**REST API (Django Rest Framework-DRF)**

**Session-3**

**Creating API:**

* Go to command prompt and create a django project

Ex: django-admin startproject Restproject

* Create application under Restproject

Ex: cd Restproject

Ex: python manage.py startapp Restapp

* Open Restproject in pycharm editor
* Install Restapp under settings.py

**Settings.py:**

INSTALLED\_APPS = [  
 'django.contrib.admin',  
 'django.contrib.auth',  
 'django.contrib.contenttypes',  
 'django.contrib.sessions',  
 'django.contrib.messages',  
 'django.contrib.staticfiles',  
 'Restapp',  
 'rest\_framework',  
]

**models.py:**

from django.db import models  
  
*# Create your models here.*class Employees(models.Model):  
 empid=models.IntegerField()  
 ename=models.CharField(max\_length=20)  
 eaddress=models.CharField(max\_length=20)  
 email=models.EmailField(max\_length=30)  
  
 def \_\_str\_\_(self):  
 return self.ename

**admin.py :**

from django.contrib import admin  
from Restapp.models import Employees  
  
*# Register your models here.*admin.site.register(Employees)

**Now go to terminal and then type the following commands**

* Python manage.py makemigrations
* Python manage.py migrate
* Python manage.py createsuperuser
* Now run server: python manage.py runserver
* Now go to browser: http://127.0.0.1:8000/admin
* **Now go to admin panel by login with super user login id and password and insert few records.**

**Note: to convert model data into JSON format then we use serializers.**

* Add a new python file under the app with the name serializers.py

**serializers.py:**

from rest\_framework import serializers  
from Restapp.models import Employees  
  
class empSerializer(serializers.ModelSerializer):  
   
 class Meta:  
 model=Employees  
 fields='\_\_all\_\_'

**views.py:**

from rest\_framework.views import APIView  
from rest\_framework.response import Response  
from Restapp.models import Employees  
from Restapp.serializers import empSerializer  
  
  
*# Create your views here.*class empDetails(APIView):  
  
 def get(self,request):  
 emp=Employees.objects.all()  
 serializer=empSerializer(emp,many=True)  
 return Response(serializer.data)  
  
 def post(self):  
 pass

**urls.py:**

from django.contrib import admin  
from django.urls import path  
from Restapp import views  
  
urlpatterns = [  
 path('admin/', admin.site.urls),  
 path('emp/',views.empDetails.as\_view()),  
]

* Now run server: python manage.py runserver
* Now go to browser: http://127.0.0.1:8000/emp