

## Employee Management REST API Documentation

### Project Overview

This project is a RESTful Employee Management API built using Django REST Framework. It provides secure CRUD operations to manage employees within a company. All endpoints are protected using JWT-based authentication. The API follows REST principles, proper HTTP status codes, pagination, filtering, and validation as per the hiring assignment requirements.

Live Deployed Base URL:

<https://employee-management-f4y3.onrender.com/api/>

### Authentication

POST <https://employee-management-f4y3.onrender.com/api/token/>

Request:

```
{
  "username": "admin",
  "password": "Admin@123"
}
```

Success Response (200 OK):

```
{
  "access": "<jwt_access_token>",
  "refresh": "<jwt_refresh_token>"
}
```

Error Responses:

401 Unauthorized – Invalid credentials

### Employee Endpoints

#### Create Employee

POST <https://employee-management-f4y3.onrender.com/api/employees/>

Request:

```
{
  "name": "Rohan Mehta",
  "email": "rohan.mehta@company.com",
  "department": "Engineering",
}
```

```
"role": "Backend Developer"
}
```

Responses:

201 Created – Employee created successfully

400 Bad Request – Validation error or duplicate email

401 Unauthorized – Token missing or invalid

Response Example:

```
{
  "id": 1,
  "name": "Rohan Mehta",
  "email": "rohan.mehta@company.com",
  "department": "Engineering",
  "role": "Backend Developer",
  "created_at": "2025-01-09T10:30:00Z",
  "updated_at": "2025-01-09T10:30:00Z"
}
```

### List Employees

GET [https://employee-management-](https://employee-management-f4y3.onrender.com/api/employees/?department=Engineering&page=1)

[f4y3.onrender.com/api/employees/?department=Engineering&page=1](https://employee-management-f4y3.onrender.com/api/employees/?department=Engineering&page=1)

Responses:

200 OK – List of employees

401 Unauthorized – Authentication required

Response Example:

```
{
  "count": 1,
  "next": null,
  "previous": null,
  "results": [
    {
      "id": 1,
      "name": "Rohan Mehta",
      "email": "rohan.mehta@company.com",
      "department": "Engineering",
      "role": "Backend Developer"
    }
  ]
}
```

### Retrieve Employee

GET <https://employee-management-f4y3.onrender.com/api/employees/1/>

Responses:

200 OK – Employee details

404 Not Found – Invalid employee ID

### Update Employee

PUT <https://employee-management-f4y3.onrender.com/api/employees/1/>

Request:

```
{  
  "department": "Product Engineering",  
  "role": "Senior Developer"  
}
```

Responses:

200 OK – Updated successfully

400 Bad Request – Validation error

404 Not Found – Invalid employee ID

### Delete Employee

DELETE <https://employee-management-f4y3.onrender.com/api/employees/1/>

Responses:

204 No Content – Deleted successfully

404 Not Found – Invalid employee ID

401 Unauthorized – Authentication required