

The Problem

SSYS team is growing every month and now we need to have some application to manage employee's information and reports. As any application written at SSYS, it must have an API to allow integrations.

The Solution

Create the "SSYS Employee Manager" app, an API that must have:

- API with employees CRUD:
 - GET: /employees/ (*employee list*)
 - POST: /employees/ (*employee create*)
 - UPDATE /employees/ID/ (*employee update*)
 - DELETE /employees/ID/ (*employee delete*)
 - GET /employees/ID/ (*employee detail*)
- API with reports:
 - GET /reports/employees/salary/ (*salary report*)
 - GET /reports/employees/age/ (*age report*)
- Persist data in a database
- Use authentication to access

Endpoint to employee list:

Request

```
curl -H "Content-Type: application/json" localhost:8000/employees/
```

Response

```
[
  {
    "id": "1",
    "name": "Anakin Skywalker",
    "email": "skywalker@ssys.com.br",
    "department": "Architecture",
    "salary": "4000.00",
    "birth_date": "01-01-1983"},
  {
    "id": "2",
    "name": "Obi-Wan Kenobi",
    "email": "kenobi@ssys.com.br",
    "department": "Back-End",
    "salary": "3000.00",
    "birth_date": "01-01-1977"},
  {
    "id": "3",
    "name": "Leia Organa",
    "email": "organa@ssys.com.br",
    "department": "DevOps",
    "salary": "5000.00",
    "birth_date": "01-01-1980"
  }
]
```

Endpoint to age range report:

Request

```
curl -H 'Content-Type: application/json' localhost:8000/reports/employees/age/
```

Response

```
{
  "younger": {
    "id": "1",
    "name": "Anakin Skywalker",
    "email": "skywalker@ssys.com.br",
    "department": "Architecture",
    "salary": "4000.00",
    "birth_date": "01-01-1983"},
  "older": {
    "id": "2",
    "name": "Obi-Wan Kenobi",
    "email": "kenobi@ssys.com.br",
    "department": "Back-End",
    "salary": "3000.00",
    "birth_date": "01-01-1977"},
  "average": "40.00"
}
```

Endpoint to salary range report:

Request

```
curl -H 'Content-Type: application/json' localhost:8000/reports/employees/salary/
```

Response

```
{
  "lowest ": {
    "id": "2",
    "name": "Obi-Wan Kenobi",
    "email": "kenobi@ssys.com.br",
    "department": "Back-End",
    "salary": "3000.00",
    "birth_date": "01-01-1977"},
  "highest": {
    "id": "3",
    "name": "Leia Organa",
    "email": "organa@ssys.com.br",
    "department": "DevOps",
    "salary": "5000.00",
    "birth_date": "01-01-1980"},
  "average": "4000.00"
}
```