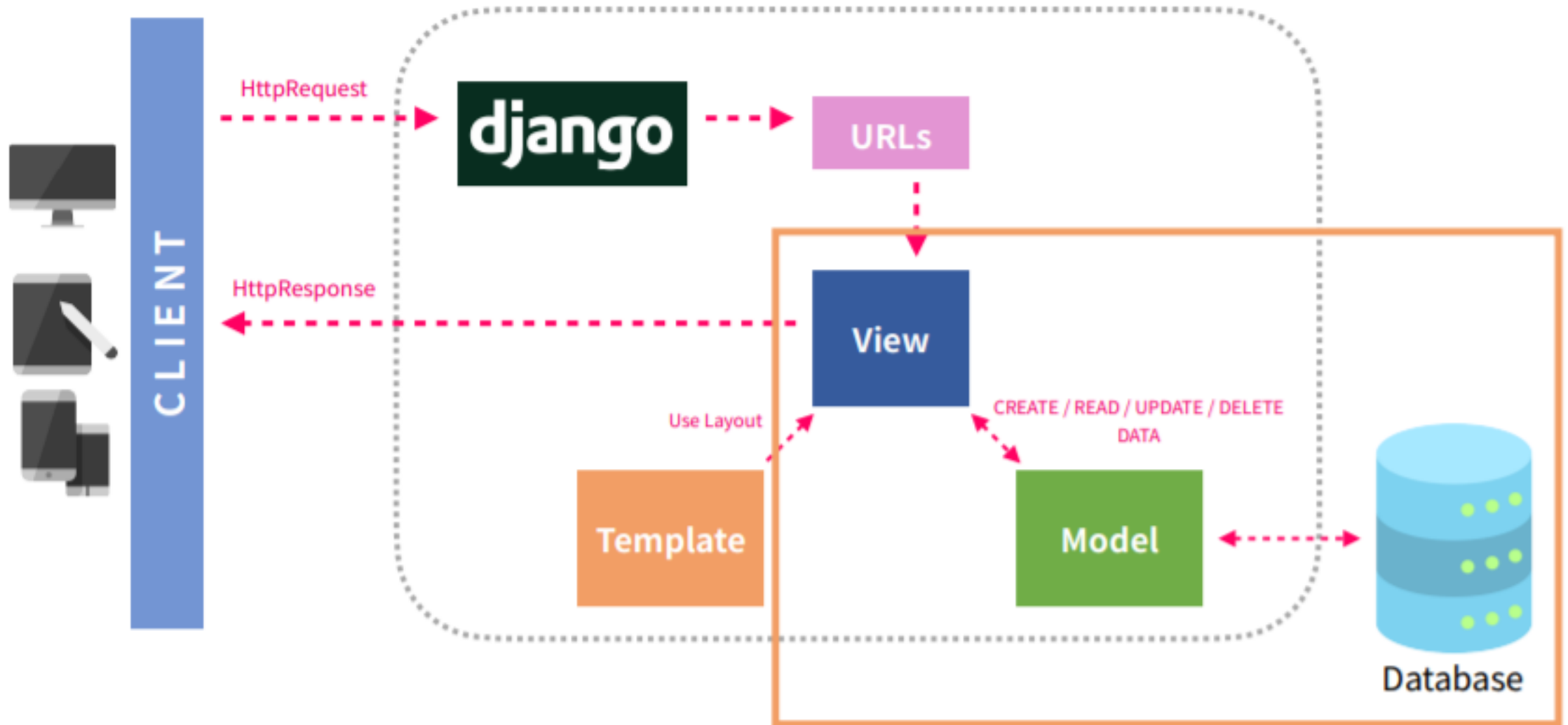
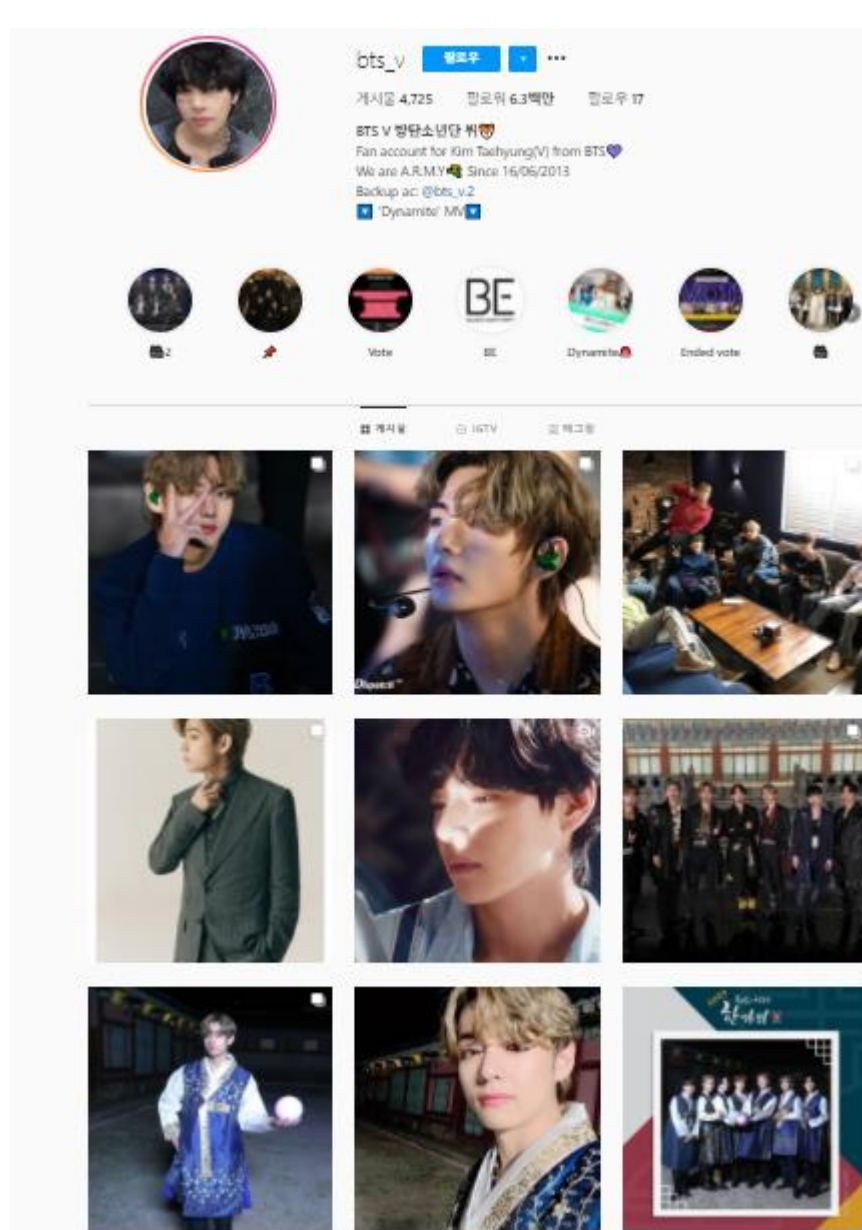


# Model





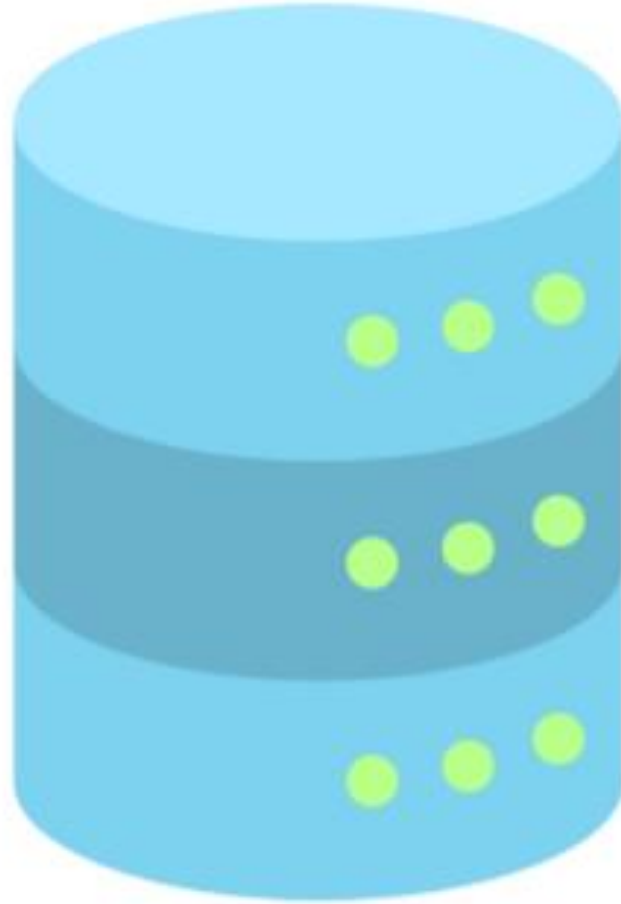
Layout+Data A



Layout+Data B







**Database**



**DBMS**

# **RDB**

**(Relational Database)**



# Post

author	body	crated_at
miin_0	방탄소년단 짱	2020-10-07
anybc	♥	2020-09-29
gsm	보조개 콕	2020-08-15

# Table

# **RDBMS**

**(Relational Database Management System)**



**RDBMS**

# SQL

(Structured Query Language)



Application



SQL

```
SELECT * FROM "Post" WHERE "author" = "min0"
```



Data

# ORM

(Object Relational Mapping)

# Post

author	body	crated_at
miin_0	방탄소년단 짱	2020-10-07
anybc	♥	2020-09-29
gsm	보조개 콕	2020-08-15

```
from django.db import models

class Post(models.Model):
    author = models.CharField(max_length=100)
    body = models.TextField()
    created_at = models.DateField()

    def __str__(self):
        return f'Author: {self.author} | Body: {self.body}'
```



Application



**Model**



Data





Application



Model



ORACLE<sup>®</sup>  
DATABASE

MySQL<sup>®</sup>

PostgreSQL<sup>®</sup>

Data

**Model**

Go to Anything (Ctrl-P)



models.py



▼ GSM\_Django - /home/

▼ gsm

► gsm

▼ posts

► migrations

▼ templates

► posts

🔗 \_\_init\_\_.py

🔗 admin.py

🔗 apps.py

🔗 models.py

🔗 tests.py

🔗 urls.py

🔗 views.py

📄 db.sqlite3

```
1 from django.db import models
2
3 # Create your models here.
4 class Post(models.Model):
5
6     author = models.CharField(max_length=100)
7     body = models.TextField()
8     created_at = models.DateTimeField()
9
10    def __str__(self):
11        return f'{self.author}: {self.body}'
```

Go to Anything (Ctrl-P)



models.py



▼ GSM\_Django - /home/

▼ gsm

▶ gsm

▼ posts

▶ migrations

▼ templates

▶ posts

🔗 \_\_init\_\_.py

🔗 admin.py

🔗 apps.py

🔗 models.py

🔗 tests.py

🔗 urls.py

🔗 views.py

📄 db.sqlite3

```
1 from django.db import models
```

```
2  
3 # Create your models here.
```

```
4 class Post(models.Model):
```

```
5  
6     author = models.CharField(max_length=100)
```

```
7     body = models.TextField()
```

```
8     created_at = models.DateTimeField()
```

```
9  
10    def __str__(self):
```

```
11        return f'{self.author}: {self.body}'
```

Go to Anything (Ctrl-P)



models.py



▼ GSM\_Django - /home/

▼ GSM

▶ GSM

▼ posts

▶ migrations

▼ templates

▶ posts

🔌 \_\_init\_\_.py

🔌 admin.py

🔌 apps.py

🔌 models.py

🔌 tests.py

🔌 urls.py

🔌 views.py

📄 db.sqlite3

1 from django.db import models

2

3 # Create your models here.

4 class Post(models.Model):

5

6 author = models.CharField(max\_length=100)

7 body = models.TextField()

8 created\_at = models.DateTimeField()

9

10 def \_\_str\_\_(self):

11 return f'{self.author}: {self.body}'

Go to Anything (Ctrl-P)



models.py



▼ GSM\_Django - /home/

▼ gsm

▶ gsm

▼ posts

▶ migrations

▼ templates

▶ posts

🔗 \_\_init\_\_.py

🔗 admin.py

🔗 apps.py

🔗 models.py

🔗 tests.py

🔗 urls.py

🔗 views.py

📄 db.sqlite3

```
1 from django.db import models
2
3 # Create your models here.
4 class Post(models.Model):
5
6     author = models.CharField(max_length=100)
7     body = models.TextField()
8     created_at = models.DateTimeField()
9
10     def __str__(self):
11         return f'{self.author}: {self.body}'
```

bash - "ip-172-31-83-241" x

Immediate (Javascript (br x



QUIT THE SERVER WITH CONTROL-C.

^Cvocstartsoft:~/environment/gsm

\$ python3 manage.py makemigrations posts

Migrations for 'posts':

posts/migrations/0001\_initial.py

- Create model Post

vocstartsoft:~/environment/gsm \$

Go to Anything (Ctrl-P)

- ▼ GSM\_Django - /home/
  - ▼ gsm
    - ▼ gsm
      - ▼ posts
        - ▼ migrations
          - 0001\_initial.py
  - ▼ templates
    - ▼ posts
      - \_\_init\_\_.py
      - admin.py
      - apps.py
      - models.py
      - tests.py
      - urls.py

```
0001_initial.py x (+)
1 # Generated by Django 3.1.1 on 2020-10-08 03:09
2
3 from django.db import migrations, models
4
5
6 class Migration(migrations.Migration):
7
8     initial = True
9
10     dependencies = [
11     ]
12
13     operations = [
14         migrations.CreateModel(
15             name='Post',
16             fields=[
17                 ('id', models.AutoField(auto_created=True, primary_key=True, serialize=False, verbose_name='ID')),
18                 ('author', models.CharField(max_length=100)),
19                 ('body', models.TextField()),
20                 ('crated_at', models.DateTimeField()),
21             ],
22         ),
23     ]
24
```



Go to Anything (Ctrl-P)

▼ GSM\_Django - /home/

▼ GSM

▶ GSM

▼ posts

▼ migrations

0001\_initial.py

\_\_init\_\_.py

▼ templates

▶ posts

\_\_init\_\_.py

admin.py

apps.py

models.py

tests.py

0001\_initial.py

```
1 # Generated by Django 3.1.1 on 2020-10-08 03:09
2
3 from django.db import migrations, models
4
5
6 class Migration(migrations.Migration):
7
8     initial = True
9
```

1:1 Python Spaces: 4

bash - "ip-172-31-83-241" x

Immediate (Javascript (br x

**vocstartsoft**:~/environment/gsm \$ python3 manage.py sqlmigrate posts 0001

BEGIN;

--

-- Create model Post

--

CREATE TABLE "posts\_post" ("id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "author" varchar(100) NOT NULL, "body" text NOT NULL, "created\_at" date NOT NULL);  
COMMIT;

**vocstartsoft**:~/environment/gsm \$

```
vocstartsoft:~/environment/gsm $ python3 manage.py migrate
```

Operations to perform:

Apply all migrations: admin, auth, contenttypes, posts, sessions

Running migrations:

```
Applying contenttypes.0001_initial... OK
Applying auth.0001_initial... OK
Applying admin.0001_initial... OK
Applying admin.0002_logentry_remove_auto_add... OK
Applying admin.0003_logentry_add_action_flag_choices... OK
Applying contenttypes.0002_remove_content_type_name... OK
Applying auth.0002_alter_permission_name_max_length... OK
Applying auth.0003_alter_user_email_max_length... OK
Applying auth.0004_alter_user_username_opts... OK
Applying auth.0005_alter_user_last_login_null... OK
Applying auth.0006_require_contenttypes_0002... OK
Applying auth.0007_alter_validators_add_error_messages... OK
Applying auth.0008_alter_user_username_max_length... OK
Applying auth.0009_alter_user_last_name_max_length... OK
Applying auth.0010_alter_group_name_max_length... OK
Applying auth.0011_update_proxy_permissions... OK
Applying auth.0012_alter_user_first_name_max_length... OK
Applying posts.0001_initial... OK
```

```
vocstartsoft:~/environment/gsm $ python3 manage.py migrate
```

**Operations to perform:**

**Apply all migrations:** admin, auth, contenttypes, posts, sessions

**Running migrations:**

Applying contenttypes.0001\_initial... **OK**

Applying auth.0001\_initial... **OK**

Applying admin.0001\_initial... **OK**

Applying admin.0002\_logentry\_remove\_auto\_add... **OK**

Applying admin.0003\_logentry\_add\_action\_flag\_choices... **OK**

Applying contenttypes.0002\_remove\_content\_type\_name... **OK**

Applying auth.0002\_alter\_permission\_name\_max\_length... **OK**

Applying auth.0003\_alter\_user\_email\_max\_length... **OK**

Applying auth.0004\_alter\_user\_username\_opts... **OK**

Applying auth.0005\_alter\_user\_last\_login\_null... **OK**

Applying auth.0006\_require\_contenttypes\_0002... **OK**

Applying auth.0007\_alter\_validators\_add\_error\_messages... **OK**

Applying auth.0008\_alter\_user\_username\_max\_length... **OK**

Applying auth.0009\_alter\_user\_last\_name\_max\_length... **OK**

Applying auth.0010\_alter\_group\_name\_max\_length... **OK**

Applying auth.0011\_update\_proxy\_permissions... **OK**

Applying auth.0012\_alter\_user\_first\_name\_max\_length... **OK**

Applying posts.0001\_initial... **OK**

Applying sessions.0001\_initial... **OK**



**Model** 데이터 형태 정의



**makemigrations** 해당 형태 분석해 필요한 SQL 코드 파악



**migrate** SQL 실제 적용을 통한 데이터베이스 반영

```
class Post(models.Model):  
    author = models.CharField(max_length=100)  
    body = models.TextField()  
    created_at = models.DateTimeField()
```



## Post

author	body	created_at

```
class Post(models.Model):  
    author = models.CharField(max_length=100)  
    body = models.TextField()  
    created_at = models.DateTimeField()
```



## Post

author	body	crated_at
miin_0	방탄소년단 짱	2020-10-07
anybc	♥	2020-09-29
gsm	보조개 콕	2020-08-15

**Admin**



python3 - "ip-172-31-83-2 x

Immediate (Javascript (br x (+

```
vocstartsoft:~/environment/gsm $ python3 manage.py createsuperuser
```

Username (leave blank to use 'ubuntu'): min0

Email address: gsmmy@gsm.hs.kr

Password:

Password (again):

This password is too short. It must contain at least 8 characters.

This password is too common.

This password is entirely numeric.

Bypass password validation and create user anyway? [y/N]: y

Superuser created successfully.

```
vocstartsoft:~/environment/gsm $
```



python3 - "ip-172-31-83-2 x

Immediate (Javascript (br x (+

```
vocstartsoft:~/environment/gsm $ python3 manage.py createsuperuser
```

```
Username (leave blank to use 'ubuntu'): min0
```

```
Email address: gsmy@gsm.hs.kr
```

```
Password:
```

```
Password (again):
```

```
This password is too short. It must contain at least 8 characters.
```

```
This password is too common.
```

```
This password is entirely numeric.
```

```
Bypass password validation and create user anyway? [y/N]: y
```

```
Superuser created successfully.
```

```
vocstartsoft:~/environment/gsm $
```

python3 - "ip-172-31-83-2 x

Immediate (Javascript (br x (+

```
vocstartsoft:~/environment/gsm $ python3 manage.py createsuperuser
```

```
Username (leave blank to use 'ubuntu'): min0
```

```
Email address: gsmy@gsm.hs.kr
```

```
Password:
```

```
Password (again):
```

```
This password is too short. It must contain at least 8 characters.
```

```
This password is too common.
```

```
This password is entirely numeric.
```

```
Bypass password validation and create user anyway? [y/N]: y
```

```
Superuser created successfully.
```

```
vocstartsoft:~/environment/gsm $
```

python3 - "ip-172-31-83-2 x

Immediate (Javascript (br x (+

```
vocstartsoft:~/environment/gsm $ python3 manage.py createsuperuser
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Username (leave blank to use 'ubuntu'): min0
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```
Email address: gsmmy@gsm.hs.kr
```

```
Password:
```

```
Password (again):
```

```
This password is too short. It must contain at least 8 characters.
```

```
This password is too common.
```

```
This password is entirely numeric.
```

```
Bypass password validation and create user anyway? [y/N]: y
```

```
Superuser created successfully.
```

```
vocstartsoft:~/environment/gsm $
```

# Django administration

Username:

Password:

Log in



0666c0ee10ca46beaabe4bbe3b7d314d.vfs.cloud9.us-east-1.amazonaws.com/admin/

## Django administration

### Site administration

#### AUTHENTICATION AND AUTHORIZATION

##### Groups

[+ Add](#) [✎ Change](#)

##### Users

[+ Add](#) [✎ Change](#)

#### Recent actions

##### My actions

None available

Go to Anything (Ctrl-P)

▼ GSM\_Django ⚙️  
▼ gsm  
    > gsm  
    ▼ posts  
        > migrations  
        > templates  
        🐍 \_\_init\_\_.py  
        🐍 admin.py

🐍 admin.py

```
1 from django.contrib import admin
2
3 # Register your models here.
4 from .models import Post
5
6 admin.site.register(Post)
7
8 |
```

# Django administration

## Site administration

### AUTHENTICATION AND AUTHORIZATION

Groups	<a href="#">+ Add</a>	<a href="#">✎ Change</a>
Users	<a href="#">+ Add</a>	<a href="#">✎ Change</a>

### POSTS

Posts	<a href="#">+ Add</a>	<a href="#">✎ Change</a>
-------	-----------------------	--------------------------

AUTHENTICATION AND AUTHORIZATION	
Groups	<a href="#">+ Add</a>
Users	<a href="#">+ Add</a>
POSTS	
Posts	<a href="#">+ Add</a>

Select post to change

0 posts



ADD POST +



## Add post

Author:

minyoung

Body:

나의 Django Project :D

Crated at:

Date:

2020-10-12

Today |



Time:

00:52:07

Now |



Note: You are 9 hours ahead of server time.

Save and add another

Save and continue editing

SAVE

## Add post

Author:

minyoung

Body:

나의 Django Project :D

Crated at:

Date:

2020-10-12

Today |



Time:

00:52:07

Now |



Note: You are 9 hours ahead of server time.

Save and add another


Save and continue editing

SAVE

Select post to change

ADD POST +

Action:

Go

0 of 1 selected

☐

POST

☐

minyoung: 나의 Django Project :D

1 post

```
def __str__(self):  
    return f'{self.author}: {self.body}'
```

## Add post

Author:

minyoung

Body:

나의 Django Project :D

Crated at:

Date:

2020-10-12

Today |



Time:

00:52:07

Now |

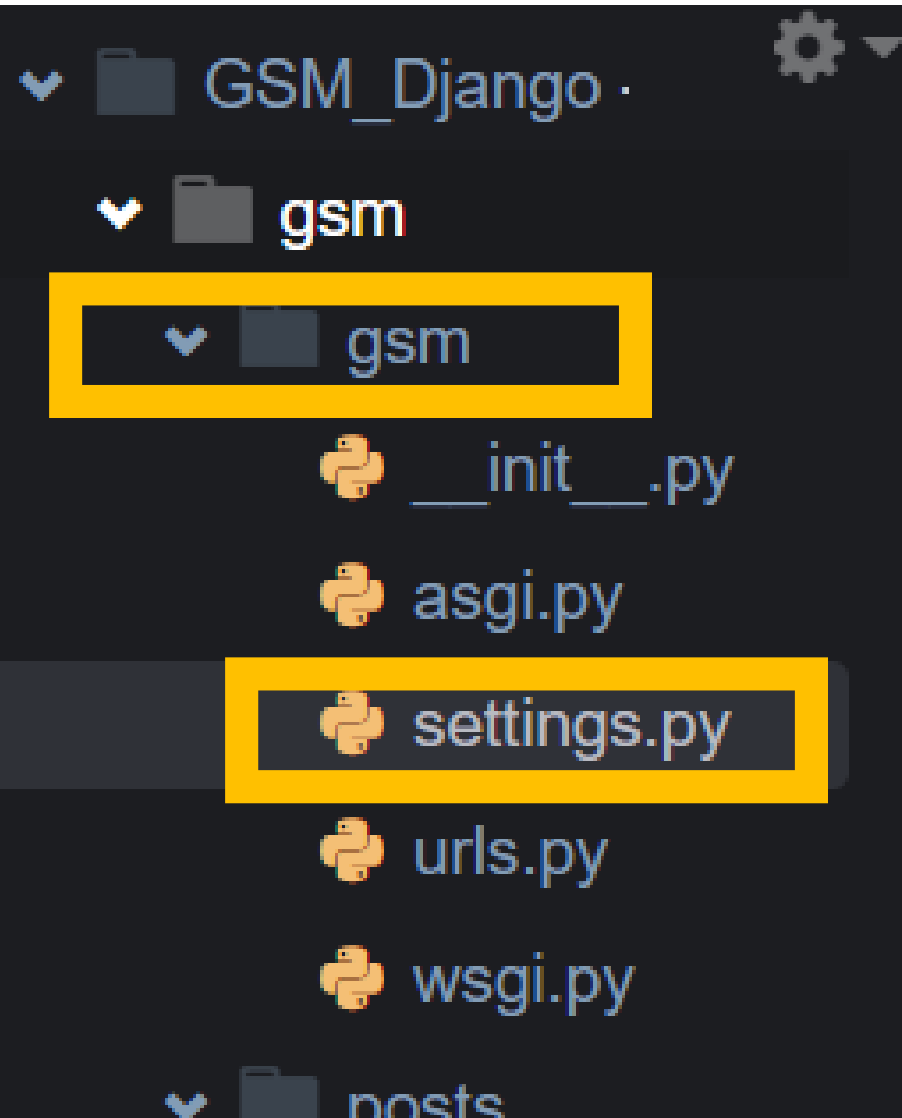


Note: You are 9 hours ahead of server time.

Save and add another

Save and continue editing

SAVE



```
102
103
104 # Internationalization
105 # https://docs.djangoproject.com/
106
107 LANGUAGE_CODE = 'ko-kr'
108
109 TIME_ZONE = 'Asia/Seoul'
110
111 USE_I18N = True
112
113 USE_L10N = True
114
115 USE_TZ = True
116
```

## post 추가


Author:


flower

Body:

안녕 나는 꽃이야

Crated at:

날짜: 2020-10-12 오늘 

시각: 09:58:03 현재 

저장 및 다른 이름으로 추가

저장 및 편집 계속

저장



0666c0ee10ca46beaabe4bbe3b7d314d.vfs.cloud9.us-east-1.amazonaws.com/posts/

# Posts

- 나의 첫 Django project



Go to Anything (Ctrl-P)



▼ GSM\_Django



▼ gsm

▼ gsm

🔗 \_\_init\_\_.py

🔗 asgi.py

🔗 settings.py

🔗 urls.py

🔗 wsgi.py

▼ posts

➤ migrations

▼ templates

▼ posts

📄 index.htm

🔗 \_\_init\_\_.py

🔗 admin.py

🔗 apps.py

🔗 models.py

🔗 tests.py

🔗 urls.py

🔗 views.py



🔗 views.py



```
1 from django.shortcuts import render
2 # Create your views here.
3 from .models import Post
4
5 # Create your views here.
6
7
8 def index(request):
9     posts = Post.objects.all()
10    context = {'posts': posts}
11
12    return render(request, 'posts/index.html', context)
13
14    #return HttpResponse("Hello World !")
```

python3 - "ip-172-31-83-2 x

Immediate (Javascript (br x



```
django version 3.1.1, using settings gsm.settings
Starting development server at http://127.0.0.1:8080/
Quit the server with CONTROL-C.
/home/ubuntu/environment/gsm/posts/views.py changed, reloading.
Watching for file changes with StatReloader
Performing system checks...
```

```
System check identified no issues (0 silenced).
October 12, 2020 - 10:26:42
```



Go to Anything (Ctrl-P)

▼ GSM\_Django ·

▼ gsm

▶ gsm

▼ posts

▶ migrations

▼ templates

▼ posts

index.html

\_\_init\_\_.py

admin.py

apps.py

models.py

tests.py

index.html

```
1 {% load static %}
2 <!DOCTYPE html>
3 <html>
4   <head>
5     <title>GSM</title>
6   </head>
7   <body>
8     <h1>Posts</h1>
9     <!--<ul>
10      <li>{{ post.author }} | {{ post.body }}</li>
11    {% if posts %}
12      <ul>
13        {% for post in posts %}
14          <li>Author : {{ post.author }} | Body : {{ post.body }}</li>
15        {% endfor %}
16      </ul>
17    {% else %}
18      <p>No Posts.</p>
19    {% endif %}
20  </body>
21 </html>
```



0666c0ee10ca46beaabe4bbe3b7d314d.vfs.cloud9.us-east-1.amazonaws.com/posts/

# Posts

- Author : minyoung | Body : 나의 Django Project :D
- Author : flower | Body : 안녕 나는 꽃이야

## 변경할 post 선택

액션:

실행

2 중 아무것도 선택되지 않았습니다.

☐ POST

☐ flower: 안녕 나는 꽃이야

☐ minyoung: 나의 Django Project :D

2 posts

# Post

author	body	crated_at
flower	안녕 나는 꽃이야	2020-10-12
minyoung	나의 Django Project :D	2020-10-12

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이 야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이 야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12

1. author가 minyoung인 게시물을 찾아줘 !(검색)

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12

1. author가 minyoung인 게시물을 찾아줘 !(검색)
2. id가 2인 게시물을 찾아줘 ! (id 기반)

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이 야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12

**Primary Key**



python3 - "ip-172-31-83-2 x

Immediate (Javascript (br x 

**vocstartsoft**:~/environment/gsm \$ python3 manage.py shell

Python 3.6.9 (default, Jul 17 2020, 12:50:27)

Type 'copyright', 'credits' or 'license' for more information

IPython 7.16.1 -- An enhanced Interactive Python. Type '?' for help.

In [1]: 

python3 - "ip-172-31-83-2" ×

Immediate (Javascript (br × +)

```
vocstartsoft:~/environment/gsm $ python3 manage.py shell
Python 3.6.9 (default, Jul 17 2020, 12:50:27)
Type 'copyright', 'credits' or 'license' for more information
IPython 7.16.1 -- An enhanced Interactive Python. Type '?' for help.
```

```
In [1]: █
```

bash - "ip-172-31-83-241" ×

Immediate (Javascript (br × +)



```
vocstartsoft:~/environment/gsm $ python3
Python 3.6.9 (default, Jul 17 2020, 12:50:27)
[GCC 8.4.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> █
```

```
vocstartsoft:~/environment/gsm $ python3 manage.py shell
Python 3.6.9 (default, Jul 17 2020, 12:50:27)
Type 'copyright', 'credits' or 'license' for more information
IPython 7.16.1 -- An enhanced Interactive Python. Type '?' for help.
```

```
In [1]: from posts.models import Post
```

```
In [2]: posts = Post.objects.all()
```

## Model Manager

```
In [3]: print(posts)
```

```
<QuerySet [<Post: minyoung: 나의 Django Project :D>, <Post: flower: 안녕 나는 꽃이야>]>
```

```
vocstartsoft:~/environment/gsm $ python3 manage.py shell
Python 3.6.9 (default, Jul 17 2020, 12:50:27)
Type 'copyright', 'credits' or 'license' for more information
IPython 7.16.1 -- An enhanced Interactive Python. Type '?' for help.
```

```
In [1]: from posts.models import Post
```

```
In [2]: posts = Post.objects.all()
```

```
In [3]: print(posts)
```

## QuerySet

```
<QuerySet [ <Post: minyoung: 나의 Django Project :D>, <Post: flower: 안녕 나는 꽃이야> ]>
```

```
In [4]: from django.utils import timezone
```

```
In [5]: new_post = Post()
```

```
In [6]: new_post
```

```
Out[6]: <Post: : >
```

```
In [7]: new_post.author = 'minil'
```

```
In [8]: new_post.body = 'Hello I am minil'
```

```
In [9]: new_post.created_at = timezone.now()
```

```
In [10]: new_post.save()
```

```
In [11]: new_post.id
```

```
Out[11]: 3
```

```
In [4]: from django.utils import timezone
```

```
In [5]: new_post = Post()
```

```
In [6]: new_post
```

```
Out[6]: <Post: : >
```

```
In [7]: new_post.author = 'minil'
```

```
In [8]: new_post.body = 'Hello I am minil'
```

```
In [9]: new_post.created_at = timezone.now()
```

```
In [10]: new_post.save()
```

```
In [11]: new_post.id
```

```
Out[11]: 3
```

```
In [4]: from django.utils import timezone
```

```
In [5]: new_post = Post()
```

```
In [6]: new_post
```

```
Out[6]: <Post: : >
```

```
In [7]: new_post.author = 'minil'
```

```
In [8]: new_post.body = 'Hello I am minil'
```

```
In [9]: new_post.created_at = timezone.now()
```

```
In [10]: new_post.save()
```

```
In [11]: new_post.id
```

```
Out[11]: 3
```

```
In [4]: from django.utils import timezone
```

```
In [5]: new_post = Post()
```

```
In [6]: new_post
```

```
Out[6]: <Post: : >
```

```
In [7]: new_post.author = 'minil'
```

```
In [8]: new_post.body = 'Hello I am minil'
```

```
In [9]: new_post.created_at = timezone.now()
```

```
In [10]: new_post.save()
```

```
In [11]: new_post.id
```

```
Out[11]: 3
```



```
In [12]: Post.objects.all()
```

```
Out[12]: <QuerySet [  
  <Post: minyoung: 나의 Django Project :D>, <Post: flower:  
  안녕 나는 꽃이야>, <Post: minil: Hello I am minil>]>
```

```
In [4]: from django.utils import timezone
```

```
In [5]: new_post = Post()
```

```
In [6]: new_post
```

```
Out[6]: <Post: : >
```

```
In [7]: new_post.author = 'minil'
```

```
In [8]: new_post.body = 'Hello I am minil'
```

```
In [9]: new_post.created_at = timezone.now()
```

```
In [10]: new_post.save()
```

```
In [11]: new_post.id
```

```
Out[11]: 3
```

```
In [13]: new_post2 = Post(author='min2', body='Hello I am min2', created_at=
...:     timezone.now())
```

```
In [14]: new_post2.save()
```

```
In [15]: new_post2.id
```

```
Out[15]: 4
```

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12
3	minil	Hello I am minil	2020-10-13
4	min2	Hello I am min2	2020-10-13

1. author가 minyoung인 게시물을 찾아줘 !(검색)

2. id가 2인 게시물을 찾아줘 ! (id 기반)

```
In [1]: from posts.models import Post
```

```
In [2]: from django.utils import timezone
```

```
In [3]: post = Post.objects.get(id=2)
```

```
In [4]: post
```

```
Out[4]: <Post: flower: 안녕 나는 꽃이야>
```

```
In [5]: Post.objects.get(id=9999)
```

DoesNotExist

Traceback (most recent call last)

```
<ipython-input-5-ff2acfbde9a9> in <module>
```

```
----> 1 Post.objects.get(id=9999)
```

```
~/.local/lib/python3.6/site-packages/django/db/models/manager.py in manager_
method(self, *args, **kwargs)
```

```
83         def create_method(name, method):
```

```
84         def manager_method(self, *args, **kwargs):
```

```
In [7]: posts = Post.objects.filter(author='minyoung')
```

```
In [8]: posts
```

```
Out[8]: <QuerySet [<Post: minyoung: 나의 Django Project :D>]>
```

```
In [9]: posts = Post.objects.filter(author='bts')
```

```
In [10]: posts
```

```
Out[10]: <QuerySet []>
```

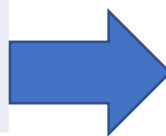
```
In [12]: posts = Post.objects.filter(author='minyoung').filter(body=
...:     '나의 Django Project :D')
...:
...:
...:
```

```
In [13]: posts
```

```
Out[13]: <QuerySet [<Post: minyoung: 나의 Django Project :D>]>
```

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이 야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12
3	minil	Hello I am minil	2020-10-13
4	min2	Hello I am min2	2020-10-13





```
In [15]: post = Post.objects.get(id=4)
```

```
In [16]: post
```

```
Out[16]: <Post: min2: Hello I am min2>
```

```
In [17]: post.body = 'Hi'
```

```
In [18]: post.save()
```

```
In [19]: post
```

```
Out[19]: <Post: min2: Hi>
```

```
In [15]: post = Post.objects.get(id=4)
```

```
In [16]: post
```

```
Out[16]: <Post: min2: Hello I am min2>
```

```
In [17]: post.body = 'Hi'
```

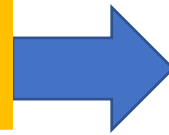
```
In [18]: post.save()
```

```
In [19]: post
```

```
Out[19]: <Post: min2: Hi>
```

# Post

id	author	body	crated_at
1	flower	안녕 나는 꽃이 야	2020-10-12
2	minyoung	나의 Django Project :D	2020-10-12
3	minil	Hello I am minil	2020-10-13
4	min2	Hi	2020-10-13



삭제

```
In [19]: post
```

```
Out[19]: <Post: min2: Hi>
```

```
In [20]: post.delete()
```

```
Out[20]: (1, {'posts.Post': 1})
```

```
In [21]: Post.objects.all()
```

```
Out[21]: <QuerySet [<Post: minyoung: 나의 Django Project :D>, <Post: flower:  
안녕 나는 꽃이야>, <Post: minil: Hello I am minil>]>
```

```
In [22]: exit()
```

```
vocstartsoft:~/environment/gsm $
```



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# Posts

- Author : minyoung | Body : 나의 Django Project :D
- Author : flower | Body : 안녕 나는 꽃이야
- Author : minil | Body : Hello I am minil

Go to Anything (Ctrl-P)

- ▼ GSM\_Django
  - ▼ gsm
    - gsm
  - ▼ posts
    - migrations
  - ▼ templates
    - ▼ posts
      - index.html
  - \_\_init\_\_.py
  - admin.py
  - apps.py
  - models.py
  - tests.py
  - urls.py
  - views.py

views.py

```
1 from django.shortcuts import render
2 #from django.http import HttpResponse
3 from .models import Post
4
5 # Create your views here.
6
7
8 def index(request):
9     posts = Post.objects.all().order_by('created_at')
10    context = {'posts' : posts}
11
12    return render(request, 'posts/index.html', context)
13
14    #return HttpResponse("Hello World !")
```



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# Posts

- Author : minyoung | Body : 나의 Django Project :D
- Author : flower | Body : 안녕 나는 꽃이야
- Author : minil | Body : Hello I am minil



Go to Anything (Ctrl-P)

▼ GSM\_Django ·

▼ GSM

▶ GSM

▼ posts

▶ migrations

▼ templates

▼ posts

index.html

\_\_init\_\_.py

admin.py

apps.py

models.py

tests.py

urls.py

views.py



views.py



```
1 from django.shortcuts import render
2 #from django.http import HttpResponse
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4
5 # Create your views here.
6
7
8 def index(request):
9     posts = Post.objects.all().order_by('-created_at')
10    context = {'posts' : posts}
11
12    return render(request, 'posts/index.html', context)
13
14    #return HttpResponse("Hello World !")
```



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# Posts

- Author : minil | Body : Hello I am minil
- Author : flower | Body : 안녕 나는 꽃이야
- Author : minyoung | Body : 나의 Django Project :D