

TUTORIAL 5 ADPAP

LESSON LEARNED

Saya belajar lebih mendalam tentang penggunaan *database* dengan Springboot.

LATIHAN SELECT ALL STUDENTS

Saya mengubah *method* `selectAllStudents` pada *class* `StudentMapper` menjadi seperti ini:

```
@Select("select npm, name, gpa from student")
@Results(value = {
    @Result(property="npm", column="npm"),
    @Result(property="name", column="name"),
    @Result(property="gpa", column="gpa"),
    @Result(property="courses", column = "npm",
        javaType = List.class,
        many = @Many(select="selectCourses"))
})
List<StudentModel> selectAllStudents ();
```

LATIHAN VIEW COURSES

Saya menambahkan *class* `CourseMapper`, `CourseController`, serta `CourseService` dengan isi sebagai berikut:

```
@Mapper
public interface CourseMapper {

    @Select("select id_course, name, credits from course where id_course=#{id_course}")
    @Results(value = {
        @Result(property="id_course", column="id_course"),
        @Result(property="name", column="name"),
        @Result(property="credits", column="credits"),
        @Result(property="students", column = "id_course",
            javaType = List.class,
            many = @Many(select="selectCourseById"))
    })
    CourseModel selectCourse ( @Param ("id_course") String id_course);

    @Select ("select studentcourse.id_course, student.name, student.npm, course.credits " +
        "from studentcourse, student, course " +
        "where studentcourse.id_course=#{id_course} " +
        "AND student.npm=studentcourse.npm AND course.id_course=studentcourse.id_course")
    List <StudentModel> selectCourseById (@Param("id_course") String id_course );
}
```

```
@Controller
public class CourseController {
    @Autowired
    CourseService courseDAO;

    @RequestMapping("/course/view/{id_course}")
    public String viewCourse (Model model,
        @PathVariable(value = "id_course") String id_course)
    {
        CourseModel course = courseDAO.selectCourse (id_course);

        if (course != null) {
            model.addAttribute ("course", course);
            return "course";
        } else {
            return "not-found";
        }
    }
}
```

```
@Service
public class CourseService {

    @Autowired
    private CourseMapper courseMapper;

    public CourseModel selectCourse (String id_course) {
        log.info ("select course by ID {}", id_course);
        return courseMapper.selectCourse (id_course);
    }
}
```