

Topic: 16. DRF Searching

Speaker: Personal / Notebook: API Development using Django Framework

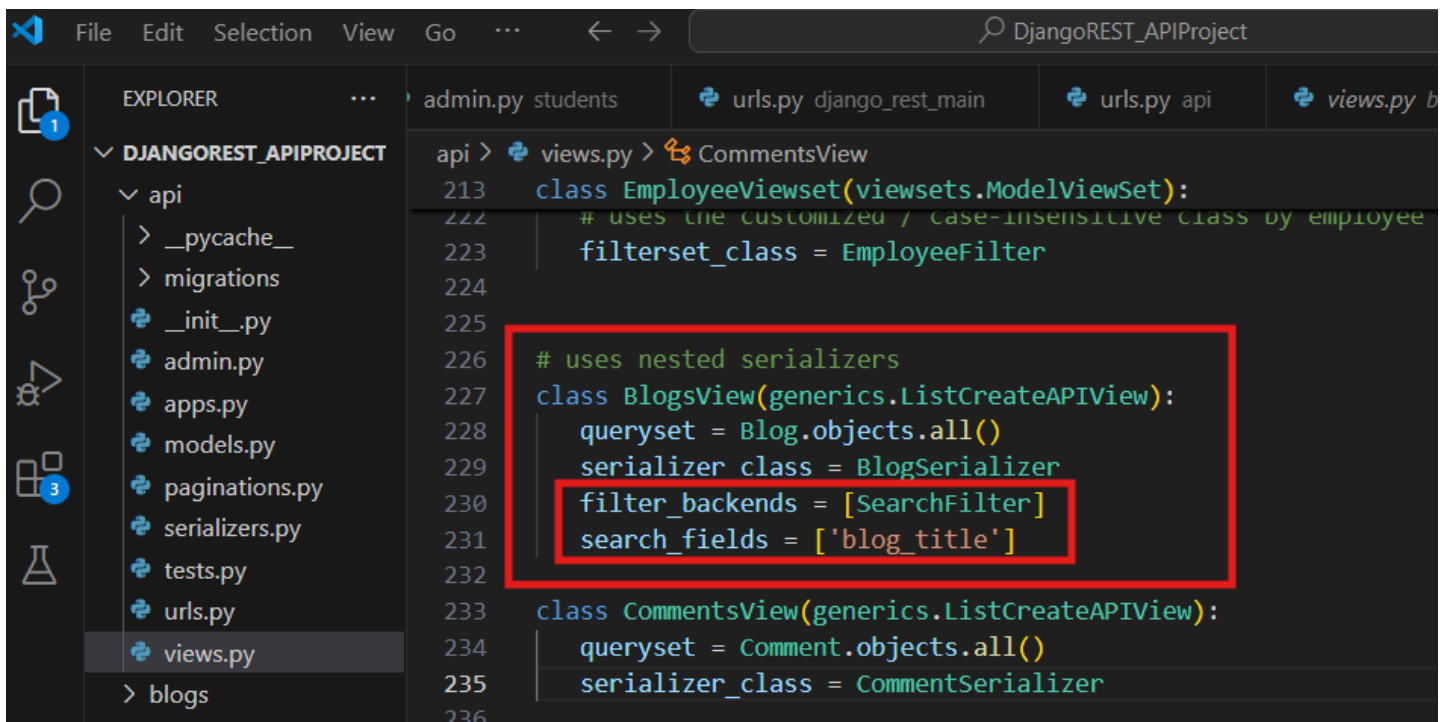


We can search through the database fields like BLOGS' title or comments.

1. Go to APIVIEWS.PY:

The screenshot shows a code editor with the Django REST API project structure on the left and the contents of `views.py` on the right. The Explorer panel on the left shows the project structure, with `views.py` selected under the `api` directory. The code in `views.py` is as follows:

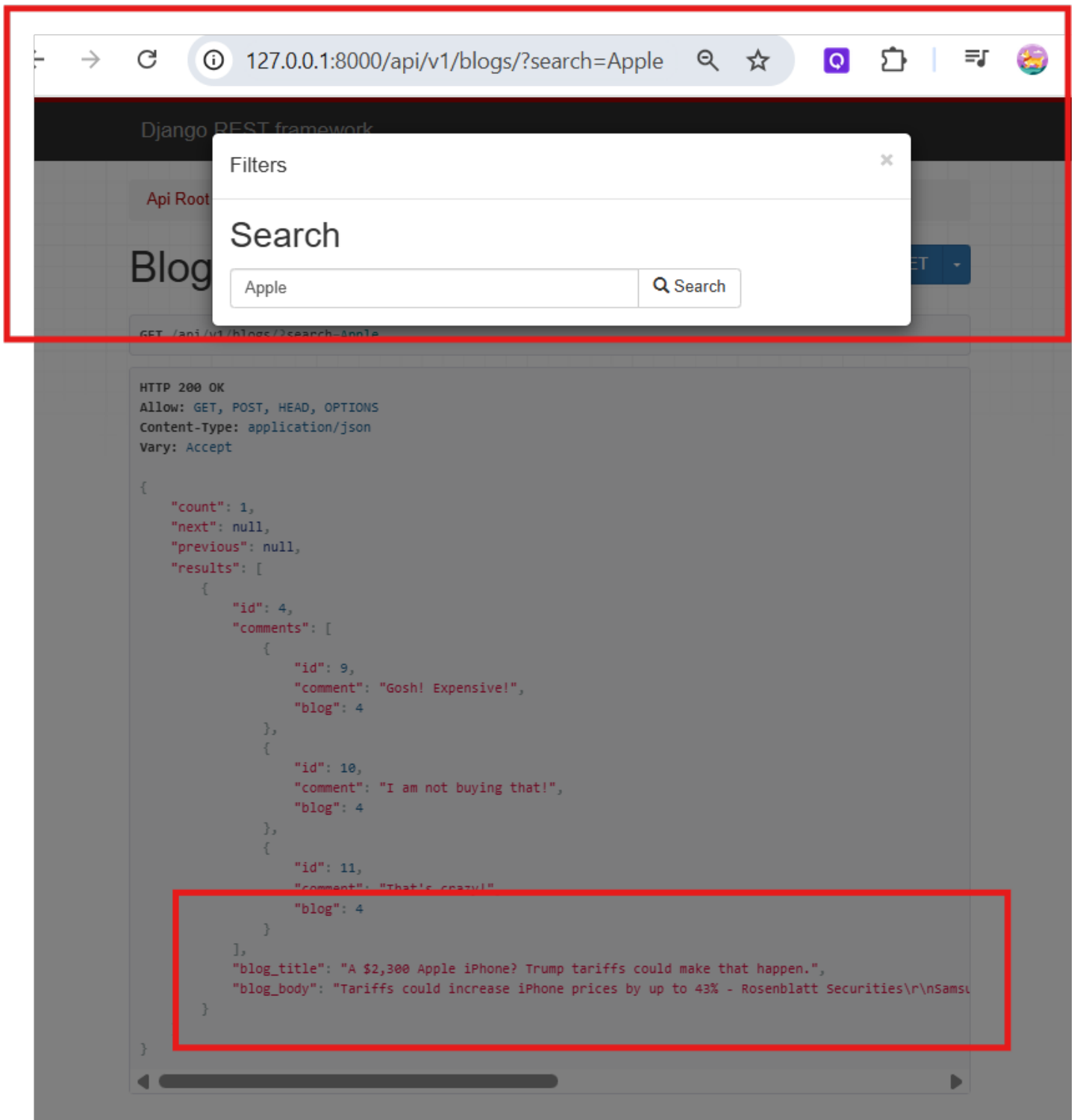
```
1 from django.shortcuts import render, get_object_or_404
2 # from django.http import JsonResponse
3 from students.models import Student
4 from employees.models import Employee
5
6 from .serializers import StudentSerializer, EmployeeSerializer
7 from rest_framework.response import Response
8 from 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 screenshot shows a code editor with a dark theme. The Explorer panel on the left shows the project structure for 'DJANGOREST_APIPROJECT'. The file 'views.py' is selected, and the editor displays the code for the 'EmployeeViewSet' and 'BlogsView' classes. The 'BlogsView' class is highlighted with a red box, and its 'filter_backends' and 'search_fields' attributes are further highlighted with a red box.

```
213 class EmployeeViewSet(viewsets.ModelViewSet):
222     # uses the customized / case-insensitive class by employee
223     filterset_class = EmployeeFilter
224
225
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']
232
233     class CommentsView(generics.ListCreateAPIView):
234         queryset = Comment.objects.all()
235         serializer_class = CommentSerializer
236
```

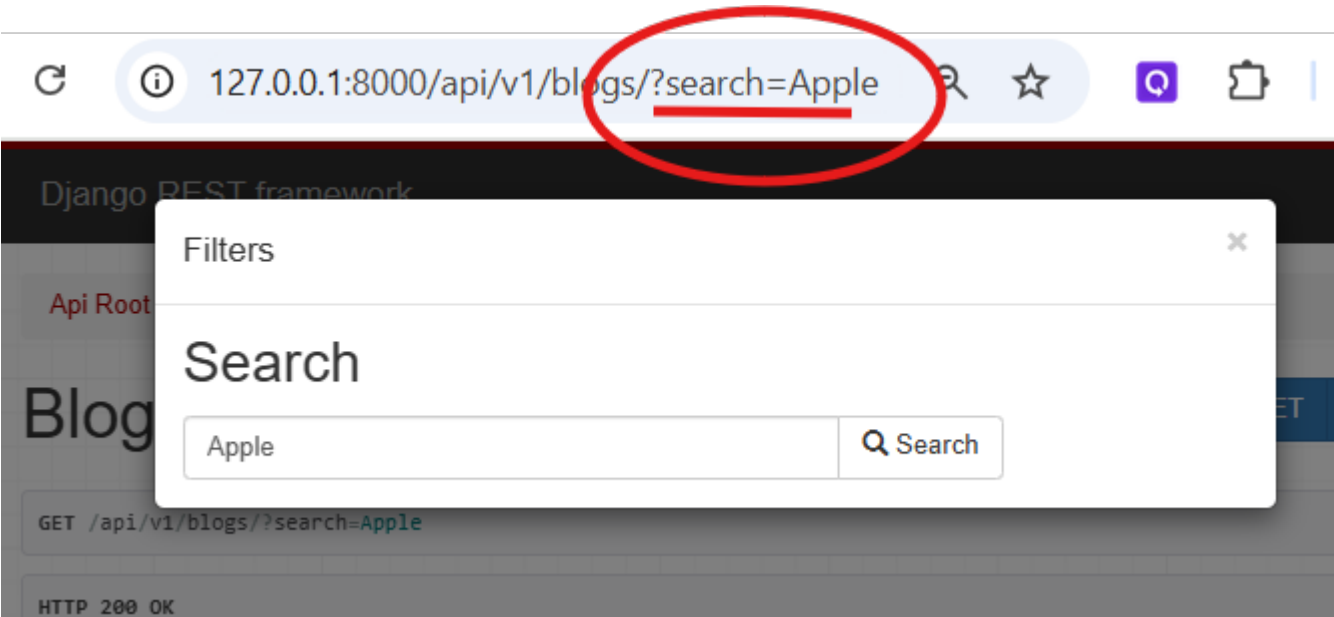
2. Now search thru BLOGS model:



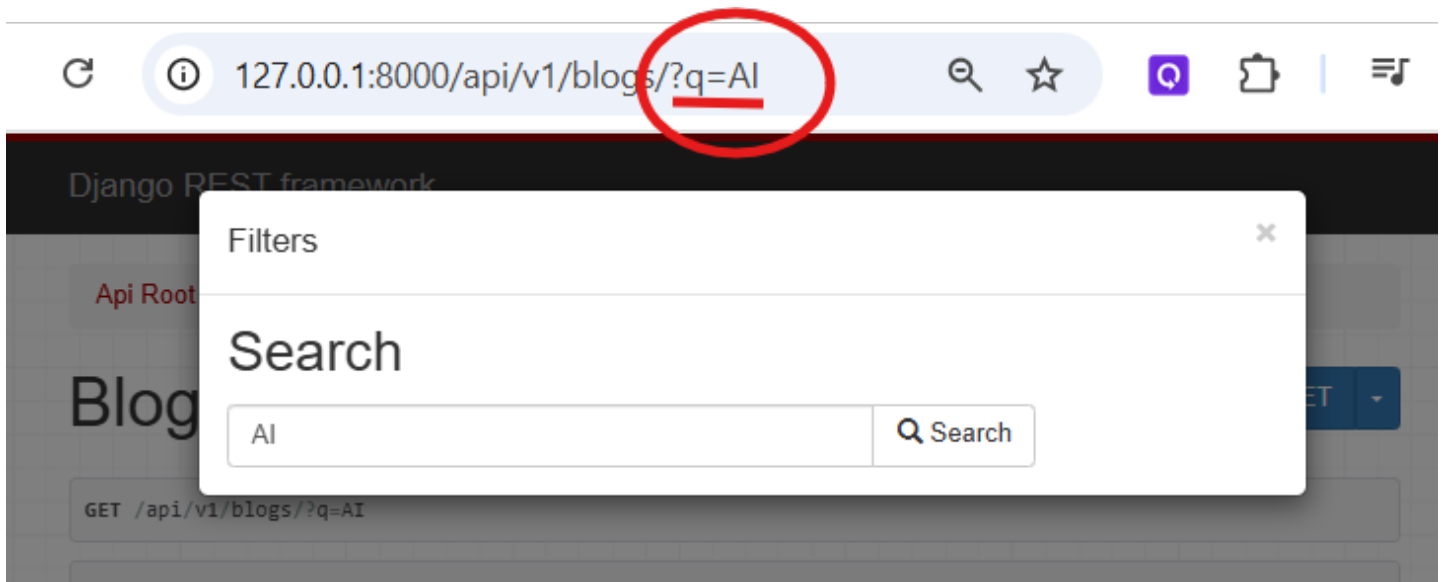
3. If you want to change the search keyword 'search' to 'q,' then update the SETTINGS.PY

```
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
```

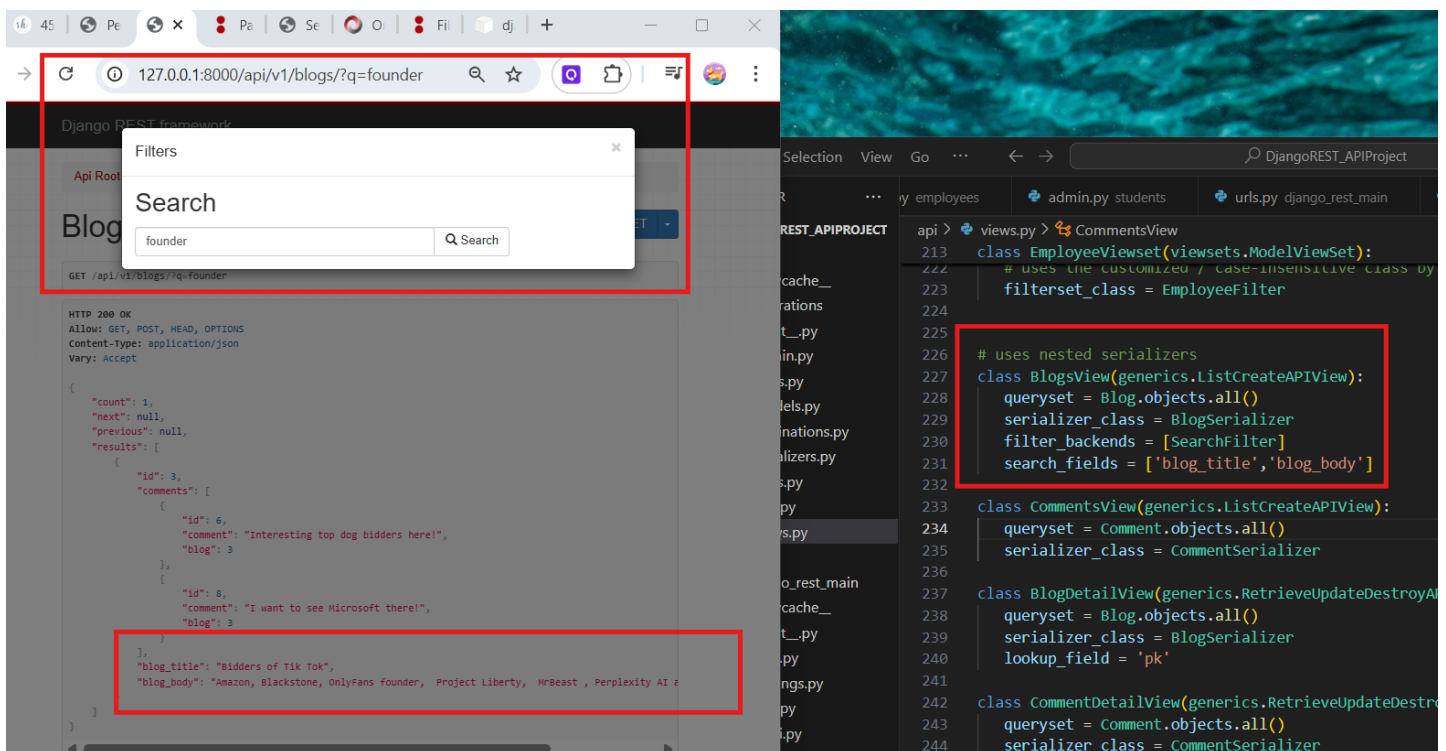
FROM:



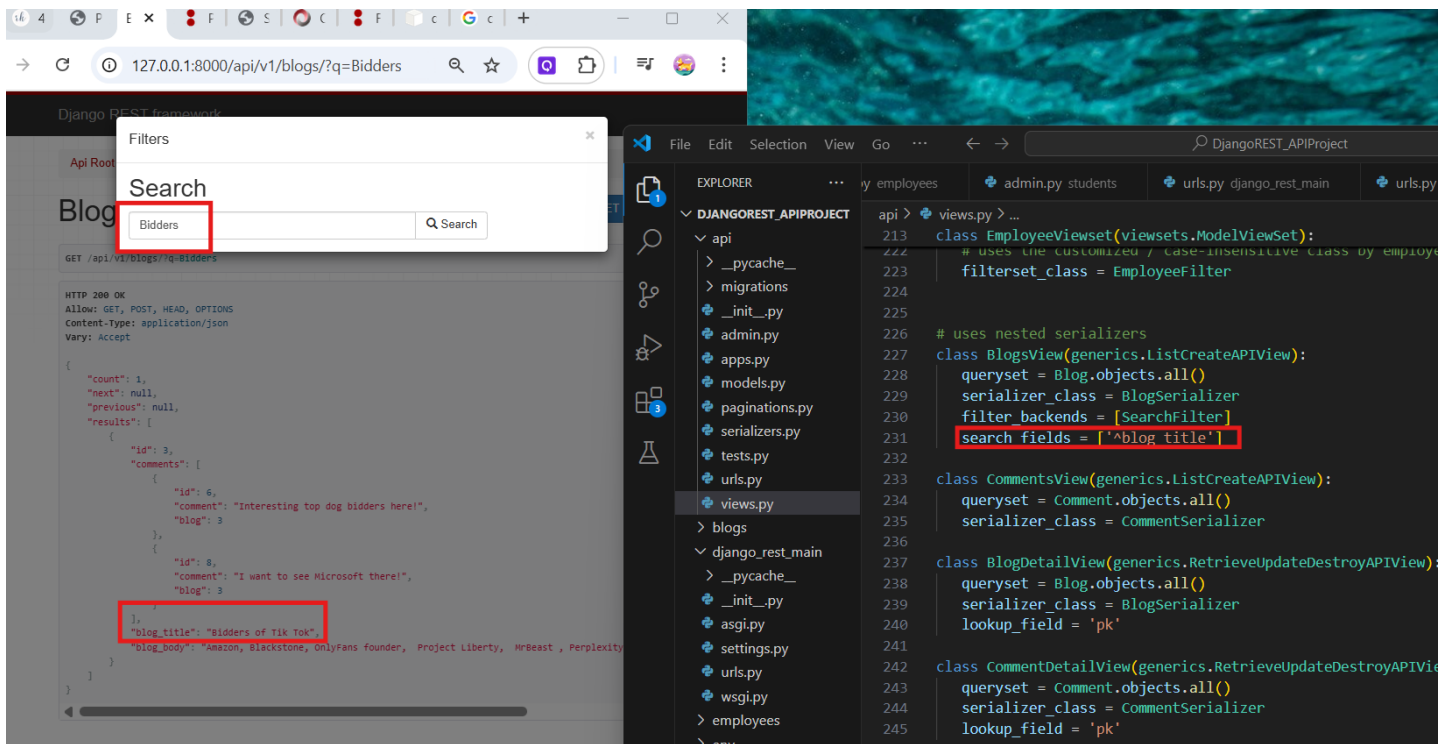
TO:



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.

