

# Tutorial 7

## Service producer

<http://localhost:8080/rest/student/view/123>

← → ↻ ⓘ localhost:8080/rest/student/view/123

```
{ "npm": "123", "name": "Channek", "gpa": 4.0, "courses": [ { "idCourse": null, "name": "MPKT", "credits": 6, "students": null } ] }
```

### String parse

```
{
  "npm": "123",
  "name": "Channek",
  "gpa": 4.0,
  "courses": [
    {
      "idCourse": null,
      "name": "MPKT",
      "credits": 6,
      "students": null
    }
  ]
}
```

## Latihan

1. **Latihan 1:** Buatlah *service* untuk mengembalikan seluruh student yang ada di basis data. *Service* ini mirip seperti *method* `viewAll` di *Web Controller*. *Service* tersebut di-mapping ke `/rest/student/viewall`. Contoh tampilan keluarannya:

<http://localhost:8080/rest/student/viewall>

← → ↻ ⓘ localhost:8080/rest/student/viewall

```
[ { "npm": "123", "name": "Channek", "gpa": 4.0, "courses": [ { "idCourse": null, "name": "MPKT", "credits": 6, "students": null } ] }, { "npm": "124", "name": "Channek Jr.", "gpa": 3.0, "courses": [ { "idCourse": null, "name": "PSP", "credits": 4, "students": null }, { "idCourse": null, "name": "SDA", "credits": 3, "students": null } ] } ]
```

### String parse

```
[
  {
    "npm": "123",
    "name": "Channek",
    "gpa": 4.0,
    "courses": [
      {
        "idCourse": null,
        "name": "MPKT",
        "credits": 6,
        "students": null
      }
    ]
  },
  {
    "npm": "124",
    "name": "Channek Jr.",
    "gpa": 3.0,
    "courses": [
      {
        "idCourse": null,
        "name": "PSP",
        "credits": 4,
        "students": null
      },
      {
        "idCourse": null,
        "name": "SDA",
        "credits": 3,
        "students": null
      }
    ]
  }
]
```

```
{
  "npm": "124",
  "name": "Channek Jr.",
  "gpa": 3.0,
  "courses": [
    {
      "idCourse": null,
      "name": "PSP",
      "credits": 4,
      "students": null
    },
    {
      "idCourse": null,
      "name": "SDA",
      "credits": 3,
      "students": null
    }
  ]
}
```