

### Tutorial 3

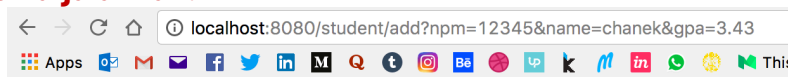
Pada InMemoryStudentService, untuk method selectStudent() Saya melakukan for loop serta if jika npm ditemukan seperti berikut:

```
public StudentModel selectStudent(String npm) {  
    for(int i = 0; i < studentList.size(); i++) {  
        if (studentList.get(i).getNpm().equals(npm)) {  
            return studentList.get(i);  
        }  
    }  
    return null;  
}
```

Pertanyaan 1:

localhost:8080/student/add?npm=12345&name=chanek&gpa=3.43  
apakah hasilnya? Jika error, tuliskan penjelasan Anda.

**Jawab: Berhasil dijalankan.**

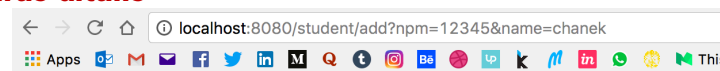


**Data berhasil ditambahkan**

Pertanyaan 2:

localhost:8080/student/add?npm=12345&name=chanek  
apakah hasilnya? Jika error, tuliskan penjelasan Anda

**Jawab: Error. Karena variable gpa pada perintah tersebut tidak tertulis, sedangkan field tersebut harus ditulis**



#### Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

Wed Sep 20 16:02:01 WIB 2017

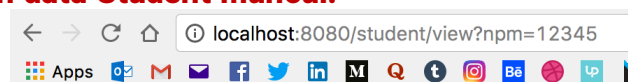
There was an unexpected error (type=Bad Request, status=400).

Required double parameter 'gpa' is not present

Pertanyaan 3:

localhost:8080/student/add?npm=12345&name=chanek&gpa=3.43 lalu buka  
localhost:8080/student/view?npm=12345,  
apakah data Student tersebut muncul? Jika tidak, mengapa?

**Jawab: Berhasil dan data Student muncul.**



**NPM = 12345**

**Name = chanek**

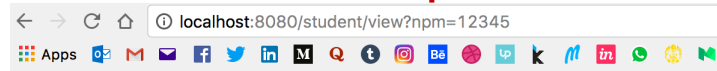
**GPA = 3.43**

Pertanyaan 4:

Coba matikan program dan jalankan kembali serta buka  
localhost:8080/student/view?npm=12345

apakah data Student tersebut muncul? Jika tidak, mengapa?

**Jawab: Tidak muncul, karena data tersebut tidak disimpan pada sebuah database, melainkan pada arraylist di class project tersebut (bersifat temporary). Sehingga ketika project di restart data akan kembali seperti semula**



## Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

Wed Sep 20 16:04:58 WIB 2017

There was an unexpected error (type=Internal Server Error, status=500).  
Exception evaluating SpringEL expression: "student.npm" (view:7)

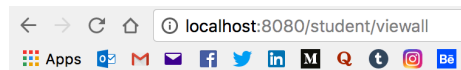
Pertanyaan 5:

localhost:8080/student/add?npm=12345&name=chanek&gpa=3.43 lalu buka

localhost:8080/student/viewall,

apakah data Student tersebut muncul?

**Jawab: Berhasil, dan data Student muncul**



No. 1

NPM = 12345

Name = chanek

GPA = 3.43

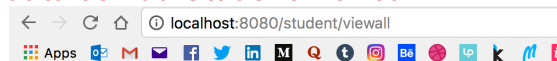
Pertanyaan 6:

Coba tambahkan data Student lainnya dengan NPM yang berbeda, lalu buka

localhost:8080/student/viewall,

Apakah semua data Student muncul?

**Jawab: Berhasil, dan data semua Student muncul**



No. 1

NPM = 12345

Name = chanek

GPA = 3.43

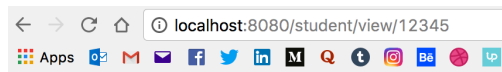
No. 2

NPM = 123456

Name = yey

GPA = 3.43

Latihan:  
Pada Latihan nomor 1



NPM = 12345

Name = chanek

GPA = 3.43

Dengan menambahkan sebuah method baru berupa viewPath yang menerima masukan npm setelah view/{npm} sehingga siswa berNPM dapat diakses melalui url setelah slash "/"

Untuk nomer 2, untuk mengubah class menjadi sesuai yang diinginkan oleh soal, maka Saya menambahkan 3 method, pada StudentService, InMemoryStudentService, serta StudentController. Menjadi seperti berikut:

```
public class StudentController {
    private final StudentService studentService;

    public StudentController() {
        studentService = new InMemoryStudentService();
    }

    @RequestMapping("/student/add")
    public String add(@RequestParam(value = "npm", required = true) String npm,
        @RequestParam(value = "name", required = true) String name,
        @RequestParam(value = "gpa", required = true) double gpa) {
        StudentModel student = new StudentModel(npm, name, gpa);
        studentService.addStudent(student);
        return "add";
    }

    @RequestMapping(value = {"student/delete/{npm}"})
    public String delete(Model model, @PathVariable Optional<String> npm) {
        StudentModel student = studentService.selectStudent(npm.get());
        if(student == null) {
            return "errorview";
        }
        studentService.deleteStudent(student);
        return "delete";
    }

    @RequestMapping("/student/view")
    public String view(Model model, @RequestParam(value = "npm", required =
true) String npm) {
        StudentModel student = studentService.selectStudent(npm);
        model.addAttribute("student", student);
        return "view";
    }

    @RequestMapping("/student/viewall")
```

```
public String viewAll(Model model) {
    List<StudentModel> students = studentService.selectAllStudents();
    model.addAttribute("students", students);
    return "viewAll";
}

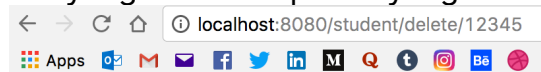
@RequestMapping(value = {"student/view/{npm}"})
public String view(Model model, @PathVariable Optional<String> npm) {
    StudentModel student = studentService.selectStudent(npm.get());
    if(student == null) {
        return "errorview";
    }
    model.addAttribute("student", student);
    return "view";
}
}
```

Serta menambahkan beberapa method baru pada interface StudentService:  
`void deleteStudent (StudentModel student);`

serta InMemoryStudentService

```
public void deleteStudent(StudentModel student) {
    studentList.remove(student);
}
```

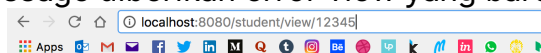
Dan juga delete.html baru yang berisikan pesan yang telah dihapus



**Data berhasil dihapus**

```
<html>
<head>
    <title> Delete </title>
</head>
<body>
    <h2>Data berhasil dihapus</h2>
</body>
</html>
```

Untuk setiap error message diberikan error view yang baru menjadi:



**Whitelabel Error Page**

This application has no explicit mapping for /error, so you are seeing this as a fallback.

Wed Sep 20 17:06:49 WIB 2017  
There was an unexpected error (type=Internal Server Error, status=500).  
Could not parse as each: "NPM kosong atau tidak ditemukan." (errorview:7)

```
<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
<head>
    <title>Error</title>
</head>
<body>
<div th:each="'NPM kosong atau tidak ditemukan.'">
<hr/>
</div>
</body>
</html>
```