

COMPTE RENDU 4



ABDERRAHIM EL  
AZHARI

# TP4 : JEE

```
package com.example.TP_JPA.Entities;

import ...

@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
public class Professor {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(length = 30, nullable = false)
    private String fullName;
    @Temporal(TemporalType.DATE) @CreationTimestamp
    private Date assignmentDate;
    @OneToOne
    private Course course;
}
```

```
package com.example.TP_JPA.Entities;

import ...

@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
public class Professor {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(length = 30, nullable = false)
    private String fullName;
    @Temporal(TemporalType.DATE) @CreationTimestamp
    private Date assignmentDate;
    @OneToOne
    private Course course;
}
```

```
package com.example.TP_JPA.Entities;

import ...

@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
public class Course {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(length = 25, nullable = false, unique = false)
    private String title;
    private String description;
    private int timing;
    @OneToOne(mappedBy = "course")
    private Professor professor;
    @OneToMany
    private Collection<Session> sessions;
}
```

```
package com.example.firstapp;

import ...

// usage
@SpringBootApplication
public class FirstAppApplication implements CommandLineRunner {

    // 13 usages
    @Autowired
    private StudentRepository studentRepository;

    public static void main(String[] args) { SpringApplication.run(FirstAppApplication.class, args); }

    @Override
    public void run(String... args) throws Exception {
        System.out.println("***** Insertion *****");
        studentRepository.save(new Student(null, "A1","Amine",new Date(),true,null,null));
        studentRepository.save(new Student(null, "A2","Ilyas",new Date(),true,null,null));
        studentRepository.save(new Student(null, "A3","Saad",new Date(),true,null,null));
        studentRepository.save(new Student(null, "A4","Arij",new Date(),true,null,null));
        studentRepository.save(new Student(null, "A5","Lina",new Date(),true,null,null));
        System.out.println("***** Inserted rows *****");
        System.out.println("Count : "+studentRepository.count());
        System.out.println("***** Display rows *****");
        List<Student> students = studentRepository.findAll();
        students.forEach(student -> {
            System.out.println(student.toString());
        });
        System.out.println("***** Get Element By ID *****");
        Student student = studentRepository.findById(3).orElse(null);
        System.out.println(student.toString());
        System.out.println("***** Update an Element *****");
        System.out.println("***** Get Element By ID *****");
        Student student = studentRepository.findById(3).orElse(null);
        System.out.println(student.toString());
        System.out.println("***** Update an Element *****");
        student.setRegistrationNumber("S3");
        studentRepository.save(student);
        System.out.println("***** Delete an Element *****");
        studentRepository.delete(student);
        System.out.println("Count : "+studentRepository.count());

        studentRepository.deleteById(5);
        System.out.println("Count : "+studentRepository.count());
    }
}
```