luv2code

Inheritance: Mapped Superclass

Inheritance Mapping Strategies

- Single table
- Table per class
- Joined table
- **Mapped superclass**

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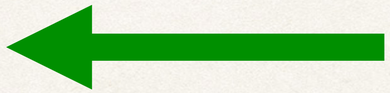
- **Mapped superclass** 

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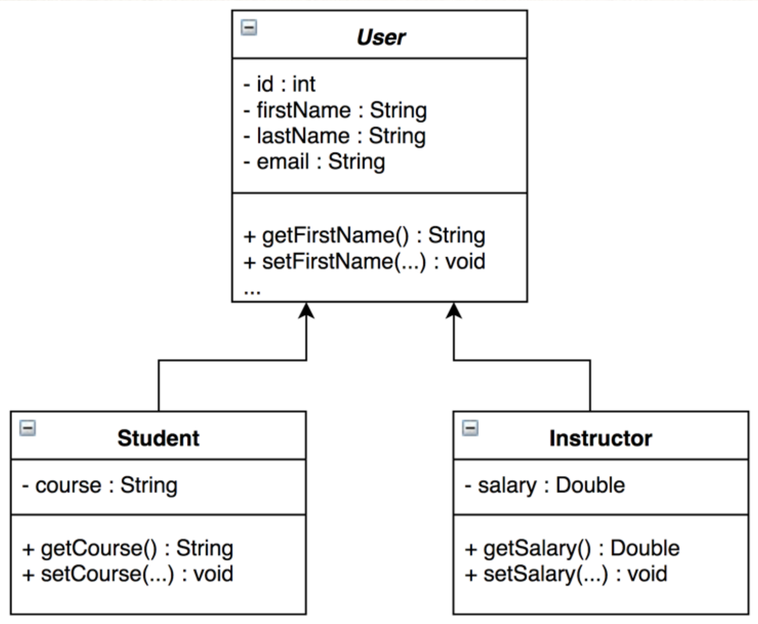

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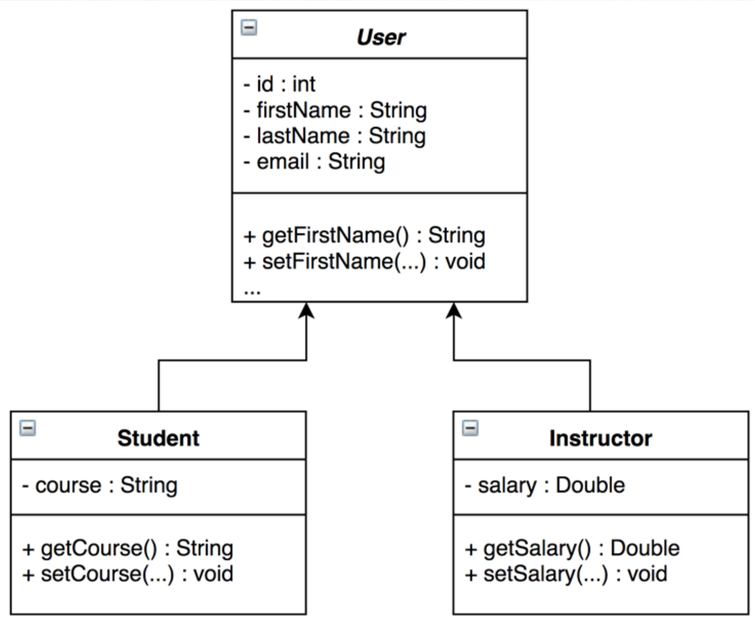

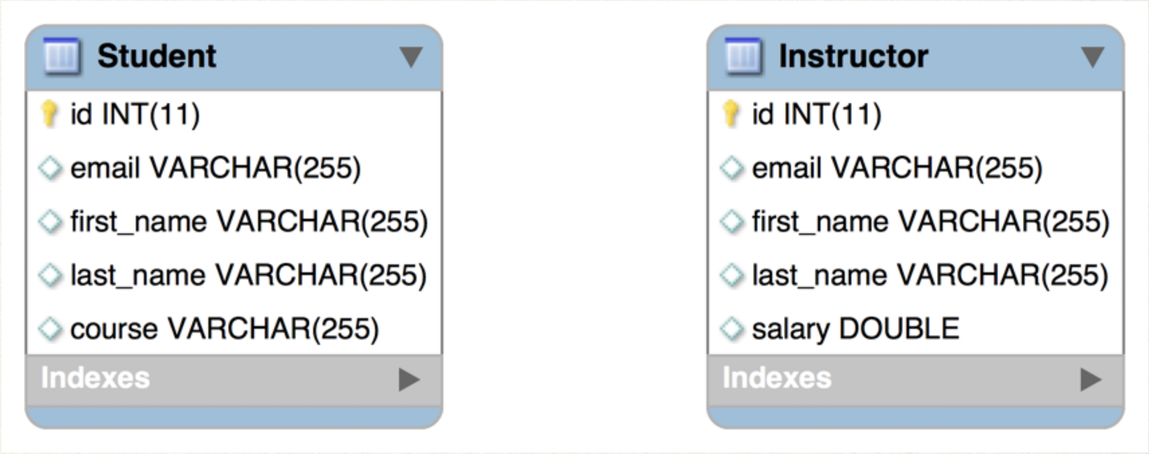

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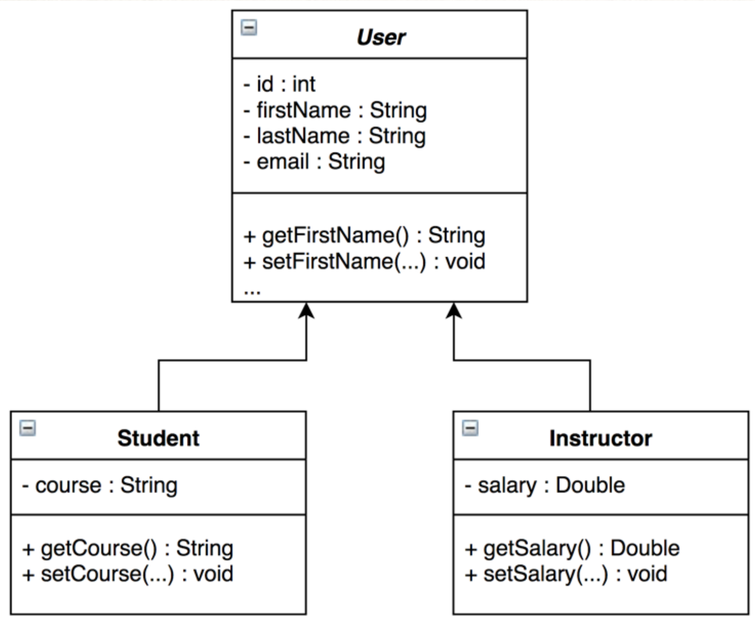

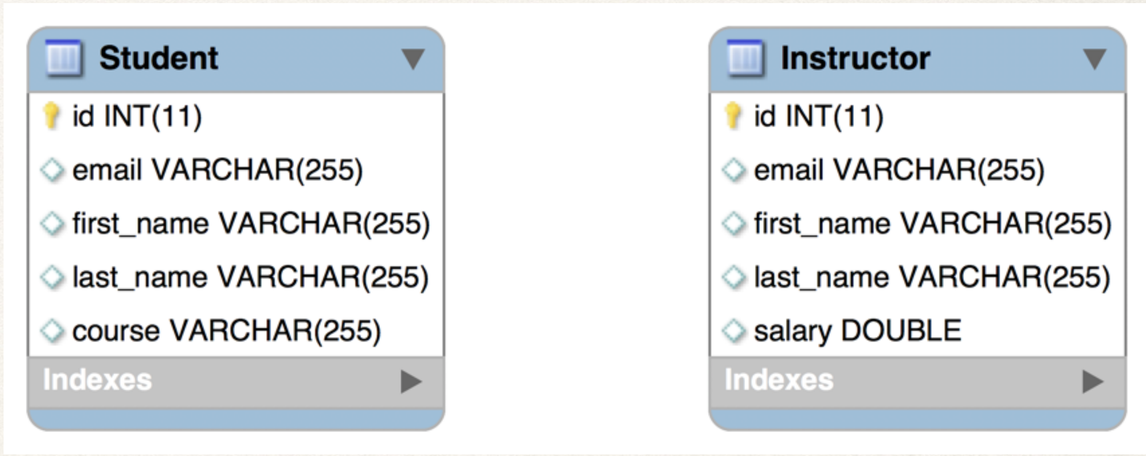

Only subclasses have tables in the database

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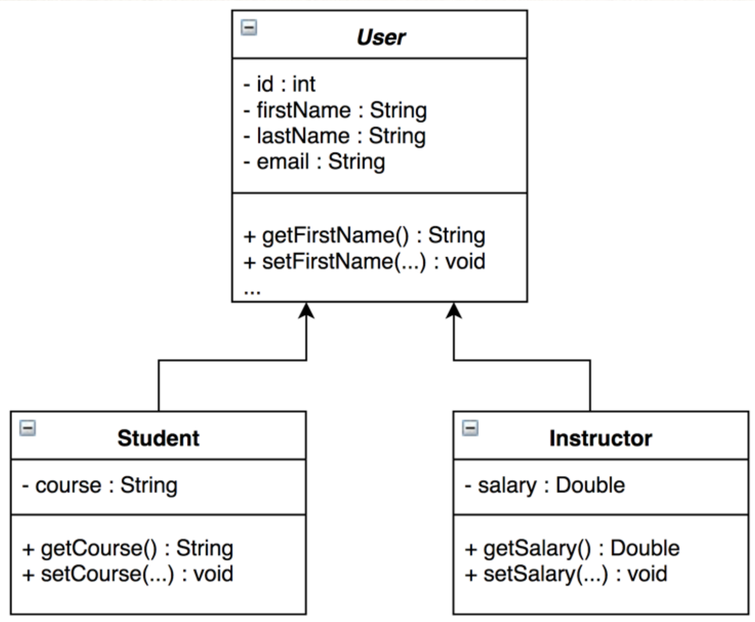
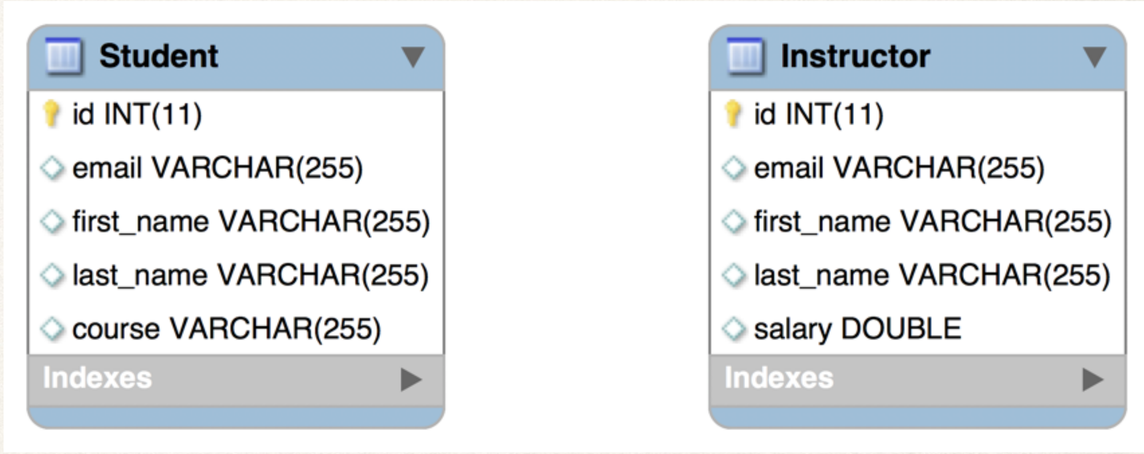


Note: No table for superclass



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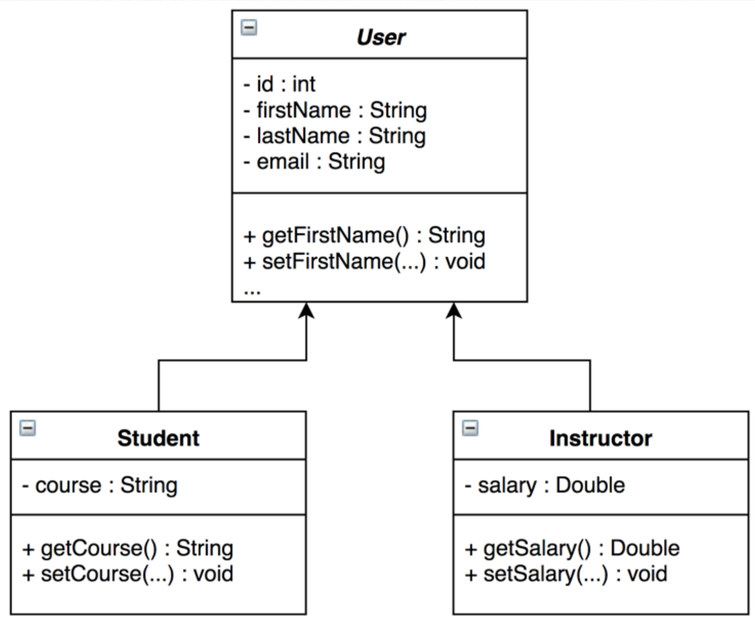
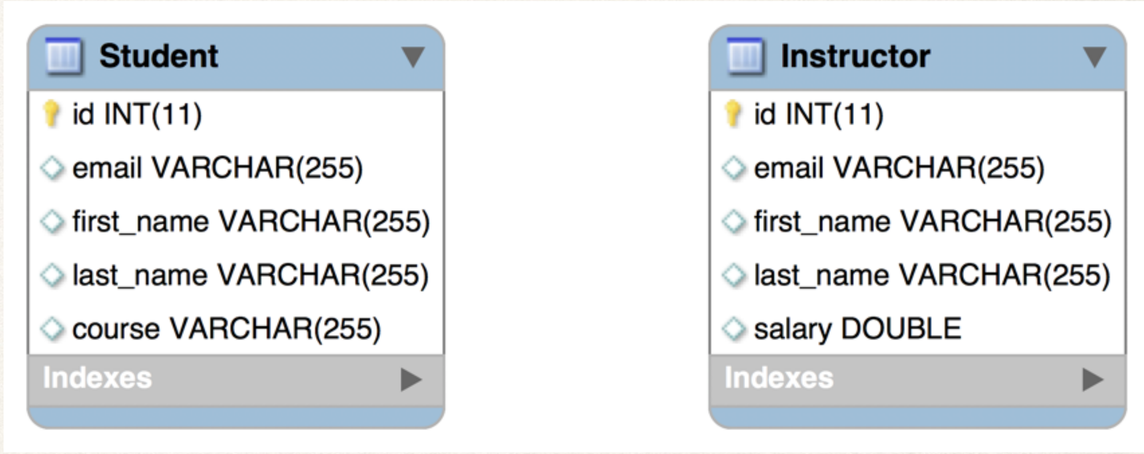
Mapped Superclass

Superclass defines common fields

Subclass table contains superclass fields and subclass fields





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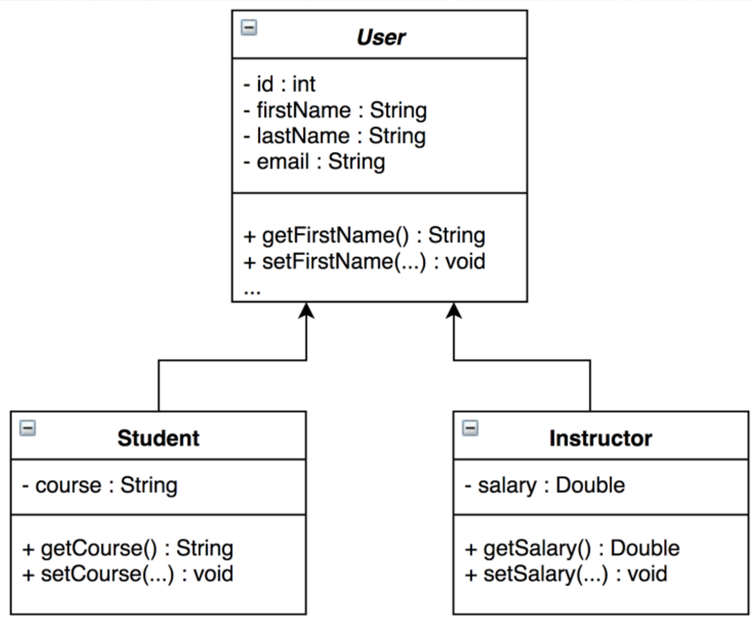

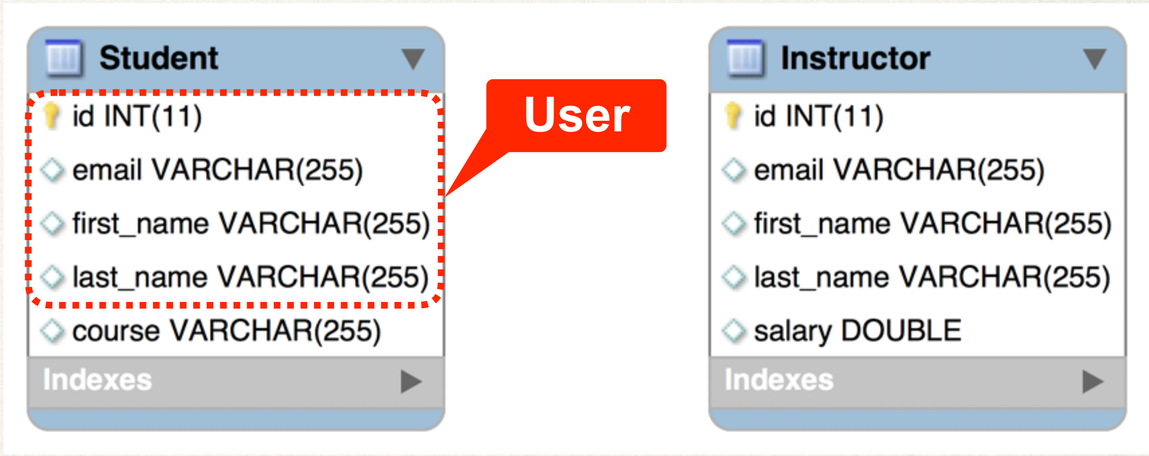

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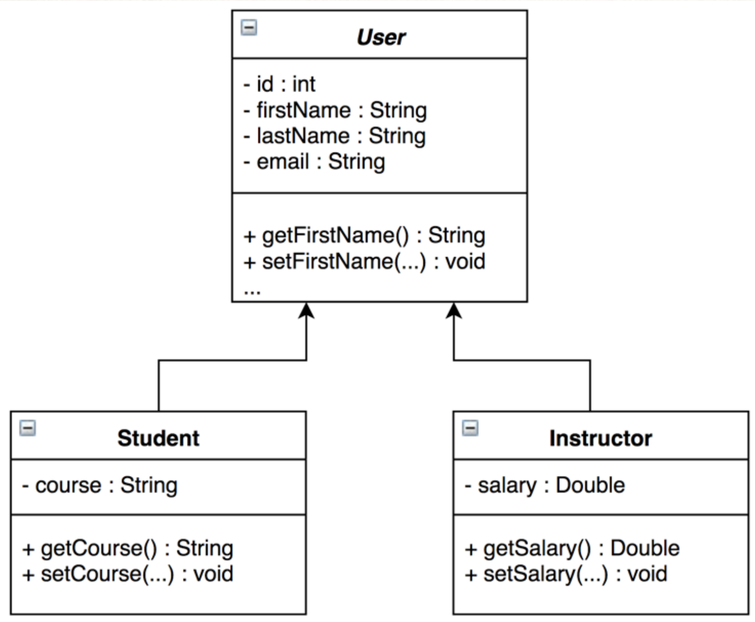

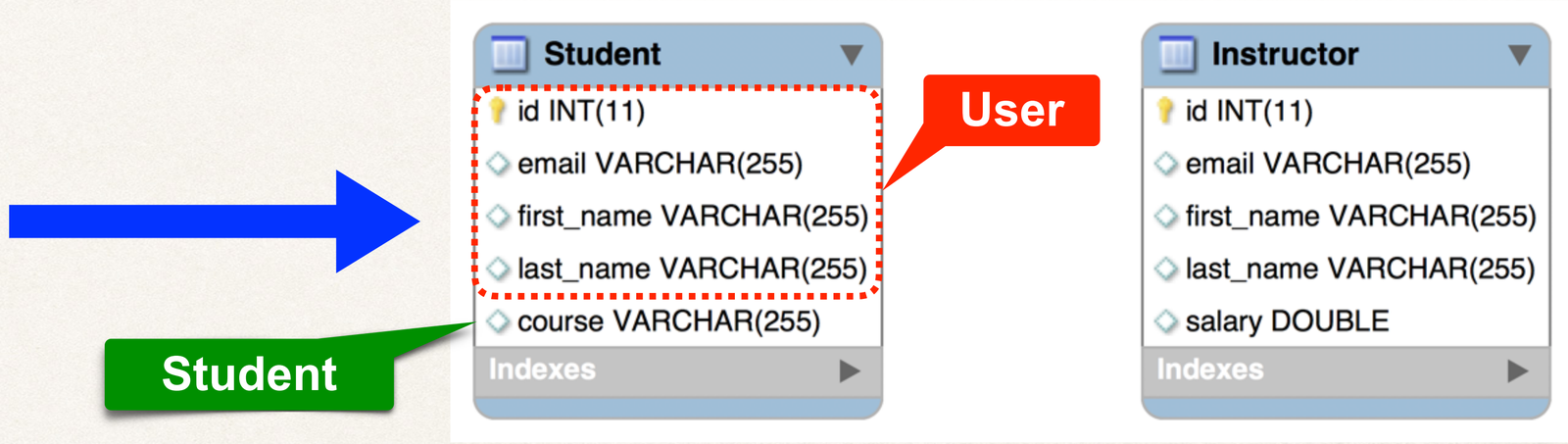

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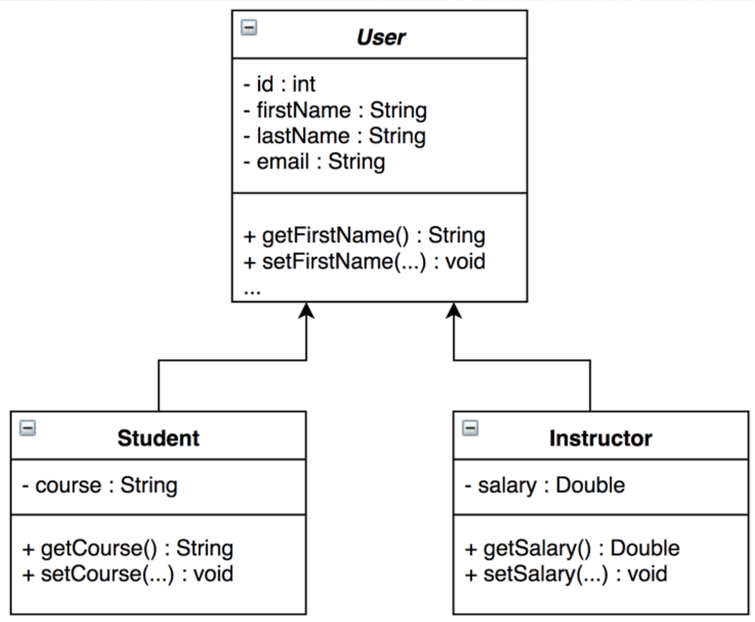

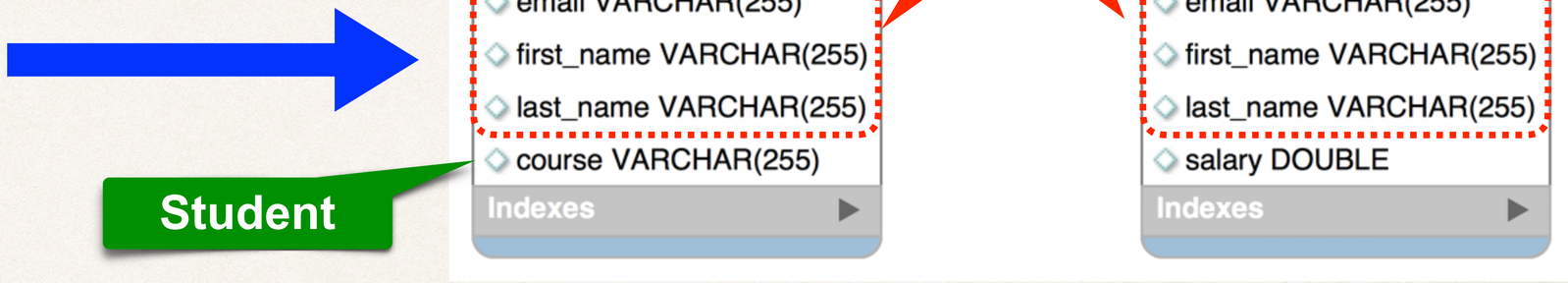

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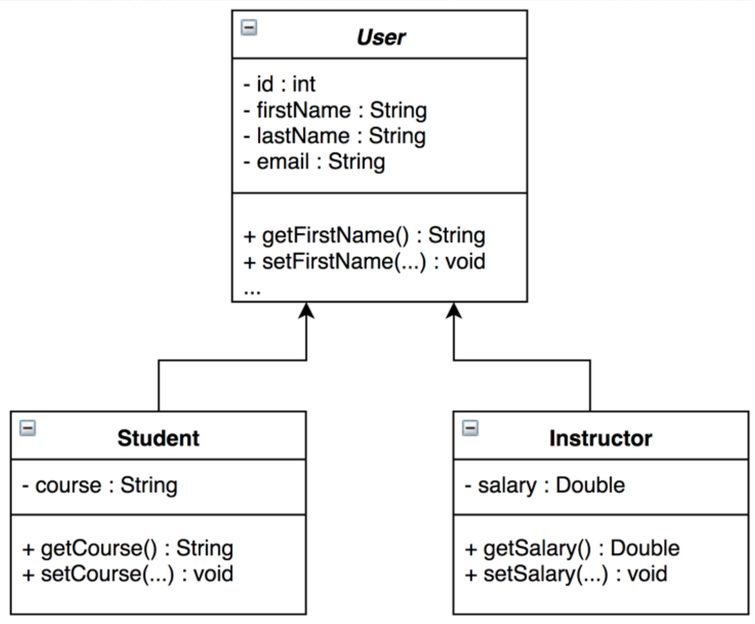

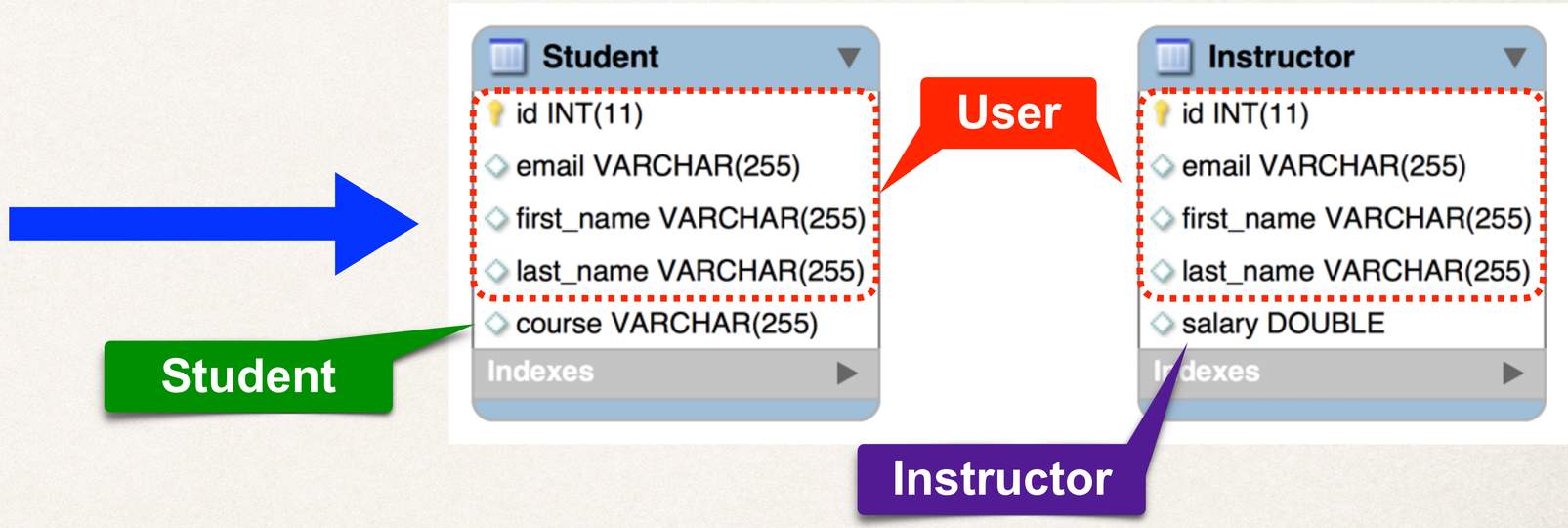

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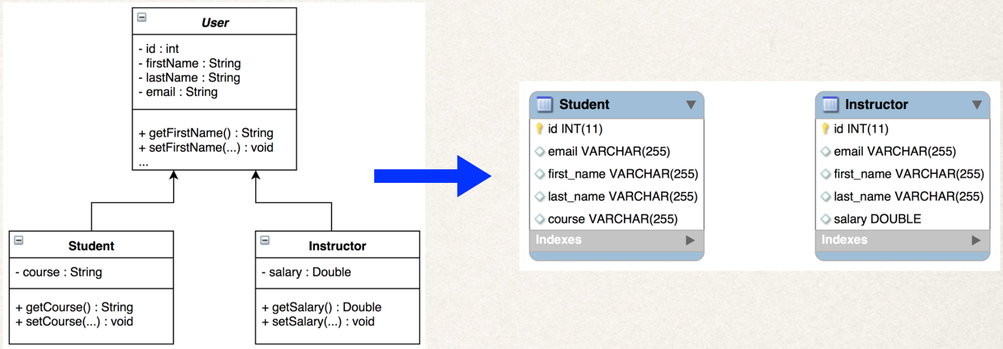

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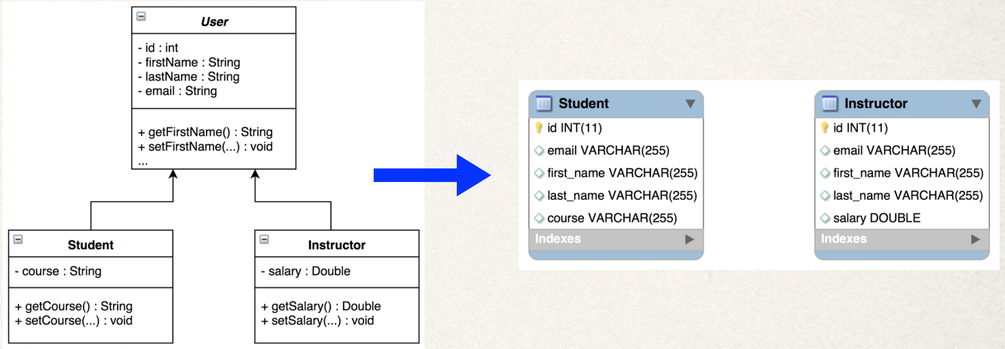

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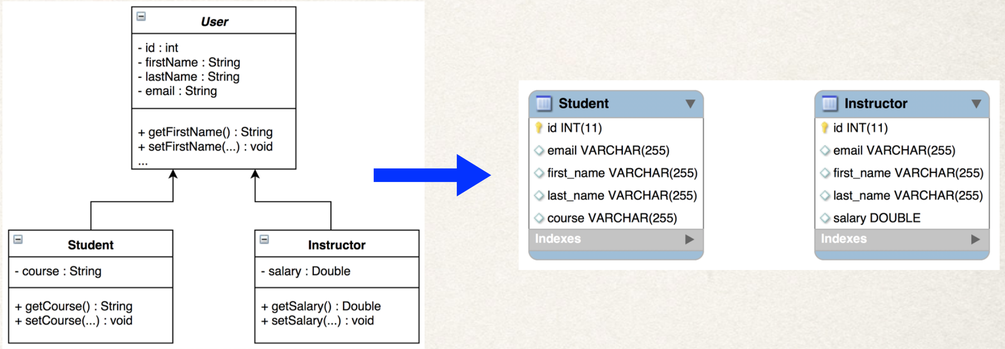
- Similar to **Table per Class** strategy but …
- **Mapped Superclass**
  - No table for superclass
  - No table joins or inheritance exists in the database schema
  - Inheritance only exists in the Java object model



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2. In superclass, remove the annotations:
    1. **`@Entity`**
    2. **`@Table`**
    3. **`@Inheritance`**

3. In subclasses, use normal Hibernate annotation: **`@Entity`**

Annotation for Inheritance

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Annotation	Description

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`@MappedSuperclass`	**Designates a class whose mapping is applied to entities that inherit from it.** **A mapped superclass has no separate table defined for it.**

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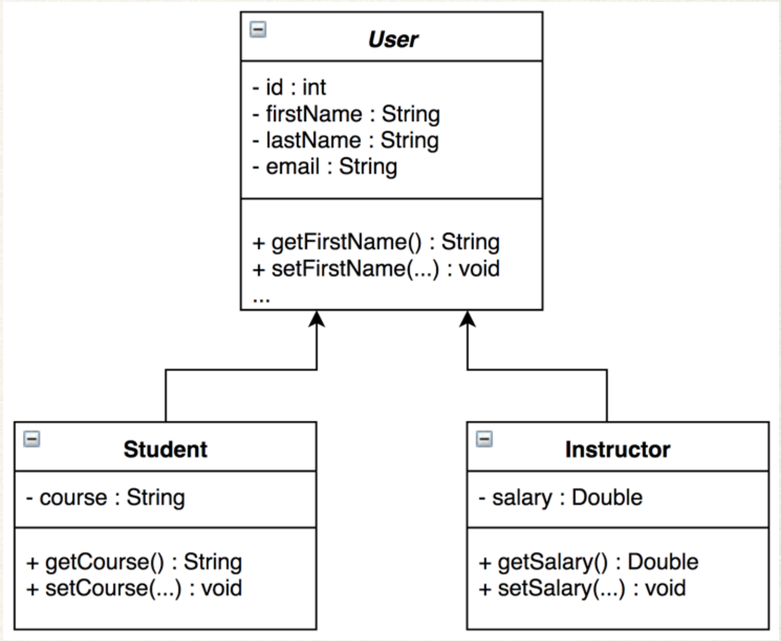

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```
@MappedSuperclass
public abstract class User {

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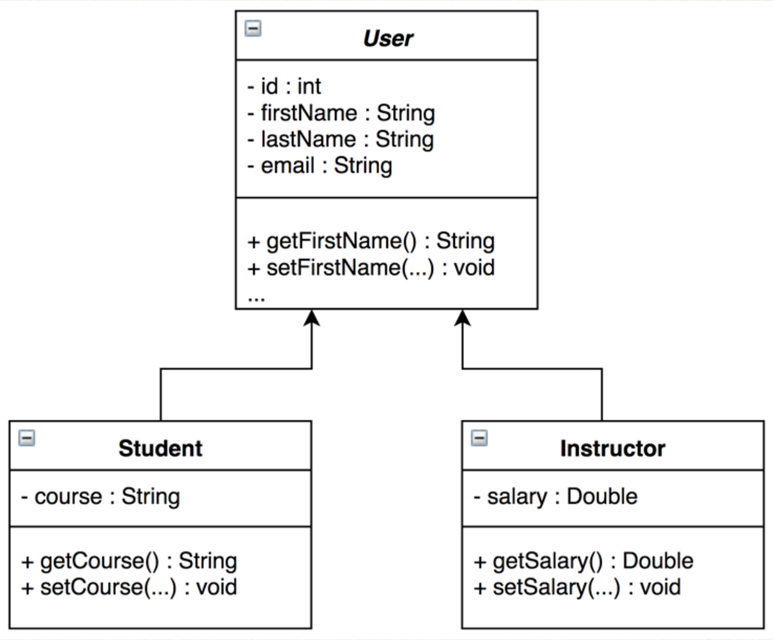

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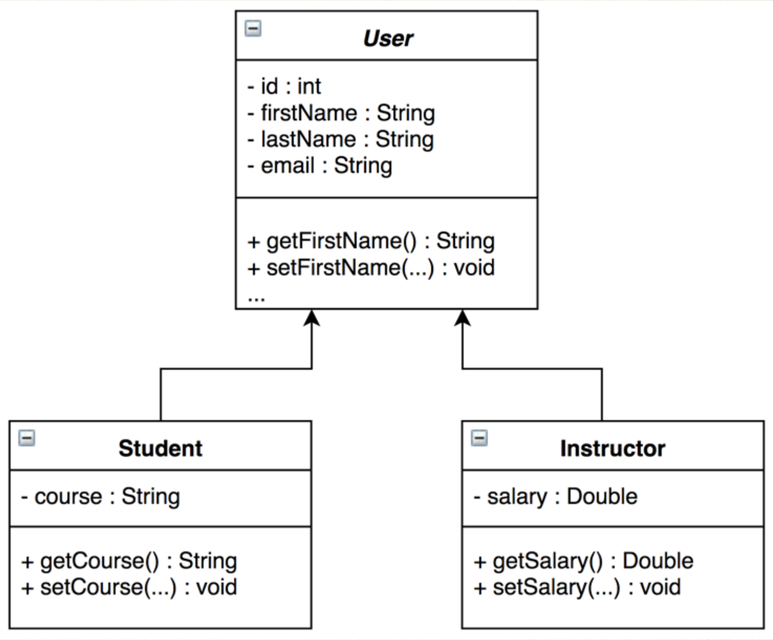

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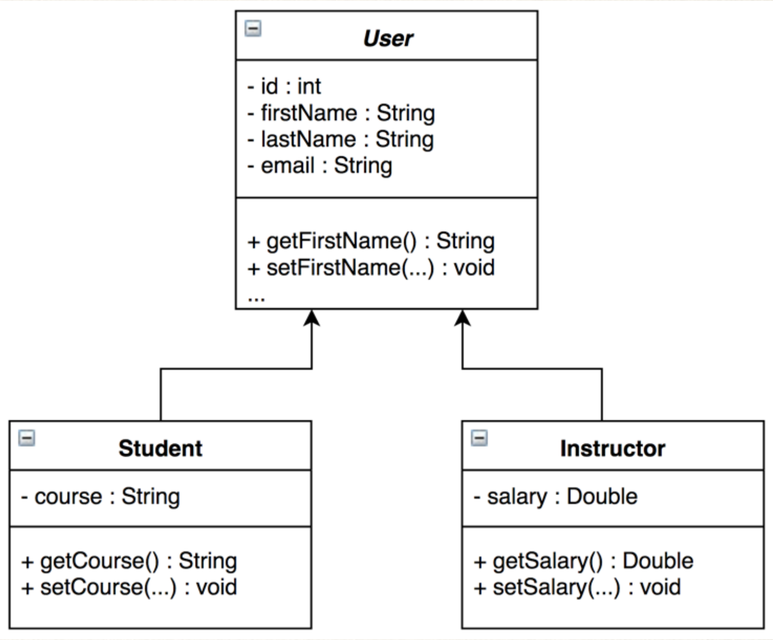

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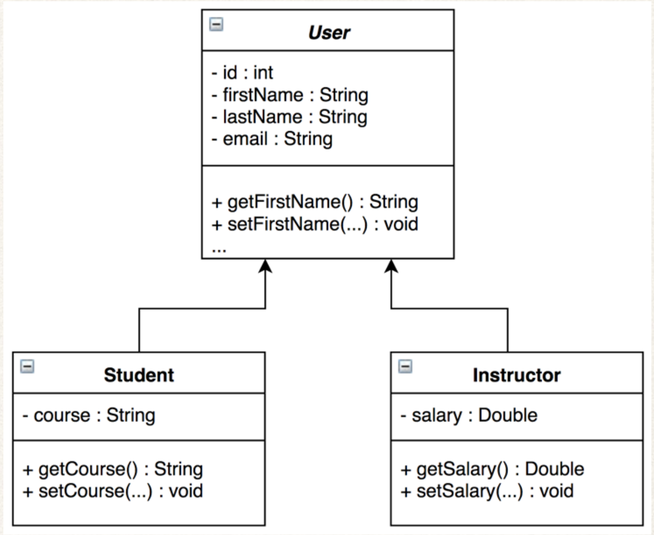

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@Entity
public class Student extends User {
  ...
}
```

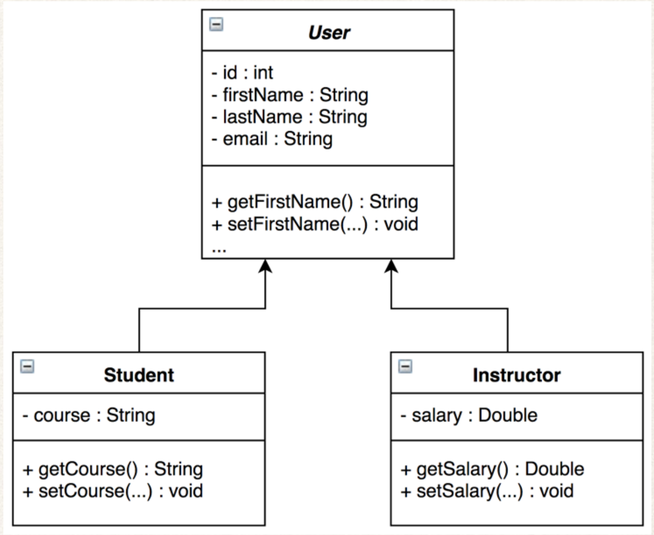

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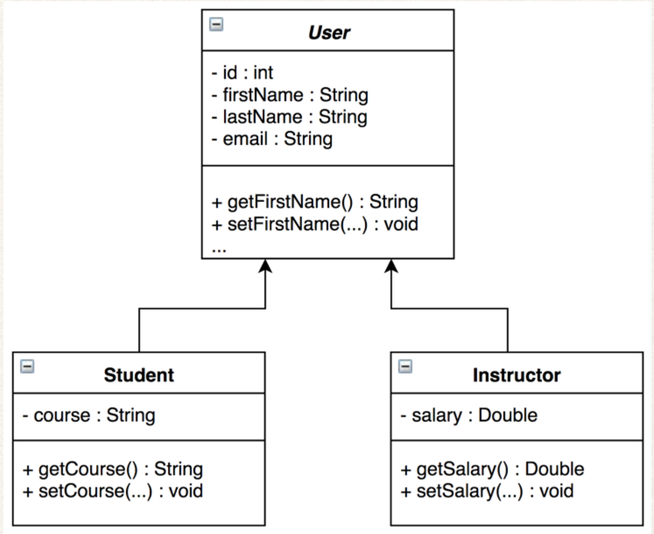


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@Entity
public class Instructor extends User {
  ...
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```

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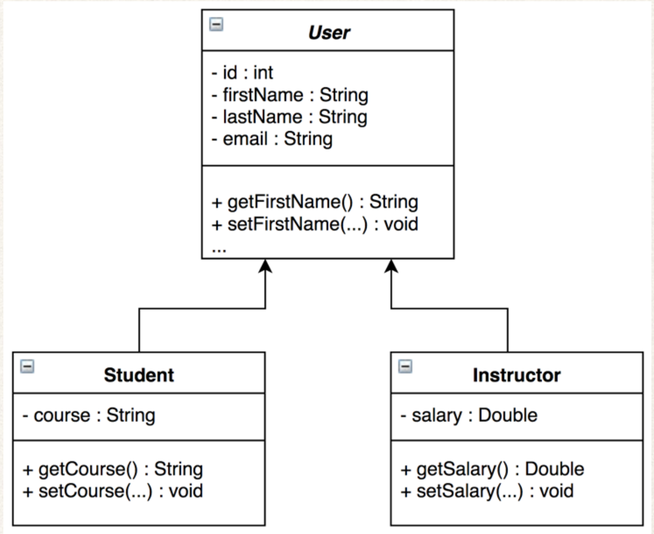


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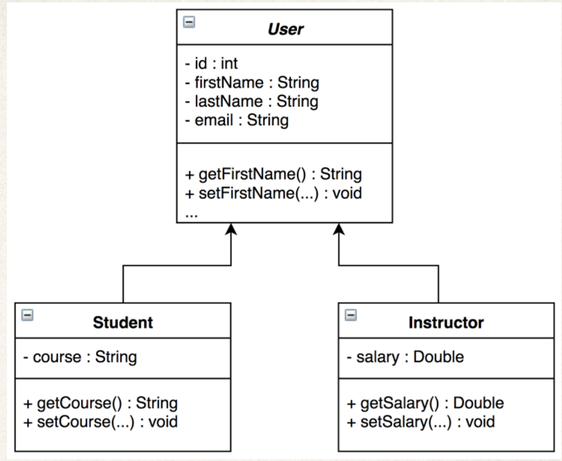
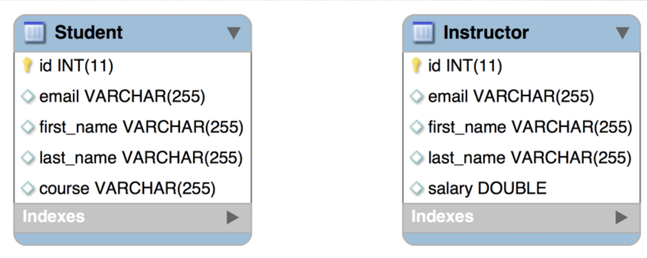
Can also customize with @Table, @Column etc…

Run the App





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Console output

```
Hibernate: insert into Student (email, first_name, last_name, course) values (?, ?, ?, ?)
Hibernate: insert into Instructor (email, first_name, last_name, salary) values (?, ?, ?, ?)
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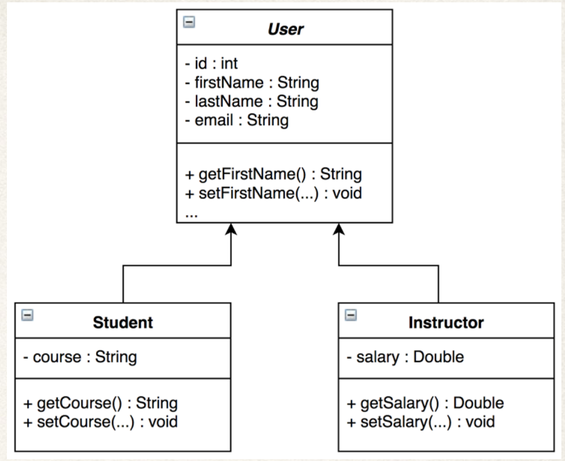

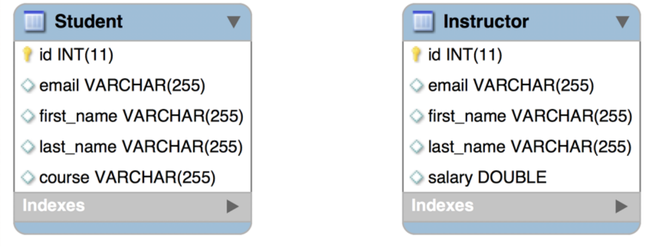

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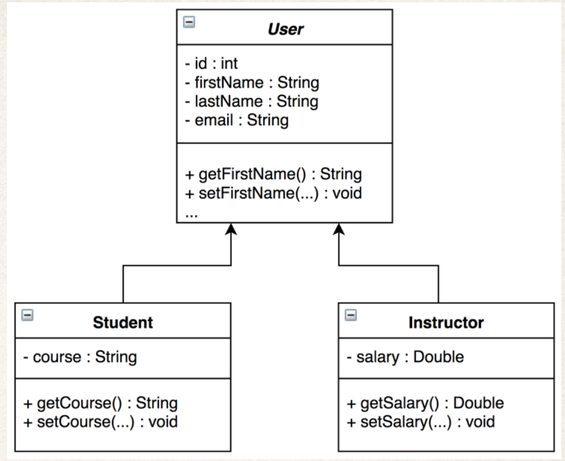
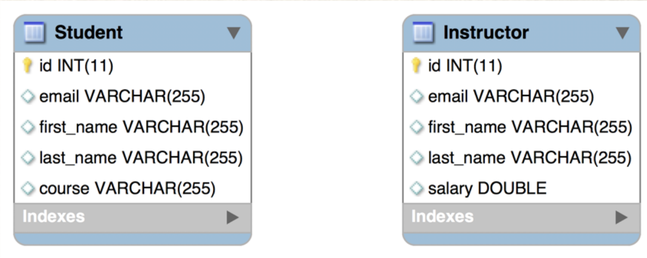


Table: Student

id	email	first_name	last_name	course
1	mary@luv2code.com	Mary	Public	Hibernate



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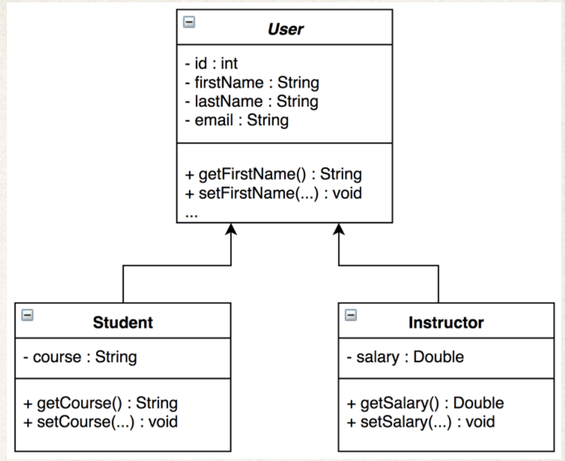

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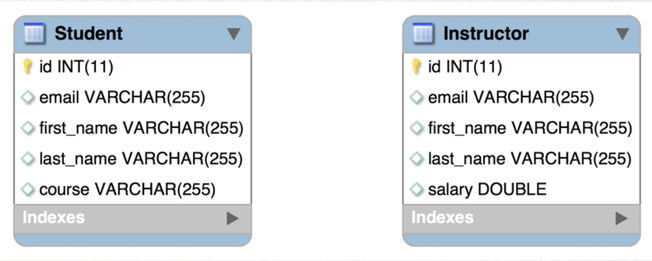
id	email	first_name	last_name	course
1	mary@luv2code.com	Mary	Public	Hibernate

Table: Instructor

id	email	first_name	last_name	salary
1	john@luv2code.com	John	Doe	20000



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    - Requires manual HQL coding
    - May result in slower performance (results in many joins)