

1. Install & configure DRF

1. Install:

`pip install djangorestframework`

2. In your settings.py, add:

```
INSTALLED_APPS = [  
    'rest_framework',  
    'your_app_name',  
]
```

2. Define the Book model

In `your_app_name/models.py`:

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

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

```
    title      = models.CharField(max_length=200)
```

```
    author     = models.CharField(max_length=100)
```

```
    description = models.TextField(blank=True)
```

```
    published_date = models.DateField(null=True, blank=True)
```

```
    def __str__(self):
```

```
        return self.title
```

Run migrations:

```
python manage.py makemigrations
```

```
python manage.py migrate
```

3. Create a Serializer

In `your_app_name/serializers.py`:

```
from rest_framework import serializers
```

```
from .models import Book
```

```
class BookSerializer(serializers.ModelSerializer):
```

```
    class Meta:
```

```
        model = Book
```

```
        fields = ['id', 'title', 'author', 'description', 'published_date']
```

4. Implement the ViewSet

In your_app_name/views.py:

```
from rest_framework import viewsets
```

```
from .models import Book
```

```
from .serializers import BookSerializer
```

```
class BookViewSet(viewsets.ModelViewSet):
```

```
    """
```

```
    Provides list(), create(), retrieve(), update(), partial_update(), destroy()
```

```
    """
```

```
    queryset = Book.objects.all()
```

```
    serializer_class = BookSerializer
```

5. Wire up URLs

In your project's urls.py (or in your_app_name/urls.py):

```
from django.urls import path, include
```

```
from rest_framework.routers import DefaultRouter
```

```
from your_app_name.views import BookViewSet
```

```
router = DefaultRouter()
```

```
router.register(r'books', BookViewSet, basename='book')
```

```
urlpatterns = [  
    # DRF browsable API and all endpoints:  
    path('api/', include(router.urls)),  
]
```

6. API Endpoints & Methods

URL	Method	Action
/api/books/	GET	List all books
/api/books/	POST	Create a new book
/api/books/{id}/	GET	Retrieve book #id
/api/books/{id}/	PUT	Full update of book #id
/api/books/{id}/	PATCH	Partial update of book #id
/api/books/{id}/	DELETE	Delete book #id