

List View – Class Based Views Django

List View refers to a view (logic) to display multiple instances of a table in the database.

Consider a project named geeksforgeeks having an app named geeks.

After you have a project and an app, let's create a model of which we will be creating instances through our view. In geeks/models.py,

```
# import the standard Django Model
# from built-in library
from django.db import models

# declare a new model with a name "GeeksModel"
class GeeksModel(models.Model):

    # fields of the model
    title = models.CharField(max_length = 200)
    description = models.TextField()

    # renames the instances of the model
    # with their title name
    def __str__(self):
        return self.title
```

After creating this model, we need to run two commands in order to create Database for the same.

Python manage.py [makemigrations](#)

Python manage.py [migrate](#)

Now let's create some instances of this model using shell, run from bash,

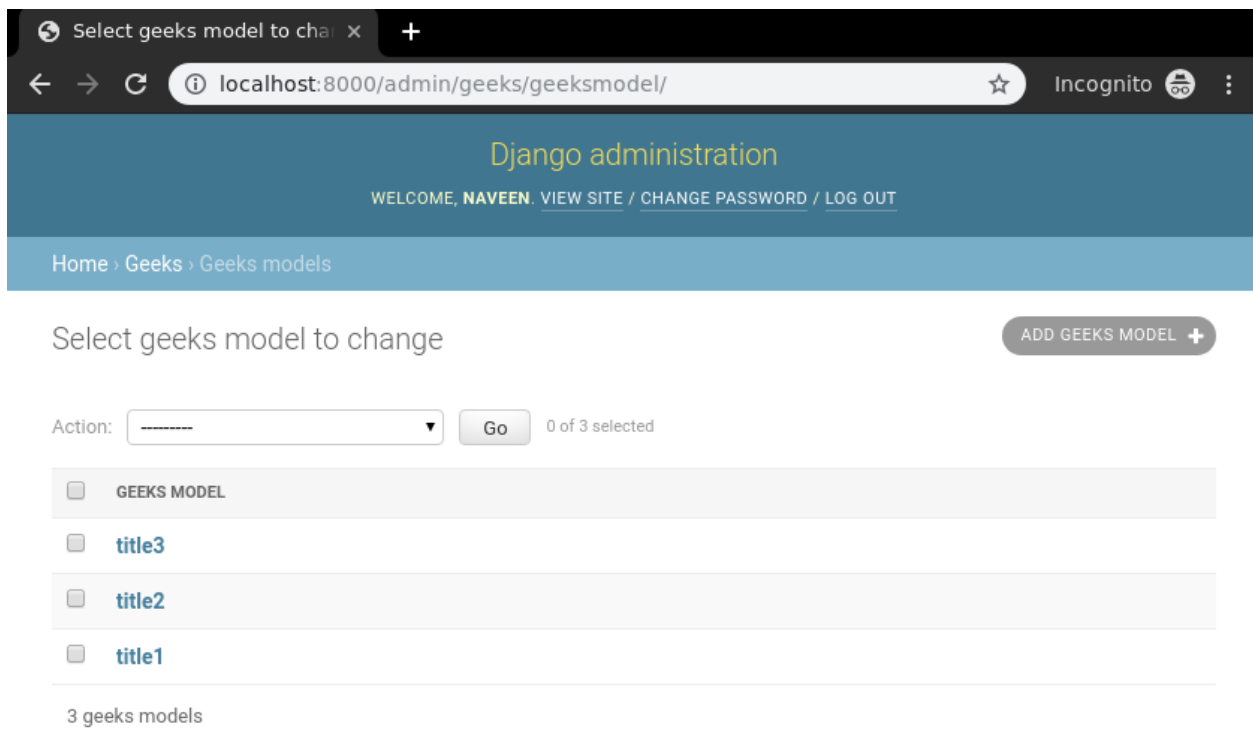
Python manage.py shell

Enter following commands

```
>>> from geeks.models import GeeksModel
>>> GeeksModel.objects.create(
                                title="title1",
```

```
                description="description1").save()
>>> GeeksModel.objects.create(
                title="title2",
                description="description2").save()
>>> GeeksModel.objects.create(
                title="title2",
                description="description2").save()
```

Now we have everything ready for back end. Verify that instances have been created from <http://localhost:8000/admin/geeks/geeksmodel/>



Class Based Views automatically setup everything from A to Z. One just needs to specify which model to create ListView for, then Class based ListView will automatically try to find a template in `app_name/modelname_list.html`. In our

case it is `geeks/templates/geeks/geeksmodel_list.html`. Let's create our class based view. In `geeks/views.py`,

```
from django.views.generic.list import ListView
from .models import GeeksModel

class GeeksList(ListView):

    # specify the model for list view
    model = GeeksModel
```

Now create a url path to map the view. In `geeks/urls.py`,

```
from django.urls import path

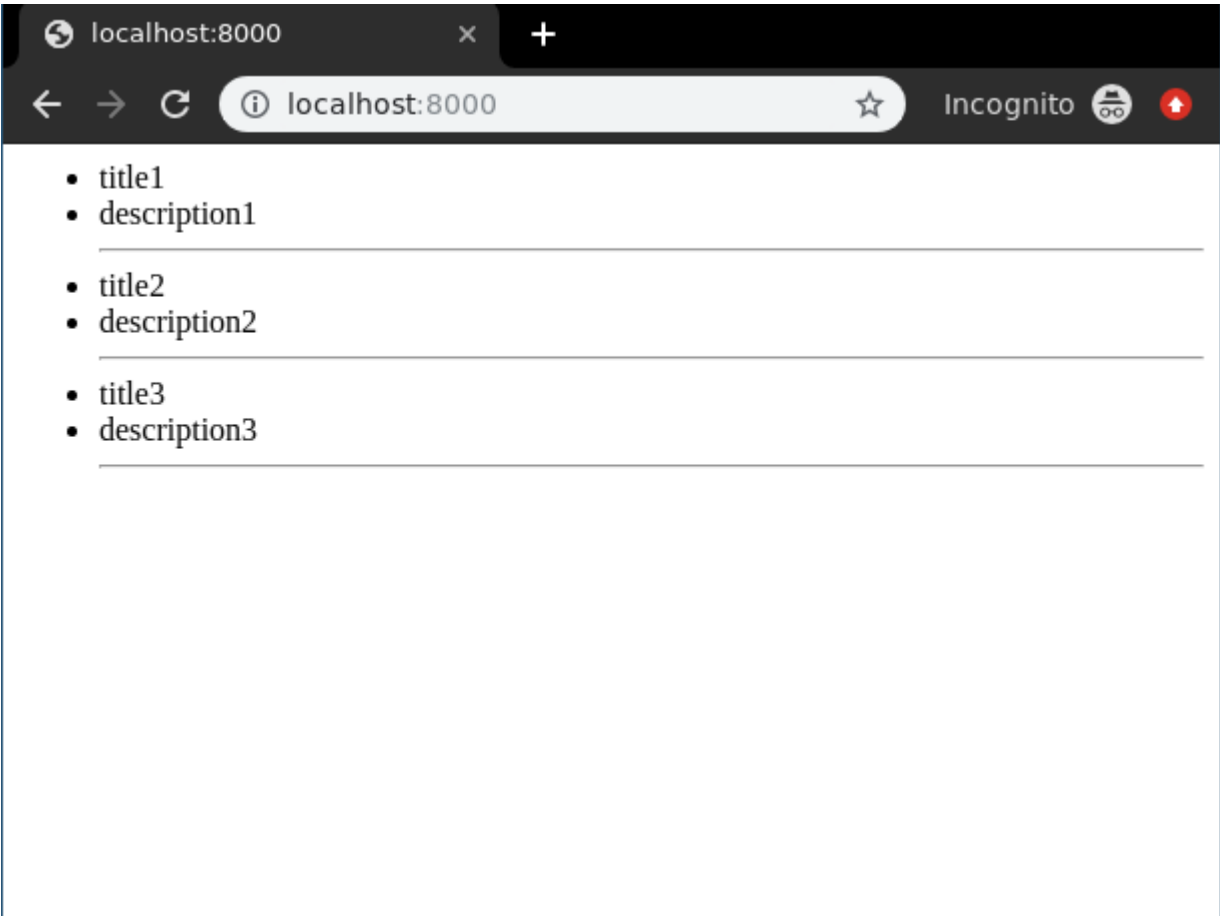
# importing views from views..py
from .views import GeeksList
urlpatterns = [
    path('', GeeksList.as_view()),
]
```

Create a template in `templates/geeks/geeksmodel_list.html`,

```
<ul>
  <!-- Iterate over object_list -->
  {% for object in object_list %}
  <!-- Display Objects -->
  <li>{{ object.title }}</li>
  <li>{{ object.description }}</li>

  <hr/>
  <!-- If object_list is empty -->
  {% empty %}
  <li>No objects yet.</li>
  {% endfor %}
</ul>
```

Let's check what is there on <http://localhost:8000/>



- title1
 - description1
-

- title2
 - description2
-

- title3
 - description3
-