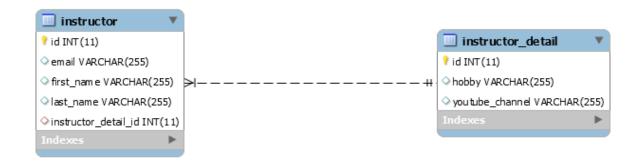
JPA/Hibernate One to One Mapping Annotation Example



```
public class Instructor {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "id")
    private int id;

    @Column(name = "first_name")
    private String firstName;

    @Column(name = "last_name")
    private String lastName;

    @Column(name = "email")
    private String email;

    @OneToOne(cascade = CascadeType.ALL)
    @JoinColumn(name = "instructor_detail_id")
    private InstructorDetail instructorDetail;
```

```
public class InstructorDetail {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "id")
    private int id;

@Column(name = "youtube_channel")
    private String youtubeChannel;

@Column(name = "hobby")
    private String hobby
```

JPA/Hibernate One to One Bidirectional Mapping Annotation Example



```
public class Instructor {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "id")
    private int id;

    @Column(name = "first_name")
    private String firstName;

    @Column(name = "last_name")
    private String lastName;

    @Column(name = "email")
    private String email;

    @OneToOne(cascade = CascadeType.ALL, mappedBy = "instructor", fetch = FetchType.LAZY)
    private InstructorDetail instructorDetail
```

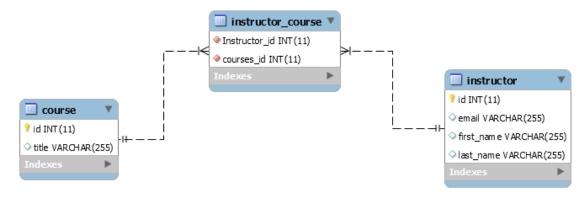
```
public class InstructorDetail {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "id")
    private int id;

@Column(name = "youtube_channel")
    private String youtubeChannel;

@Column(name = "hobby")
    private String hobby;

@OneToOne(fetch = FetchType.LAZY)
    @JoinColumn(name = "instructor_id")
    private Instructor instructor;
```

JPA / Hibernate One to Many Unidirectional Mapping Example



```
public class Instructor {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "id")
    private int id;

    @Column(name = "first_name")
    private String firstName;

    @Column(name = "last_name")
    private String lastName;

    @Column(name = "email")
    private String email;

    @OneToMany(cascade = CascadeType.ALL)
    private List < Course > courses = new ArrayList < Course > ();
```

```
public class Course {
  @Id
  @GeneratedValue(strategy = GenerationType.IDENTITY)
  @Column(name = "id")
  private int id;
  @Column(name = "title")
  private String title;
```

JPA/Hibernate One to Many Bidirectional Mapping Example



```
public class Instructor {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "id")
    private int id;

@Column(name = "first_name")
    private String firstName;

@Column(name = "last_name")
    private String lastName;

@Column(name = "email")
    private String email;

@OneToMany(mappedBy = "instructor", cascade = { CascadeType.PERSIST, CascadeType.MERGE, CascadeType.DETACH, CascadeType.REFRESH })
    private List<Course> courses;
```

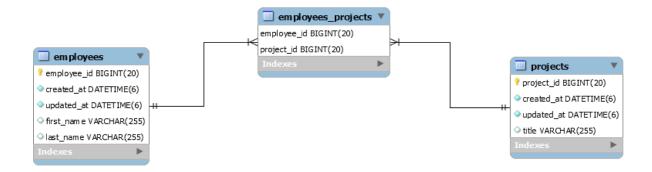
```
public class Course {

@Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "id")
    private int id;

@Column(name = "title")
    private String title;

@ManyToOne(cascade = CascadeType.ALL)
    @JoinColumn(name = "instructor_id")
    private Instructor instructor;
```

Hibernate Many to Many Annotation Mapping Example



```
public class Employee {
    private static final long serialVersionUID = 1L;
    @Id
    @Column(name = "employee_id")
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long employeeId;
    @Column(name = "first_name")
    private String firstName;
   @Column(name = "last name")
    private String lastName;
   @ManyToMany(cascade = {
        CascadeType.ALL
    })
    @JoinTable(
        name = "employees_projects",
        joinColumns = {
            @JoinColumn(name = "employee id")
        inverseJoinColumns = {
            @JoinColumn(name = "project_id")
    Set < Project > projects = new HashSet < Project > ();
```

```
public class Project {

private static final long serialVersionUID = 1L;

@Id
    @Column(name = "project_id")
    @GeneratedValue
    private Long projectId;

@Column(name = "title")
    private String title;

@ManyToMany(mappedBy = "projects", cascade = { CascadeType.ALL })
    private Set<Employee> employees = new HashSet<Employee>();
```