



Django Home Work 3

What is the main purpose behind using the virtual environment?

The main purpose is can have its own independent set of installed Python packages in its site directories and lets the user have control over all the necessary packages and particular versions.

How to create a virtual environment?

- Create a project directory
- Change into the project directory
- Open Windows PowerShell
- Write this command [python -m venv env]

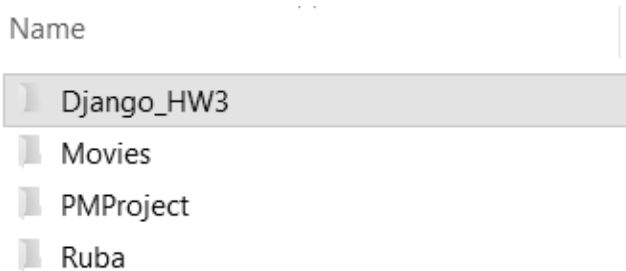


figure-1 Create a project

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\user> cd PycharmProjects
PS C:\Users\user\PycharmProjects> cd Django_HW3
PS C:\Users\user\PycharmProjects\Django_HW3> python -m venv env
PS C:\Users\user\PycharmProjects\Django_HW3>
```

figure-2 Windows PowerShell commands

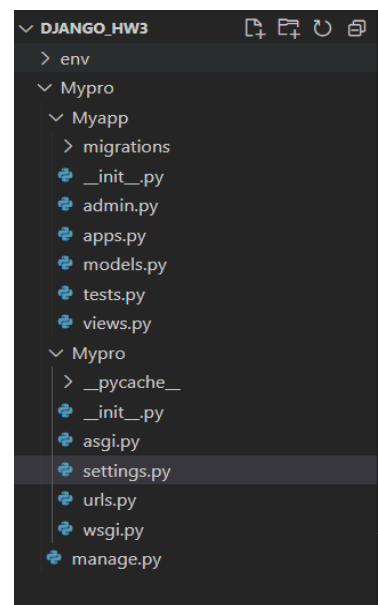


figure-3 Visual Studio Code



Task#2: Apply CRUD on ToDoList Project

```
In [2]: from To_Do_listApp.models import ToDo

In [3]: td = ToDo.objects.create(To_Do="go to shopping")

In [4]: td = ToDo.objects.create(To_Do="check my email")

In [5]: td = ToDo.objects.create(To_Do="doing exercises")
```

figure-4 create objects

```
sqlite> .tables
To_Do_listApp_todo      auth_user_user_permissions
auth_group              django_admin_log
auth_group_permissions  django_content_type
auth_permission         django_migrations
auth_user               django_session
auth_user_groups
```

figure-5 table for model ToDo

```
In [10]: ToDo.objects.filter(To_Do="check my email")
Out[10]: <QuerySet [<ToDo: check my email>, <ToDo: check my email>, <ToDo: check my email>, <ToDo: check my email>]>

In [11]: ToDo.objects.filter(To_Do="check my email").delete()
Out[11]: (4, {'To_Do_listApp.ToDo': 4})
```

figure-6 filter(), delete

```
In [13]: ToDo.objects.filter(To_Do="go to shopping").update(To_Do='go to sleep')
Out[13]: 0

In [14]:
```

figure-7 update()



Reference:

- <https://docs.python.org/3/library/venv.html>
- <https://peps.python.org/pep-0405/>
- <https://github.com/Tuwaiq-Python/main/tree/main/Django>