Django

Daily Work

New Project create చేయాలంటే Open

Step-1 : Press windows + R – CMD

C:\Users\LENOVO X1CORBON> **python**

Close cmd

C:\Users\LENOVO X1CORBON> **pip install virtualenv**

Close cmd

C:\Users\LENOVO X1CORBON> **virtualenv env**

Env foldername

C:\Users\LENOVO X1CORBON>cd env

C:\Users\LENOVO X1CORBON\env>cd scripts

C:\Users\LENOVO X1CORBON\env\Scripts>activate

(env) C:\Users\LENOVO X1CORBON\env\Scripts>cd..

(env) C:\Users\LENOVO X1CORBON\env>cd core

(env) C:\Users\LENOVO X1CORBON\env> pip install django 5.0.3

(env) C:\Users\LENOVO X1CORBON\env>django-admin startproject core

Core is a project name env folder లో ఉంటుంది

(env) C:\Users\LENOVO X1CORBON\env> python manage.py startapp home

Home app లో మనం Website design చేస్తాం

Example కి ఇంకొక app create చేద్దాం

(env) C:\Users\LENOVO X1CORBON\env> python manage.py startapp accounts

(env) C:\Users\LENOVO X1CORBON\env>python manage.py runserver

మనకి ఒక link వస్తుంది దాన్ని copy చేసుకొని website లో చేయాలి

Changes in files

Open settings.py(core)

Under INSTALLED_APPS= [ ]

```
EXTERNAL_APPS = [
    'accounts',
    'home',
    ]
INSTALLED_APPS += EXTERNAL_APPS
```

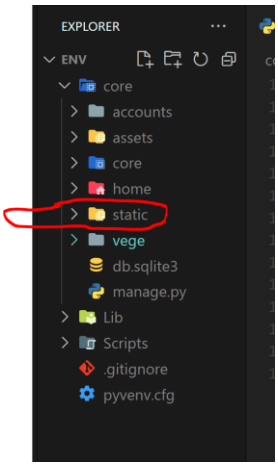
Line 1

```
Import os
```

Line 125

```
STATIC_URL = 'static/'
MEDIA_URL = '/images/'
STATICFILES_DIRS = [
    os.path.join(BASE_DIR, 'static')
]
MEDIA_ROOT = os.path.join(BASE_DIR, 'static/images')
STATIC_ROOT = os.path.join(BASE_DIR, 'staticfiles')
STATIC_ROOT = os.path.join(BASE_DIR, 'assets')
```

Right click on core select create folder – static



Open CMD

Cntrl + C

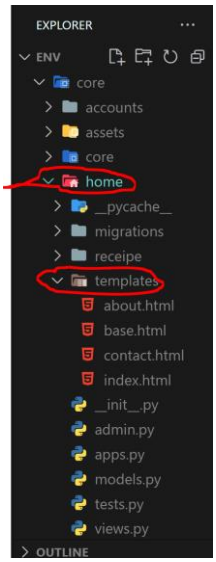
(env) C:\Users\LENOVO X1CORBON\env>python manage.py collectstatic

(env) C:\Users\LENOVO X1CORBON\env>python manage.py migrate

(env) C:\Users\LENOVO X1CORBON\env>python manage.py runserver

Lets Design Website using home app we created

Right click on home select create folder – templates



మనం multiple html files ని create చేస్తాం వాటి అన్నిటికి <head> same ఉంటుంది మళ్ళీ మళ్ళీ use చేయకుండ మనం ఒక base.html file ని create చేసి దాని <body> లో red color code ని paste చేస్తాం

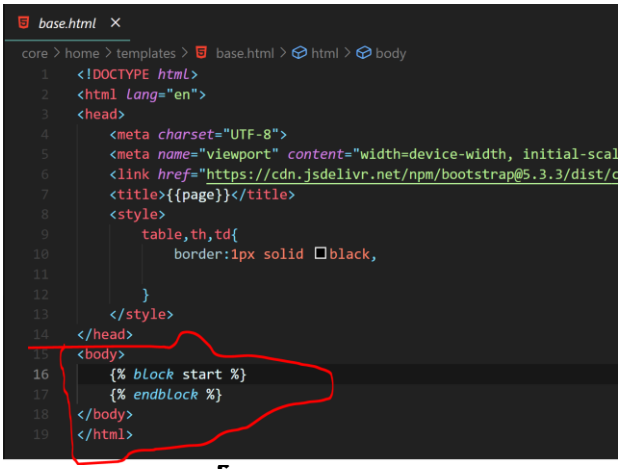
<body>

{% block start %}

{% endblock %}

</body>

See below Image for better understanding



Remaining Html files లో like about.html,contact.html, etc లో red color code ని paste చేస్తాం

{% extends 'base.html' %}

{% block start %}

{% endblock %}

See below Image for better understanding

```
{% extends 'base.html' %}
{% block start %}
    <h1>This is Contact Page</h1>
    ||<a href="/">Home</a>||
    ||<a href="/abt/">About </a>||

{% endblock %}
```

Open views.py(home)

```
from django.shortcuts import render
from django.http import HttpResponse
def cnt(request):
    context = {'page': 'Contact'}
    return render(request, 'contact.html', context)
```

ఇది ఎందుకంటే website contact.html లో మనం ఏదైనా click events చేస్తే దాని functions ఇందులో రాస్తాం

Open urls.py(core)

```
from home.views import *
urlpatterns = [
    path('', cnt, name='cnt'),
]
```

Here home. అంటే home app name

Here cnt అంటే మనం views.py లో create చేసిన function name

Note: Views లో ఏ function create చేసిన urls.py లో కి వచ్చి path ఇవ్వాలి

This is all about link among Html, views & urls.

CREATE DATABASE (DB)

Open models.py(home)

Create a table

```
class student(models.Model):
    name = models.CharField(max_length=100)
    age = models.IntegerField()
    email = models.EmailField()
    address = models.TextField()

    def __str__(self) -> str:

        return self.name
```

ఈ name,age,email address అనేవి table column names automating గా student (class name) అనే table database app లో create అవుతుంది

Open CMD

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```
(env) C:\Users\LENOVO X1CORBON\env>python manage.py makemigrations
(env) C:\Users\LENOVO X1CORBON\env>python manage.py migrate
(env) C:\Users\LENOVO X1CORBON\env>python manage.py runserver
```

Note : models.py లో ఏ చిన్న changes చేసిన ఈ 3 steps cmd లో compulsory చేయాలి

Enter Data in Database

Open CMD

Cntrl + C

(env) C:\Users\LENOVO X1CORBON\env>python manage.py shell

>>> from home.models import *

Home app name

>>>student.objects.create(name="Tom",age="23",email="tom@gmail.com",address="USA")

Student classname we created in models.py

>>><student:student object(1)>

To see all data in student table

>>>student.objects.all()

>>><Queryset [<student:student object(1)>]>

To see data in student table with id

>>>student.objects.get(id = 1)

>>><Queryset [<student:student object(1)>]>

To Update data in student table with id

>>>student.objects.filter(id = 1).update(name="John")

1

To Delete data in student table with id

>>>student.objects.get(id = 1).delete()

Close cheyali ante

>>>**exit()**