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

**Session-14**

**Working with ModelViewSet:**

* The ModelViewSet class inherits from GenericAPIView and includes implementations for various actions, by mixing in the behavior of the various mixin classes.
* The actions provided by the ModelViewSet class are .list(), .retrieve(), .create(), .update(), .partial\_update(), and .destroy().
* Because ModelViewSet extends GenericAPIView, you'll normally need to provide at least the queryset and serializer\_class attributes.

**ReadOnlyModelViewSet:**

* The ReadOnlyModelViewSet class also inherits from GenericAPIView. As with ModelViewSet it also includes implementations for various actions, but unlike ModelViewSet only provides the 'read-only' actions, .list() and .retrieve()

**Settings.py:**

INSTALLED\_APPS = [  
 **'django.contrib.admin'**,  
 **'django.contrib.auth'**,  
 **'django.contrib.contenttypes'**,  
 **'django.contrib.sessions'**,  
 **'django.contrib.messages'**,  
 **'django.contrib.staticfiles'**,  
 **'myapp.apps.MyappConfig'**,  
 **'rest\_framework'**,  
  
 **'myapp7'**,  
]

**Models.py:**

**from** django.db **import** models  
  
*# Create your models here.***class** Manager(models.Model):  
 name=models.CharField(max\_length=20)  
 address=models.CharField(max\_length=20)  
 mail = models.CharField(max\_length=20)  
 age = models.IntegerField()

**admin.py:**

**from** django.contrib **import** admin  
**from** myapp7.models **import** Manager  
*# Register your models here.*@admin.register(Manager)  
**class** ManagerAdmin(admin.ModelAdmin):  
 list\_display = [**'id'**,**'name'**,**'address'**,**'mail'**,**'age'**]

**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>
* Insert few records

Create a new python file with the name serializers.py.

**serializer.py:**

**from** rest\_framework **import** serializers  
**from** myapp7.models **import** Manager  
  
**class** ManagerSerializer(serializers.ModelSerializer):  
 **class** Meta:  
 model=Manager  
 fields=[**'id'**,**'name'**,**'address'**,**'mail'**,**'age'**]

**views.py:**

**from** django.shortcuts **import** render  
**from** myapp7.models **import** Manager  
**from** myapp7.serializers **import** ManagerSerializer  
**from** rest\_framework **import** viewsets  
  
*# Create your views here.***class** ManagerModelViewSet(viewsets.ModelViewSet):  
 queryset = Manager.objects.all()  
 serializer\_class = ManagerSerializer  
  
*#ReadOnlyModelViewSet***'''class ManagerModelViewSet(viewsets.ReadOnlyModelViewSet):  
 queryset = Manager.objects.all()  
 serializer\_class = ManagerSerializer'''**

**urls.py**:

**from** django.contrib **import** admin  
**from** django.urls **import** path,include  
**from** myapp7 **import** views  
**from** rest\_framework.routers **import** DefaultRouter  
  
*#create a router object*router=DefaultRouter()  
  
*#register your viewset with router*router.register(**'ManagerViewset'**,views.ManagerModelViewSet,basename=**'manager'**)  
  
urlpatterns = [  
 path(**'admin/'**, admin.site.urls),  
 path(**''**,include(router.urls)),  
  
]