Create a login application with a database using Django

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Step 1 start project

1 my laptop windows11 cmd: pip3 install Django

2 check if installed successfully

```
C:\Users\chenyiyun>python
Python 3.10.1 (tags/v3.10.1:2cd268a, Dec 6 2021, 19:10:37) [MSC v.1929 64 b)
Type "help", "copyright", "credits" or "license" for more information.
>>> import django
>>> django.get_version()
'3.2.9'
>>>
```

3

```
C:\Users\chenyiyun>cd desktop
C:\Users\chenyiyun\Desktop>django-admin startproject mysite
C:\Users\chenyiyun\Desktop>
```

Then open the folder with pycharm

Step 2 database migration

```
1 add code in __init__.py:
import pymysql
pymysql.install as MySQLdb()
```

2 replace content of DATABASES in setting.py

```
76  # DATABASES = {
     # 'default': {
            'ENGINE': 'django.db.backends.sqlite3',
78
     #
     #
               'NAME': BASE_DIR / 'db.sqlite3',
80 #
         }
     ⊕# }
82 DATABASES = {
83
          'default': {
           'ENGINE': 'django.db.backends.mysql',#数据库的类型
84
             'NAME': 'django_test', #所使用的的数据库的名字
85
            'USER': 'root', #数据库服务器的用户
87
             'PASSWORD': '123456yiyunTX', #密码
88
             'HOST': 'cdb-68ln96rr.gz.tencentcdb.com', #主机
             'PORT': '10011', #端口
89
90
```

3 in terminal: python manage.py migrate

Then we can see new tables in database

Step 3 create app named polls

1 python manage.py startapp polls

2 add installed_app in settings.py

```
□INSTALLED_APPS = [
    🐌 wsgi.py
                                     33

∨ Impolls

                                      34
                                                   'django.contrib.admin',
 > migrations
                                      35
                                                   'django.contrib.auth',
   🐌 __init__.py
                                                   'django.contrib.contenttypes',
                                      36
    ઢ admin.py
    apps.py
                                      37
                                                   'django.contrib.sessions',
    models.py
                                      38
                                                   'django.contrib.messages',
    tests.pv
                                      39
                                                   'django.contrib.staticfiles',
    🐌 views.py
                                      40
                                                  'polls',
  指 manage.py
                                      41
```

3 create urls.py under polls

4 add code to mysite\urls.py, polls\urls.py, polls\views.py

5 create a folder named templates under polls to put html Add html files to templates Change DIRS of TEMPLATES in settings.py

6 modify polls\models.py
And then in terminal: python manage.py makemigrations polls
Python manage.py migrate

7 test it using python manage.py runserver

Step 4 apply the project to the web server

Using centos server

1 modify the ALLOWED_HOSTS in settings.py

ALLOWED HOSTS = ["*",]

2 login centOS server, attention: replace python cmd to python3 in centOS pip install django

Step 4-2 install vsftpd service on server

1 under root user:
sudo yum install vsftpd
2 #先创建 ftp 目录
\$ sudo mkdir /home/ftpdir
#添加用户
\$ sudo useradd -d /home/ftpdir -s /bin/bash ftpuser
#设置用户密码
\$ sudo passwd ftpuser
#设置 ftp 目录用户权限
\$ sudo chown ftpuser:ftpuser /home/ftpdir

3 #新建文件/etc/vsftpd.user list, 用于存放允许访问 ftp 的用户:

\$ touch /etc/vsftpd.user_list

\$ vim /etc/vsftpd.user_list

Add ftpuser to the file

4 \$ sudo service vsftpd restart

5 open FZ app (FileZilla) on windows and connect to server

Upload the folder of project

Step 4-3 start Django app on server

1 get in the project folder

```
[root@VM-16-11-centos ~]# ls
[root@VM-16-11-centos ~]# cd /
[root@VM-16-11-centos /]# cd home
[root@VM-16-11-centos home]# ls
ftpdir
[root@VM-16-11-centos home]# cd ftpdir
[root@VM-16-11-centos ftpdir]# ls
mysite
[root@VM-16-11-centos ftpdir]# cd mysite
```

2 install pymysql: pip install pymysql

3 nohup python3 manage.py runserver 0.0.0.0:8000 &

(using nohup command & to let the Django cmd run continuously after the terminal closed)

4 result:



Command: service vsftpd restart

And use FZ to upload files