

# 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-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