# EMPLOYEE MANAGEMENT SYSTEM

### Task:

- 1. Login API (Use any authentication techniques)
  - a. Only an Admin user should be able to access the APIs for Admin and only Employee should be able to access APIs for Employee
- 2. Admin User
  - a. Employee Page:
    - i. Create API
      - 1. Fields: Employee Name, Email, Contact Number, Emergency Contact Number, Address, Position, DOB, Martial status, Blood Group, Job Title, work Location, Date of Joining (use pipe for a particular format), Reporting to, Linked In link, Profile picture
    - ii. List API
      - 1. Functionalities: search, sort
      - 2. Show: Employee id, Employee Name, contact, Email, Designation, Reporting to, Work location
    - iii. Detail API
    - iv. Edit API
      - 1. Fields: Employee Name, Email, Contact Number, Emergency Contact Number, Address, Position, DOB, Martial status, Blood Group, Job Title, work Location, Date of Joining, reporting to, Linked In link, Profile picture
    - v. Delete API
  - b. Leave Page:
    - i. List API to list all employees leave request
      - 1. Filters: list all approved leaves, to list pending approval leaves
      - 2. Fields: Employee Name, Apply date, Nature of leave, first day, last day, number of days
    - ii. API to approve and reject leave request from employees
- 3. Employee User
  - a. API to list leaves of current employee
    - i. Show: Apply date, Nature of leave, first day, last day, number of days
    - ii. Functionalities: search, sort
  - b. Leave application request API:
    - i. Fields: Apply date (auto populate), Nature of leave, first day, last day, number of days
- 4. Logout API

Note: Use proper validations for fields

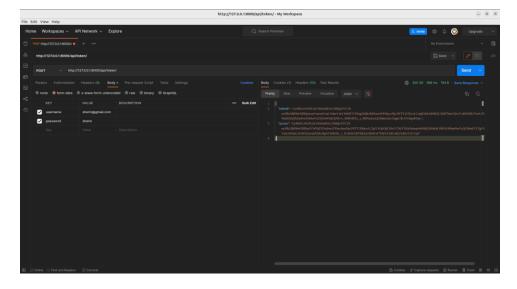
### **Requirements**

- Django
- Djangorestframework
- Markdown
- Djagno\_filter
- Djangorestframework\_simplejwt
- Pillow

### **Token**

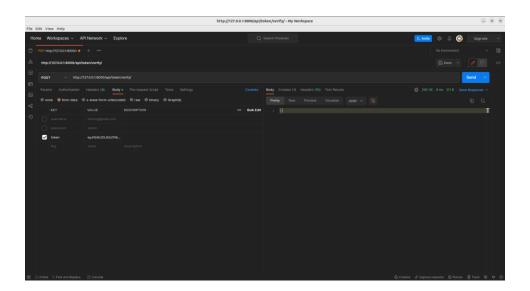
### 1. Token Generation

- http://127.0.0.1:8000/api/token/
- Simple jwt is used for the token generation
- from rest\_framework\_simplejwt.views import TokenObtainPairView
- URL path "path('api/token/',TokenObtainPairView.as\_view()),"
- Enter the registered username and password for generate the token



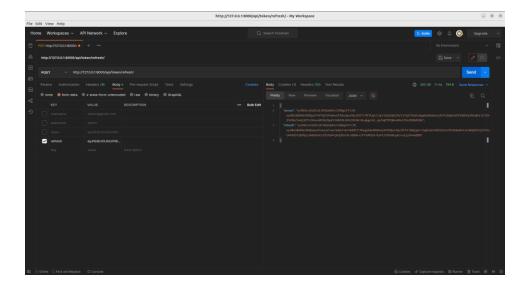
### 2. Token Verification

- http://127.0.0.1:8000/api/token/verify/
- Simple jwt is used for the token generation
- from rest\_framework\_simplejwt.views import TokenRefreshView
- URL path "path ('api/token/refresh/', TokenRefreshView.as view()),"



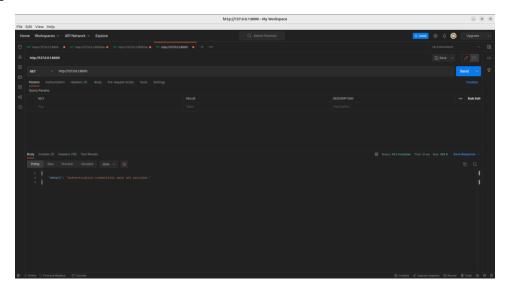
### 3. Token Refresh

- <a href="http://127.0.0.1:8000/api/token/refresh/">http://127.0.0.1:8000/api/token/refresh/</a>
- Simple jwt is used for the token generation
- from rest\_framework\_simplejwt.views import TokenVerifyView
- URL path "path ('api/token/refresh/', TokenVerifyView.as view()),"



# **Login API**

- <a href="http://127.0.0.1:8000/">http://127.0.0.1:8000/</a>
- 'rest\_framework.urls' is used for the authentication

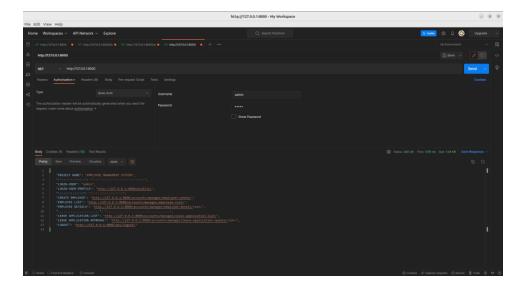


• Enter the correct username and password, it will be redirected to index page

# 1. Admin User

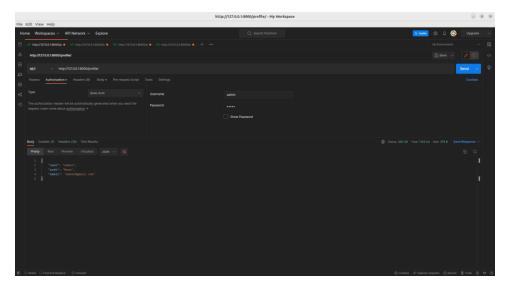
# a. Index Page

• It contains the accessible links for current admin user



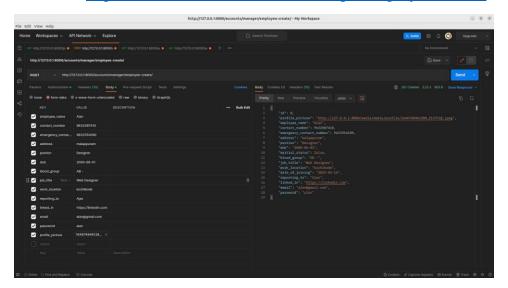
# b. Profile Page

• <u>http://127.0.0.1:8000/profile/</u>



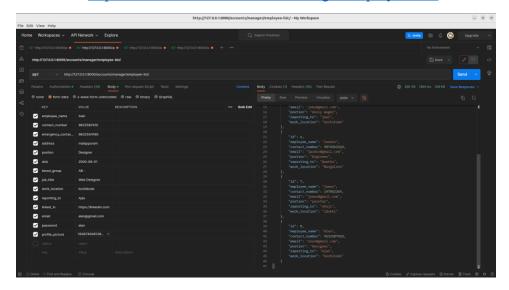
### c. Employee API

- i. Create Employee API
  - http://127.0.0.1:8000/accounts/manager/employee-create/



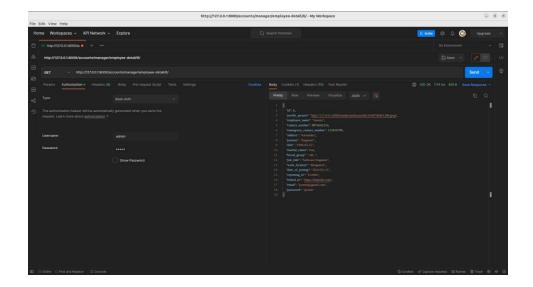
### ii. Employee List API

• http://127.0.0.1:8000/accounts/manager/employee-list/



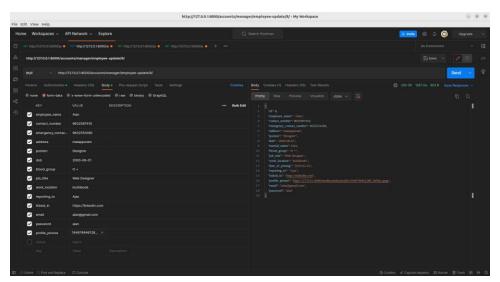
## iii. Employee Detail

• http://127.0.0.1:8000/accounts/manager/employee-detail/6/



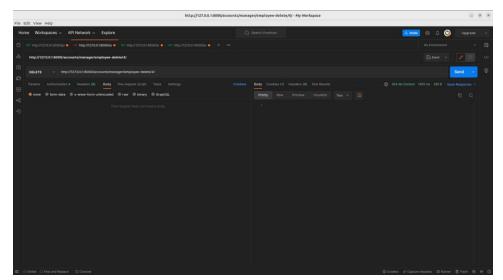
# iv. Edit/Update Employee

• http://127.0.0.1:8000/accounts/manager/employee-update/8/



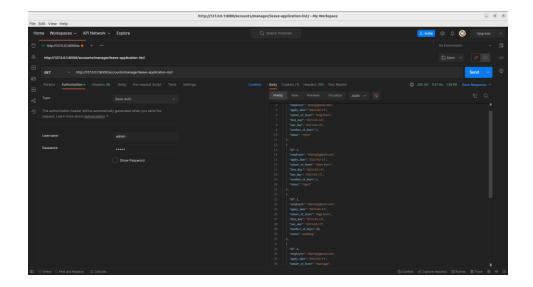
### v. Delete Employee

• http://127.0.0.1:8000/accounts/manager/employee-delete/4/



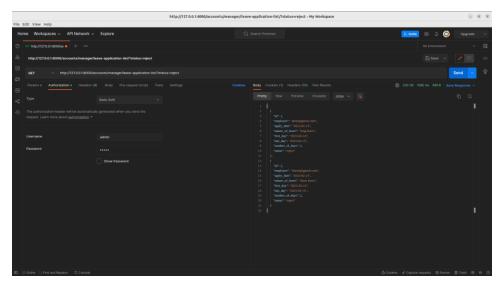
### d. Leave Application List page

- i. List API to list all employees leave request
- ii. <a href="http://127.0.0.1:8000/accounts/manager/leave-application-list/">http://127.0.0.1:8000/accounts/manager/leave-application-list/</a>

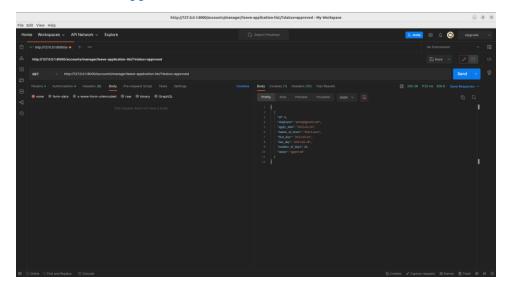


### e. Filtering

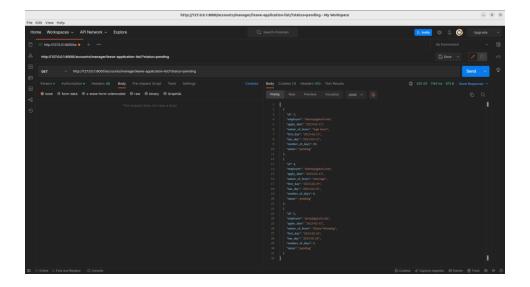
• http://127.0.0.1:8000/accounts/manager/leave-application-list/?status=reject



• http://127.0.0.1:8000/accounts/manager/leave-application-list/?status=approved



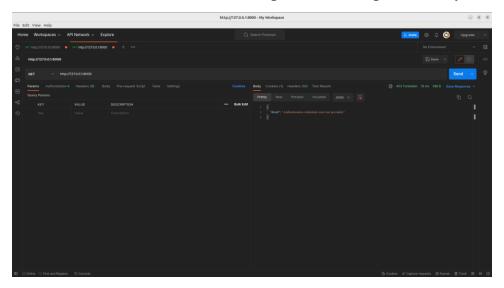
• <a href="http://127.0.0.1:8000/accounts/manager/leave-application-list/?status=pending">http://127.0.0.1:8000/accounts/manager/leave-application-list/?status=pending</a>



# 2. Employee User

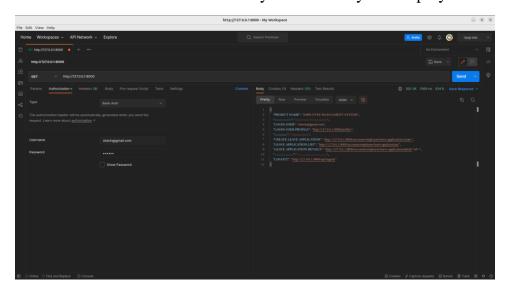
# a. Login

- <u>http://127.0.0.1:8000/</u>
- Use the email as username and password are provided by the admin



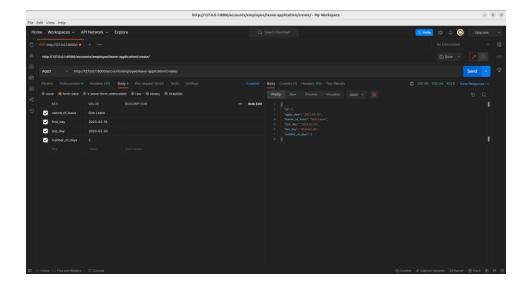
### b. Index Page

• It contains the links that can only accessible by the employee users



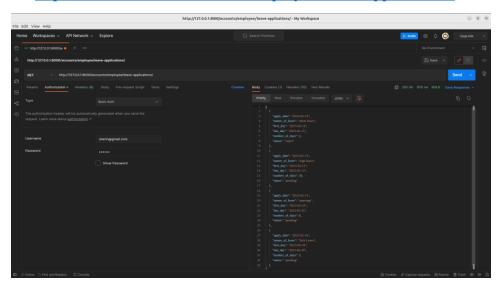
### c. Leave Application Create API

• <u>http://127.0.0.1:8000/accounts/employee/leave-application/create/</u>

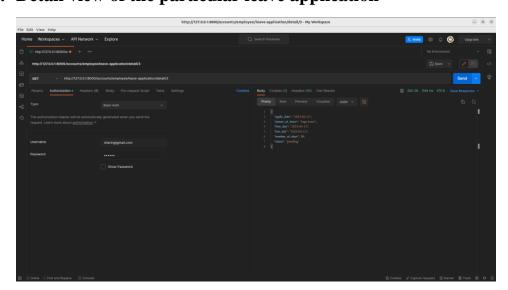


# d. List of all Leave Applications for the Current login user

• http://127.0.0.1:8000/accounts/employee/leave-applications/

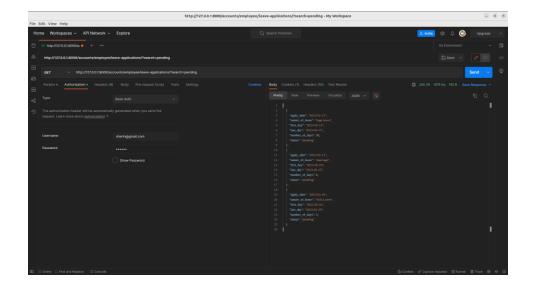


e. Detail view of the particular leave application

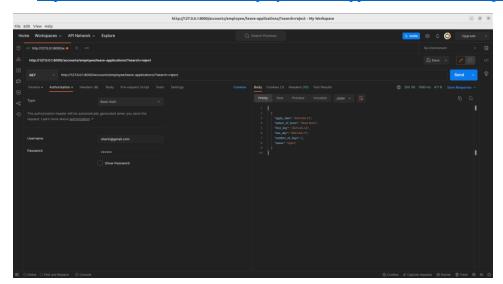


# f. Searching, Sorting

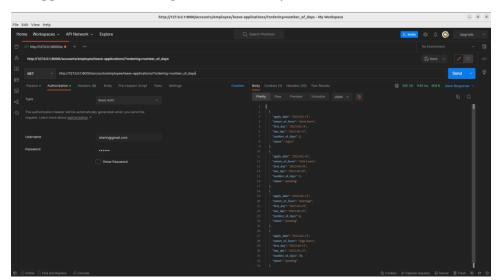
• http://127.0.0.1:8000/accounts/employee/leave-applications/?search=pending



• <a href="http://127.0.0.1:8000/accounts/employee/leave-applications/?search=reject/">http://127.0.0.1:8000/accounts/employee/leave-applications/?search=reject/</a>



• <u>http://127.0.0.1:8000/accounts/employee/leave-applications/?ordering=number\_of\_days</u>



# **Logout API**

• http://127.0.0.1:8000/api/logout/