

****Backend (Django Rest Framework):****

1. Install required packages:

```
``bash
pip install django djangorestframework
django-cors-headers
``
```

2. Set up Django project and app:

```
``bash
django-admin startproject myproject
cd myproject
python manage.py startapp myapp
``
```

3. Configure settings (`myproject/[settings.py](#)`):

```
``python
INSTALLED_APPS = [
    # ...
    'rest_framework',
    'myapp',
    'corsheaders',
]
```

```
MIDDLEWARE = [
```

```
# ...
```

```
'corsheaders.middleware.CorsMiddleware',  
]
```

```
# Allow all origins for simplicity (customize  
for production)
```

```
CORS_ALLOW_ALL_ORIGINS = True
```

```
...
```

4. Define models (`myapp/[models.py](#)`):

```
```python
```

```
from django.db import models
```

```
from django.contrib.auth.models import
```

```
User
```

```
class Doctor(models.Model):
```

```
 user = models.OneToOneField(User,
on_delete=models.CASCADE)
```

```
class Patient(models.Model):
```

```
 user = models.OneToOneField(User,
on_delete=models.CASCADE)
```

```
 doctor = models.ForeignKey(Doctor,
on_delete=models.CASCADE, null=True,
blank=True)
```

```
class Illness(models.Model):
```

```
class Illness(models.Model):
 patient = models.ForeignKey(Patient,
on_delete=models.CASCADE)
 doctor = models.ForeignKey(Doctor,
on_delete=models.CASCADE)
 description = models.TextField()
 ...
```

5. Create serializers (`myapp/[serializers.py](#)`):

```
``python
from rest_framework import serializers
from .models import Doctor, Patient, Illness

class
DoctorSerializer(serializers.ModelSerializer):
 class Meta:
 model = Doctor
 fields = '__all__'

class
PatientSerializer(serializers.ModelSerializer):
 class Meta:
 model = Patient
 fields = '__all__'

class
IllnessSerializer(serializers.ModelSerializer):
 class Meta:
 model = Illness
```

6. Implement views (`myapp/[views.py](#)`):

```
```python
from rest_framework import generics
from .models import Doctor, Patient, Illness
from .serializers import DoctorSerializer,
PatientSerializer, IllnessSerializer

class
DoctorList(generics.ListCreateAPIView):
    queryset = Doctor.objects.all\(\)
    serializer_class = DoctorSerializer

class
PatientList(generics.ListCreateAPIView):
    queryset = Patient.objects.all\(\)
    serializer_class = PatientSerializer

class
IllnessList(generics.ListCreateAPIView):
    queryset = Illness.objects.all\(\)
    serializer_class = IllnessSerializer
```
```

7. Set up URLs (`myapp/[urls.py](#)`):

```
```python
from django.urls import path
from .views import DoctorList, PatientList,
IllnessList
```

```
urlpatterns = [  
    path('doctors/', DoctorList.as\_view\(\),  
name='doctor-list'),  
    path('patients/', PatientList.as\_view\(\),  
name='patient-list'),  
    path('illnesses/', IllnessList.as\_view\(\),  
name='illness-list'),  
]  
...
```

8. Configure main `urls.py`:

```
python  
from django.contrib import admin  
from django.urls import path, include  
  
urlpatterns = [  
    path('admin/', admin.site.urls),  
    path('api/', include(myapp.urls)),  
]  
...
```

Run migrations and start the server:

```
python manage.py makemigrations  
python manage.py migrate  
python manage.py runserver
```