

Project User Guide

Environment

- ♦ Python 3.7.5
- ♦ PyMySQL 0.9.3
- ♦ Mysqlclient 1.4.4
- ♦ MySQL -connector-python 8.0.18
- ♦ Django 2.2.7
- ♦ Flask 1.1.1
- ♦ MySQL 5.6 or later
- ♦ Recommend install: MySQL Workbench 6.3 or later
- ♦ VS Code or PyCharm (need to run Django server and flask separately)

Database Import

>project> database.sql

In your SQL, import this database;

Django Settings

1. Open VS Code (or other your preferred program), open folder: "Django"
2. >Django>hospital>settings.py:

```
79  ▾ DATABASES = {  
80  ▾     'default': {  
81          'ENGINE': 'django.db.backends.mysql',  
82          'NAME': 'django_test_db',  
83          'USER': 'root',  
84          'PASSWORD': 'Admin123',  
85          'PORT': '3306',  
86          'HOST': 'localhost',  
87          'OPTIONS': {'charset': 'utf8mb4'}  
88      },  
89  }
```

Change the DATABASES parameters to your database (NAME, USER, PASSWORD, PORT, HOST)

3. >Django (back to Django project folder)

Shell:

Python (or Python3) manage.py migrate

You'll see a warning message:

django.core.exceptions.ImproperlyConfigured: mysqlclient 1.3.13 or newer is required; you have 0.9.3.

Don't worry, this is because Django's library has some conflict with mysqlclient module (since you have 1.4.4 but Django says you have 0.9.3, which is the version of pymysql...)

4. Fix module conflict

```
File "D:\Anaconda3\lib\site-packages\django\db\backends\mysql\base.py", line 36, in <module>
    raise ImproperlyConfigured('mysqlclient 1.3.13 or newer is required; you have %s.' % Database.__version__)
django.core.exceptions.ImproperlyConfigured: mysqlclient 1.3.13 or newer is required; you have 0.9.3.
```

Go to this file: base.py, line 36:

```
version = Database.version_info
if version < (1, 3, 13):
    raise ImproperlyConfigured('mysqlclient 1.3.13 or newer is required; you have %s.' % Database.__version__)
```

Comment line 35 and 36:

```
version = Database.version_info
# if version < (1, 3, 13):
#     raise ImproperlyConfigured('mysqlclient 1.3.13 or newer is required; you have %s.' % Database.__version__)
```

Then, in Shell: **Python (or Python3) manage.py migrate**

You'll see an error:

AttributeError: 'str' object has no attribute 'decode'

Don't worry, we are one-step to success;

Go to operation.py line 146:

```
sql = self.db.ops.last_executed_query(self.cursor, sql, params)
File "D:\Anaconda3\lib\site-packages\django\db\backends\mysql\operations.py", line 146, in last_executed_query
    query = query.decode(errors='replace')
AttributeError: 'str' object has no attribute 'decode'
PS D:\COMP\2019T3\COMP9900\project\Django>
```

```
140 def last_executed_query(self, cursor, sql, params):
141     # With MySQLdb, cursor objects have an (undocumented) "_executed"
142     # attribute where the exact query sent to the database is saved.
143     # See MySQLdb/cursors.py in the source distribution.
144     query = getattr(cursor, '_executed', None)
145     if query is not None:
146         query = query.decode(errors='replace')
147     return query
148
```

Change decode to encode:

```

140  def last_executed_query(self, cursor, sql, params):
141      # With MySQLdb, cursor objects have an (undocumented) "_executed"
142      # attribute where the exact query sent to the database is saved.
143      # See MySQLdb/cursors.py in the source distribution.
144      query = getattr(cursor, '_executed', None)
145      if query is not None:
146          query = query.encode(errors='replace')
147      return query

```

Then migrate again:

```

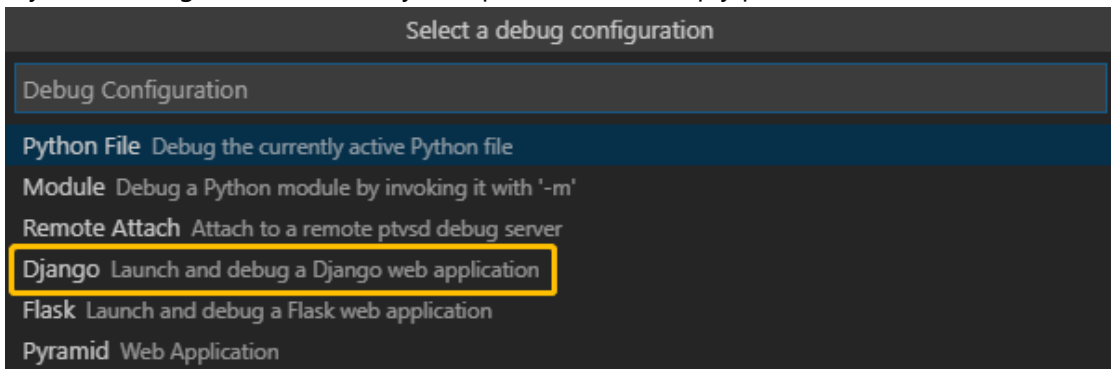
PS D:\COMP\2019T3\COMP9900\project\Django> python manage.py migrate
Operations to perform:
  Apply all migrations: admin, auth, contenttypes, sessions
Running migrations:
  No migrations to apply.
PS D:\COMP\2019T3\COMP9900\project\Django>

```

It's done! (You'll see some migrate procedures)

5. Run Django server:

If you are using VS Code, under your opened folder, simply press "F5" and choose:



Or in Shell, type: **Python (or Python3) manage.py check**

After checking, in Shell, type: **Python (or Python3) manage.py runserver**

```

Performing system checks...

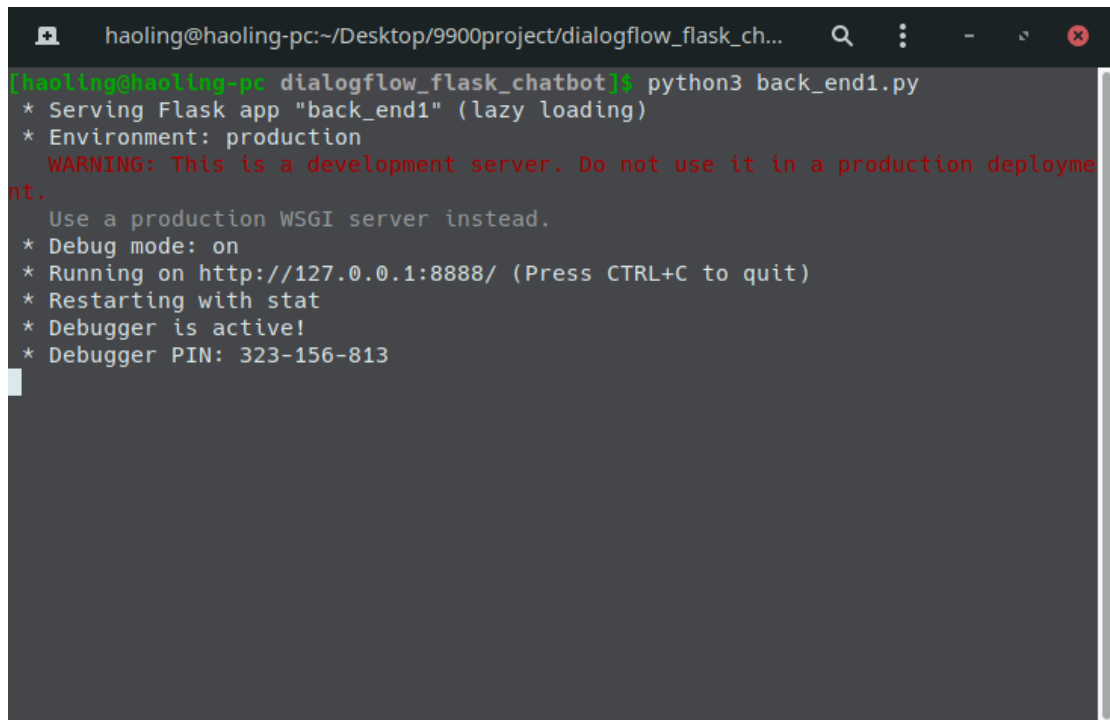
System check identified no issues (0 silenced).
November 25, 2019 - 00:55:29
Django version 2.2.7, using settings 'hospital.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.

```

Django server has run successfully!

Flask

1. Open a terminal, and go to ">project>dialogflow_flask_chatbot" directory
2. Set a different port with the port running Django
3. input "python3 backend1.py" in terminal

A terminal window with a dark background. The title bar shows the user 'haoling' on a machine named 'haoling-pc' at the directory '~/Desktop/9900project/dialogflow_flask_ch...'. The prompt is '[haoling@haoling-pc dialogflow_flask_chatbot]'. The command 'python3 back_end1.py' has been executed. The output shows Flask serving the app 'back_end1' in production mode. A red warning message states: 'WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.' Below this, it shows debug mode is on, the server is running on 'http://127.0.0.1:8888/', and that it is restarting with 'stat' and the debugger is active with a PIN of '323-156-813'.

```
haoling@haoling-pc:~/Desktop/9900project/dialogflow_flask_ch...  
[haoling@haoling-pc dialogflow_flask_chatbot]$ python3 back_end1.py  
* Serving Flask app "back_end1" (lazy loading)  
* Environment: production  
  WARNING: This is a development server. Do not use it in a production deployment.  
  Use a production WSGI server instead.  
* Debug mode: on  
* Running on http://127.0.0.1:8888/ (Press CTRL+C to quit)  
* Restarting with stat  
* Debugger is active!  
* Debugger PIN: 323-156-813
```

When you see the response above, you have run flask successfully.