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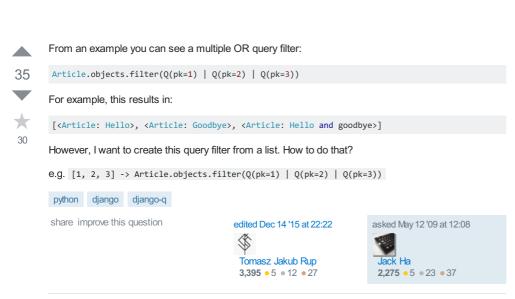
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How to dynamically compose an OR query filter in

iterate over django form results (not in a template)

asked 7 years ago viewed 12164 times active 4 months ago

How to dynamically compose an OR query filter in Django?



You appear to have asked this twice: stackoverflow.com/questions/852404 - Dominic Rodger May 12 '09 at

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You could chain your queries as follows:





values = [1,2,3]# Turn list of values into list of O objects queries = [Q(pk=value) for value in values] # Take one Q object from the list query = queries.pop() # Or the O object with the ones remaining in the list for item in queries: query |= item

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answered May 12 '09 at 12:21



- 2 Thanks! This was what I was looking for :) Didn't know you could do |= Jack Ha May 12 '09 at 12:43
- 7 You could also initialize the query using: query = Q() chachan Jul 16 '12 at 0:58
- 1 you can make dynamic fields by using **{fieldname': value}: queries = [Q(**{fieldname': value}) for value in values] rechie Sep 11 '13 at 3:17 *

How can you compose raw queries with Django if you want to add optional conditions like above? – Error Jul 13 '14 at 18:34

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A shorter way of writing Dave Webb's answer using python's reduce function:

27

```
values = [1,2,3]
# Turn list of values into one big Q objects
query = reduce(lambda q,value: q|Q(pk=value), values, Q())
# Query the model
Article.objects.filter(query)
```

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answered May 22 '09 at 13:36



Tom Viner 3,066 • 4 • 25 • 34

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```
values = [1, 2, 3]
query = reduce(operator.or_, (Q(pk=x) for x in values))
```

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answered May 22 '09 at 14:34



Ignacio Vazquez-Abrams 419k • 56 • 736 • 904

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Maybe it's better to use sql IN statement.

14

Article.objects.filter(id__in=[1, 2, 3])



See queryset api reference.

If you really need to make queries with dynamic logic, you can do something like this (ugly + not tested):

```
query = Q(field=1)
for cond in (2, 3):
    query = query | Q(field=cond)
Article.objects.filter(query)
```

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edited May 12 '09 at 12:28

answered May 12 '09 at 12:12



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To build more complex queries there is also the option to use built in Q() object's constants Q.OR and Q.AND together with the add() method like so:

10

```
list = [1, 2, 3]
# it gets a bit more complicated if we want to dynamically build
# OR queries with dynamic/unknown db field keys, let's say with a list
# of db fields that can change like the following
# list_with_strings = ['dbfield1', 'dbfield2', 'dbfield3']
```

2

How to dynamically compose an OR query filter in Django?

1

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dynamically connecting Django Q objects with AND and OR

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django query with Q and multiple categories

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- Do opponents see your alternate hero?
- Is there a more effective way to build the vocabulary of a fictional language than a word frequency list?
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```
# init our q objects variable to use .add() on it
q_objects = Q()

# loop trough the list and create an OR condition for each item
for item in list:
    q_objects.add(Q(pk=item), Q.OR)
    # for our list_with_strings we can do the following
    # q_objects.add(Q(**{item: 1}), Q.OR)

queryset = Article.objects.filter(q_objects)

# sometimes the following is helpful for debugging (returns the SQL statement)
# print queryset.query
```

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answered Mar 19 '15 at 16:26

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timbre characteristics?



1 For newcomers to this thread, like myself, I think this answer should be regarded as the top answer. It is more Djangoesque than the accepted answer. Thank you! — theresaanna Jun 26 '15 at 14:03

add a comment



See the docs:



```
>>> Blog.objects.in_bulk([1])
{1: <Blog: Beatles Blog>}
>>> Blog.objects.in_bulk([1, 2])
{1: <Blog: Beatles Blog>, 2: <Blog: Cheddar Talk>}
>>> Blog.objects.in_bulk([])
{}
```

Note that this method only works for primary key lookups, but that seems to be what you're trying to do.

So what you want is:

```
Article.objects.in_bulk([1, 2, 3])
```

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answered May 12 '09 at 12:11



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You can use the |= operator to programmatically update a query using Q objects.

4

share improve this answer

answered May 12 '09 at 12:12



Is this documented anywhere? I have been searching for the last 15 minutes, and this is the only thing I can find. - wobbily_col Mar 9 at 10:56

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In case we want to programmatically set what db field we want to query:

2

```
import operator
questions = [('question_contains', 'test'), ('question_gt', 23 )]
q_list = [Q(x) for x in questions]
Poll.objects.filter(reduce(operator.or_, q_list))
```

share improve this answer

answered Sep 24 '12 at 16:01



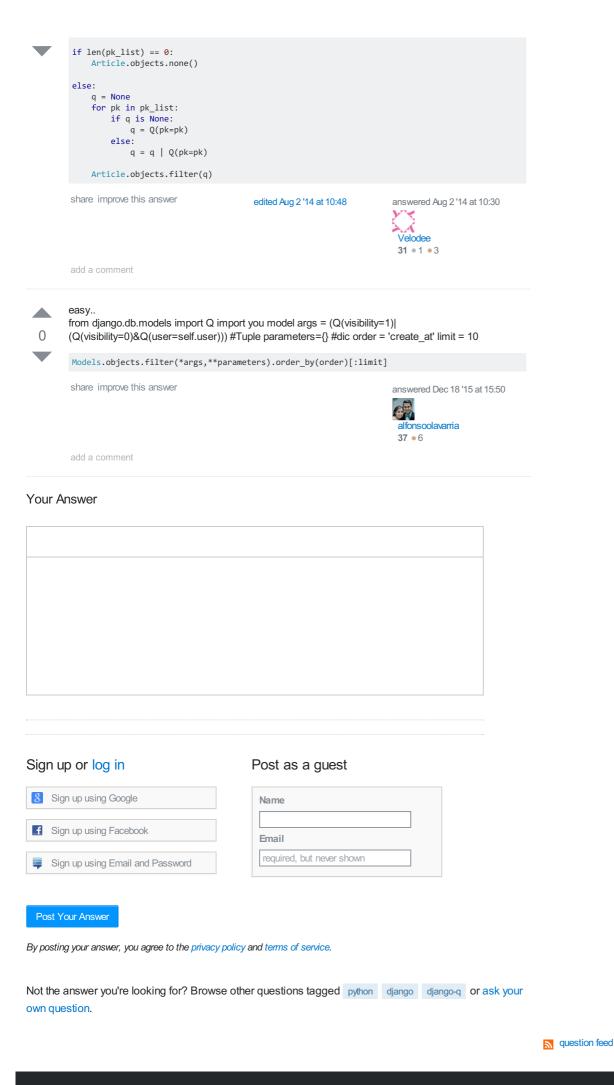
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1

This one is for dynamic pk list:

pk_list = qs.values_list('pk', flat=True) # i.e [] or [1, 2, 3]





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