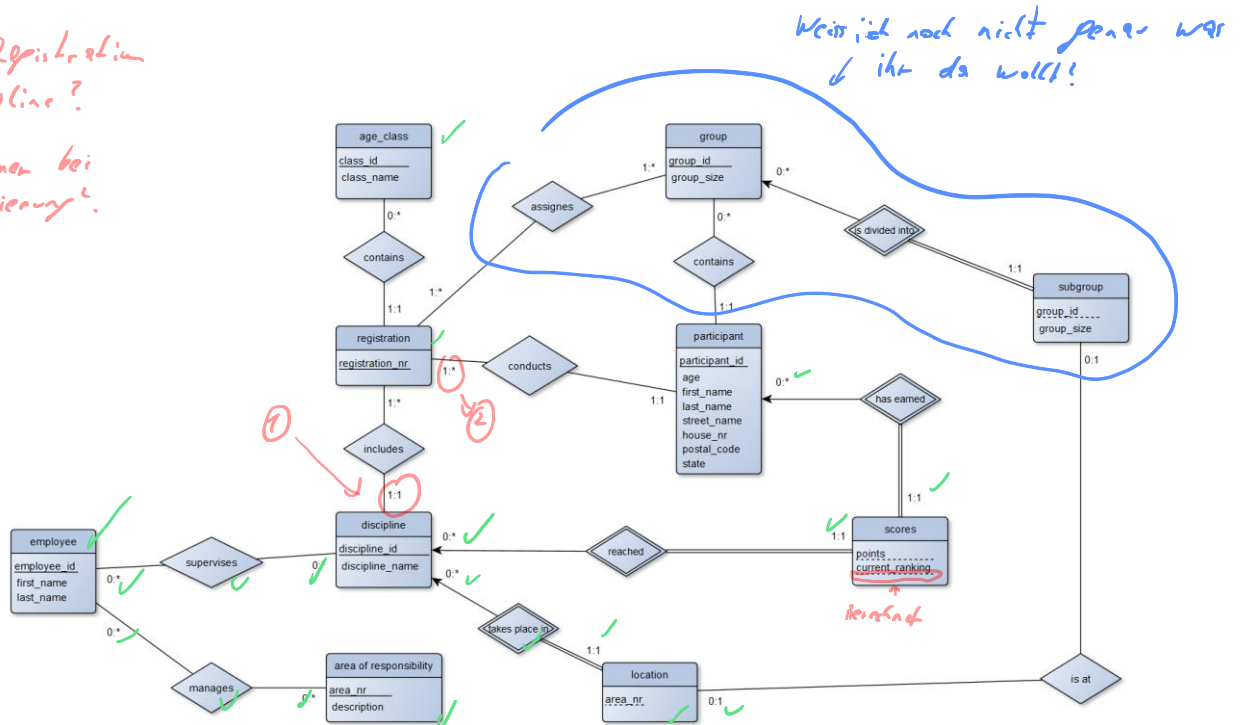


## Team Exercise 02

### ER-Model

- ① ... max 1 Registrierung pro Disziplin?
- ② ... viele Teilnehmer bei einer Registrierung?



*Domäne ≠ Datentyp*

*gäbe die ein-  
beziehung sein  
↓ was gemeint ist!*

## Entity-types and attributes

Entity	Attribute	Attribute Domains	Description
participant	Participant_id	INTEGER	Strong
	Age	INTEGER	
	First_name	VARCHAR	
	Last_name	VARCHAR	
	Street_name	VARCHAR	
	House_nr	INTEGER	
	Postal_code	INTEGER	
	state	VARCHAR	
registration	Registration_nr	INTEGER	Strong
age_class	Class_id	INTEGER	Strong
	Class_name	VARCHAR	
employee	Employee_id	INTEGER	Strong
	First_name	VARCHAR	
	Last_name	VARCHAR	
discipline	Discipline_id	INTEGER	Strong
	Discipline_name	VARCHAR	
area of responsibility	Area_nr	INTEGER	Strong
	description	VARCHAR	
group	Group_id	INTEGER	Strong
	Group_size	INTEGER	
subgroup	Group_id	INTEGER	Weak
	Group_size	INTEGER	
location	Area_nr	INTEGER	Weak
scores	Points	INTEGER	Weak
	Current_ranking	INTEGER	

## Relationships

Relationship	Relationship Type	Description
contains	One to Many	One age_class contains one registration
assignes	Many to Many	Registration assignes to zero to many Groups
conducts	One to Many	One participant conducts one to many registrations
includes	One to Many	One registration includes one discipline
is divided into	One to Many	One group is divided into zero to many subgroups
is at	One to One	One subgroup is at one location
takes place in	One to Many	One discipline takes place at zero to many locations
reached	One to Many	Scores reached in the discipline
has earned	One to Many	Scores that the participant has earned
manages	Many to Many	One employee manages zero to many areas of responsibility
supervises	Many to Many	One employee supervises zero to many disciplines

*Anmerkung zu conducts: für jede Disziplin muss sich der participant neu registrieren.*

## Constraints

Constraints
Age must be $\geq 0$
Group size must be $\geq 3$ and $\leq 6$
One participant must be registered at least once
Area number must be $\geq 1$ and $\leq 20$