

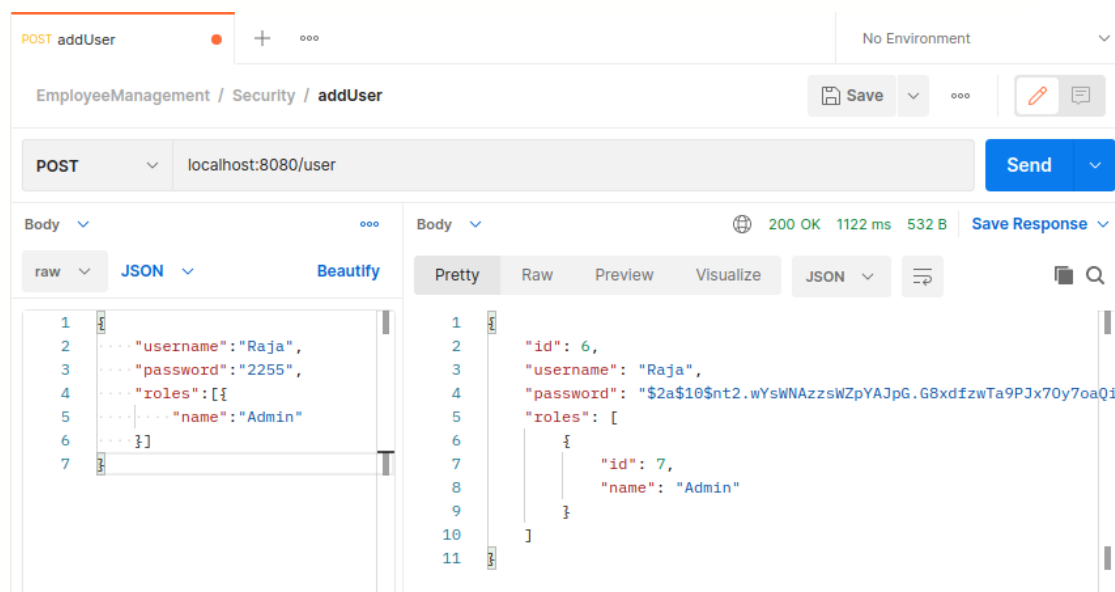
# EMPLOYEE MANAGEMENT RESTFUL API DESIGN

## ABSTRACT:

This is web based Restfull API developed by SpringBoot for Employee Management System.It perform CRUD(Create,Read,Update and Delete) functionality along with Sorting and some concepts of security. It is secure Rest Api. And it has different endpoints for different operations.

## API features:

1. API able to add Users in the db which can be used for authentication purposes.



(Result: Img 1)

2. API able to add employees data in the db if and only if the authenticated user is  
**ADMIN**

**Default admin and user credential details:**

Username : Raja

Password: admin

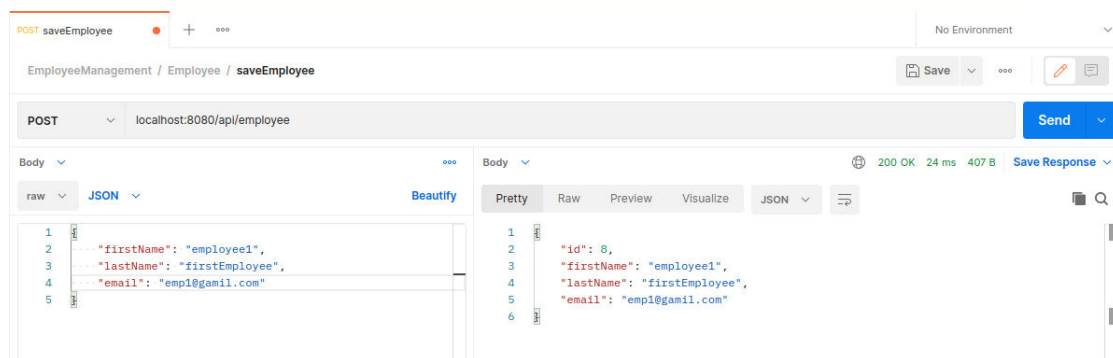
Role: ADMIN and USER

Username: Tinku

Password: user

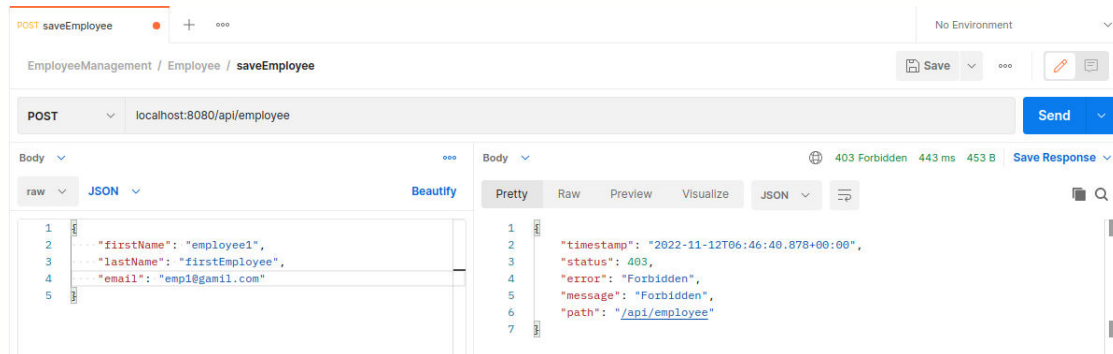
Role: USER

**Adding Employee by ADMIN role:**



*(Result: Img 2.1)*

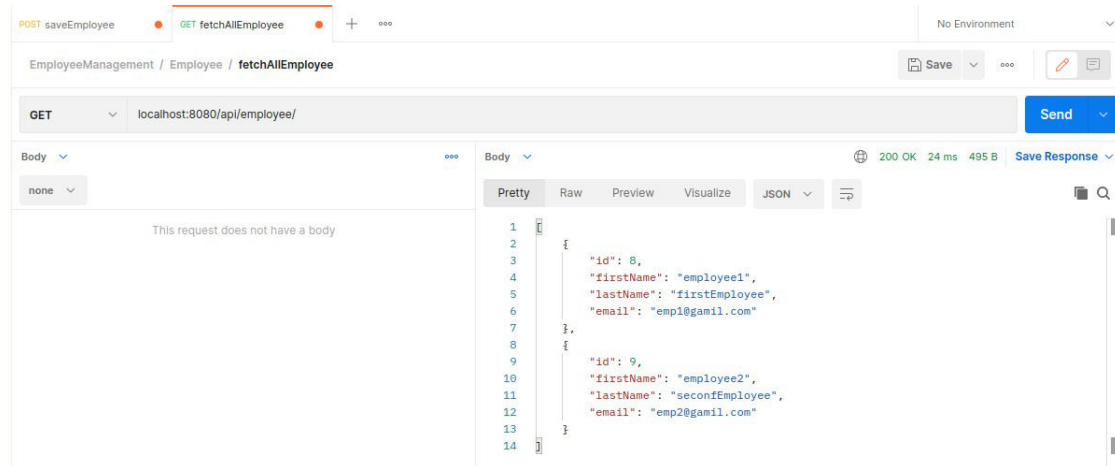
**Adding Employee by USER role:**



*(Result: Img 2.2)*

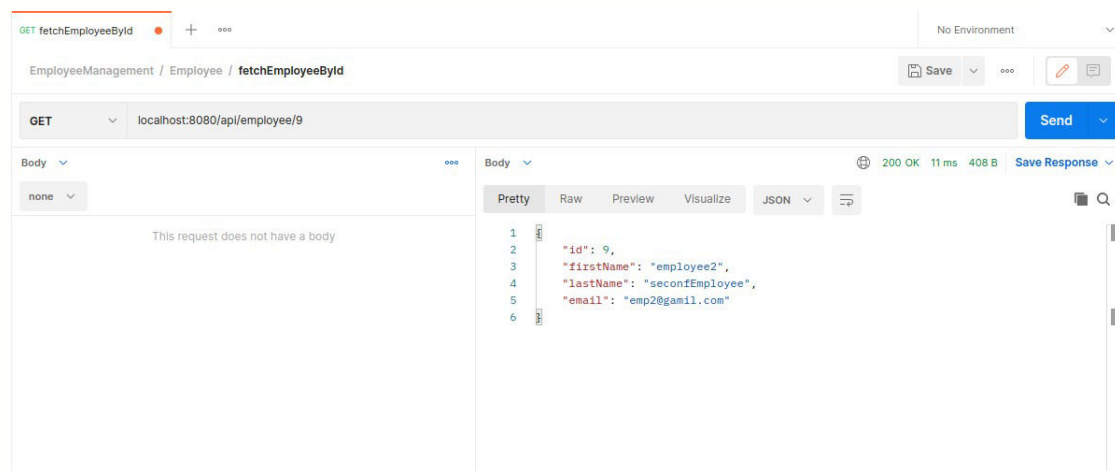
3. API will provide an endpoint to list all the employees stored in the database.

**Note:** Event Role as USER



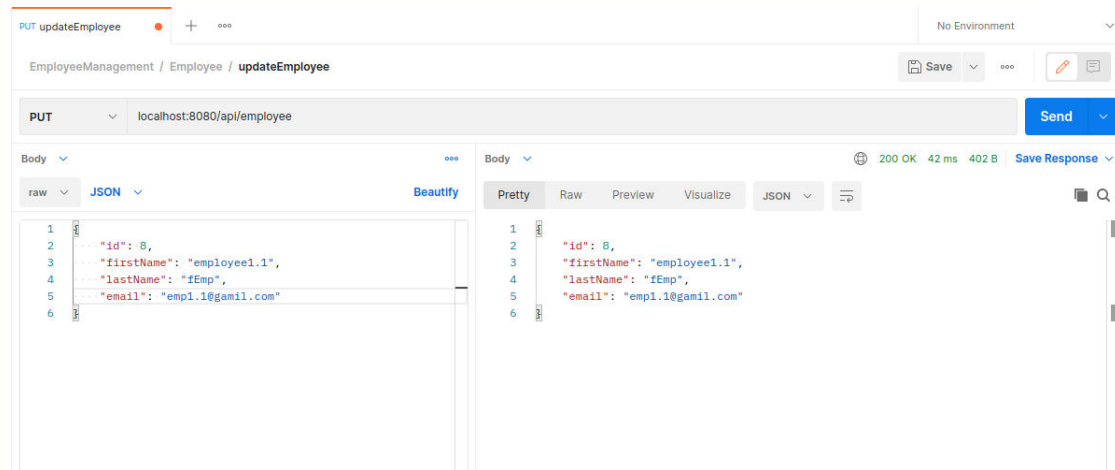
(Result: Img 3)

4. API will provide endpoint to fetch or get an employee record specifically based on the id of that employee.



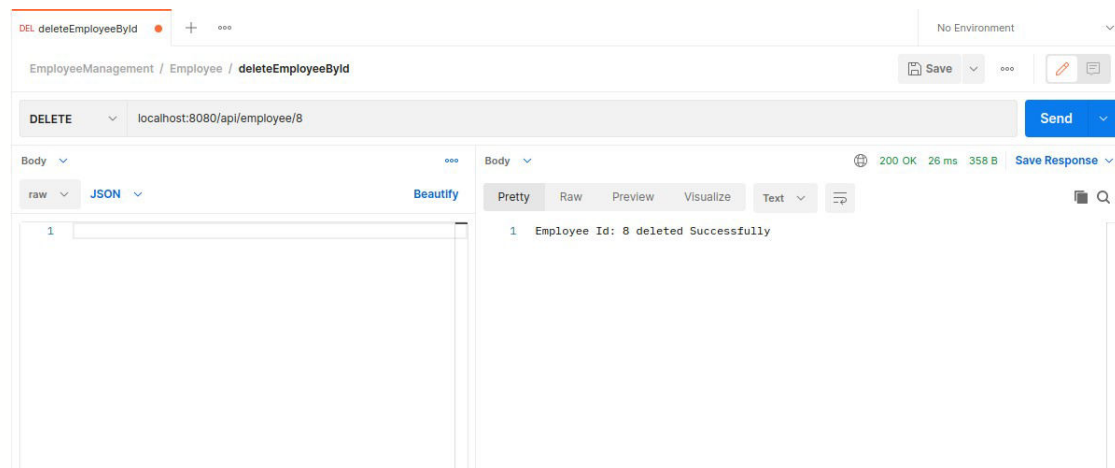
(Result: Img 5)

5. API will provide endpoint to update an existing employee record with the given updated json object.



*(Result: Img 6)*

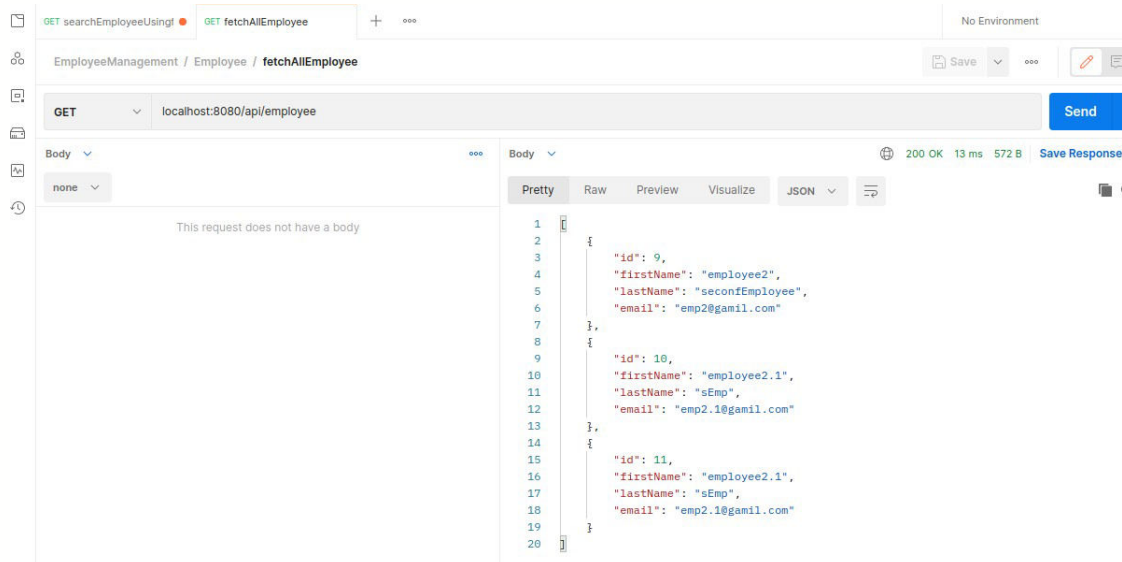
6. API will also provide an endpoint to delete an existing employee record based on the id of the employee



*(Result: Img 7)*

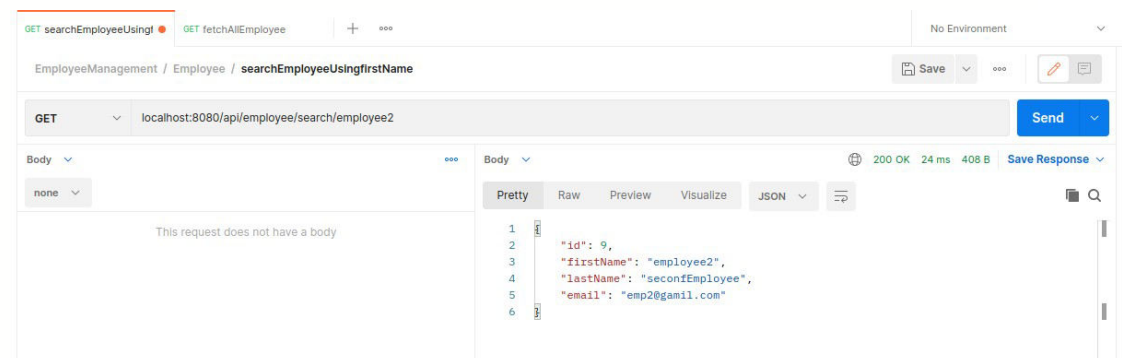
7. API will provide an endpoint to fetch an employee by his/her first name and if found more than one record then list them all

**Note:** query did not return a unique result! Spring JPA team will give update for this in future. As of now we are able to see one record which is matching employee “First Name”).



(Result: *Img 8.1*)

**Note:** We can Get “employee2” except employee 2.1



(Result: *Img 8.2*)

8. API will be able to list all employee records sorted on their first name in either ascending order or descending order .

Descending order:

EmployeeManagement / Employee / customOrderByFirstName

GET localhost:8080/api/employee/sort?order=desc

Params

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/>	order	desc	
Key	Value	Description	

Body

```
1 {
2   {
3     "id": 13,
4     "firstName": "Isaac",
5     "lastName": "Newton",
6     "email": "dontknow@gmail.com"
7   },
8   {
9     "id": 12,
10    "firstName": "Abdul",
11    "lastName": "Kalam",
12    "email": "dontknow@gmail.com"
13  }
14 }
```

200 OK 15 ms 481 B Save Response

*(Result: Img 9.1)*

Ascending order:

EmployeeManagement / Employee / customOrderByFirstName

GET localhost:8080/api/employee/sort?order=asc

Params

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/>	order	asc	
Key	Value	Description	

Body

```
1 {
2   {
3     "id": 12,
4     "firstName": "Abdul",
5     "lastName": "Kalam",
6     "email": "dontknow@gmail.com"
7   },
8   {
9     "id": 13,
10    "firstName": "Isaac",
11    "lastName": "Newton",
12    "email": "dontknow@gmail.com"
13  }
14 }
```

200 OK 17 ms 481 B Save Response

*(Result: Img 9.2)*