

Topic: 16. DRF Searching

Speaker: Personal / Notebook: API Development using Django Framework



We can search through the database fields like BLOGS' title or comments.

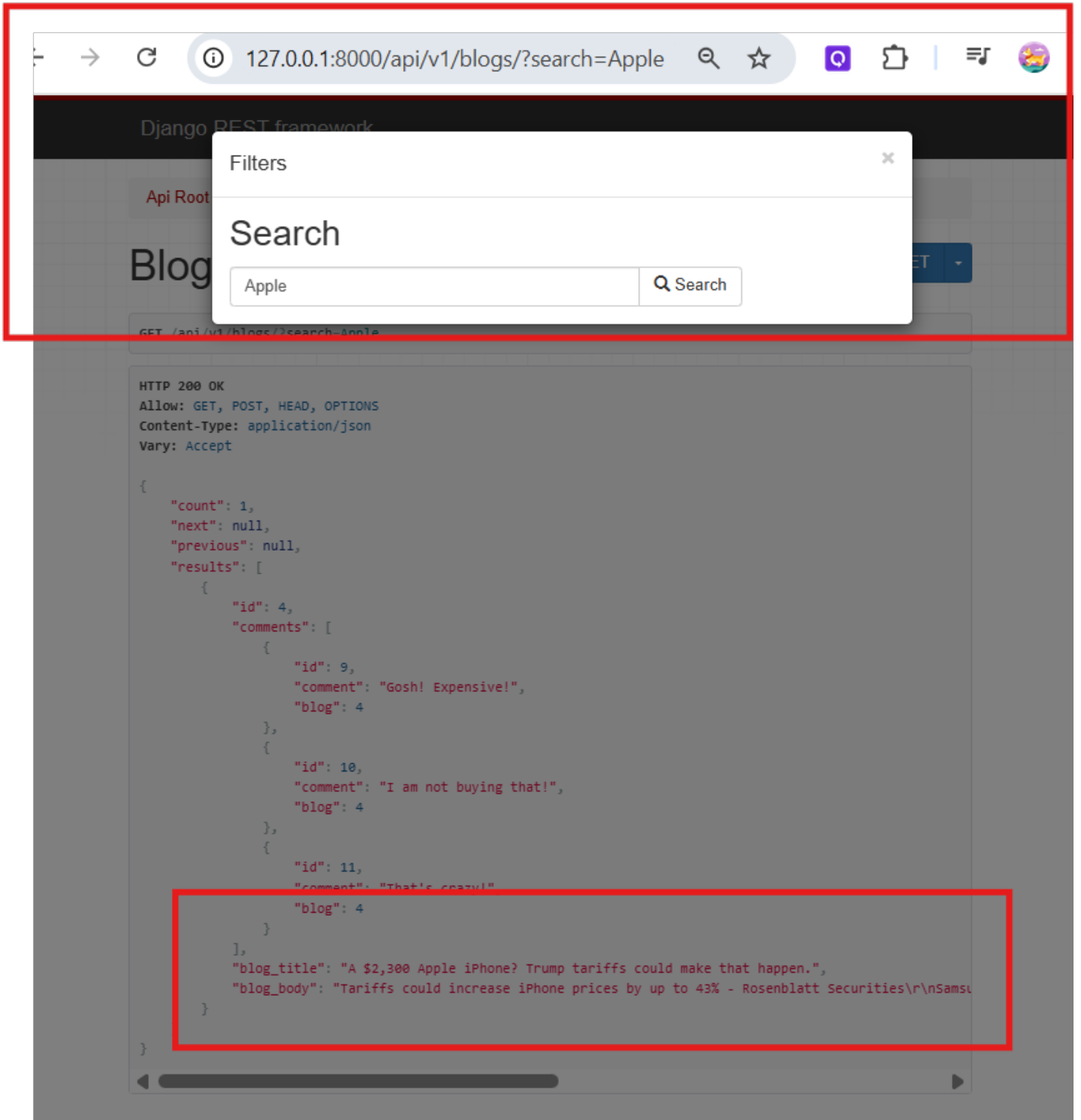
1. Go to APIVIEWS.PY:

```
File Edit Selection View Go ... DjangoREST_APIProject
admin.py students urls.py django_rest_main urls.py api views.py blogs
DJANGOREST_APIPROJECT
  api
    > __pycache__
    > migrations
    > _init_.py
    > admin.py
    > apps.py
    > models.py
    > paginations.py
    > serializers.py
    > tests.py
    > urls.py
    > views.py
  > blogs
  > django_rest_main
  > employees
  > env
  > students
  db.sqlite3
api > views.py > ...
1 from django.shortcuts import render, get_object_or_404
2 # from django.http import JsonResponse
3 from students.models import Student
4 from employees.models import Employee
5
6 from .serializers import StudentSerializer, EmployeeSerializer
7 from rest_framework.response import Response
8 from rest_framework import status
9 from rest_framework.decorators import api_view
10 from rest_framework.views import APIView
11 from django.http import Http404
12
13 from rest_framework import mixins, generics, viewsets
14 from blogs.models import Blog, Comment
15 from blogs.serializers import BlogSerializer, CommentSerializer
16 from .paginations import CustomPagination
17 from employees.filters import EmployeeFilter
18 from rest_framework.filters import SearchFilter
19
20
21
```

The image shows a Visual Studio Code editor window for a Django REST API project. The Explorer sidebar on the left shows the project structure under 'DJANGOREST_APIPROJECT', with 'api' expanded to show 'views.py'. The main editor area displays the code for 'views.py', specifically the 'BlogsView' class. A red box highlights the following code snippet:

```
226 # uses nested serializers
227 class BlogsView(generics.ListCreateAPIView):
228     queryset = Blog.objects.all()
229     serializer_class = BlogSerializer
230     filter_backends = [SearchFilter]
231     search_fields = ['blog_title']
```

2. Now search thru BLOGS model:

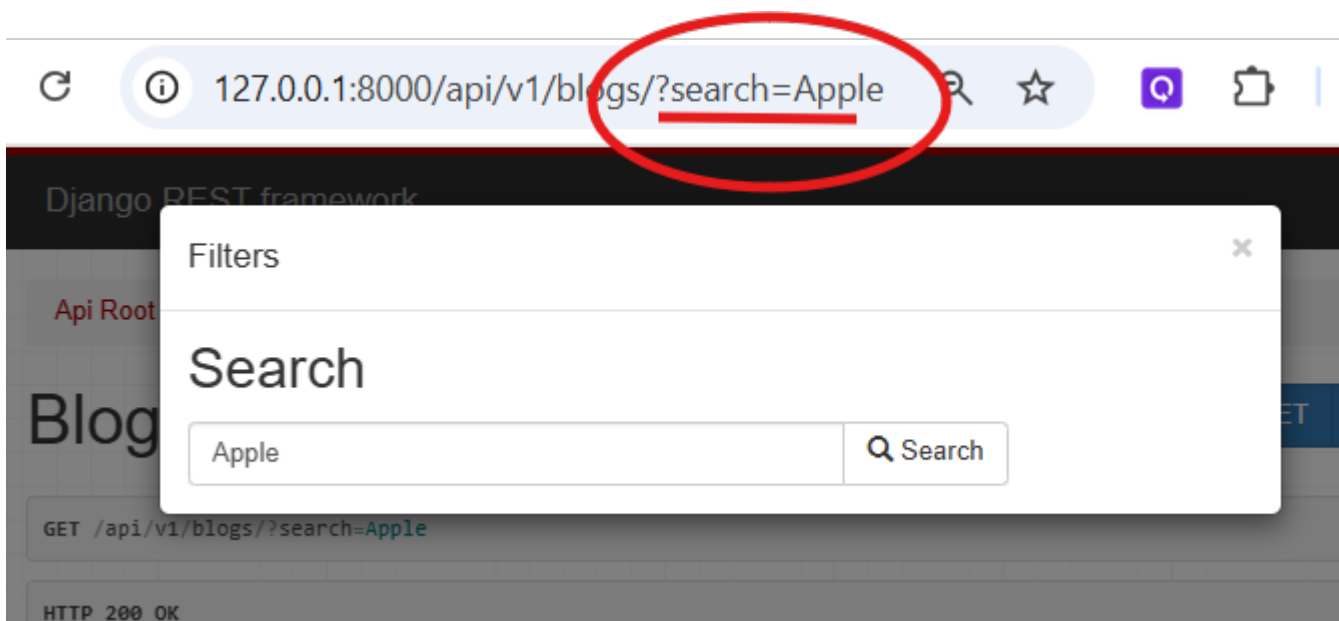


3. If you want to change the search keyword 'search' to 'q,' then update the SETTINGS.PY

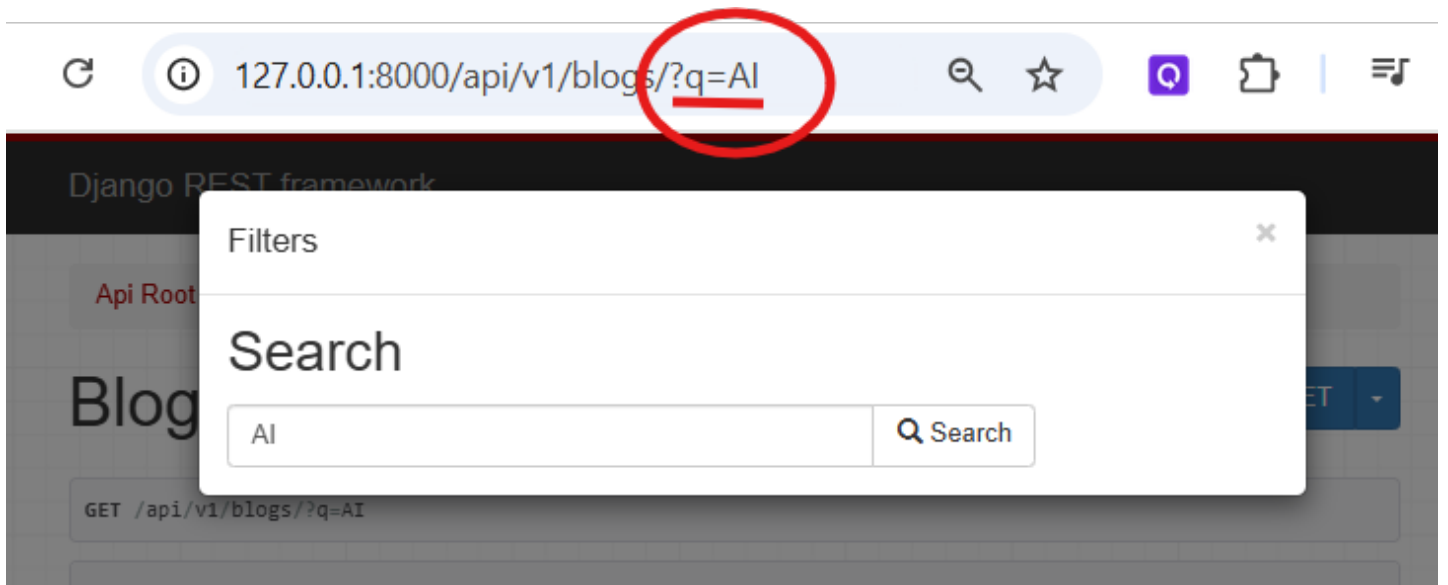
```
131
132 REST_FRAMEWORK = {
133     # for Global Pagination
134     'DEFAULT_PAGINATION_CLASS': 'rest_framework.pagination.LimitOffsetPagination',
135     'PAGE_SIZE': 5,
136     # for Global Filtering
137     'DEFAULT_FILTER_BACKENDS': ['django_filters.rest_framework.DjangoFilterBackend'],
138     # overrides the query parameter instead of the default label 'search'
139     'SEARCH_PARAM': 'q',
140 }
141
```

The Explorer sidebar on the left shows the project structure with 'settings.py' highlighted in the 'django_rest_main' folder.

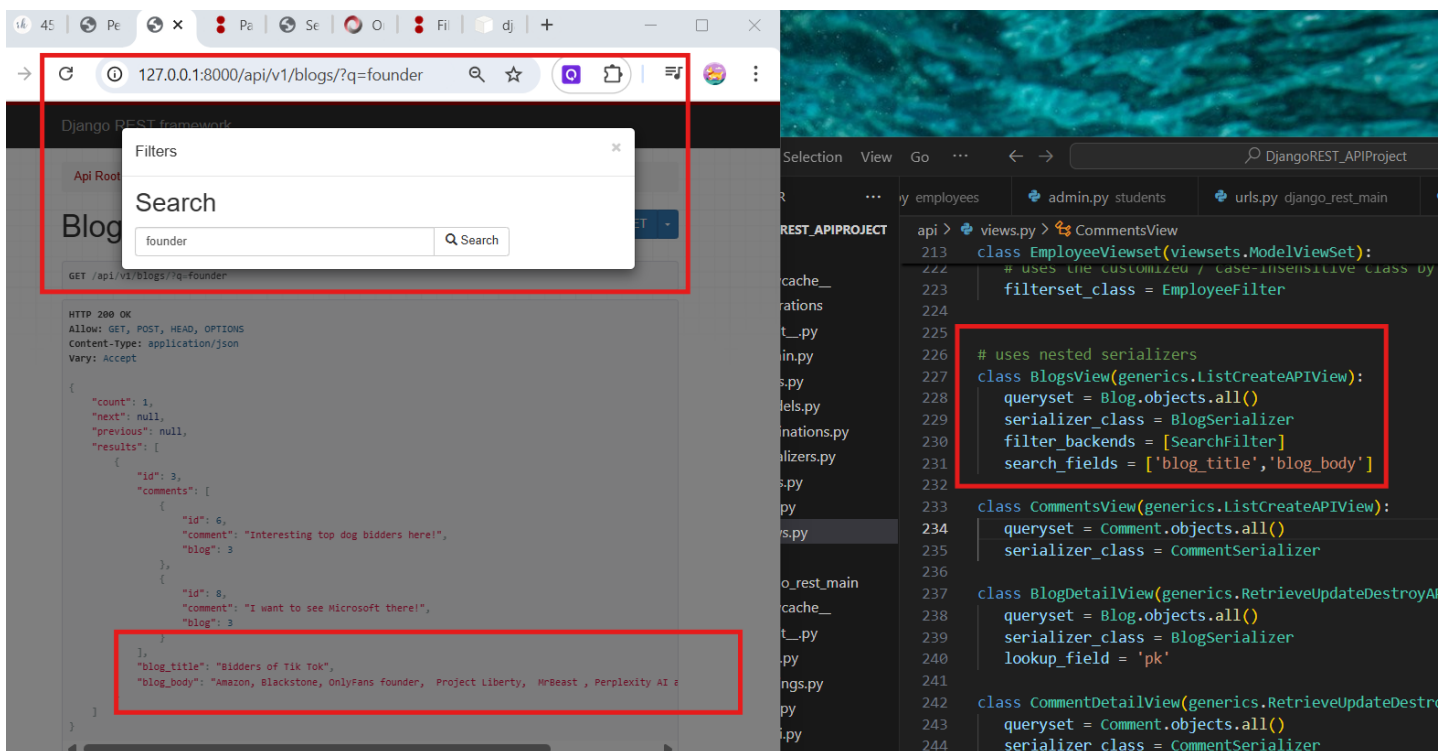
FROM:



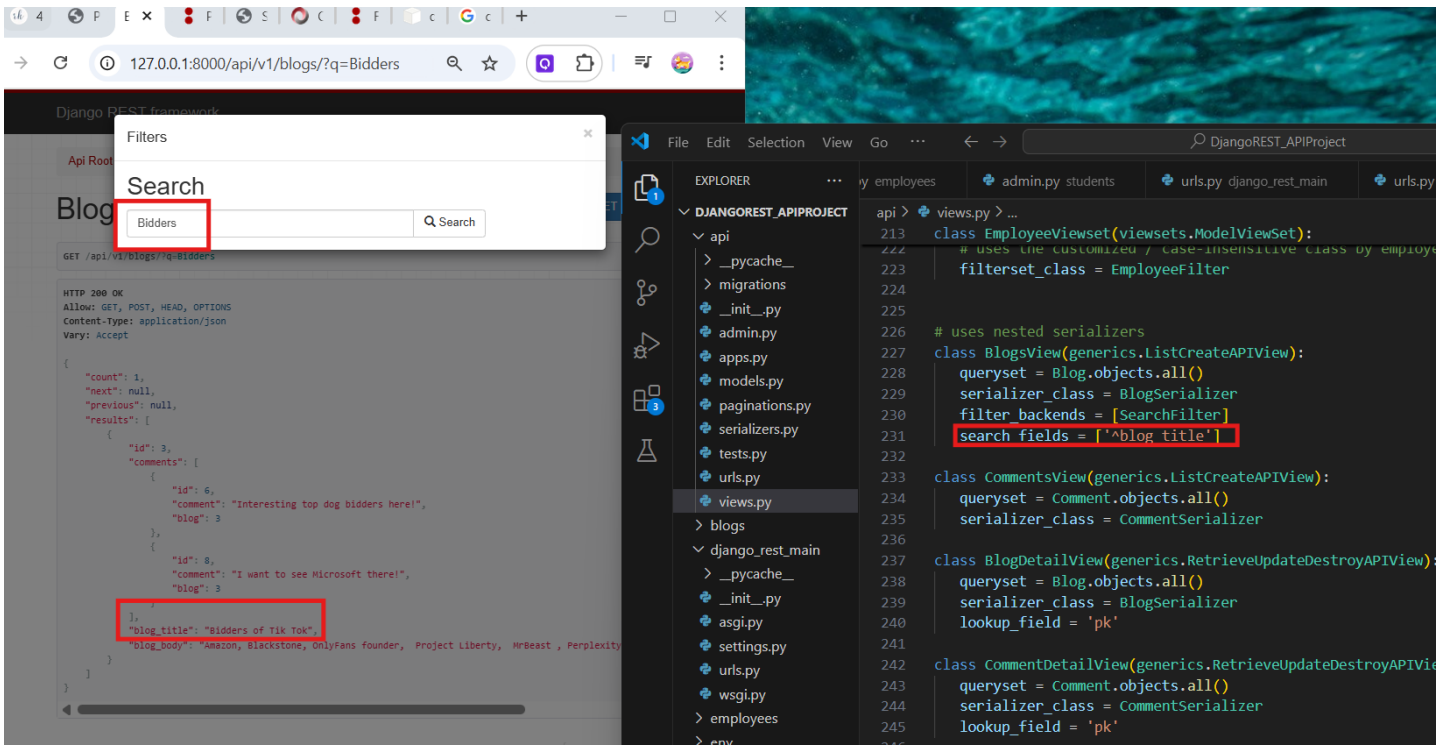
TO:



4. To search through the BLOG_BODY:



5. To search for a blog title that starts with a specific keyword, use the caret symbol (^).



But when you use a keyword, not the actual starting word, it won't show any result.

