

Hibernate Advanced Mappinias



Basic Mapping

Java Class

Student
- id : int
- firstName : String
- lastName : String
- email : String
...

Hibernate

Database Table

student
id INT
first_name VARCHAR(45)
last_name VARCHAR(45)
email VARCHAR(45)
Indexes

Advanced Mappings

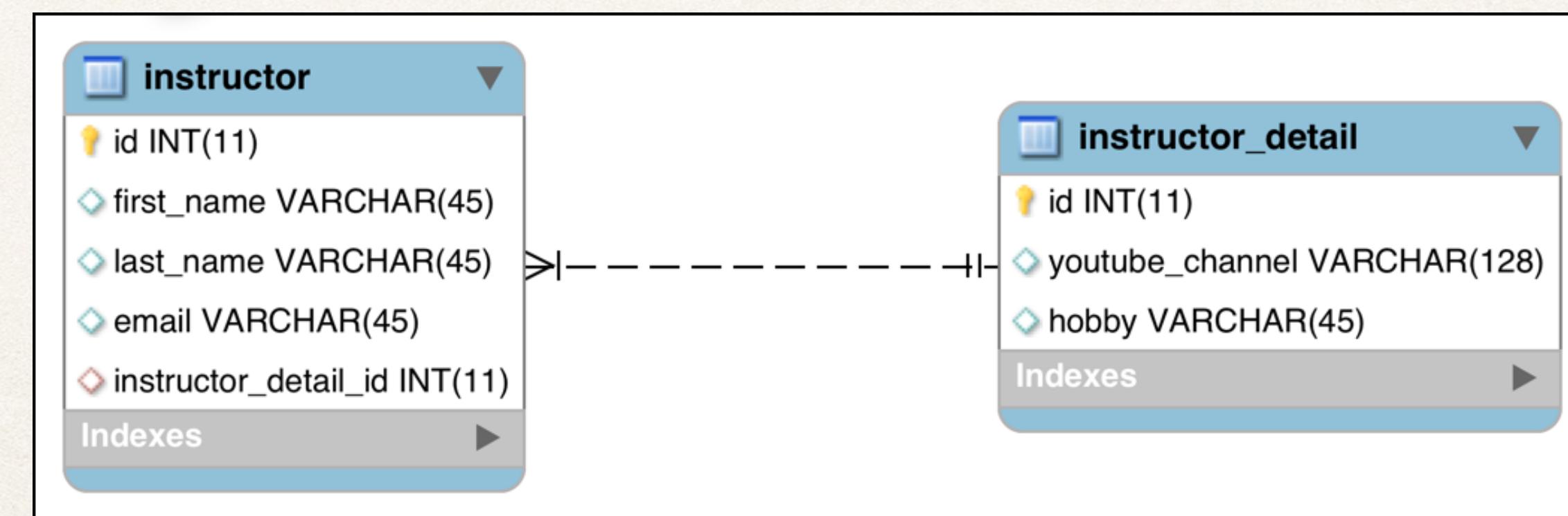
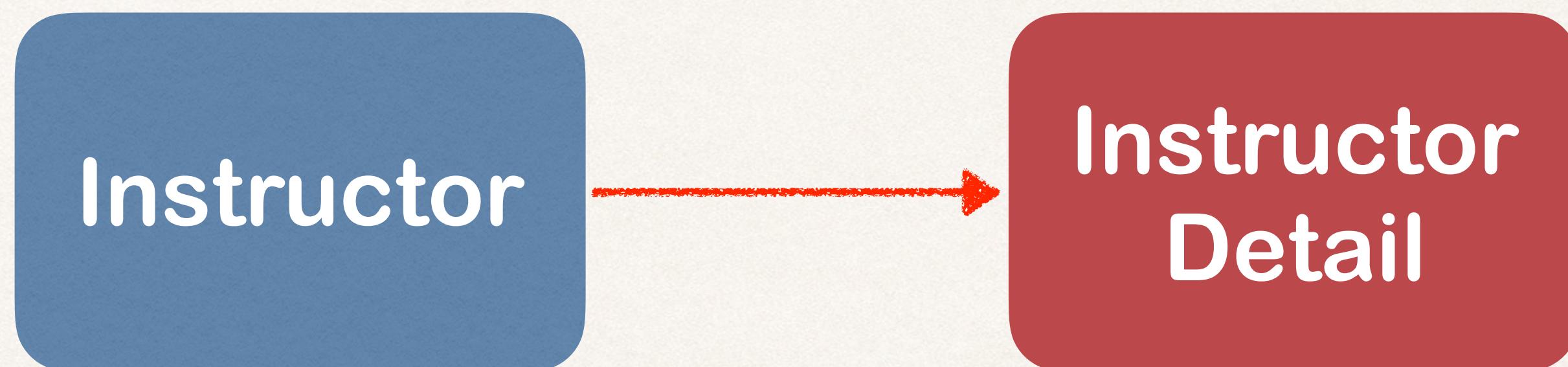
- In the database, you most likely will have
 - Multiple Tables
 - Relationships between Tables
- Need to model this with Hibernate

Advanced Mappings

- One-to-One
- One-to-Many, Many-to-One
- Many-to-Many

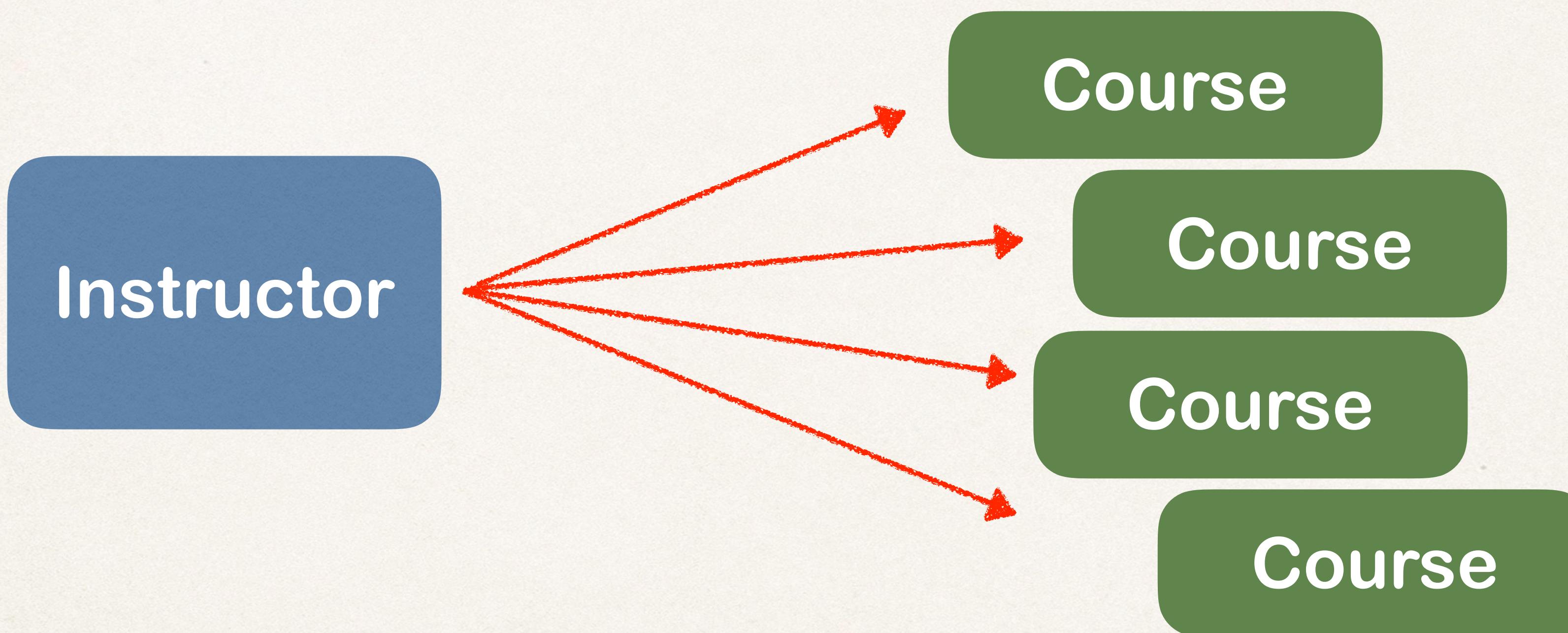
One-to-One Mapping

- An instructor can have an “instructor detail” entity
 - Similar to an “instructor profile”



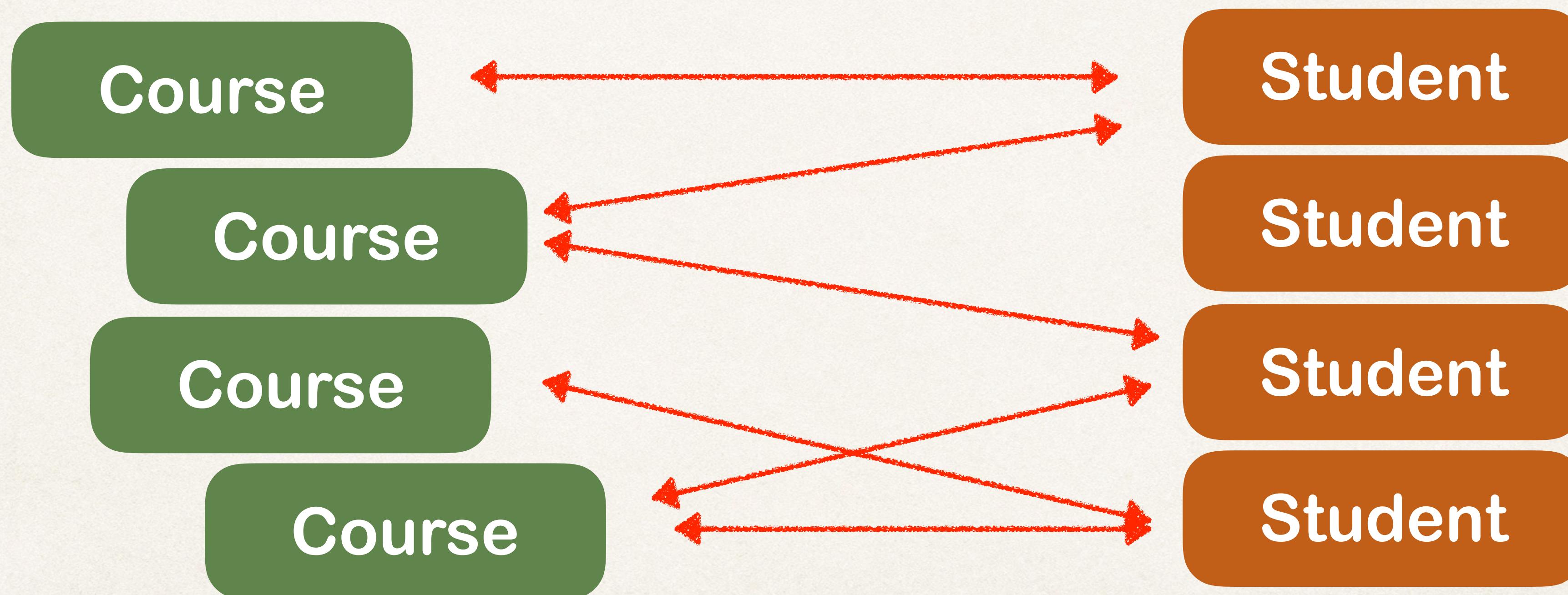
One-to-Many Mapping

- An instructor can have many courses



Many-to-Many Mapping

- A course can have many students
- A student can have many courses



Important Database Concepts

- Primary key and foreign key
- Cascade

Primary Key and Foreign Key

- Primary key: identify a unique row in a table
- Foreign key:
 - Link tables together
 - a field in one table that refers to primary key in another table

Foreign Key Example

Table: instructor

id	first_name	last_name	instructor_detail_id
1	Chad	Darby	100
2	Madhu	Patel	200

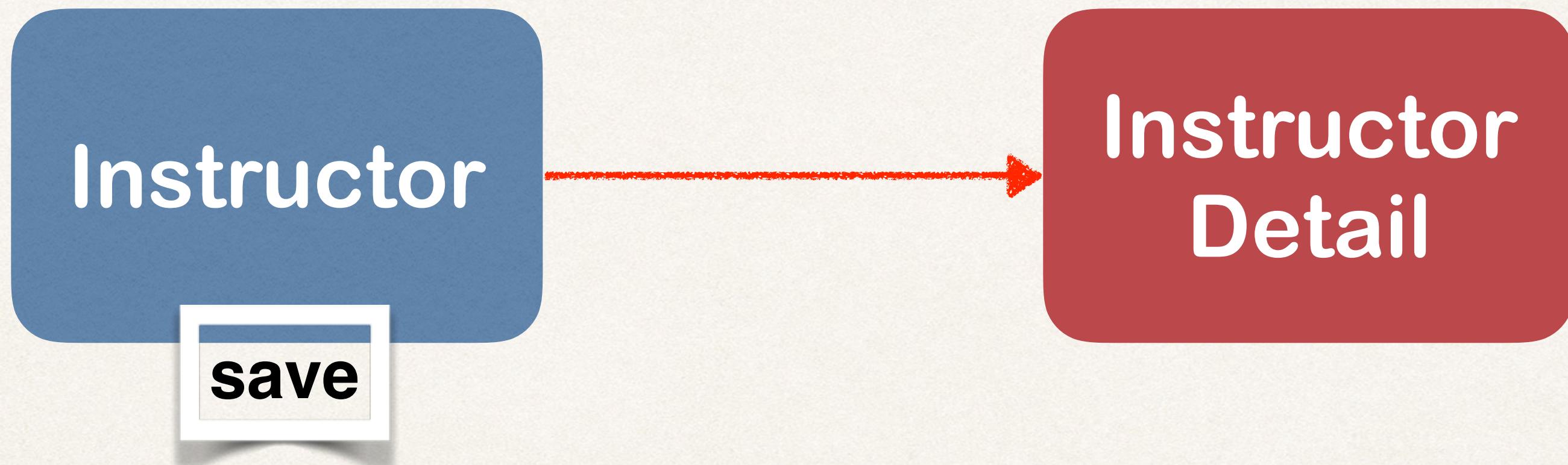
Foreign key
column

Table: instructor_detail

id	youtube_channel	hobby
100	www.luv2code.com/youtube	Luv 2 Code!!!
200	www.youtube.com	Guitar

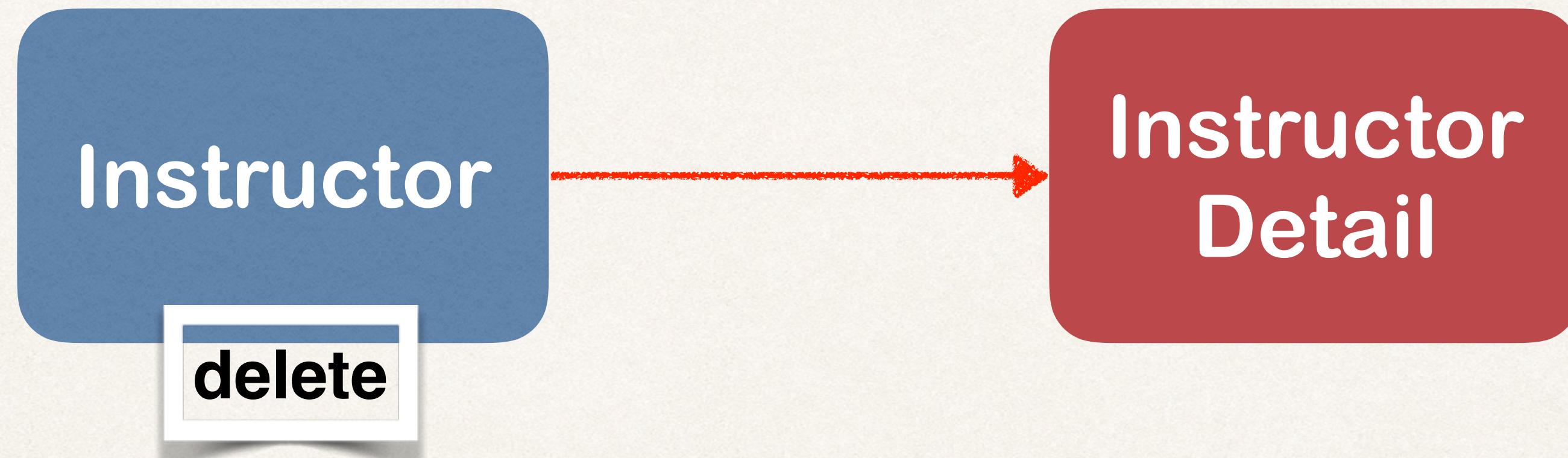
Cascade

- You can **cascade** operations
- Apply the same operation to related entities



Cascade

- If we delete an **instructor**, we should also delete their **instructor_detail**
- This is known as “CASCADE DELETE”



Cascade Delete

Table: instructor

id	first_name	last_name	instructor_detail_id
1	Chad	Darby	100
2	Madhu	Patel	200

Foreign key
column

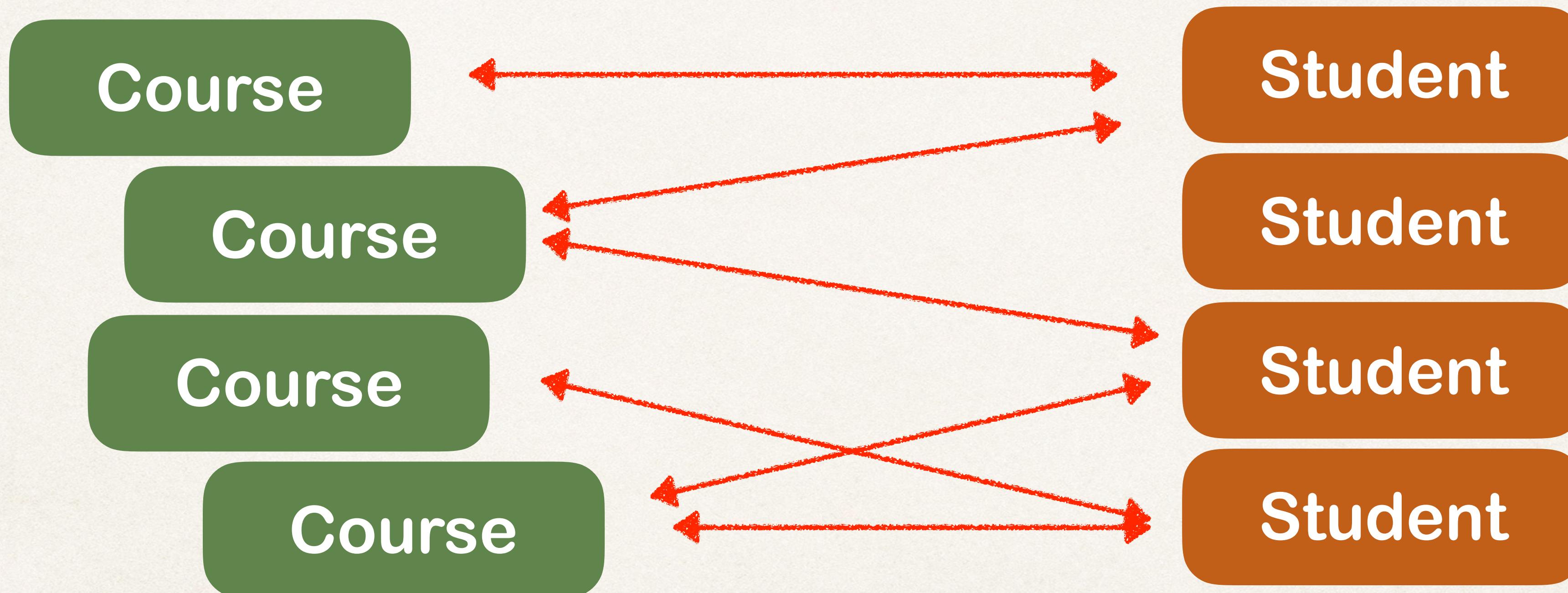
Table: instructor_detail

id	youtube_channel	hobby
100	www.luv2code.com/youtube	Luv 2 Code!!!
200	www.youtube.com	Guitar

Cascade Delete

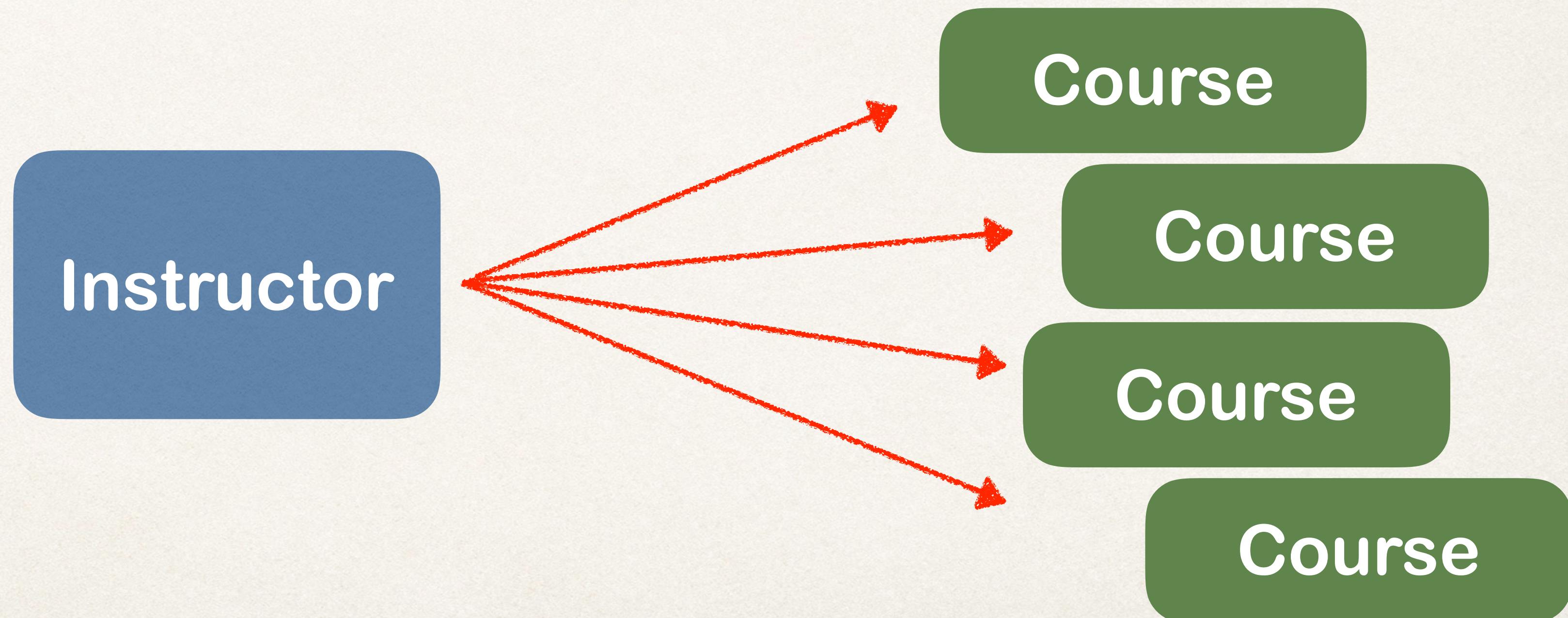
- Cascade delete depends on the use case
- Should we do cascade delete here???

Developer can
configure cascading

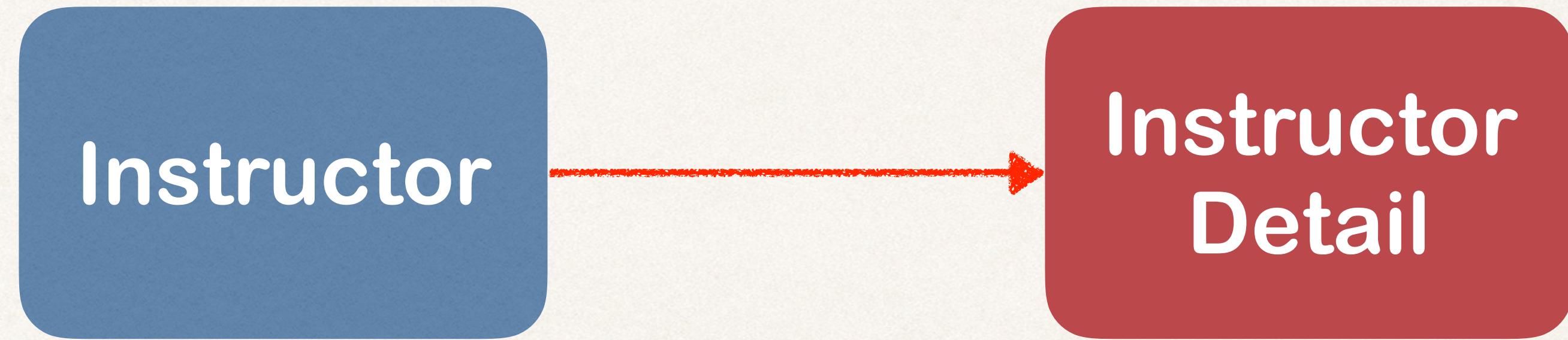


Fetch Types: Eager vs Lazy Loading

- When we fetch / retrieve data, should we retrieve EVERYTHING?
 - **Eager** will retrieve everything
 - **Lazy** will retrieve on request



Uni-Directional



Bi-Directional

