**Simple Steps to Create a REST API Using Django**

**REST Framework in Win10**

**1st Download & Install : for database software**

[**https://www.postgresql.org/ftp/pgadmin/pgadmin4/v9.1/windows/**](https://www.postgresql.org/ftp/pgadmin/pgadmin4/v9.1/windows/) **- Setup,**

**2nd Create new database, Username & Password**

**3rd Run in Background**

**Download Python Form Office Site**

**https://www.python.org/ftp/python/3.13.2/python-3.13.2-amd64.exe**

**Install File & Restart OS Windows**

**Download VS Code & Install : Open VS Code**

*Run : python –version*

*Run : django-admin –version*

**If Not Present, Then you need to install all packages**

*Run :* pip freeze List Show packages || Not Available then install all packages

*Run :* **pip install -r requirements.txt (if Existing Project then Run important)**

*Run :* pip install django

*Run :* pip install djangorestframework

*Run : pip install django\_rest\_framework*

*Run :* pip install psycopg2

*Run :* python manage.py createsuperuser | **for developer id**

***If Security Error Show Then*** *Run : Set-ExecutionPolicy Unrestricted -Scope Process*

**Create main project Folder (anything name)**

**1st Create Main Project :** *Run :* **django-admin startproject app**

**Cd app**

**2nd Create Project Module or app :** *Run :***python manage.py startapp jwt\_api**

**Under app Folder (api-name-folder or app name)**

*Run : cd* **api-name-folder**

GoTo main app folder decretory, open **setting.py** and goto section config #

from datetime import timedelta # import this library top of the settings.py file

**Application definition- install apps name**

Under add 2 line simple.

  'rest\_framework',

    'rest\_framework\_simplejwt',

    'jwt\_api'

save & exit;

# put on your settings.py file below INSTALLED\_APPS

REST\_FRAMEWORK = {

    'DEFAULT\_PERMISSION\_CLASSES': (

        'rest\_framework.permissions.IsAuthenticated',

    ),

    'DEFAULT\_AUTHENTICATION\_CLASSES': (

        'rest\_framework\_simplejwt.authentication.JWTAuthentication',

    ),

}

SIMPLE\_JWT = {

    'ACCESS\_TOKEN\_LIFETIME': timedelta(minutes=60),

    'SLIDING\_TOKEN\_REFRESH\_LIFETIME': timedelta(days=1),

    'SLIDING\_TOKEN\_LIFETIME': timedelta(days=30),

    'SLIDING\_TOKEN\_REFRESH\_LIFETIME\_LATE\_USER': timedelta(days=1),

    'SLIDING\_TOKEN\_LIFETIME\_LATE\_USER': timedelta(days=30),

}

add save & exit;

After go to database setting: use default

 'ENGINE': 'django.db.backends.postgresql',

        'NAME':'api\_health',

        'USER':'postgres',

        'PASSWORD':'admin',

        'HOST': 'localhost',  # Change if using a remote DB

        'PORT': '5432',  # Default PostgreSQL port

After database credentials add save & exit;

Open **urls.py** And add this, basically api folder root

from rest\_framework\_simplejwt.views import TokenObtainPairView, TokenRefreshView

from django.contrib import admin

from django.urls import path, include

urlpatterns = [

    path('admin/', admin.site.urls),

    path('api/token/', TokenObtainPairView.as\_view(), name='token\_obtain\_pair'),

    path('api/token/refresh/', TokenRefreshView.as\_view(), name='token\_refresh'),

    path('', include('jwt\_api.urls')), # include your app urls.py here

]

After save & exit; All setting are done in main project.

**Now Open Api Folder or app folder**

**Open apps.py and view code**

from django.apps import AppConfig

class JwtApiConfig(AppConfig):

    default\_auto\_field = 'django.db.models.BigAutoField'

    name = 'jwt\_api'

After save & exit;

**open models.py and Create**

from django.db import models

# Create your models here.

class Logincheck(models.Model):

    username=models.CharField(max\_length=50)

    password=models.IntegerField(default=18)

    def \_\_str\_\_(self):

        return self.username

After save & exit;

**open views.py and edit**

from django.shortcuts import render

from rest\_framework.response import Response

from rest\_framework.decorators import api\_view

from .models import Person

from .serializers import PersonSerializer

from rest\_framework import status

from django.db import transaction

# Create your views here.

from django.shortcuts import render

from rest\_framework.views import APIView

from rest\_framework.response import Response

from rest\_framework.permissions import IsAuthenticated

from rest\_framework\_simplejwt.authentication import JWTAuthentication

class Home(APIView):

    authentication\_classes = [JWTAuthentication]

    permission\_classes = [IsAuthenticated]

    def get(self, request):

        content = {'message': 'Working JWT API Token'}

        return Response(content)

After save & exit;

**Create urls.py and edit**

from django.urls import path

from .views import Home

urlpatterns = [

    path('', Home.as\_view()),

]

… After save & exit;

**Open admin.py and edit (if You Want Show in Django Admin Panel, Otherwise)**

from django.contrib import admin

from .models import Person

# Register your models here.

admin.site.register(Person)

After save & exit;

cd app

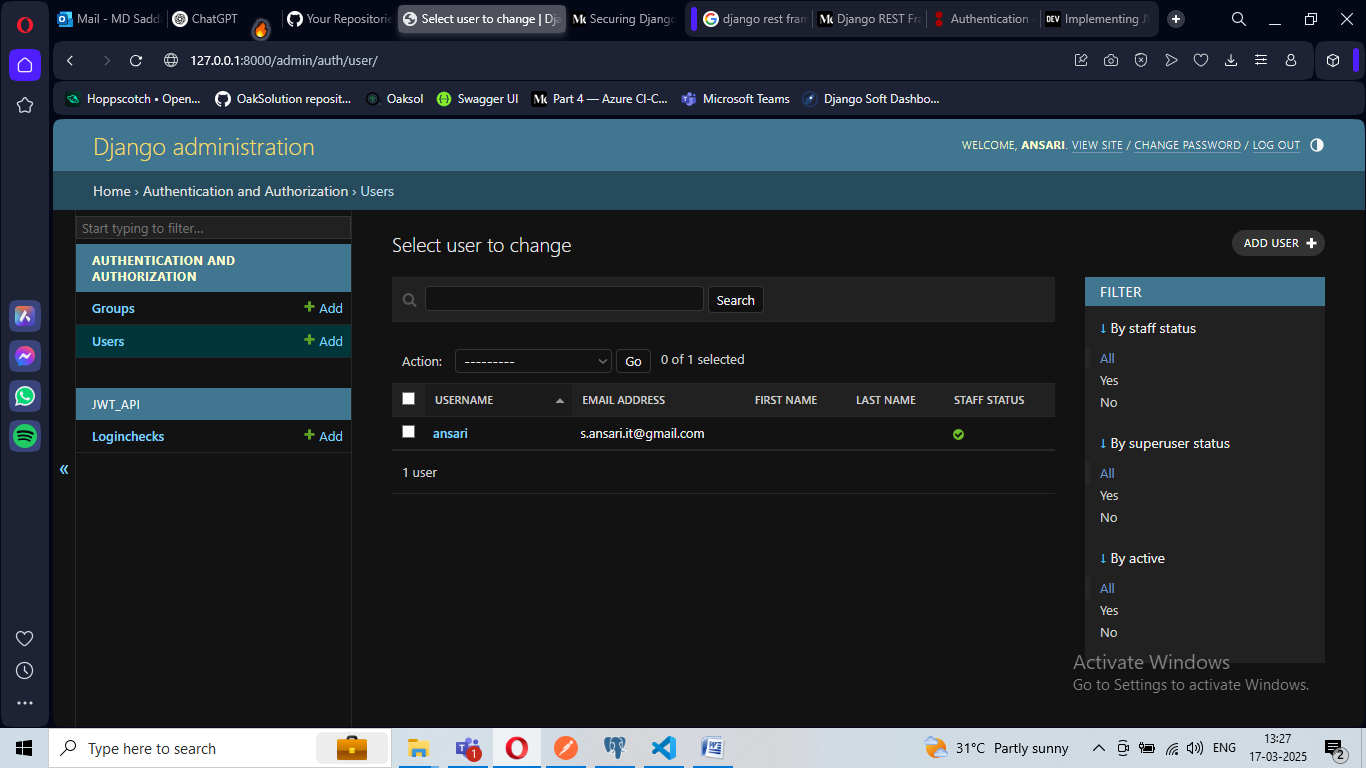
python manage.py makemigrations **every work after**

python manage.py migrate **every work after**

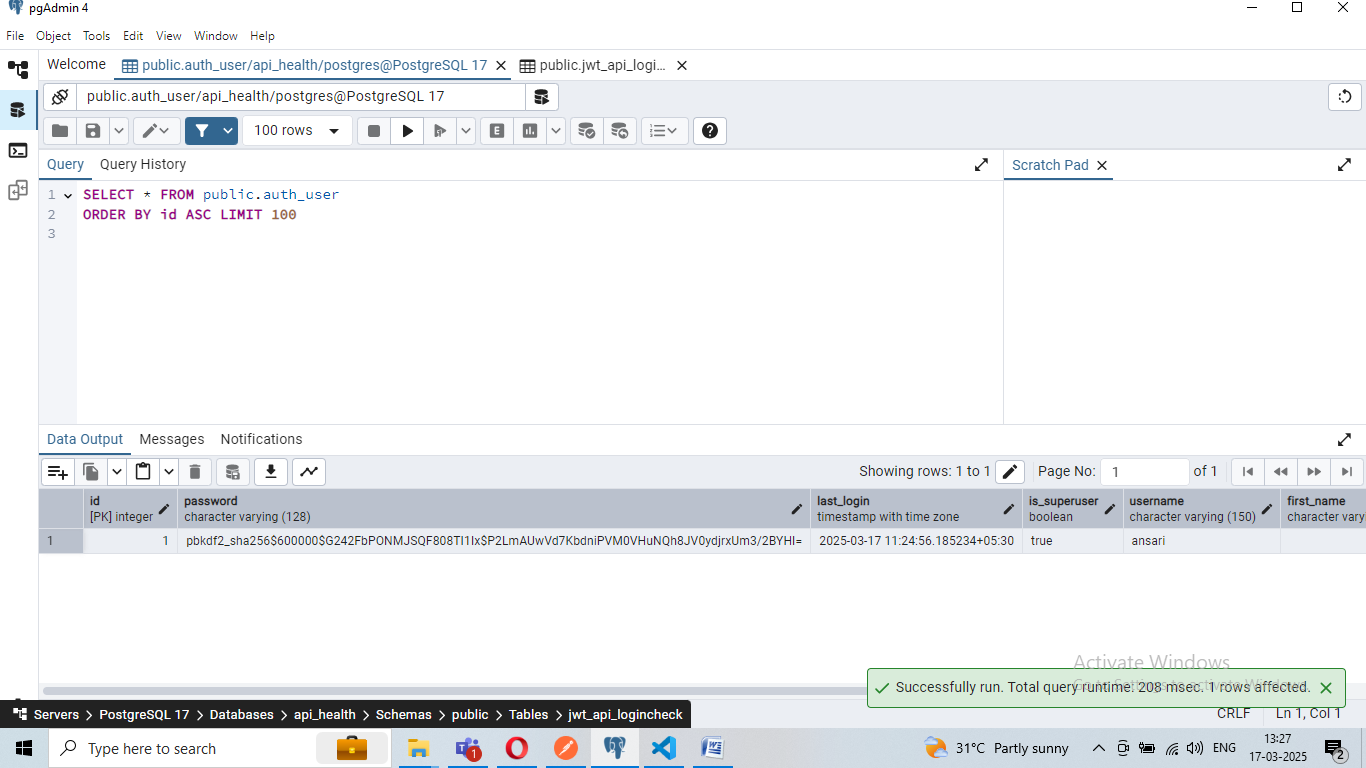
python manage.py runserver 8000 – **Get web address with custom port**

**after run open browser**

**http://127.0.0.1:8000/admin/**

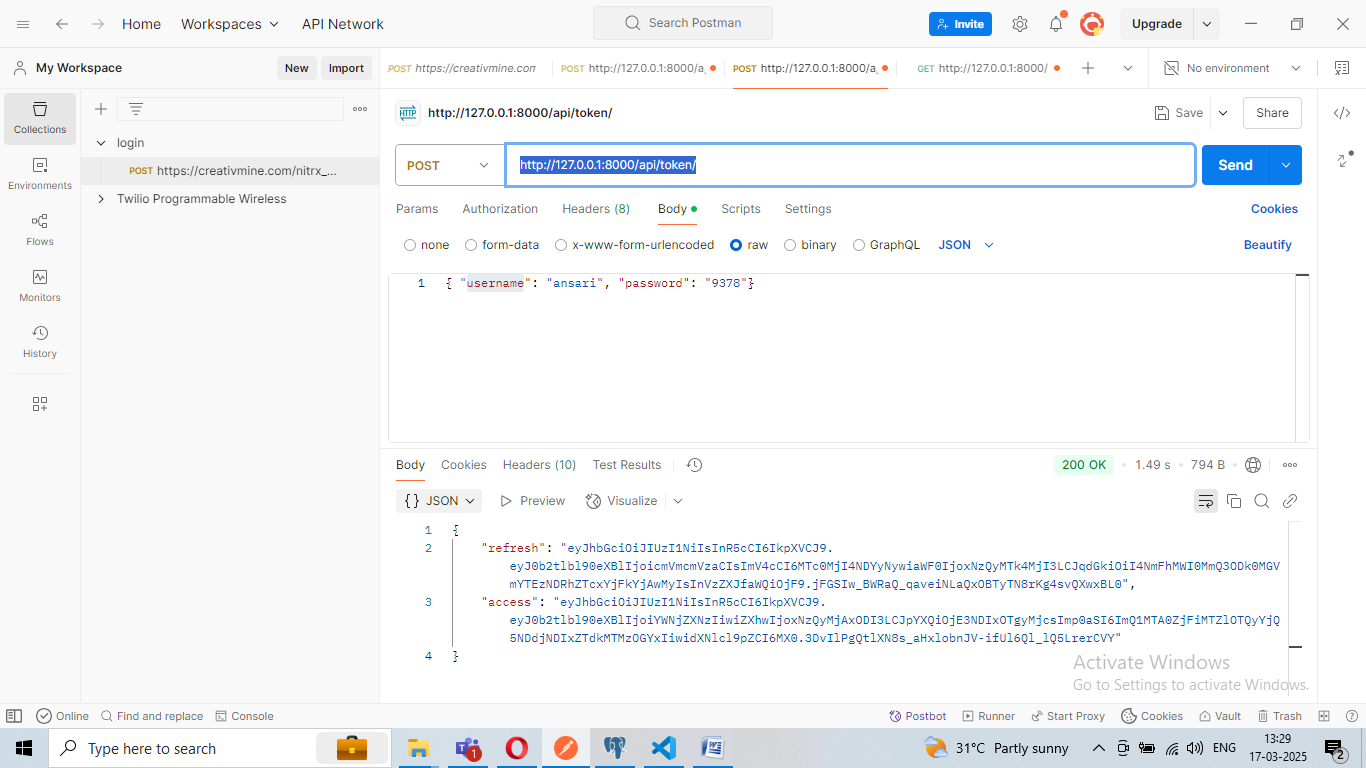
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**Admin view mode**

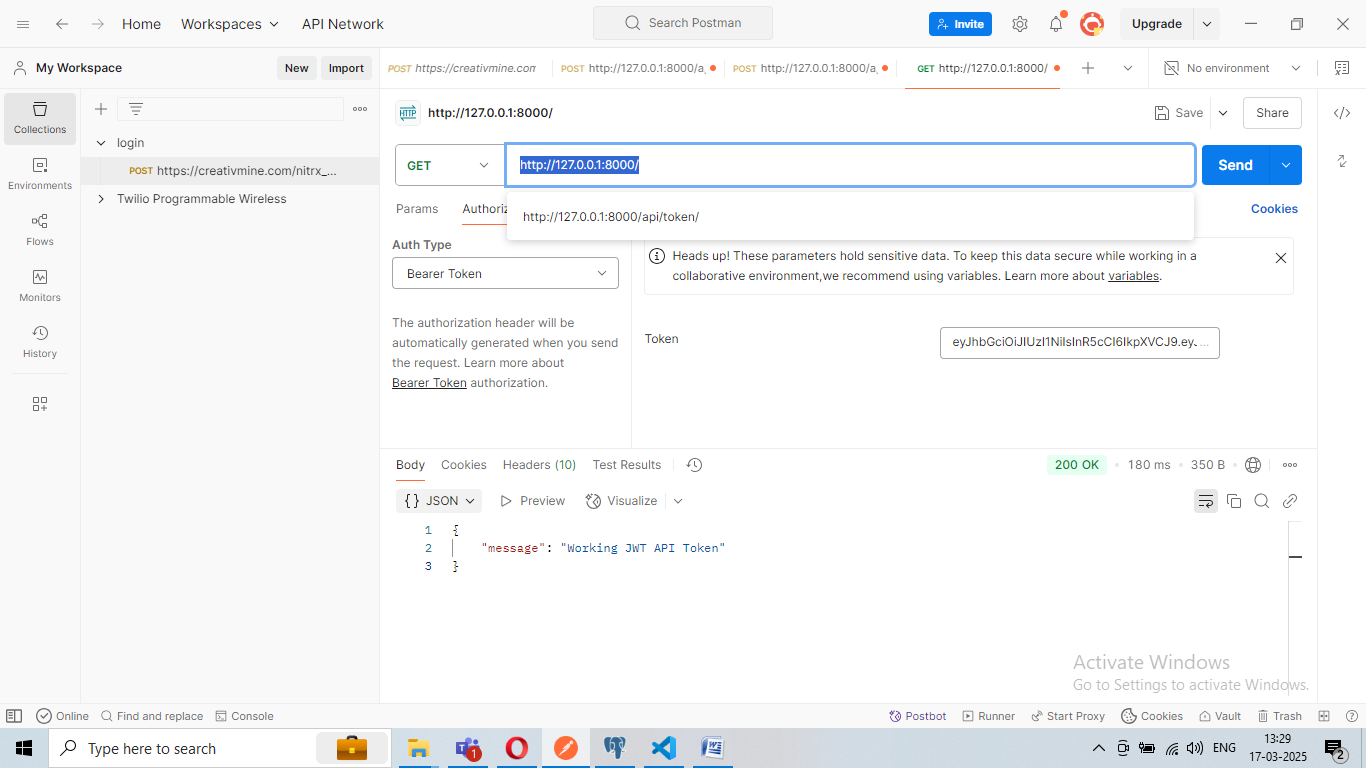
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**Show data in table under database.**

**Url for JWT Token Generate vai user & Pass API :** <http://127.0.0.1:8000/api/token/>

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<http://127.0.0.1:8000/>

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**Now You can See Token is valid .**

**Sample Jsom Format :**  { "username": "ansari", "password": "9378"}

**Ref : https://medium.com/django-unleashed/securing-django-rest-apis-with-jwt-authentication-using-simple-jwt-a-step-by-step-guide-28efa84666fe**