Vidyavardhini's College Of Engineering Assignment No. 3 Book Management System API

Django REST Framework

Title: Book Management System (CRUD API)

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Assignment No: 4

Roll Number: 72

Class: SE3

Modules Developed

- 1. models.py Defines Book model
- 2. serializers.py Converts model to JSON
- 3. views.py Contains API logic
- 4. urls.py API routing
- 5. settings.py DRF Configuration

Code: -

1. models.py

from django.db import models

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

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

isbn = models.CharField(max length=13)

def __str__(self):

return self.title

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```

2. serializers.py

```
from rest framework import serializers
from .models import Book
class BookSerializer(serializers.ModelSerializer):
  class Meta:
    model = Book
    fields = ' all '
3. views.py
from rest framework import generics
from .models import Book
from .serializers import BookSerializer
class BookListCreateView(generics.ListCreateAPIView):
  queryset = Book.objects.all()
  serializer class = BookSerializer
class
BookRetrieveUpdateDestroyView(generics.RetrieveUpdateDestroyAPIView):
  queryset = Book.objects.all()
  serializer class = BookSerializer
```

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```

4. library_app/urls.py

```
from django.urls import path

from .views import BookListCreateView, BookRetrieveUpdateDestroyView

urlpatterns = [
    path('books/', BookListCreateView.as_view(), name='book-list-create'),
    path('books/<int:pk>/', BookRetrieveUpdateDestroyView.as_view(),
    name='book-detail'),

]
```

5. library_project/urls.py

```
from django.contrib import admin

from django.urls import path, include

urlpatterns = [

path('admin/', admin.site.urls),

path('api/v1/', include('library_app.urls')),

]
```

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Screenshots

1. Running Server

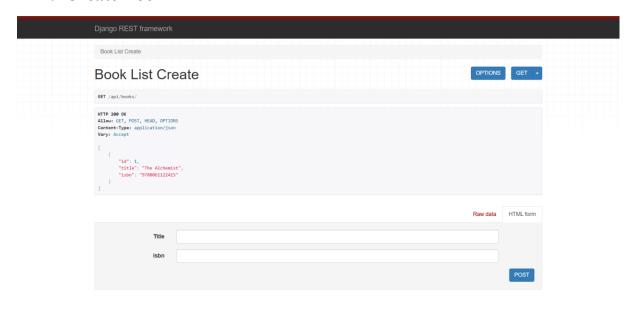
```
C:\Users\Rajas Patil\library_project>python manage.py runserver Watching for file changes with StatReloader Performing system checks...

System check identified no issues (0 silenced).

March 29, 2025 - 16:06:56

Django version 5.1.7, using settings 'library_project.settings' Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

2. Create Book



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3. View Books, Update Book, Delete Book

